Going Beyond *I Like it* in a Portfolio Context: Scaffolding the Development of Six Grade Two Learners' Reflections

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ABSTRACT

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One component of self-regulated learning is a learner's ability to reflect on her/his learning process. This study examined: (a) the development of reflective language grade two students used when describing their learning, and (b) instructional activities and interactions that supported this development. A grounded theory framework was used to collect data from six grade two students, and their teacher in the context of a portfolio activity. Data sets included student portfolios, a student-led portfolio conference, classroom observations and interviews with the classroom teacher. Single case and cross-case analyses were used to respond to the research questions guiding this study. Findings indicated that these students express metacognitive thoughts under six topics of reflective language such as affect, task-understanding and judgment. In addition, students' reflection strategies evolved throughout the school year and included tactics such as echoing classroom language and providing rationales within their reflections. Teacher scaffolds were many and varied over the course of the school year and fell into two broad categories: structural and procedural. Structural scaffolds included environmental conditions, prompting and questioning. The most common reflection scaffold in the portfolio was the use of prompts and questions, which varied in degree from structured to open-ended. Whereas procedural scaffolds involved peer and teacher modeling, discussion as well as large group and individual conferencing. The

combination of structural and procedural scaffolds point to a need for redefining the scaffolding metaphor in order to capture the complex dynamics involved in supporting young students in their reflection process. This study concludes by offering a metaphor that captures the complexity of supporting student reflection.

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For instilling in me, from an early age, the importance of education. I know you did not always understand the madness of doing this degree, but I know you are proud of me. Hvala lepa.

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To all those with whom I discussed student reflection, your experiences and questions motivated me to write this thesis, to document in some small way the wonderful practices taking place in so many classrooms.

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INTRODUCTION

> Your research is autobiographical in that some aspect of yourself is narrated in the work you choose to pursue
>
> (Glesne & Peshkin, 1992, p. 178).

Over the last four years, as I worked towards the completion of this Masters degree, I was often asked, by colleagues, family and friends, *Why are you doing this?* Sometimes these inquiries were out of professional interest at a workshop, conference or in the school staff room. Other times the question emerged from a concern regarding the amount of seemingly unnecessary work I was imposing upon myself. I rarely had the opportunity to explain my rationale in its entirety and take the time to do so here using a retrospective reflection to look at the experiences influencing my thesis process. This personal reflection serves two important purposes. One, to situate myself in the research by explaining the impetus for this thesis was, and remains, a reflective, iterative process shaped by my experiences and by the many people I interacted with since entering the field of education. These conversations and experiences are not forgotten and in fact constitute the writing between the lines of the chapters that follow. Two, situating myself will provide a context for later discussions on my role as a researcher and on the trustworthiness of this study.

Situating Myself in the Research

I bring to this thesis a culmination of eight years of conversations, observations and questions related to learning and using a portfolio process with elementary and middle school students and their teachers. These eight years represent an internal tug-of-

war between practice and theory in the field of education. Labaree (2003) described this as the *clash* between two paradigms often experienced by educators pursuing graduate studies. Labaree (2003) continued by stating "teachers who enter [graduate] programs in education often feel they are being asked to abandon teacher culture in favor of a new academic culture" (p. 14). One of the ways I decided to address this internal conflict is by writing about the experiences that brought me to this research study.

The impact of personal experience is fourfold and represents different chapters of my professional and educational career. Each of these experiences merits a reflective mention in my thesis process: (a) teaching in elementary school, (b) teaching in middle school, (c) teaching teachers, and (d) graduate studies.

Teaching in Elementary School: A Theme Emerges

My interest in the educational issue of student reflection initially emerged when I was a grade two teacher and I first began experimenting with portfolios. While in grade two, the students gathered their writing in a manila folder we referred to as our *writing folders*. These collections were used as springboards for discussions regarding the students' writing processes. At this point I would hesitate to call these early collections a *portfolio* per say, but gathering work samples helped ground the conversations the students and I had in relation to their writing, and these conversations were my first experience with young students' reflections. Even in my early attempts with student reflection, I was amazed with how much these young students knew about their writing process. Reflecting on these grade two experiences helped me shape my research theme: *reflection and young students*. This early inkling of the importance of reflection stemmed strictly from my classroom practices. Soon after grade two, I changed school boards and

began teaching a new grade level. This transition brought with it many moments of professional reflection regarding the role of the teacher in a constructivist classroom.

As a grade six teacher my students' portfolios began to evolve and grow. I noticed the students' reactions to their own learning when they looked back at their work at the end of a term. Some were surprised by the changes they could see others were aware of the changes they wanted to see. Working with these students brought me, the teacher, to a new level in the portfolio reflection process, I intuitively began to ask probing questions in response to the students' own reflections: *Why did you see a change? What will you do to make the changes happen?* These questions emerged from discussions with individual students and with the class as a whole. The conversations evolved during that school year and challenged students to work towards their individual goals. In the end, the result was a classroom of students who were starting to understand the power they held in their own learning. It was with this classroom of learners where I began to redefine my role as a teacher. I began to question and *guide,* instead of *tell.* The less I *told* the more the students began to reflect and act on their reflections. However, I learned that year, teaching innovations required strong pedagogical convictions to survive the change process. The process to reach the end of the year in this grade six class was a difficult one, nearly ending my work with portfolios.

I questioned myself extensively during the school year: *How can I help these parents understand the portfolio process? Is learning to learn really that important or am I just working against a system that expects students to output that which is input?* Sometimes I questioned in frustration: *Can't they see how much progress their child has made? Don't they want their children to be lifelong learners as they enter high school?*

In grade six I learned that teaching is an iterative process requiring ongoing reflection and a return to pedagogical theory for support and further clarification. This was the year I made my first attempt to bring practice and theory closer together. I delved into the literature on portfolios and student reflection in order to reaffirm the success I experienced with my students. These experiences in grade six remained with me in the following years.

Teaching in Middle School: Discovering a Research Methodology

Teaching positions being what they were, I once again was in transition and moving to a new school and new grade level. Middle school was unlike anything I experienced in my teacher training or elementary teaching experiences. The adolescent energy would practically emanate from the students and ricochet off the walls when I walked down the hallways. I was accustomed to working with less than thirty students and now I was faced with over one hundred and twenty! That meant one hundred and twenty portfolios, too. It was while working in these middle-school classrooms that I delved deeper into the portfolio process. In particular, three aspects of my middle school experiences influenced my decision to use a qualitative approach in order to research reflective language in this study: (a) teacher action research, (b) working with student-teachers, and (c) learning from my students.

Teacher Action Research

The Ministry of Education of Quebec provided classroom teachers with opportunities to apply for grants subsidizing the cost of substitution in order for teachers to conduct projects in their own classrooms. I participated in such grants in the past, and

once I entered middle school, I began to write my own proposals and gather teams of teachers to work on projects.

One of the first grants I received was on the topic of portfolios. This grant was renewed for three consecutive years and resulted in the development of several portfolio documents, and more importantly, created opportunities for rich professional discussions related to the issues of portfolio management and student reflection. (See references for the Quebec English Schools Network (QESN) website where some of the portfolio documents may be found).

The portfolio grant team developed a problem solving approach to portfolio practices. We scheduled monthly meetings where we discussed difficulties we were experiencing with portfolio management in our classrooms and then used our classroom experiences to try and help one another find solutions leading to better practices. (Now I know what we were in fact doing was similar to what Creswell (2001) refers to as *action research.*) In the months following, I introduced this group to some of the readings I started to collect while teaching grade six and soon, our meetings evolved into a routine of sharing, problem solving, reading and reflecting. We hoped the theory we were reading would somehow enlighten our classroom practices. We did find some interesting literature on portfolio practices, but few articles or books delved into the area of reflection to the same degree we were attempting to do. By the end of the second year of this grant, we generated lists of guiding reflection questions, which we piloted in our classrooms, and we developed our own teacher portfolios.

Reflecting on the work with this team reminded me of the value of classroom research when looking at issues such as student reflection and highlighted the existing

gap on this topic in the literature (Perry & VandeKamp, 2000). Later, I will discuss the gap in classroom research related to student reflection. The portfolio grant also guided my decision to use a qualitative research methodology to conduct my thesis study in order to capture the important elements of the classroom context and individual learner characteristics. As such, a qualitative approach was well adapted to representing the complex, intricate, and context dependent nature of an educational issue, such as student reflection (Labaree, 2003; Merriam, 2001). Particularly, I thought to employ a grounded theory analysis in order to remain true to the data collected on student reflection.

One other grant deserves mention in this introduction. This grant was on a smaller scale than the portfolio one and involved two colleagues and myself. The topic for this grant was student reader response. In the final days of our research, exploring how students responded to a common novel in an online environment, our team was analyzing the reflections we collected from all our students. During the analysis of three sets of classroom reflection data, it emerged that in general, the reflections of my students were more sophisticated than in the other two classrooms. Our populations were similar enough to discount this as a factor. Two things transpired during this grant which have influenced my thesis. First, one of the teachers in the team looked at me and asked me a direct question, "What did *you* do to make this happen?" My response was that I did exactly what they had, provided the students with the reflection questions we had agreed upon a few weeks earlier. But once again, I was posed the same question. This question has echoed in the back of my mind since that day. *What was my role in the reflection process?* As a result, the role of the teacher in scaffolding student reflection is also addressed in this study.

During this grant we also uncovered one particular student who consistently wrote profound responses and reflections throughout the project. Because the students used pseudonyms for this project, all we knew was that this student was in my class. Upon looking up the name of this student, I was taken aback for a brief moment. The sophisticated reflections were by a student who struggled with English writing and who was in fact coded as having learning difficulties. There was little literature that I found to confirm our findings. Reflecting on this experience influenced my decisions when selecting the student participants for my thesis case studies. I wanted to ensure special needs students were represented so teachers reading this study could related the findings to their own classroom situations.

Working with Student-Teachers

In my time in middle school I had the opportunity to host seven student teachers. These were university students learning to become teachers who joined me, and in some cases, took over the teaching in several of my classrooms. The process of mentoring someone so that they learn to manage a reflective, portfolio classroom was a challenge. Putting into words what I was doing, often intuitively, often from habit, required me to further reflect on my teaching practices, and on the question that was asked of me in the previous grant: "What did *you* do to make this happen?" This question was now extended by the pre-service teachers to include *how* did this happen? It was during this time in middle school that I started a reflection log. The process of having to reflect on my own practices and to step away from my classroom and observe what I did through another's eyes has helped me in my role as a qualitative researcher in this thesis study.

Learning from my Students

Above all my experiences in middle school, I learned the most about portfolio processes as a teacher, from the various classrooms of twelve to fourteen year old students in middle school. In particular, one group of students became co-learners in the reflective portfolio process. This group of students was no different from most other middle school classes in that the student population consisted of a combination of high achievers, average achievers, and special needs students. However, these students were willing to take new risks in learning as I introduced them to Guided Independent Learning Plans (fondly referred to as the 'gilp'), these were plans that were negotiated with the students and mapped out the learning assignments and projects for the term. With these students, I learned to create an environment conducive to the development of self-regulation. I learned (a) to guide independent learning within the collective structure of a classroom curriculum; (b) to guide students to set realistic goals (goal setting); (c) to help them asses their understanding of what was expected (task understanding); (d) to build criteria for quality work and most importantly; and (e) to reflect on their learning. With this group of students I began to realize the importance of developing reflective language in the classroom. It took a visit from a school-board consultant to highlight this for me.

At the end of the school year, a school board consultant asked if he could bring a visitor to the classroom, from another school board, who was interested in seeing how a portfolio classroom was run, I agreed. The visit was rather late in the school year and happened to fall on the day when we were having our portfolio celebration. A portfolio celebration was a time set aside each term when the furniture was moved to the

peripherals and the students and I sat in our chairs, making a circle facing one another in order to share, or celebrate, some aspect of our portfolios. We proceeded as usual while our guests opted to sit at the back of the class to observe us. We hosted so many visitors throughout the year that after brief introductions we essentially forgot these two adults were there. Our celebration proceeded as usual with students opting to read an excerpt from their portfolio or to simply reflect out loud on their learning process or to set new goals. At the end of the class period, once the students went home, and the guest was seen to the door, the consultant, also a personal friend of mine, returned to the classroom.

He thanked me for welcoming them into the classroom and proceeded to tease me by saying, "you prompted the kids well." I was re-arranging the furniture and did not understand what he meant. He continued by explaining that there was no way, middle school students naturally spoke about their learning the way he had just witnessed. He figured that I had somehow *scripted* or had the students *practice* some of the conversations, which had transpired only moments earlier, in preparation for the visit. Indeed I had not, and I found it rather humorous that this was his interpretation of our portfolio celebration. But this conversation remained with me, as have the other experiences mentioned earlier, providing much food for though and professional reflection: *Why were my students using this language when they reflected on their learning? Did reflection have a language of its own?* The experiences in middle school guided me to read about socio-constructivist classrooms and to find myself in the literature on self-regulated learning.

Two final changes occurred during my time, and soon after I left middle school, each playing a role in this thesis. One, I became a pedagogical consultant with Riverside School Board and two, I began my graduate studies at Concordia university.

Teaching Teachers: Finding Motivation to Write

The predominant source of motivation for writing this thesis emerged thanks to my role as consultant at Riverside School Board. These last three years saw a new curriculum program introduced into the elementary sector in the province of Quebec, and my role as a consultant was to support teachers in this time of transition. Particularly, my emphasis was twofold. One to support teachers with special needs learners in their classroom and two, to support the implementation of a portfolio process across the elementary schools of Riverside School Board, and often, in various schools of other English school boards across the province.

In my interactions with hundreds of teachers I collected questions regarding portfolio practices and listened to successes and concerns related to portfolio practices in the classroom. One of the emerging concerns during many workshops and school visits, was student reflection. *How can I get my students to go beyond 'I like it'? The students do not like reflecting; it is getting boring and redundant for them.* Both of these statements were in contrast with my own classroom experiences as a teacher. Furthermore, there was a group of teachers who would emerge at each workshop who would disagree with the above teachers, saying that reflection had changed their students learning and their own classroom practices. I considered it a part of my role as a consultant to find articles and books related to the topic of reflection, yet each time it seemed the content of the article skimmed the surface on what reflection looked like in a

classroom or was addressing older student populations. In other words, theoretically the concept of reflection seemed wonderful, but practically, provided little guidance for a classroom teacher and her or his students. It was now confirmed the topic of reflection needed to be explored further. This was my motivation to write this thesis. While all of this was transpiring, I was simultaneously in my second year of graduate studies when I also became aware of my need to merge practice and theory when exploring the issue of student reflection.

Graduate Studies: Bringing Practice into Theory

Bridging the gap between practice and theory remained the undercurrent of my graduate studies. I describe this as the push and pull between two paradigms trying to find the right balance to benefit one another. Many times I resented portfolio and reflection theory because its abstraction in the literature did not appear to reflect the experiences of the teachers I was working with, at my school board and across the province. And still other times I was frustrated working with teachers who either continuously were *reinventing the pedgogical wheel* (Labaree, 2003) or who ignored theory completely and continued to struggle when answers to some of their questions were available in the research. Moreover, when in the walls of the university, I somehow felt that theory dominated practice, sometimes feeling almost embarrassed or silenced to argue a point from a practical perspective if I did not have a researcher name to *drop* in the conversation. Hence the decision to conduct a research study. As such, playing the dual role of educator and researcher, I knew that a study could not simply be conducted to explain *what* I knew from my own practices. Instead that a research study would help me explore *why* what I knew about reflection occurred in a classroom (Labaree, 2003).

Before I graduated, I needed to harmonize practice with theory; to make heard the voice of a classroom teacher, a voice that would be understood by other classroom practitioners; a picture of one practitioner's classroom practices documented through a formal research study, grounded in practice and supported with theory.

As you will see in the following chapters, this is a qualitative study employing various research methodologies. The methodologies I selected reflected the need to bring practice into theory, hence a grounded theory approach. As well, in order to maintain the integrity and complexity of the classroom context and the participants in the reflection process, I selected a case study methodology. The theory was used to support and guide the research process and findings with the intent of making links to larger, theoretical and philosophical underpinnings about student reflection. However, the practices of the teacher in this study, and my own experiences are not silenced, or treated as *biases* that put into question the results of this study (Bogden & Biklen, 1992; Creswell, 2001). Instead, they are used as support and insight to the reflection process in a particular grade two classroom (Merriam, 2001), with measures taken to ensure the truthfulness of what transpired in a grade two classroom. This thesis was an opportunity for me to document phenomena in a classroom and add to educational knowledge while validating the teaching practice of one grade two teacher and producing a product in which hopefully, other elementary teachers can find themselves and transfer aspects to their own practices.

Statement of the Problem

This study analyzed the language grade two students used to reflect on their learning using a portfolio process. In my various roles over the last few years as teacher, pedagogical consultant, and graduate student, I noticed the important role reflection

played in students becoming successful learners. In my own classrooms I observed, as have other researchers (Perry, 1998; Routman, 1996; Zimmerman, 1986), that reflection is a learned skill requiring good modeling by the teacher and practice on the part of the students. As students were exposed to opportunities to reflect on their learning, I noticed there was a specific language construct that emerged. While students became more competent at analyzing their learning, usually through their portfolios, there were certain language features that emerged both in their written and verbal reflections (Sunstein, 2000; Tierney et al., 1998). The area of research I identified as requiring further exploration was the reflective language that *young* students used when explaining their learning (Perry, 1998; Tierney et al. 1998). In fact, some researches who studied the self-regulatory processes of younger children claimed this is too complex a task for students to undertake. Yet, many of the classrooms where I worked I listened to children who were able to reflect on their learning and express reflective thoughts to others. Yet another catalysts that spurred on the need for a research study.

Research Questions

I addressed the following questions in a five-month study of six grade two students and their teacher:

1) What is reflective language in grade two?

2) How do grade two students' reflections develop over time?

3) What is the role of the teacher in supporting student reflection?

The research questions for this study evolved from (a) my own educational experiences; (b) through discussions with colleagues and teachers, and my supervisor, Dr. Hadwin; (c) through readings of various studies and literature; and (d) from my own

introspective thoughts on students' reflection development. The questions were refined and changed as the data was collected and new themes emerged and were related to the literature.

Overview of the Study

This study is presented in six sections: (a) introduction, (b) literature review, (c) research methodology, (d) data analysis, (e) findings and discussion, and (e) conclusions. The introduction serves the purpose of situating myself in the study and will provide context for later discussions of the role of the researcher and research validity.

The second section is a review of the literature related to the study of student reflective language. Three theoretical lenses were adopted to define and provide support to the topic of this thesis. First, the theory of self-regulated learning provided insight into the importance of *learning to learn* while also discussing the various sub-processes demonstrated by self-regulating learners. Second, a focus on socio-constructivist theory provided insight into the role social interactions played in the learning process. Within this theoretical framework, I also explored a Vygotskian perspective of language development and the relationship of these tenets to reflective language development. In addition, the role of the teacher in helping students develop language in a socio-constructivist classroom was investigated. Lastly, a section clarifying the definition and role of a portfolio process was explored. This literature clarifies the role of the portfolio in the reflection process for this study.

The third section details the research methodologies employed in collecting, coding and organizing the data. Theoretical discussions about qualitative research, grounded theory analysis and case study design help situate this study and myself as a

researcher. Moreover, this section explains my concerns with the ethics of this research study and identifies the methods I used to address these concerns.

The fourth section of this study is the analysis of data. This section details the procedures used to code the various data sources. A detailed exploration of research *trustworthiness* (validity) reveals the efforts I employed to ensure the data collected and analyzed met the requirements of a quality research study. Discussions of various forms of triangulation, member checking and methods of coding provide substance to the findings.

The fifth section focuses on the findings of the research. Each participant is presented as a case narrative in order to create a detailed portrait of each student and her or his reflection development, as well as a portrait of the teacher who supported this reflection in the classroom. Following this, each research question is addressed using a cross-case analysis to weave together a response to these questions.

The last section of this study is a conclusion. In this part of the thesis I summarize the study and provide an explanation of how my findings contribute to educational knowledge. I will conclude with several suggestions for future implications of this study on theory, research, and practice. Documents deemed useful to a classroom teacher wanting to explore reflection with her students are included in the Appendix E.

The audience for this thesis is the classroom practitioner. I hope that as you read the following chapters you are able to find yourself in the research and that the process and products of this thesis prompt you to reflect on your practices and help you to guide your students in becoming reflective and self-regulating learners.

* Please note all names were changed in order to protect the identity of participants.

LITERATURE REVIEW

The theoretical foundation for understanding the reflective language grade two students used during a portfolio process is grounded in research on self-regulation, socio-constructivism, and portfolio practices. It is the combination of these three perspectives that a complete picture of student reflection can be provided. The review of related literature will be presented in four sections: (a) self-regulated learning (SRL); (b) socio-constructivism; (c) portfolio practices; and (d) the relationships between SRL, socio-constructivism and portfolio practices.

Self-Regulated Learning

Learning is a process where the student actively integrates and organizes information, constructs meaning, and monitors understanding (Meece, 1994). As such, learning can be viewed as an ongoing problem-solving process. Henderson (1986) stated that the strategic knowledge involved in problem solving requires metacognitive effort and students' awareness of and regulation of their learning process. For this reason, one of the theoretical lenses through which this study explored student reflection was Self-Regulated Learning (SRL).

SRL refers to the process whereby students are actively engaged in the cognitive, behavioural, and affective process toward the attainment of specific learning goals (Schunk, 1994; Zimmerman, 1986). Zimmerman (2000) is often credited with providing the most common definition of self-regulated learning as being a process of "self-generated thoughts, feelings, and actions that are planned, and cyclically adapted to the attainment of personal goals" (p. 14). Zimmerman (1986) further explained that metacognitively, self-regulating learners can plan, organize, self-instruct, self-monitor,

and self-evaluate their learning process. Moreover, he described the learner as someone who is a metacognitively, motivationally, and behaviourally active participant in his or her own learning process. Motivationally, self-regulating learners perceive themselves as competent, self-efficacious, and autonomous learners. Behaviourally, self-regulating learners select and establish positive working environments that optimize their learning. These elements of SRL are common when exploring this theory in the context of education (Perry & VandeKamp, 2000; Pintrich, 1994).

Characteristics of Self-Regulating Learners

Self-regulating learners share several common characteristics. These characteristics include self-motivation and the learners ability to define the parameters of a task, plan for learning, set goals, seek information and help, self-monitor, structure the learning environment, and self-evaluate (Carver & Scheier, 2001; Schunk & Zimmerman, 1997; Zimmerman, 1986). Each of these characteristics requires the learner to be aware of her or his learning, thereby using metacognitive knowledge.

Metacognition and Self-Regulated Learning

I would be remiss to discuss SRL without drawing upon information on metacognition. Although metacognition is an intricate process required for self-regulating, some clarification is offered here.

Garcia and Pintrich (1994) make a distinction between metacognitive knowledge and self-regulation. They consider metacognitive knowledge as a more static form of knowledge not involving motivational constructs. For this reason, exploring reflection simply as a metacognitive process would not have provided the complete portrait of this phenomenon. As such, self-regulation represents a more dynamic construct that impacts a

learner's choice, effort, and persistence when engaging in the learning process. For the purpose of this study, three general types of strategies shared by models of metacognition and self-regulation are explored in greater depth. These include (a) planning, (b) monitoring, and (c) regulating.

Planning activities include goal setting, task analysis, and strategy selection (Garcia & Pintrich, 1994; Zimmerman, 1986). Each of these activities involves a metacognitive decision-making process by the learner. Setting goals for learning requires learners to rely on metacognitive awareness of what and how they can accomplish the task. Furthermore, Perry (1998) stated, in order for learners to set appropriate goals they require a clear understanding of the task and must possess sufficient abilities and strategies to be able to begin the task. Metacognition allows learners to draw upon previously learned strategies and then apply this learning to new goals.

Monitoring, or keeping track of, individual's thinking and performance is essential to metacognition and is critical to continued strategy use as part of SRL (Ghatala, 1986). In order to successfully attain their goals, learners monitor their actions and cognitive processes during the learning process. Monitoring is a metacognitive process self-regulating learners engage in repeatedly as part of the regulating process.

Many of the strategies common to metacognition and self-regulated learning cannot be separated from each other. For this reason, regulation strategies do not exist on their own, but instead include several sub-processes of SRL. For instance, the processes of planning and monitoring are also processes of regulating whereby learners use their prior experiences to regulate future learning. Another example is that self-regulated learners develop the ability to make realistic judgements about their performance

(Bandura, 1986), requiring meta-knowledge of their learning. These judgements are most often based upon a comparison between their past and present performance or upon some specified criteria established in the classroom. One of the means used to teach students to metacognitively regulate their learning is through reflection (Paris & Winograd, 2001; Zimmerman, 2000).

Reflection: A Component of Self-Regulated Learning

Reflection is a component of self-regulated learning. For the purpose of this study, reflection is defined as learners' abilities to cognitively analyze their own learning (Sunstein, 2000). In relation to the grade two students, whose reflections were studied in this research, the ability to reflect on one's learning process was an important factor in school success. This was particularly pertinent, in light of new curriculum reforms, in the province of Quebec (2001) which emphasized the development of cross-curricular competencies, including reflection.

Researchers have uncovered a positive correlation between students' abilities to reflect on their learning and academic achievement (Black, 1999; Schunk, 1986; Zimmerman, 1986; 2000). Schunk (1986) discovered that students who did not demonstrate reflective abilities were not able to adjust their learning strategies and goals and often gave up on tasks or were not successful, leading to academic failure. However, on the positive side, SRL is a socially constructed skill (Zimmerman, 2000) which can be taught. And in fact, when students are taught to self-regulate, or specifically, to reflect, Paris & Winograd (2001) noted students, "from 5-16 years of age became increasingly aware of their own personal knowledge states" (p. 3). As students become aware of their knowledge states, they also become more adept at communicating about their learning.

However, the SRL literature is only beginning to point to ways that teachers can guide young learners to *become aware of their knowledge states.* Furthermore, there remains a gap in the research on *how* students communicate their *awareness* or reflective thoughts as part of the SRL process (Perry, VandeKamp, Mercer, & Nordby, 2002). For this reason, I now turn to the literature on socio-constructivism and language development to provide some insight into how communication develops and what role that social contexts of the classroom plays on this development.

Social-Constructivist Perspectives on Language Development

Before addressing the issue of social influences on the development of student reflection, the following section describes the literature on the development of language. In order for young students to be able to communicate their reflective thoughts, they need to develop a language for reflection.

The Development of Language

The social-constructivist perspective on language development weaves together tenets of various theories, with a strong emphasis on the role of culture and society on a child's development. Kavanaugh (1991) described socio-constructivism as a theory that "acknowledges biological contributions to language acquisition, but emphasizes that language acquisition is also social" (p. 11). The role of social influences is essential to consider when examining language development of school-age children. For this reason, social-constructivist theory was an essential source for studying student reflection, since schooling itself was an important social influence (Bruner, 1990; Dixon-Krauss, 1996; Vygotsky, 1962).

There were several essential features of this theory first explored by Lev Vygotsky (1962), and later by other researchers such as Jerome Bruner (1990), and James Wertsch (1985). The features of language and learning detailed in the following pages include: (a) language as a socially constructed sign system; (b) language, cognition and inner speech; (c) language and thought; and (d) language and social support.

Language as a Socially Constructed Sign System

In his infamous work titled *Thought and Language*, Vygotsky (1962) defined language as the "functional use of signs" (p.38). From Vygotsky's perspective, language was a system of signs, such as words or gestures that are not only used in social contexts, but gain their meaning through social interactions.

Vygotsky was concerned with the study of the *purpose* of language whereas other dominant theories in his time, such as Behaviorist theories and Nativist theories, emphasized the *structure* of language. If the purpose of language was to communicate, then it is important that those involved in the communication share a common understanding of the language being used. This was confirmed with my own experiences with elementary and middle school students, where we developed our own reflective language system. As such, Vygotsky (1962) emphasized the fact that language was inevitably situated in the social context where it emerged. Hence, language development was seen as a fluid process between the learner and the environment. Moreover, during this process learners purposefully construct, and reconstruct language and learning through their interactions and experiences. Vygotsky's perspective on how this process evolved differed from pure Cognitivist view of development and the following will explain the rational for the Vygotskian perspective of this thesis.

Socio-Constructivist versus Cognitivist Perspectives on Language Development

Rare is there a teacher who enters the profession without having read the work of cognitivist, Jean Piaget. Often, Piaget's theory of child development is the focal point of teacher training. However, for the purpose of this study, Piaget's work will be used in discussions to confirm the need for a *socio*-constructivist perspective on reflective language development.

Vygotskian perspectives of learning varied from Piagetian perspectives in several ways. One of the main discrepancies rested in how each school of thought explained the process of human development. The Vygotskian view claimed learning was *a result of social interaction* whereas the Piagetian view stated that learning was also a result of social interaction but depended on the learner's *maturation* process. In other words, the first believed that learning *precede* development and the second believed that development *leads* learning (Menyuk, 1995). For instance, Piaget would state that in order for children to speak, they must first be able to think, this is described by Reid (1998) as a "biological constructivist perspective" (p. 387). Whereas a social-constructivist would state that children use verbal language in order to formulate thoughts. The distinction seems almost mute, in that both perspectives may hold true at different points in a child's learning process. For this reason, it is interesting to take a closer look at one area of language where the two theories compliment each other in an important way when related to reflection. Where Cognitivist views of egocentric speech leave off is where Vygotskian views continue with concepts of inner speech.

Inner speech

Vygotsky's views on children's egocentric talk differed from Piaget's view on the same issue. The disagreement was not so much in the fact that Vygotsky did not agree with the principle of egocentric talk as an important part of language development; but lied with Piaget's observations of what occurred to egocentric talk in the language process. Piaget believed egocentric talk evolved with maturation and eventually disappeared and was not longer required by the child for learning to occur. While Vygotsky (1962) observed that egocentric speech was the *precursor* to what he referred to as "inner speech" (p. 149).

From a social-constructivist perspective, inner speech is the essential link between language and thought. Vygotsky (1962) believed egocentric speech was not the end of an immature learning process, but in fact a step to the development of a highly sophisticated ability of learners to use social language internally to make sense and learn. The difficulty he acknowledged was that unlike egocentric talk, inner speech was difficult to observe. However, to say that inner speech did not exist because it could not be observed was akin to saying that "children stop counting when they no longer use their fingers" (Vygotsky, 1962, p.135). All in all, Dixon-Krauss (1996) described inner speech as the "mental tool for thought" (p. 17).

SRL theory also discusses the importance of inner or *private speech* (Shunk, 1986). Zimmerman (1986) confirmed the important role inner speech played in students', "exercising greater self-direction and comprehension during acquisition of knowledge" (p. 307). As children develop, they begin to communicate, using inner speech in overt ways to their intended audiences. Routman (1996) confirmed, with guidance, students

can use reflective language in order to explain their learning in such a way that shows their insights and depth of their knowledge. However, Routman (1996) does not elaborate on *how* reflective language is developed or what precisely reflective language looks like. If learners can use language to explain their insights, this then evokes the question: what is the relationship between language and thought?

Language and Thought

Language is the most powerful tool children have to help them develop cognitively. Garton & Pratt (1998) described language as the "tool that facilitates representations of the world" (p.51). In the first two years of life Vygotsky (1962) claimed language and thought developed separately but then came together to continue to grow along side and with each other. From this perspective, language is the vehicle through which thought is created and transmitted (Garton & Pratt, 1998; Vygotsky, 1962). Bruner (1990) ascertained that humans used language to help develop their knowledge in a dynamic, interactive way, using language within their cultural settings to help them develop their thoughts. Moreover, the link between verbal speech and thought is such that speech structures support the structures of a child's thinking (Vygotsky, 1962). This notion proposes important challenges for school curriculum. That is, if language is the interface for higher order thinking (Jones & Brad, 2002), and language is socially constructed, then the social interactions occurring in classrooms must have an influence on children's development of thought and language.

The Relationship Between Verbal and Written Language

Until this point, I have discussed the development of language, with an emphasis on social and thus, verbal communication. Here arises a new discussion on language, one

that becomes predominant once children enter the school setting: written language. Vygotsky (1962) defined writing as a complex *symbolic function*. Writing is a complex symbol system because it is more than speech written down (Kavanaugh, 1991). In the words of Wink & Putney (2002) "for children, the written word is a second-order representation. It therefore represents the spoken form of the word which in turn represents the object, rather than directly representing the object itself" (p. 179). Put simply, writing is one step removed from thought and as such, is the most complex form of language communication (Vygotsky, 1962). Because writing can change the way we organize our thoughts, it is said to *mediate* our thoughts. Although verbal and written language generally work together to develop thought, each process has distinct features important for consideration in light of student reflection.

The Complexity of Communicating Thoughts in Writing

As children develop writing abilities, they begin with random scribbles and drawings that later become letter approximations and eventually words; whereby they assign meaning to these symbols first through verbalizing explanations of their messages, and then through expanded writing. The major difference between verbal and written forms of language is the presence and absence of an audience (Kavanaugh, 1991). When communicating one's thoughts verbally, the student has an immediate audience who can provide clues when a message in unclear by using gestures, facial expressions or by asking questions. This provides an opportunity for students to clarify the meaning or sense of what they are trying to communicate. Vygotsky (1962) ascertained this aspect to be an important consideration because "thoughts, unlike speech, do not consist of separate units" (p. 149). In other words, "thinking is pure meaning" (Vygotsky, 1962, p.

149) entailing the student who is speaking communicate her or his thoughts using socially constructed words that are understood by the audience. Needless to say, the movement from thought to verbal language is complex and becomes even more so when thought moves directly to writing, whereby there is no *direct* audience with whom students can interact. The need to clearly express one's thoughts in writing becomes a challenging process for students in the early grades. However, it must be reiterated that verbal social interactions help students develop language and thus thought. For this reason, social-constructivist theory provides educators with several key principles to help students construct their language and learning within the social context of the classroom.

Language and Social Support

Both Bruner (1986) and Vygotsky (1962) believed that spoken and written language should develop in a natural way through children's interaction with the people of the culture where they are growing up. When students interact socially with others this supports their developing language in that they are able to make the transition from external sign systems to internal systems, such as inner speech (Vygotsky, 1962). For a classroom teacher, it is also important to understand socio-constructivist theory of language when planning for literacy development and the reflection process.

The Role of the Teacher in Students' Language Development

From a social-constructivist perspective, language is said to develop from "whole to part" (Dixon-Krauss, 1998, p. 19). Thoughts are whole sets of meaning broken down into parts in order to communicate verbally or in writing. The role of the teacher or social other is to scaffold the development of written communication. One form of scaffolding

explored in the socio-constructivist literature is the notion of helping students develop in their *zone of proximal development*.

Zone of proximal development

Vygotsky's original concept of the Zone of Proximal Development (ZDP), elaborated upon by Wertsch (1985), explained that learning occurs with the support of *knowledgeable others*. The premise of the ZPD is that students can work beyond their current level of development if they have the support of an adult or knowledgeable peer (Wertsch, 1985). Dixon-Krauss (1996) described this as the "*gap* between actual development and potential development" (pp. 14-15). However, it is important to remember that even during the moments when students are receiving supports from others, they remain active participants in the learning process, and they continue to initiate interactions with their environment. Students are not passive subjects simply being *taught*. The outcome of working at a level that is challenging is understanding that what students can do with support at the moment, they will be able to do on their own later on (Bruner, 1985; Dixon-Krauss, 1996; McMahen, 1996; Vygotsky, 1962; Wertsch, 1985). Bruner (1985) cautioned that in order for learning to be successful in the ZPD, students must first be willing to learn and second, teachers must provide supports or scaffolds for the learning.

Scaffolding Learning

The idea of creating sufficient scaffolds for individual learners is often overwhelming for the classroom teacher. Scaffolds should be "transitional supports that help guide a student through a learning process that they are not yet competent to handle on their own" (McMahen, 1996). In English Language Arts setting, this may include the

use of graphic organizers for various forms of writing, checklists for editing, procedures for writer's workshop or the support of a teacher or peer. Vygotsky cautioned against the idea that it is always the *knowledgeable other* who created these scaffolds. If the student is always relying on the teacher or a peer to learn, then this becomes no better than a Behaviourist model whereby the child needs a stimulus in order to respond or react. For this reason, Vygotsky's theory stated that students must learn to also build their own scaffolds by becoming aware and understanding their learning processes. Although the literature on self-regulated learning, especially in relation to young learners in classroom settings, is notably lacking (Perry 1998; Perry & VandeKamp, 2001); one of the currently researched strategies that helps students become self-regulating learners who are aware of their thinking processes is through the process of reflection (Perry et al., 2002).

Portfolio Practices

Portfolio Defined

The term portfolio invokes a variety of definitions and perceptions. For the purpose of this study, portfolio is defined as a purposeful selection of student created work that demonstrates learning processes and outcomes as well as students' reflective insights on their learning progress (Graves, 1992; Routman, 1997; Sunstein, 2000; Tierney et al., 1998). The portfolio generally consists of student work samples that are completed, in real or authentic contexts of learning and become a source for authentic assessment. Melograno (1996) noted that authentic assessment allows students to demonstrate their abilities in authentic contexts such as those where their learning originally occurred.

What Makes a Portfolio, a Portfolio?

The selection of student work allows teachers, students and parents to document the process of how learning is taking place. Contents are purposefully selected for a portfolio in such a way that they demonstrate a student's development or change in learning. A portfolio provides a context to organize all these notable changes, documenting the past, present and future of a student's learning in an authentic manner. In other words, a portfolio is a growing document that reflects a student's performance of her or his learning in various ways, over a period of time, across a variety of situations (Vucko, 2001).

Advocates of portfolios believe there are key elements that distinguish a portfolio from a simple computer file or traditional binder. A review of the literature (Graves & Sunstein, 1998; Tierney & Clark, 1998; Rosenblath, 1993; Vucko, 1999) revealed several key characteristics of portfolios that reflect the portfolios used by the grade two students in this study. For instance, the portfolio contents were a representative selection of student work. Selections were often accompanied by student reflections or self-evaluations, describing the reasons and process of learning demonstrated in each sample, or across a variety of samples. The selections were based upon criteria for assessment, established by the teacher, often with the students, and linked to local educational standards. Portfolios help students document their various thinking processes and as such are an ongoing dialogue between all members of the learning community: student, teacher, and parents.

Portfolio Process

Using a portfolio process places students at the center of their learning. The portfolio process invites students' involvement, encourages reflection, and allows for individualized learning (Robbins, et al., 1995). The versatility of portfolios also challenges students to become self-directed learners. Because students have the ownership and authority to develop their portfolios, they can incorporate metacognitive processes to guide their learning, focusing on the positive act of learning, be it through successes or errors. This in turn allows for differentiated learning and teaching in the classroom. Sunstein (2000) emphasized the many roles of a portfolio including being a springboard for further classroom instruction by helping focus the student and teacher on specific criteria and goals trying to be attained. In turn, the process of developing a portfolio provides a place where students are guided towards becoming self-assessors, accountable for their learning. The many roles of a portfolio process in the classroom are complex and intricately tied to the classroom dynamic created by the teacher. The teacher's task is to facilitate these processes, to help students learn how to learn.

Student Reflection and Portfolio Keeping

Reflection, in its simplest form can be defined as, "the act of seeing one's own work" (Sunstein, 2000, p. 8). One presumes when students reflect on their work, as documented in their portfolios, they are metacognitively analyzing various aspects of their learning. Some of these learning aspects may include reflecting on the processes used (a) to complete the work; (b) to plan that the process required; (c) to evaluate the success or failure of the process and product; (d) to attain a personal goal; or (e) to retrace the use of strategies (Graves, 1992; Zimmerman, 1986; Black, 2000; Schunk, 1986;

Sunstein, 2000). Furthermore, Sunstein (2000) defined the relationship between portfolios and reflection as follows:

> Portfolios...with their emphasis on critical self-analysis—the acts we've come to call *reflection* and *reflexivity*—offer us and our students a way to determine, define, and display our work with windows into the processes we've used to produce it
>
> (p. 6).

The *windows* Sunstein (2000) refers to are opened when students communicate their metacognitive thought processes. Reflection is one of the windows through which students permit us to see their thought processes. However, as with a conventional window in any building, the reflection window does not open on its own. That is, researchers have noted that reflection is a socially constructed competency that develops through observation and practice (Schunk, 1986; Sunstein, 2000; Zimmerman, 1986).

The Development of Reflection in the Portfolio Classroom

Reflective language is the *interaction* that takes place through communication, be it verbal, written or through other symbol systems learned and understood in specific social contexts (Black, 1999). One component of this symbol system is the reflective language used in a school context. In my experiences, when students first begin to reflect on the work in their portfolios, the language they use is often a label or a feeling about their work, such as 'good', 'my best', or 'I like it.' This observation is supported with research conducted by Tierney et al. (1998).

Tierney et al. (1998) noted the development of reflective language is demonstrated through greater amounts and breadth of comments. In fact, in their study, of

writing portfolios, the researchers noted student reflective communication developed in five main ways: (a) number of comments increased; (b) comments focused on more specific aspects of writing; (c) comments became more focused on both personal and community expectations; and (d) students began to notice growth through comparisons with previous work; students' abilities to evaluate their total performance. The changes in reflection ability in the above study took place in the social context of a school. However, the authors did not elaborate on *how* student reflection was supported nor did they detail the language students used to reflect. Since the language we use is socially determined, it would follow that the nature of learning the characteristics of reflective language would be socially dependent.

Due to the importance of social influences on the development of student reflection and in the SRL process; and the role the portfolio plays as an instrumental support in the reflection process, I now explore the link between these three areas of the literature and the role they played in defining the questions for this study.

The Connection Between SRL, Portfolios and Student Reflection

Self-Regulation, Reflection and Young Students

There is some concern that self-regulating one's learning is a complex, abstract process that cannot be coordinated by younger learners (Pressley, Forrest-Pressley, Elliott-Faust, & Miller, 1985; Winne, 1997; Zimmerman, 1990). Young students are not often provided with opportunities to become a part of the reflective process. For this reason, Snider, Lima, & DeVito (1994) stated that many are "skeptical about expecting young children to be reflective and analytic about learning (p. 83). This study began with the premise that young learners *can* self-regulate and thereby reflect on their learning

processes. As mentioned in the introduction, in my own experiences with younger students, I know that self-regulation was demonstrated by young learners. The question thus became not whether young learners are *able* to regulate, and in particular, to reflect, instead the focus of this study explored what reflective language learners needed to express their thoughts. Moreover, socio-constructivist theory pointed to the importance of socializing agents in the learning process which when viewed in relation to SRL and put into question the role of the teacher in helping students become reflective thinkers.

Supports That Help Students Develop Reflective Language

Black (1999) defined the role of teacher as one who provides the *scaffold* for the building of reflective language. Essentially, the role of a teacher is to provide a supportive role in students' acquisition of reflective language. Black (1999) stated "in this supportive role, the teacher has to discern the potential of the learner to advance in understanding, so that new challenges are neither too trivial nor too demanding" (p. 147). Thus, there is an appropriate and productive learning challenge which, discussed earlier, is what Vygotsky called the *zone of proximal development* (Black, 1999). However, true to SRL theory, the learner can only accomplish the actual building of the knowledge. In other words, one can guide, but cannot reflect *for* the student. Students need to learn to communicate their metacognitive thoughts, reflection being one of the ways to do so.

Donald Graves (1992) provides us with a quote that synthesizes the dilemma related to the communication of reflective thoughts: "Students usually know when their writing is good, but it is hard for them to know *why* their writing is good" (p. 90). Knowing *why* their work is good, is the reflective language and understanding students need to learn in order to communicate their metacognitive thought processes, and hence

develop self-regulating competencies. Proponents of self-regulated learning (SRL) state that knowing how to increase students' SRL abilities, including reflection, is a key factor in successful learning (Paris & Winograd, 2001; Zimmerman, 1986). If educators are aware of the thought processes that students are employing while learning, they are in a position to guide or intervene when appropriate to ensure that successful learning is taking place. Davies et al. (1992) claimed "when we encourage children to think and talk about learning, we are providing them with valuable insights. We are also giving children opportunities to extend their understanding of their own learning" (p. 85).

Black (1999) defined learning from a Vygotskian perspective as a process that, "proceeds from the interaction between the teacher and learner" (p. 122). As such, portfolios can serve as a form of communication between teachers and students. Within this definition, the teacher plays an important role in guiding student reflection based upon the decisions she or he makes in creating a classroom environment that promotes self-regulated learning, and hence, reflection.

Ley & Young (2001) and Perry & VandeKamp (2000) offer many suggestions for embedding SRL into the classroom learning environment. First and foremost, Perry & VandeKamp, (2000) maintained that the role of the teacher is essential in SRL and student reflection. She described SRL as

> being more likely to develop when teachers guide rather than direct students' learning, acting as facilitators or coaches rather than mangers. In this role, teachers provide instrumental support to students (Perry, 1998, p. 716).

These *instrumental supports* are well documented in the SRL literature (Ley & Young, 2001; Perry et al, 2002; Zimmerman, 2000) and include (a) teaching the learner to structure the learning environment; (b) including metacognitive processes within lessons; (c) providing opportunities for the learners to monitor their progress; and (d) provide opportunities for learners to self-evaluate and receive feedback through evaluation. Glazer (1994) proposed that learning how to reflect occurs when self-monitoring activities are built into classroom routines. In addition, Ley & Young (2001) emphasized the importance of providing continual support to learners who may need prompting in the classroom to make better decisions. Perry and VandeKamp's (2000) research has recently uncovered ways the teacher can create these supports through modeling behaviour, or reflective language, by creating open-ended tasks and by using a portfolio process to guide student reflection; however, the author herself points to need for studies exploring SRL issues to continue, particularly when related to young learners in classroom contexts.

Research Questions

The previous literature review used three lenses to view student reflection. One, the theory of self-regulated learning, provided insight into the importance of planning, monitoring and regulating one's learning. SRL theory also explained the dynamic interplay between metacognition and reflection. Second, information was provided regarding the developmental aspects of language growth and the literature emphasized the importance of socio-constructivist frameworks required to support the development of reflective language, even in young students. Last, the portfolio as a learning context and

authentic assessment tool was defined and discussed as a vehicle for student reflection in the classroom.

Each of the three perspectives provided support and pointed to a need for further research on the discussions that follow on the issue of reflective language grade two students use during a portfolio process. This issue is explored via three guiding research questions:

1) What is reflective language in grade two?

2) How do grade two students' reflections develop over time?

3) What is the role of the teacher in supporting student reflection?

The proceeding chapter discusses the methodology used to gather information related to these research questions.

RESEARCH METHODOLOGY

Research Design

> The methods we choose say something about our views on what qualifies as valuable knowledge and our perspective on the nature of reality
>
> (Glesne & Peshkin, 1992, p.5).

Quantitative and Qualitative Research

Early forms of research originated in the sciences and were concerned with investigating things observable and measurable in some way (Bogden & Biklen, 1992; Creswell, 2001). These research methods were referred to as *quantitative.* The purpose of quantitative research methodology is to objectify what is being observed by the researcher, with the intent that others can repeat the study. Moreover, the main focus for this type of research is to generalize findings to the greater population being represented in the study. The end goal of quantitative research is to explain and predict human behaviour with the belief that behaviours can generalized to other people or places and are based upon the idea that there is one shared, common reality (Creswell, 2001; Glesne & Peshkin, 1992; Merriam, 2001). For this reason, researcher objectivity is an important construct to quantitative research designs. Although quantitative research methods have contributed significantly to various fields of study, some of the strengths of this methodology become constraints in the study of student reflection and thus a predominantly qualitative approach was selected for this thesis.

This study explored six grade two students' reflective language using a qualitative research design. Qualitative research, broadly defined, is the study of a central

phenomenon, situated in context of human reality (Creswell, 2001; Glesne & Peshkin, 1992). The purpose of qualitative research is to explore and understand some aspect of human behaviour that is complex and requires the holistic exploration of people and places in order to provide a complete picture of the phenomena. Glesne and Peshkin (1992) described the underpinnings of qualitative methodology as deriving from a view of the world that ascertains "multiple, socially constructed realities or *qualities* that are complex and indivisible into discrete variables" (p. 6). In essence, qualitative researchers believe *the whole is greater than the sum of its parts.*

Bogden and Biklen (1992) provided five key features of qualitative research: (a) qualitative research takes place in a natural setting, (b) qualitative research is descriptive, (c) qualitative research is concerned with process, (d) qualitative research is inductive, and (d) qualitative research is concerned with meaning. I will explore each of these tenets is relation this study.

Qualitative Research Takes Place in a Natural Setting

The setting whereby data is collected is the place where the phenomena being studied naturally occurs. Qualitative research emphasizes the importance of context on human behaviour (Creswell, 2001). For this reason, the data collected on student reflection included descriptions of the classroom setting, routines and relationships, all of these elements assisted in the understanding of student reflective language. In addition, Bogden and Biklen (1992) highlighted the importance of the researcher as the primary research instrument through which data is collected. From this perspective, researcher insights guide the data collection and interpretation based upon observations, and interactions with the participants and the setting.

Qualitative Research is Descriptive

Rich description is the hallmark of qualitative research. (Creswell, 2001; Glesne & Peshkin, 1992; Strauss & Corbin, 1992). This study, I attempted to engage the reader in a narrative describing the contexts of grade two student reflections. This context was critical to the understanding of the students' reflective language and details not only physical contexts but also human contexts, such as the classroom environment created by the teacher and the learner's individual characteristics. The complexity of reflection required a detailed exposure of the peripherals surrounding these students on a daily basis. Or, in the words of Bogden and Biklen (1992), "when data are produced by subjects...we want to know where, how, and understand under what circumstances they came into being" (p. 30).

Qualitative Research is Concerned with Process

The focus of qualitative research is to explain *how* changes occur and *what* led to the change process (Bogden & Biklen, 1992). The discussions regarding reflective language focused on the processes guiding student reflective language and reflection development. As mentioned in the introduction, the audience for this thesis is classroom teachers. For this reason, a focus on the process of reflection was important to detail so that other teachers might draw on this information to inform their own practices. Leslie Roma (1989) stated that presenting the process of qualitative research, in such a way that the teacher can gleam from the story told of this classroom, "reduces the divide between the researcher's intellectual work and member's ordinary way of describing and understanding [an] experience" (in LeCompte, 1998, p. 652)

Qualitative Research is Inductive

Qualitative data analysis is an inductive process. Themes emerged from the data during a systematic, analytical process. This is often described as a bottom up approach (Creswell, 2001; Glesne & Peshkin, 1992). Such an approach differs from deductive quantitative research where the goal is to prove or disprove a hypothesis established prior to the study (Creswell, 2001). In qualitative research, researchers turn to the participants and the data to explore the arising patterns and phenomena (Glesne & Peshkin, 1992). In other words, quantitative researchers begin their journey with a detailed map and a final destination in mind, using the stops along the way to confirm they are on the right path. Whereas qualitative researchers are explorers who embark in a car with an idea of where they want to go, but allow their stops along the way to direct and focus their final destination, sometimes taking many detours along the way. One of the reasons I selected an inductive approach to this study was due to the lack of specific pervious research on young students' reflective language. Although the literature pointed to the fact that reflection was a tool for metacognitive thought, exploring how we support students to use that tool has only recently emerged (Perry, 1998; Perry et al., 2002). Moreover, information on *how* teachers scaffold the development of reflective thought in young adult and adult learners is available, however how this scaffolding changes when working with young learners remains a gap in the research community. As such, I could not confirm previous research, as might a quantitative methodology, but instead I relied on my data to guide and reveal important characteristics about reflection in a grade two classroom.

Qualitative Research is Concerned with Meaning

The main concern of qualitative research is to capture participants' perspectives as accurately as possible (Bogden & Biklen, 1992; LeCompte et al., 1992). Gaining insight into student reflection required learning about the students' and the teacher's perspectives. Such an approach is labeled *emic*, whereby "insider perspectives" (Merriam, 2001, p. 6) help the researcher make sense of the issues being studied. Through various data collection techniques, I tried to gather information that would contribute to the meaning of the phenomena I was studying, in the hopes of making the invisible visible (Bogden & Biklen, 1992, Glesne & Peshkin, 1992).

In sum, qualitative research holds central the ideas that research should be naturally situated and focused on the process surrounding the issue being explored. Moreover, that reflective processes be explored in an inductive manner, where in the researcher is the primary research instrument who tries to unravel the meaning behind the phenomena of study, using the data collected to accomplish this. Last, qualitative research is concerned with exploring the meaning of the phenomena being studied. All of these characteristics are central to a qualitative study. Nevertheless, the method by which these characteristics are employed may differ from study to study.

Methodology: Grounded Theory & Case Study

The design of this study borrows from two qualitative research methodologies. LeCompte et al (1992) ascertained many qualitative studies do not fit into one paradigm, and thus, the combination of several aspects of different methodologies is often required. This research design is qualitative in nature and borrows from grounded theory and case study methodology.

Grounded Theory

At the onset of the study, a grounded theory research methodology was selected. The inherent purpose of grounded theory is to explain social processes, actions and interactions in relation to specific topics, with the intent of developing a theory that emerges from the various data sources (Boudreau, 2001; Creswell, 2001; Glaser & Strauss, 1967). Student reflective language is itself socially constructed, lending itself to this methodological process.

Grounded theory resulted from the work of Glaser and Strauss (1967). Glaser and Strauss were concerned with outlining an inductive method of qualitative research, allowing social theory to be generated systematically from data. That is, they believed theories were grounded in rigorous empirical research. Grounded theory is a way of conceptualizing data, a methodology. It is a rigorous process involving many steps. The researcher employs an inductive process to explore phenomena, using the data as the primary source of information. This methodology contrasts quantitative approaches where theory is derived deductively from previous research (Creswell, 2001). The end goal of grounded theory is to generate a theory or hypothesis that has emerged from, and thus remains true to, the data collected (Boudreau, 2001; Glaser & Strauss, 1967).

The inherent purpose of a grounded theory in this study is to allow for the data gathered from the student portfolios, conferences and teacher interviews to emerge into categories of student language as it is used during the reflection process. Creswell (2001) asserted that "categories are themes of basic information identified in the data by the researcher and used to understand the process being studied" (p. 216). Moreover, Leedy and Ormrod (2001) suggested that a grounded theory design allows for flexibility within

the context of set procedures. The flexibility of grounded theory is important to this study due to the fact that student reflection is a dynamic process continually changing and developing. Moreover, there are many related factors that cannot be excluded or controlled for when studying reflective language in the context of a classroom.

In grounded theory, the coding process is a fluid one and moves from whole to part to whole. This process is often described as *phases of coding* (Leedy & Ormrod, 2001; Shagoury & Power, 1993). This study made use of three phases of coding referred to as (a) open coding, (b) axial coding, and (c) selective coding.

Open coding occurs as the first step in a grounded theory design. During this process the researcher remains open to the data, labeling words, sentences or chunks of data (Creswell 2001; Strauss & Corbin, 1998). The data initially collected are labeled, sometimes using the language of the participants. The process of open coding, and of the entire grounded theory, is one of becoming very familiar with the data through systematic reading, re-reading and reading again of the data sets in a recursive manner. It is during this phase that the researcher simultaneously develops a codebook where definitions and examples of the codes are provided. The codebook is essential to maintaining a consistent coding scheme throughout the analysis, and to keep track of new and emerging codes (Strauss & Corbin, 1998). I employed an emic approach to openly coding the data. In the case of this study, after reading through a student' s portfolio I began by underlining the language the student used in her or his reflective responses. For example, when coding David's term 1 portfolio, I underlined the word *like*. *Like* appeared several times in David's reflections and was emerging as a type of language this student used to explain his metacognitive thoughts. This language then became a first level code that was

transcribed into my codebook with a definition and example. First level codes were then used to subsequently code other data. This process was cyclical and involved returning to the data frequently as new codes emerged from other data.

Axial coding is the second phase of grounded theory methodology. During this process a category from the open-coding phase is selected and other categories are related to it (Creswell, 2001). The initial coded category is explored from various vantagepoints, using contexts and additional data to solidify the features of the category. The systemic approach involved in axial coding helps alleviate concerns about the trustworthiness of the emerging categories and provides for rigor in a study (Creswell, 2001; Strauss & Corbin, 1998). During the axial phase of coding the data for this study, first level codes were categorized into themes. For instance, first level reflective language codes such as *like, love, funny, happy* etc. were regrouped into an abstract category labeled *affect*. As such, each of the first level codes became descriptors, or instances of a broader theme of reflection category.

The third phase of grounded theory is called selective coding. During this phase categories are integrated and refined until they have reached the point of saturation (Creswell, 2001). That is, no new categories emerge from the data. The researcher looks at the parts in context of the whole research in order to make sense of what the data is saying within the real context where it was collected. It is during selective coding that a theory begins to emerge. This occurs as the data are organized according to their relationships. This phase of coding involved the exploration of themes and the relationships between these themes. For instance, student reflective language emerged into six predominant themes: (a) skills and procedures; (b) task understanding; (c) affect;

(d) judgement; (e) goals; and (f) effort. One of the relationships between these themes was the level of sophistication of *strategies* students employed to reflect within these categories of reflective language. Please note each of the coding phases is elaborated on in the Analysis chapter that follows.

In addition to grounded theory methodology, the intrinsic nature and context dependent aspects of reflection necessitated a second methodology, in order to fully answer the research questions being explored.

Case Study Analysis

This study also borrowed from case study methodology. Due to the inherent complexity of reflection as a metacognitive process, it was imperative I not only explore data collected regarding the students' reflective language; but that I contextualize the meaning of this data with information regarding the students themselves. Researcher Robert K. Yin (1984) defines the case study research method as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used" (p. 23). Reflection and the learner characteristics were intricately related and could not be dissected. For this reason, the in depth exploration of each participant, using a case study methodology, was appropriate for this study. I made use of three types of case studies: (a) exploratory case study, (b) instrumental case study, and (c) collective case study.

The purpose of an exploratory case study is to identify questions or initial categories prior to the main study (Davey, 1991). A case study may be used to generate initial codes. These codes are used as a starting point to help analyze the remaining data.

In this study, the exploratory case study was not a part of the original research design, but emerged out of necessity when research commenced for the purpose of a graduate course evolved into a thesis. This will be discussed later in this chapter.

The purpose of using instrumental case studies is to highlight specific characteristics of the phenomenon being studied (Creswell, 2001). Using instrumental case studies requires that the researcher determine whether to study cases that are unique in some way. In this study, the purposeful selection of learners was used to illuminate qualities of reflection in different populations of students, such as second language and special needs learners. Merriam (2001) ascertained that "a case study might be selected for its very uniqueness for what it can reveal about a phenomenon, knowledge that we would not otherwise have access to" (p. 33).

The purpose of collective case studies is to describe and compare several cases across particular phenomena (Creswell, 2001). Merriam (2001) described the relationship between the single case and the other cases in a study as each case first being treated as a single case after which each case's conclusions are used as information contributing to the whole study. A key strength of the case study method involves using multiple sources and techniques in the data gathering process.

Research Context

Participants were purposefully selected for this research study from an elementary school in Riverside School Board located in the province of Quebec, Canada. Riverside is an English school board situated on the South Shore, approximately twenty kilometers from the city of Montreal; consisting of twenty-three elementary schools and five high schools. In the process of implementing the new Quebec Education Program (2001),

Riverside School Board moved towards a student-centered approach to assessment. One element of this assessment was the development of student portfolios. In the 2000-2001 school year, most cycle one (grade one and two) students began to develop their portfolios.

My research theme became focused thanks to my interactions with teachers and students of this school board. Hence, it only seemed appropriate, and reciprocal, to conduct this study in the context of a Riverside school setting. Last, in my role as consultant, I introduced the portfolio process and provided professional development to the elementary teachers of Riverside. Thus, I now wanted to explore the practice of reflection in the classroom in order to bring the experiences of a classroom into the theories of self-regulation, socio-constructivism, and portfolio keeping. All this with the intent of bridging the gap between practice and theory on the issue of student reflection.

Method of Recruitment of Participants

Site Selection

The site selected was an elementary school with a population exceeding 500 students. The students who attended the school were from a variety of cultural backgrounds. At the time of this study, this school was in the process of implementing the second year of the Quebec Curriculum Reform (2001). As such, the cycle one teachers were in their second full year of reform implementation.

The class selected for the research study was in year two of cycle one (grade two) and the students were using portfolios for a second consecutive year. It is due to the students' familiarity with the portfolio process, and the fact that grade two students were

able to communicate in writing in such a way that an outsider could understand what they had written, that this grade level was purposefully selected for this study.

There were a total of seventeen students in this split-level classroom, twelve of whom were in grade two. The study included six of the grade two students, but none of the other students from the split. There were four girls and two boys between the ages of seven and nine years old. The participants represented a culturally diverse group; as well as having varying learning abilities, including those with learning difficulties and intellectual handicaps, such that (a) two students were identified as special needs learners in this study, (b) two students were first language learners, and (c) two students were second language learners. A maximal variation sampling strategy was used to select learners representing diverse learner characteristics typical of many classrooms. There were various reasons for this purposeful selection. First, as mentioned in my introduction, based upon my own experiences as a classroom teacher, and now as a special-education consultant, it was imperative that special needs students be represented in my population for this study on reflection. And second, the research on reflective language used by younger students is rare, and particularly when these young students are second language learners or have special learning needs. Merriam (2001) considers such purposeful selection of participants as "essential for understanding the range of variety of human experience, which is essential for understanding and appreciating the human condition" (p. 33).

Participants

Teacher

I met Mrs. Valerie (herein to be referred to as Mrs. V), three years ago through various school board workshops. Our contacts increased when I became a consultant for the same school board in which Mrs. V was employed. In the fall of 2001, preceding the commencement of this study, I was already working on a project with Mrs. V and her students. I was visiting her class in the first two terms of the school year on a regular basis to implement a Digital Reading Portfolio (Vucko, 2000). In that time, Mrs. V, who was in her second year of using portfolios with her students, and I, often discussed the students and their portfolio reflections.

Mrs. V was a reflective teacher who continued to strive to find better ways to manage the portfolio process in an ongoing manner with her students. She often sought my feedback and advice on strategies to do so. Our discussions were a benefit to both of us. On the one hand, Mrs. V gained from me ways to improve her portfolio management and, on the other hand, I gained the opportunity to learn from her and see if the strategies that I suggested actually came to fruition when tried with a group of students. In essence, we were conducting a type of *informal* action research.

During my fall visits to this classroom as a consultant, I noticed students in Mrs. V's class very often were reflecting well beyond *I like it* when discussing their learning in the context of portfolio activities. As mentioned in the introduction, this was an ongoing concern expressed by many elementary teachers in the last few years during my portfolio workshops. I knew selecting a site where reflective language was present was essential to this study. Patton (1990) refers to this as purposeful sampling based upon the criteria that

this site was "information rich" (p. 169). Moreover, Mrs. V and I had grown comfortable with one another and began to consider each other colleagues and friends. Both factors made approaching this teacher easy and at the same time, an ethical dilemma, to be discussed later in this chapter.

Students

As mentioned earlier, six students were selected for this study. Each student was purposefully selected due to her or his learner characteristics. Ariel and Cathleen were selected due to the fact they were each identified as special needs students. Ariel was identified as having Dyslexia and Cathleen was born with Down syndrome. It was important to me to remain true to my earlier experiences as a teacher and to document the reflective language special needs students used. I hoped the data collected from these students provides insight for teachers who may have special needs students in their classrooms, and who may be questioning what reflective language these students use.

Marie-Eve and Robert were selected due to the fact that both children spoke English as a second language. In my travels and discussions with teachers across the province of Quebec, many of the classrooms in English school boards have second language learners. I wanted to discover what their reflective language looked like as well.

Last, Christine and David were selected because, although they were both distinct as learners, neither struggled with a learning difficulty and each spoke English as a first language.

It was with great regret I was required to drop one particular little boy from this study. Despite measures taken by the classroom teacher, this boy lost his portfolio after

term three when it was not returned to the school. Thereby the data I collected on his reflective language development was incomplete.

The five remaining students in grade two (out of the twelve) were not included in this study for various reasons. One student, who was the source of my exploratory case study, could not be directly used for my thesis data since the content of that study fulfilled the requirements of a course. Another student was not in the classroom during many of my observations, therefore could not be included. The three remaining students did not attend the student-led conference and thereby the data set for these participants was incomplete and dropped from the study.

Parents

The parents of the six students were involved in the research study due to their participation in a student-led conference. Their role was minor and lasted from ten to fifteen minutes during the student-led conference. With one exception, the parent of the Down syndrome student, Cathleen, who I had an opportunity to observe and have informal discussions with more often during my visits to the classroom.

Technician

I also approached the classroom special education technician and asked her if she would be willing to take part in the study. Her role was particularly important in that she worked with Cathleen, the Down syndrome girl, during the portfolio selection and reflection process.

Consent

In order to begin this study, I was required to gain approval from the Concordia ethics committee. In fact, I received approval for this study twice. Originally, I intended

to conduct this study as part of the requirements of a graduate course in Research Methods. I received approval to proceed. However, in the initial stages of the data collection process it became clear I had too much data to manage in the timeframe of a course; and yet, too rich a data set already collected to simply discard. Hence, I once again sought approval from the Concordia university ethics committee to proceed with this study as part of my thesis work, permission was granted. In order to proceed, I selected one student to present as a case study to fulfill the requirements of the course, who was included in this thesis study as an exploratory case study. There was no conflict regarding the participants the parents were already informed in the first consent form that the data might be used for the purpose of a thesis.

In order to gain access to the research site, a research Summary Protocol Form was presented to the Riverside School Board Research Committee for approval received permission to proceed with the research soon after. Simultaneously, the principal was approached in person in order to request permission for research to take place in the school. I discussed the idea of the research study with the classroom teacher who happily agreed. Subsequently, parents and students received a letter (Appendix A) and a consent form (Appendix B) and the teacher and technician received a consent form for the research, outlining the requested process of the data collection to take place (Appendix C). Mrs. V volunteered to read the consent form and explanatory letter to the students. She explained to the class that I was studying at the university and would be coming to visit them more often in the next few months to look at their portfolios and to see how they were learning. One section of the consent form stipulated students were also required to sign permission for me to look at their portfolios. This was important to me,

and part of my philosophy that a portfolio first, and foremost, belongs to the student. With the permission of their parents, all the students agreed to allow me to look at their portfolios.

Data Collection

Four main sources of data were collected in this study: (a) four terms of student portfolios; (b) the second term student-led conferences were documented at which time parents were present; (c) classroom observations took place from February to June; and (d) two interviews with the classroom teacher, and informal discussions with the teacher, technician, and a parent.

Students' Paper Portfolios

Each student in this classroom developed a cross-subject portfolio. The subjects included in the portfolio were Language Arts, Mathematics, Art, French, and Physical Education. For the purpose of this study, only the subjects taught by Mrs. Valerie, English Language Arts, Math, Art, and Social Sciences were included in the data set.

Throughout the portfolio as students made selections they wrote a reflection, which was attached to the specific selection made for the portfolio. At the end of term two, the students' portfolios were borrowed for a weekend in order to copy their contents. In order to maintain the privacy of participants, students' names were masked during the photocopying of the portfolio, and the portfolio identification sheets were not included in the data set. Each page of the copied portfolio contents was labeled, using a computer label, with a student pseudonym. Once the contents were labeled, the copied portfolio was spiral bound and labeled with a matching pseudonym. A list with the students' original names and matching pseudonyms was compiled and known only to me. Next, a research

assistant transcribed the portfolios, using conventional spelling. I subsequently transcribed the portfolios within the same file, using the precise spelling the students used. This was an important step in helping me immerse myself in the data and the language students used while reflecting. Only the reflection papers were transcribed using a word processing program. Each student's portfolio became a computer file. The format used was to label each entry with the date of the reflection, a code for the term, for instance term two was T2, then the title of the reflection, relating it to the subject it pertained to. The reflection question was in bold typeface, the student reflections were in regular typeface and the teacher or adult comments were in italics. These conventions facilitated the coding process. The original contents were returned to each student's portfolio container and the portfolios were returned in their original state to the classroom teacher. The same procedure took place after term three and four.

Video Tape of Student-Led Conference

On the evening of second term parent interviews, for the first time, the students were presenting their portfolios to their parents in the form of a student-led portfolio conference. A portfolio conference is an opportunity for students to describe their learning to their parents, using the portfolio as a discussion piece (Bailey & Gushey, 2001). A group of three desks were moved to one side of the classroom and placed in such a way that the student would sit in the center of a parent and the teacher. Two tools were used to capture these conferences. One, an audio tape recorder was placed on the desk, and covered with cardstock to make it less noticeable to the participants. The second tool was a digital video camera. The camera was set up across the grouped conference desks, facing the student. In order to avoid making the participants feel too uncomfortable, the camera was placed

approximately four meters from the desks, thereby making it less obtrusive. The primary data collection tool was the audio recorder; the camera was a back up and was used to help complete my observation notes.

Participants were asked to identify themselves prior to beginning the interview for the purpose of labeling the videotape and later matching the pseudonyms from the paper portfolio to the taped conference. Prior to taping, participants were asked if they prefer me to be in the room, to have the camera running with me out of the room, or to have no videotape and I would take field notes during the conference. When I remained in the classroom, the camera focused on the speaker or on the item in the portfolio being discussed, depending on what was appropriate. However, in the case of one participant, who opted to have me out of the room, the camera remained fixed on the student. A research assistant also transcribed the conferences from the audiotapes in order to facilitate the analysis process.

Interviews and Discussions

Creswell (2001) described an open-ended, or unstructured-interview as one in which "the researcher asks the participant questions that are open to several responses" (p. 205). Two official open-ended interviews were conducted with the classroom teacher. One half way through the research and one at the end of the research. The first interview was audio taped and took place after school, in the classroom, and lasted one hour. I did use several guiding questions to initiate conversation and to keep the discussion focused (see Appendix D). The second interview took place in a restaurant whereby I took anecdotal notes and asked similar questions to the first interview. The goal of the second interview

was twofold. First, to clarify certain findings that emerged from the student data and second, to confirm what the teacher had said in the first interview.

Aside from the formal interviews, Mrs. Valerie and I had dozens of conversations around the topic of student reflection. These conversations took place spontaneously, sometimes before class, after class or over lunch. The essence of these conversations was documented in my research log once I returned home.

Classroom Observations

Classroom observations took place from February to June for a total of sixteen visits to the classroom. The focus of the first three visits was to document the essence of the classroom routines and procedures as well as to allow the students' time to adjust to my changed role from consultant to researcher. During these first visits I observed the class at different times, morning or afternoon in order to get a complete picture of the spirit of the class at different times of the day. As the study evolved, I began to focus my observations during writer's workshop time when the students were in the class for a longer period of time. It was often during the writer's workshop, or soon after, when students made selections for their portfolios.

On several occasions, the teacher arranged to make portfolio selections on the days that I would be observing. This provided me the opportunity to observe the reflection process. A reflective task included the students (a) discussing and establishing criteria with the teacher; (b) selecting a piece of work for their portfolios; (c) writing a written reflection; (d) or conferencing with the teacher. Other times, the students would be working on math problems, projects or usual classroom activities.

I kept track of observations using a notebook. Each visit was dated with the time and included descriptions of the activities I observed. I tried to capture some of the mood of the classroom when I began my notes, realizing these cues helped me better remember the details from the observation, somehow mentally transporting me back into the classroom, later when I transcribed my notes. The left margin was reserved for labels, such as the student's name or a code for what was said. Quotes were identified using quotation marks. If the teacher intervened in the discussions I used square brackets to separate this dialogue from the rest. Whenever applicable, I also sketched the way students were sitting or the symbols that the teacher used along with writing in the classroom. A research assistant was not used for this process as the notes were often sketchy and messy, and required elaboration which only I could provide.

My Role in the Classroom

My role as a researcher varied from visit to visit and during the visits themselves. When I first began my observations I tried to remain unobtrusive and most often circulated behind the students or observed, sitting in a chair at the back of the class. Other times, I interacted with the students, asking questions and often and answering their questions. Bogden and Biklen (1992) describe my role as a "participant observer" (p. 88). When I wanted to observe, my goal was to remain detached from the learning processes that were taking place so as not to influence or interrupt the students and teacher. However, as the students became more comfortable with me in my role as a researcher, they often initiated conversations with me or sought my help. For instance, if the teacher was occupied conferencing with a student, certain students came to see me as just another adult who could help them. They would leave their seats to get my attention or ask me to

help them with a task, such as finding out how many pages of paper were needed to make a folded book in order to publish their story. Although the questions and tasks were minor, sometimes they interrupted a thought or observation I was doing. This dilemma of being a researcher in a classroom of young learners highlights some of the difficulties of being a participant-observer when working with children (Bogden & Biklen, 1992). This leads me to discuss the ethics of this research study.

Ethical Concerns

Ethics in qualitative research are a sensitive issue. When working with real people and in real contexts, it is essential that no harm come to those who are participating in the study (Bogden & Biklen, 1992; Creswell, 2001; Merriam, 2001; Strauss & Corbin, 1998). Ethical issues arise throughout a research process. Merriam (2001) describes the role of the researcher as "weighing costs and benefits of an investigation, with safeguard to protect the rights of participants and the ethical consideration in the presentation of research findings" (p. 213). Ethics were addressed in several ways in this study.

The first step to ensuring the participants' safety was described in an earlier section explaining the research consent process. This was notably the easiest ethical issue to address. Other than consent, there are few hard rules for ethical research in qualitative research. Most people who write about ethics in research suggest a practical, reflective approach on the part of the researcher (Merriam, 2001). Discussions of how I ensured my study was conducted ethically and respectfully are elaborated under the following six concerns: (a) in the students' best interest, (b) blending in, (c) temporarily leaving the site, (d) relationship with Mrs. V, (e) researcher as expert; and (e) reciprocity.

In the Students' Best Interest

I tried to be very conscious of the impact my visits had on the students and the teacher in the classroom. Even though I was welcome and that the visits were most often scheduled, I always let the teacher know that I was in the classroom. If I arrived before the class had commenced I would inform her of the role I was going to play that day, observer or participant or a combination of both, and sometimes ask Mrs. V if she had a preference (to be discussed later under the heading of reciprocity).

The other issue that arose soon into my observations was that I realized that I could not remain an observer if the students required my assistance. During the periods when I decided to observe and not interact with the students, there would at times be students who approached me for help, or who wanted to read their written story to me. Many times, these students were not part of this study but relying on my common sense; at first I always stopped my observations to help. To these students I was simply another resource in the classroom. However, as the students became to see me as just another adult I felt comfortable asking a student to wait a moment if I was in the process of capturing an important quote from my observation. This was also something that Mrs. V did when she was working with a student and someone else required her assistance.

Overall, I addressed classroom ethical situations in two ways. One, whenever possible, I tried to follow what the established class rules, when I was not sure, I always checked with Mrs. V. For instance, one day a few students picked-up on the fact that maybe they could get away with going to the washroom, more than one person at a time, by asking me instead of the teacher. I was thankful at that moment for my own prior teaching experience and without hesitation, redirected the children to Mrs. V.

Consistently, I addressed classroom-related ethical concerns by posing myself a question when placed in an uncertain situation: *what is in the student's best interest?* If it meant stopping my observation and risk missing an interesting statement, that came second to the needs of the student standing before me. I consoled myself in the fact that I was returning to the site for numerous visits.

Obtrusiveness

On a few occasions the students would become aware of me watching them and taking notes. Sometimes they would scurry to get back on task, as though they were saying, *hey, watch me!* When this occurred I would put down my notebook and move on to another part of the classroom to defer their attention from me. Glesne and Peshkin (1992) refer to this as an ethical dilemma that occurs when a participant over identifies with the researcher and may try to provide responses that would please the researcher. As important, I did not want to interrupt the learning or somehow shape the students' behaviour in such a way that what I was now observing was atypical (Merriam, 2001).

Last, at the onset of the research I discussed my concerns with Mrs. Valerie about being disruptive to the students and her. Mrs. Valerie and I had an agreement that if my presence was an interruption she would let me know. This did not occur during my time with the group.

Temporarily Leaving the Site

During the month of March, there was a student teacher from a local university who was taking over some of the teaching in the class. Mrs. Valerie informed me that this student teacher was experiencing difficulties in her new role as a teacher. Here is an excerpt from my research log on how I grappled with this dilemma:

Stay or Leave?

> ...Okay, what are the pros and cons of me staying or leaving? If I stay, there is no interruption to my data collection process and observations. I can continue to collect information and maybe seeing the students with a student teacher will give me a different perspective. Cons, the student teacher is having a hard time, even if the [student teacher] gives consent, if I stay this may be harmful in that I think I will be an additional stress. It's hard enough to begin to teach and have the 'real' class teacher in the room, let alone a stranger who is 'researching' your processes. Also, with what Mrs. V has mentioned to me, there may not be many occasions when the students will be asked to reflect. Maybe leaving the site will give me some time to go through the portfolios again and focus my next visits. And hey, on a selfish note, I do have three courses; a job and contract work to finish and I could sure use the time.
>
> Research Log, February 28

As a result, during those three weeks I informed the teacher that I would not come in for observations as I thought that this would be too many disruptions for the students, a stress for the pre-service teacher and an additional responsibility for the classroom teacher.

Relationship with Teacher

My greatest ethical concern during this study was that this research would somehow jeopardize my relationship with the teacher. Mrs. Valerie and I were colleagues and had become friends. On the one hand, our relationship made each of us feel at ease with one another and provided for extensive numbers of conversations. At this point I turned to the literature on ethics in qualitative research and found that Glesne and Peshkin (1992) provided me with some insight. The most important point that I retained from their discussions on friendship and research were that I was to remember I was "the researcher at all times" (Glesne & Peshkin, p. 35). So, I discussed this with Mrs. Valerie, explaining that once I commenced the research that our conversations, in the classroom and outside, would become a part of my data. I addressed this concern by frequently reminding Mrs. V at the beginning of one of our chats, that if she did not want a conversation to be a part of the research, she simply had to say, *off the record.* This arrangement worked well for us.

In addition to concerns about our friendship, our relationship proved to be awkward at times such as during the 'official' interviews. Here follows an excerpt of a rocky start to our first interview.

> I set up the tape recorder and informed Mrs. Valerie that I would take a few notes to help keep me focused. I explained that I had a few guiding questions to help us keep on topic. Because we knew one another I was concerned about getting too far off the topic of reflection during the interview. We started the interview and after I asked my first question, we

were interrupted with a knock at the classroom door. We started the interview again and here is the awkward discussion that followed:

Stephanie: I'm going to ask you to define a few things just so that I can have your perspective of what a portfolio, and what reflection means to you. [Mrs. V is laughing in the background, causing me to smile and laugh with her, I feel foolish, like a student acting up in class, I tried to regain my composure].

Stephanie: (Laughing) Don't laugh [Mrs. V] [more laughter from both of us].

Mrs. Valerie: (Nervous laugh)

Stephanie: Ah…(pause) and then I'll ask you just a few things and just feel free to just share that [your thoughts] with me.

Mrs. Valerie: Okay. Well I think I know where I can start.

Stephanie: Okay. [I paused to give her an opportunity to begin, but there was an awkward silence where we just stared at each other and Mrs. Valerie glanced at the tape recorder, I knew she was feeling uncomfortable]

Mrs. Valerie: [laughter resumes] I don't know if you wanted me to wait for questions first.

Stephanie: No, not necessarily [I stopped the tape recorder at this time and spoke with Mrs. Valerie as a friend and a researcher. She expressed that it was just weird for us to be talking in

> an interview format. I asked her if she wanted me to not tape, and she was very adamant that I continue. I moved the tape recorder out of the way, so that it wasn't between us, and I put my note pad to the side, so that it would feel more like out usual conversations. Once the awkward moment passed, the interview went very well]
>
> Research Log, April 16.

Although this moment seems rather light-hearted, I tried to remain conscious of my role as researcher. Hence the reason I made the small adjustments to make Mrs. Valerie feel more comfortable as a participant in this research. Once again, at the forefront of my mind was that I was a researcher in this relationship at that moment (Glesne & Peshkin, 1992).

I was also very careful not to interrupt Mrs. Valerie during the class times when I became a researcher in the classroom. After the study was over, Mrs. Valerie commented to me that she had thought it was rather funny how *official* I was at times when I came to her classroom once I became a researcher. In my role as consultant, I would pop-by to ask her a question or share an idea while the students were working. But once the research commenced, and I was in the class far more frequently, I stopped these types of informal moments during class time and usually waited for her to initiate talk with me if I was present to document an observation.

One of the other ethical concerns I had was that the teacher would not deem my descriptions of the students, the setting, and herself, accurate and thus cause her distress or feelings of distrust or resentment towards me. For this reason, as I began to write and

describe what I was observing, I often checked with the teacher to clarify activities that I was observing and to ask her to read what I wrote. On several occasions I asked her to describe the activity which would be taking place during my observation. I used the language of the classroom to describe what I observed, for instance; I use *book talk* instead of book report throughout this document. Mrs. V was accepting of what I had written and when listening to my description of her said, "I feel validated."

Researcher as Expert

After several initial observations I began to realize that an unwanted pattern was emerging in my discussions with the teacher. Once Mrs. V finished a reflection activity or the school day was over and I was in the classroom, she would ask me, "how was that?" I thought nothing of this the first two times, and would simply answer, "great!" But, after the same question arose repeatedly at the end of a lesson or class period, instead of my usual "great" I replied with a question "why?" Mrs. V explained that she wanted to know what I thought and to see if I was getting good information for my research, adding that she could do something differently if I wanted. After some discussion the issue arose in the fact that she considered me a portfolio and reflection 'expert'. What I interpreted from that is that she was concerned about doing something incorrectly that might be reflected in the data. This issue was resolved in two ways. One, after each observation I tried to informally debrief the teacher, letting her know what I had observed in the students and herself that day. Two, at the end of term three I agreed to assist Mrs. V in planning out a term of reflection, guiding her through a series of steps to help her design reflection questions for the last term. This process will be elaborated

on in my findings and discussions. Working with the teacher to plan for a term of reflection was one of the ways that I addressed the issue of reciprocity.

Reciprocity

Glaser (1982) defines reciprocity as the "exchange of favors and commitments, the building of a sense of mutual identification and feeling of community" (p. 50). In my role as a pedagogical consultant, reciprocity was already a part of my interactions with teachers. Whenever I asked a teacher to co-present a workshop, I would consciously send a thank you note or provide a small token of appreciation for her work. For this reason, during this study I was highly conscious of wanting this research study to be reciprocal for all the participants. This was addressed differently for each of the groups of participants.

The parents who gave consent to the study will all receive a copy of the final report, as well as the technician, and the teacher. Reciprocating with the students was quite easy. For one thing, they did not expect anything from me and were delighted if I agreed to read them a story, or listen to their personal creations. Other times this involved the simplest of gestures that are appreciated by a child in second grade, such as opening up a tricky juice box, double knotting a shoelace, or being a receptive audience to a riddle or joke. In addition to this, with the permission of the classroom teacher, I brought in treats at Valentine's day and at the end of the year. They were delighted and my 'thank you' gift to them generated many thank you's in exchange. Due to the fact that this was a split class, I also brought treats for the other students who were not a part of this study.

Reciprocating for the teacher was a greater concern for me, as this study required a lot more of the teacher's time than collaborating for a workshop. Mrs. V invested a

considerable amount of time in this study. At one point in the study I came to feel guilty about the amount of time I was asking of Mrs. V, and I did not want to become what Glesne and Peshkin (1992) refer to as a researcher exploiter. As per usual, once I grappled with an issue during my research, I turned to Mrs. V with my concern.

Mrs. V laughed out loud and told me that she felt the exact same way, that she was gaining a lot from my being in the classroom and that I was not getting enough for my research! In helping the students, listening to their stories, or sometimes intervening to respond to a quick question if Mrs. V was otherwise occupied had not only benefited the students, but also the teacher. There were several other ways that I tried to give back to Mrs. V including, taking on the role of assistant when the task required it, taking her out for lunch on three occasions, helping her develop the layout of her term four reflection questions, and listening to her ideas about portfolio and reflection. Last, I told Mrs. V that I considered the research study to be a joint venture. Whenever I spoke to her I used the term 'our research'. I think that she felt once again validated to have her story told. As such, I mentioned to Mrs. V that I would like to share *our* research by contributing to the literature on student reflection and publishing an article where we, along with my research supervisor, would be co-authors. She was delighted. Such practices are common and recommended in the literature on reciprocity in qualitative research (Merriam, 2001; Tilley, 1998).

In sum, I believe that both the researcher and participants benefited from this study on student reflective language in grade two. I addressed ethical issues as they arose: (a) by following research protocol to gain consent from the university, school board, school principal and the participants; (b) sometimes by writing in my research log; (c)

sometimes by exploring the literature; (c) other times by relying on my past experiences and common sense; (d) but most often, through discussions with the classroom teacher. In keeping issues of ethics and especially reciprocity, at the forefront of my practices, I was able conduct what Tilley (1998) refers to as "respectful research" (p. 317).

The upcoming section addresses the procedures used to analyze the data. The analysis chapter begins with discussions on how I addressed issues related to trustworthiness, or validity, of this study. Followed by explanations of how I used Grounded theory methodology to analyze the data and borrowed from case study analysis to interpret the data from various perspectives.

ANALYSIS

Trustworthiness of Data: A Qualitative Approach to Ensuring Validity

Ensuring the quality of a study is essential from the selection of the research questions to the analysis of data and reporting of findings. A reader must be able to judge whether the findings of the researcher are accurate. Most writers suggest qualitative research should be judged as credible and confirmable as opposed to valid and reliable (Merriam, 2001). Some qualitative researchers have argued that the term validity is not applicable to qualitative research and espoused their own theories of *validity* and often generated or adopted what they consider to be more appropriate terms, such as *trustworthy, relevant, plausible, confirmable,* or *representative* (Denzin & Lincoln, 1998; Guba & Lincoln, 1989; Hammersley, 1987; Mishler, 1990; Wolcott, 1990). Other qualitative researchers have rejected the notion of *validity*, in any form, as entirely inappropriate to their work. I will adopt the term *trustworthiness* in my discussions.

Returning to chapter one, briefly, I want to recall that the emputus of this thesis was to bring practice into theory. In such a way that documenting practices from a grade two classroom would (a) not only benefit the teachers reading this study, but also (b) bring classroom research to the forefront of qualitative endeavors, as legitimate means for building theory, in this case, regarding young students' reflection. For this reason, a great deal of care was taken from the onset, to the completion of this research to ensure findings would be deemed trustworthy. Following, I discuss issues and methods addressed during the course of this study. Research suggests (Glesne & Peshkin, 1992; Guba & Lincoln, 1989) trustworthiness can be ensured by (a) addressing subjectivity, (b)

writing rich descriptions, (c) fully disclosing coding schemes; (d) employing a mixed-methodology, (e) discussing transferability, and (f) triangulating.

Addressing Subjectivity

> The quest should not be for fool's gold of objectivity, but for the real gold of self-awareness. For it is not our subjectivity that entraps us, but our belief that somehow we can be free of it
>
> (Rubin, 1981, p. 103, in Merriam, 2001, p. 703).

According to Peshkin (1988) subjectivity is an invariable aspect of social research. In turn, Le Compte (1998) locates subjectivity in researcher's personal history and professional training. By being conscious of these influences and thereby identifying the sources of influence, researchers can enhance the quality of their studies. The purpose of the introductory chapter was to explain my prior experience with student reflection. Moreover, I do not seek the 'fool's gold' that Rubin (1981) alludes to in the above quote. There has been no desire from the onset of this study to dismiss my experiences as an educator. For this reason, I do not choose to use the word *bias* to label my prior knowledge, as it carries with it intonations of something wrong or deceitful. Instead, I adopt the position shared by researcher Lilian Rubin (1981) who states that for social researchers "to deny their subjectivity is to deny the basic assumption that people are shaped by the social environment" (p. 708). As such, the procedures employed in this thesis aim to uncover Rubin's (1981) *real gold* where subjectivity is addressed through disclosures of self-awareness and various other procedures to confirm or disconfirm my interpretations.

Two direct ways I explored subjectivity during this study included (a) situating myself in this research, and (b) full disclosure of coding schemes.

On several occasions in this document I make reference to my writings in the introductory chapter. I used this chapter as a pivotal point to situate myself in this research study. I share my subjectivity with my reader throughout by making explicit my past experiences and prior knowledge, which inevitably guided my research processes and provided a lens through which I observed, interpreted and wrote what I saw. LeCompte (1998) stated that in order for research to meet the standards of validity, the researcher must make explicit her or his subjectivity so as not to obscure the findings. Moreover, that this prior knowledge also "build in some theoretical tradition" (p. 659). As you will see in the upcoming pages, my experiences are but one lens I used in this study to analyze the phenomenon of reflection.

The second method I employed to address my subjectivity as a researcher was via disclosure of my coding schemes. The categories of codes for the student reflections and for the teacher reflection questions can be found in the Findings and Discussion chapters of this thesis. This decision adds to the trustworthiness of my findings in that for themselves, readers judge whether the codes are trustworthy. In addition, including my coding categories provides the opportunity for processes of this study to be utilized by other researchers. This will be discussed further in the concluding chapter.

Duration of Time in the Field

One of the strengths of this study is that it explored the development of student reflection, as it occured, in the context of the classroom. Perry (1998) discussed the need for research in the field of self-regulated learning, with young learners, to become

situated in the context of classrooms. Moreover, one of the essences of qualitative research is immersing oneself in the field of study for a period of time long enough to know the people and context in an in depth manner (LeCompte & Pressle, 1993; Merriam, 2001). The purpose of such research practices is to verify events over time. As mentioned, I spent 16 days as a researcher in the grade two classroom from February to June. On account of the particularities of how this study emerged, I was already familiar with the grade two classroom, the teacher and the students due to other time I had spent with them in the first part of the school year in my role as consultant. Subsequently, the sixteen days I spent as a researcher in this classroom allowed me to focus my attentions and to document what I was seeing, hearing and interpreting about student reflection.

Rich Description

Merriam (2001) stated "the more grounded in supporting detail a researcher's findings are, the more credible and trustworthy they are" (p. 152). In the pages of this document I make a conscious attempt to capture the descriptions of the participants and the context where the study took place. Where applicable, I include excerpts from my research log, quotes from participants and scanned examples of artifacts from the portfolios. These elements contributed to the authenticity of my discussions and findings. Moreover, researcher Leslie Roman (1989) explained that using the words of participants "reduces the divided between the researcher's intellectual work and group members' ordinary way of describing and understanding their experiences" (p. 652). As the audience for this work is the classroom teacher, the words of the participants will resonate with these readers who are familiar with the dialogue that emerges in a classroom context. The importance to this study to ensure that findings are deemed

trustworthy is further highlighted by my choice of qualitative research methodologies used to explore reflection in grade two.

Combination of Grounded Theory and Case Study Analysis

As discussed in the Methodology chapter, this study borrows from grounded theory and case study methodology. These methods were purposefully selected in order to ensure a complete picture of reflection would emerge from the data collected. In grounded theory research, the data collection process contains a self-correction nature. That is, based on analyzing one set of data, the researcher obtains direction from the analysis for the next set of data (Charmaz, 2000). Using a grounded theory approach also permitted me to remain close to the data throughout the analysis process. As the literature on young students' reflective language is limited, it was critical that the categories emerged directly from the data sources. As well, the initial codes for the reflection categories were emic. I used the language of the participants to code the reflections. Such an approach adds to the trustworthiness of my findings and is supported by Merriam (2001) who outlined three ways a researcher may decide to name the categories emerging from the data: (a) using the researcher's language, (b) using the literature, or (c) using the participant's language. She cautioned against selecting data for a category established by another theory. Using other people's language to generate codes and categories tends to hinder the generation of new categories, because the major effort is not generation, but rather data selection. This if often referred to as forcing the data (Creswell, 2001). Usually, emergent categories prove to be the most relevant and best fitted to the data. Particularly when there is little empirical work to guide the study. However, this is not to

say that theory did not play a role in the analysis of the data, the role of theory will be elaborated in the section titled *triangulating using theory*.

In addition to grounded theory methodology, the case-study format provided detailed insight into the six students and the classroom teacher. Using a case study approach helped me focus on specific learners and collect in depth information for each learner over a period of time. This methodology also contributed to maintaining the data and findings within the context where they occurred. One drawback of a grounded theory approach is data can begin to feel disjointed during the coding and analysis process. Using the case-study method helped me to continually pull the data back into the context of the setting and keep various other factors, such as learner characteristics, at the forefront of the analysis. One final benefit of a mixed-methodology approach is the potential for the transferability of findings.

Transferability

Although, it is not the intent of a qualitative study to generalize findings to other populations, Guba and Lincoln (1989) provide some insight into this issue. Guba and Lincoln (1989) re-categorized quantitative criteria for judging the soundness of qualitative studies. For instance, these researchers renamed external validity (generalizability) as transferability. Generalizability is an important goal for quantitative research, where results from one study are expected to reflect a greater population or inform future practice and theory and research (LeCompte, 1998). However, in the case of qualitative research, where the sample of people being studied is often smaller, focused and highly contextualized, generalizability is not often possible, and not the

intent of such research. However, if one changes the view of generalizability to *transferability*, this changes the perspective and the potential for qualitative research.

Transferability refers to the degree that results can be conveyed to contexts beyond those in the study (Guba & Lincoln, 1989). This notion may cause some conflict for researchers since it is not the intent of qualitative research to generalize findings from one setting to another (Creswell, 2001, Merriam, 2001). Erickson (1986, in Merriam, 2001) confirms this fact by stating that "the production of generalizable knowledge is an inappropriate goal for interpretive research" (p.208). However, in the realm of qualitative research, it is the role of the reader or interpreter of the study to transfer knowledge or information to his or her own circumstances or to other contexts. Glesne & Peshkin (1992) describe the role of the researcher as the facilitator, making transferability of findings possible for the reader through rich description of the research context and by revealing assumptions at the center of the study. It can be said the general lies in the particular; what we learn in a particular situation we can transfer or make inferences to similar situations subsequently encountered. In essence, the belief in transferability of qualitative research lies in the concept that it is in examining things that are particular and concrete that people are able to discover the universality of situations and theories (Guba & Lincoln, 1989). This is, in fact, how most people cope with everyday life. Moreover, this is how teachers function day to day and year to year in their classrooms.

During one of my conversations with Mrs. V, the teacher was reflecting on what she learned about her role in the portfolio and reflection process

> I already know how I'm going to do this differently next year. It seems that I always say, okay, it worked this year, but I think I can find a better way to make it work next year
>
> Research log, May 23.

Much like Mrs. V, as I mentioned in the first chapter, this is how we evolved as middle school teachers, by transferring from other's experiences and often from our own experiences with students, in order to improve our practices. It was stated at the onset of this thesis that one of the goals of this study was for classroom teachers, endeavoring to begin the portfolio and reflection process with students, be able to gleam information from this research and apply it to their classroom. As long as we can find ourselves in some way in what we are reading or others are experiencing, then transferability is possible. One of the ways I tried to ensure some degree of transfer would occur was through rich descriptions and the use of varied student profiles for my cases.

Diverse Case Studies

Merriam (2001) suggested using multiple cases helps "strengthen the precision, the validity and the stability of the findings" (p. 212). In addition, Merriam (2001) highlighted the validity of using several cases in the study of an issue, especially if those cases selected maximize diversity in the phenomenon of interest. This allows the results to be applied by readers to a greater range of situations. According to Labaree (2003) "where similarity exists, there is the possibility of finding practices that teachers can adopt or adapt to meet their own pedagogical needs" (p. 20). Hence the reason for a maximal variation sampling strategy used to select learners representing diverse learner characteristics typical of many classrooms. The diverse case selections for this study

including special needs first, and second language learners. In addition, researchers such as Yin (1994), suggest the use of cross-case analysis increases the potential for inferences to be made by the reader, especially when specific procedures for coding and analysis are used. This study begins with single case analysis and then employs techniques of cross-case analysis to discuss the findings revealed about student reflective language.

Triangulation

To minimize distortion, a triangulated approach was used for the collection and verification of data throughout this study. Berg (1989) emphasized

> by combining several lines of sight, researchers obtain a better, more substantive picture of reality; a richer, more complete array of symbols and theoretical concepts; and a means of verifying many of these elements
>
> (p. 4).

To address issues of trustworthiness of the data, three forms of triangulation were employed: (a) triangulation using multiples data sources, (b) triangulation using multiple perspectives, and (c) triangulation using theory. Each of these is discussed below.

Triangulating Using Multiple Data Sources

Data triangulation involves the use of multiple sources of information to corroborate the findings emerging from a study. This type of triangulation is commonly sited in qualitative literature (Creswell, 2001; Glesne & Peshkin, 1992; Guion, 2002; LeCompte, 1998). Merriam (2001) described data triangulation as a process whereby multiple sources of data are used to confirm emerging findings, thus supporting and adding to the trustworthiness of what the researcher is observing. This study addressed

the trustworthiness of findings by collecting several forms of data using three principle data sources by triangulating findings using: (a) documentation, (b) observations, and (c) dialogue.

The first set of information collected was through paper documents. The primary paper documents collected for this study were the students' portfolios. Four terms of portfolios were collected and documented for analysis. These portfolios contained selections of artifacts of the students' work. Included in the portfolios were journals, stories, math problems, book talks, and projects--all were accompanied by student reflections. In addition, the written reflection questions the teacher asked were also collected as a source of information from within the portfolio.

The second set of data was via classroom observations. Observations occurred on sixteen occasions and included a variety of situations: students selecting items for their portfolio, students reflecting, students completing classroom assignments such as writing stories or presenting their book talks. In addition, the role of the teacher, and the questions she asked the students were also documented. Moreover, when collecting observational data, timing of the sampling was carefully considered.

Bogden and Biklen (1992) recommended researchers conduct what is referred to as *time sampling* when observing participants. Time sampling consists of extended times in the field, which vary during the day. That is to say, in order to increase the trustworthiness of what is being observed the researcher observes participants on different days and at different times during the day. Having taught grade two myself, I knew that students at times perform differently when they are fresh in the morning compared to when they have had a full day of school. For this reason, my observations

varied across morning to afternoon and extended over several months. One final element related to my observations contributing to the quality of this study was the extensive description of the classroom setting and routines documented in my research log for the purpose of contextualizing the phenomena being studied.

The third set of data collected was through dialoguing with participants during classroom discussions and open-ended interviews. Discussions occurred when I interacted with the students and asked them questions about their classroom activity or reflections. Interviews were conducted with the classroom teacher in addition to informal discussions with the parent of the Down syndrome student and the special-education technician. Each of these data sources provided additional support for the themes emerging from the data and was used to extend or confirm what was becoming evident. One data set was often used to guide observations or dialogue from other data source, which is common practice in grounded theory and provides a self-correcting aspect to the data collection and analysis process (Bogden & Biklen, 1992). This will be detailed later in this chapter in the upcoming data coding section.

Triangulating Using Multiple Perspectives

The second type of triangulation instituted in this study was the use of various perspectives. Merriam (2001) described one of the processes of gaining multiple perspectives as "taking back the results to the participant" (p. 204) and asking them if the results are plausible or accurate. This process helps alleviate concerns related to researcher subjectivity. Another method of ensuring accurate perspective is through peer examination. Peer examination is similar to member checking, except the person viewing the data may also be familiar with research processes. Last, the qualitative researcher

may also use her experiences to corroborate findings. I used various means to safeguard my interpretations as accurate and true to the data, these will be detailed under the following headings: (a) member checking with participants, (b) discussions with my supervisor, and (c) drawing on my prior knowledge.

Member-Checking with Participants

Throughout the study I consulted the classroom teacher, Mrs. V. First, to ensure I was reading the work samples and reflections correctly. Due to the approximations in spelling used by several of the students, when I was uncertain about a word or meaning of a reflection, I checked with the teacher. When I was in the classroom and the students were reflecting in writing, I often asked them to read me their reflections to ensure I understood what was written and to ask clarifying questions regarding the message they were communicating.

Second, I asked Mrs. V to read the student profiles. I had already assigned the students their pseudonyms and I wanted to see if Mrs. V could easily identify the students being described. The teacher was able to identify all six students, without hesitation. I also read to Mrs. V her profile to ensure information I gathered regarding her teaching experience, and my overall descriptions of her, were accurate. She agreed with her profile and was in fact, pleased to see I noticed and documented several aspects of her teaching.

Third, I asked Mrs. V to briefly describe each of the students as *reflectors*. I used this information to cross-reference my own notes and observations. The combination of Mrs. V's and my descriptions provided a holistic portrait of each student.

Last, Mrs. V and I compared our coding of one of the student's portfolios to ensure the codes I was using were accurate and identifiable by another person. This

process is referred to as inter-rater reliability (Creswell, 2001) and involves two or more people coding the same document and comparing the accuracy of how each person attributed the codes to the data selected. Mrs. V. coded David's portfolio and I then compared the codes I used for the same portfolio.

Discussions with supervisor

Another form of triangulation, via multiple perspectives, is peer examination of categories. This was an important process to ensure the trustworthiness of the categories emerging from the data. I asked my supervisor, Dr. Hadwin to verify the codes for the teacher reflection questions and student reflections. These discussions helped refine and confirmed the categories of teacher scaffolds and student reflections.

Drawing on my prior knowledge

The final way I verified for the consistency in my data analysis was using my own perspectives and self-checking my codes. Regarding my own perspectives, I used my knowledge regarding student reflection to help initially code the portfolios. This prior knowledge helped me identify initial codes for reflective language students were using, later validated by the classroom teacher, Dr. Hadwin and the literature on self-regulated learning theory. In addition to this, I also conducted a self-check.

I define a self-check similar to Merriam's (2001) definition of a member check. In order to self-check, I completed the final coding of the sophistication levels of teacher reflection questions, and then put the data away for a month. After, I returned to a fresh copy of the data and I re-coded the questions and placed them into the three categories, as I had initially. I then compared my initial categories with my second attempt. My coding was nearly 100% accurate with only two questions out of 82 moved to another category.

This process helped confirm that the questions were accurately coded. Categories of teacher reflection questions appear in the *Findings and Discussion* chapters that follow.

Triangulating Using Theory

A final method employed to ensure the trustworthiness of the data collected, using a triangulation method, was to verify the categories using theory. The categories emerging from the data were explored through the lenses of self-regulated learning and socio-constructivism. In addition to this, I also explored the research on portfolios and student reflection since many of these documents were not research reports per say, but did discuss reflection in the context of the elementary classroom, with an emphasis of the role of the teacher. This method of triangulation assisted me in refining the language of my final categories, especially when I began the conceptual ordering phase of analysis.

In conclusion, several measures were taken to ensure the trustworthiness of my findings. From full disclosures of my subjectivity and coding procedures, to the purposeful selection of a mixed-methodology and various methods of triangulation, I attempted to bring practice into theory in such a way that the practices of this grade two classroom were deemed accurate and true, and the findings may enrich the theory on young students' reflections. The following section details the analysis procedures used to make sense of the data collected.

Analysis Procedures

I begin with a quote from my research log:

> I can't believe it, you read about it in the texts, but nothing is as real as when you experience this awful moment. I am afraid of my data! What if all my notes are just that, notes, random words?

> What if there is nothing there to help me understand my research questions? I started coding but nothing is clear yet. I feel so lost
>
> Research log, March 19.

This is an example of the absolute sense of fear and doom I experienced when starting to code the collected data. Glesne (1999) describes this as "entering the code mines" (p. 135). The following pages explain how my research process moved from confusion and uncertainty in the *code mines* to clarity and confidence in reporting findings uncovered.

Beginning with an Exploratory Case Study

I began the analysis for this study using a single student's portfolio as an exploratory case study. As mentioned in the previous chapter, this emerged out of necessity when a course project evolved into my thesis, where the single case study was used to fulfill the requirements of the course. Due to university regulations, this case study could not be used as my thesis. However, as you will see, the process used to analyze the exploratory case did play an important role. The goal of a single case study is to begin the coding of one student's portfolio and use these codes as a starting point when analyzing the subsequent portfolios (Bogden & Biklen, 1992).

In my first attempt at analyzing the exploratory portfolio, I used an open-coding process whereby I read the contents of this student's reflections (the student will herein be referred to as Mary). I used a photocopy of Mary's first and second term portfolio to begin the coding process. My first step was to read through all the portfolio artifacts and reflections in order to become familiar with Mary's writing. Then, I returned to the first reflection in the portfolio and began to underline words Mary used to describe her

learning in her written reflections. These initial codes were emic, in that I used Mary's words to label the reflective language.

The exploratory study revealed 40 initial codes of reflective language Mary used to describe her learning. For the scope of the course, only the paper portfolio and my classroom observations were used as data sources. However, in coding this portfolio, I made what Glesne (1999) referred to as the classic error of an initial researcher: I became so focused on not missing a detail that I coded Mary's portfolio word by word. This was the reason for my frustration as expressed in the research log quote at the top of this section. There is an expression describing my experiences as someone who was *not seeing the forest for the trees*. Not only was I not seeing the forest, the bigger picture of Mary's reflection, I was focusing on what my husband refers to as the *mushrooms*! This coding became so detail oriented that I was concerned about the need to enlist the support of a linguist who could make sense of all the grammar and syntax and help me see how these related to reflection. Needless to say, my initial analysis attempts were far too refined and had lost the greater meaning behind Mary's reflection. However, the process of coding this portfolio was not wasted and in fact resulted in several important outcomes, directly impacting this study. One, I gained new insight in how to better code the upcoming data for this study and two, I realized that some of the initial codes were in fact *first level* codes for reflective language. As well, in coding Mary's reflections, I overlooked the written scaffolds the teacher used to guide Mary's reflection, and now realized these needed to be addressed as an important data source. Conducting this exploratory case study contributed to the analysis process employed in this study, and to

improved my subsequent coding procedures, hence contributing to the trustworthiness of my coding schemes.

Model for Analysis

In order for this study to be modeled in grounded theory, a constant comparative research process was adapted. Creswell (2001) defines a constant comparative method as a process whereby "concepts or categories emerge from one stage of the data analysis and are compared with concepts emerging from the next" (p. 451). This entails data being simultaneously collected, coded and analyzed throughout the research process. In order to develop categories of reflective language used by grade two students, it was inherent to the design that the above mentioned processes occurred simultaneously such that new data was compared to initial data and new categories were created or restructured in relation to one another.

Coding the Data

The first phase of analysis entailed coding the students' term one and term two portfolios. The initial codes generated by the exploratory case study of Mary's portfolio were regrouped and used to begin the analysis of the next portfolios. To develop a coding procedure, I explored the literature for various examples and borrowed parts from various sources to create a model for coding (Creswell, 2001; Strauss & Corbin, 1996, Merriam, 2001). In order to conduct this first level of analysis, I first coded photocopied versions of the term one and two portfolios. In order to maintain the essence of the data, the teacher scaffolds and student reflective responses became the unit of analysis. I began with one student's portfolio, writing the codes in the left-hand margin and underlining the chunk of the sentence being coded. At times, more than one code applied to a sentence. As new

codes emerged they were immediately noted in my codebook and included a description and quoted example from a portfolio. Coding the portfolios was an iterative process such that after an initial coding of each of the paper portfolios, I returned to verify all the portfolios for any new codes that may have emerged from other students' reflections, which I may not have noticed at first. This was a labour intensive process repeated for the term three and four portfolios. My initial code list included 37 first level codes. The student-led conferences and my observation notes were coded in a similar fashion, except that I went directly to the computer files to code this data, as it was less lengthy than the portfolios.

Once the portfolios were coded on paper, a computer file was formatted into a table according to the codes and the portfolio contents copied into the table. I used one table for written portfolio reflections and another table for the student-led conferences. This was the first attempt at organizing the data. It was after organizing the data and indepthly analyzing the exploratory portfolio when categories of reflective language began to emerge and I realized the need to separately code the teacher questions used to scaffold the reflective process. I created a third table and organized the teacher questions according to the same codes as the student portfolios. There appeared to be a connection between the scaffold the teacher provided and the students' reflective language. For instance, one of the patterns that emerged was the process students used to write their reflections. Some students repeated a part of the teacher's question stem in their reflective response, which I labeled *echoing*.

The teacher data was far simpler to analyze than the student reflective responses. Initially, coding Mrs. V's written scaffolds entailed using the same categories used to

code the student data. However, as the process evolved, it became evident that the scaffolds the teacher employed fell into clear categories. I confirmed these categories with the teacher. As well, the emergence of the themes from the teacher data lead to a second interview being scheduled with the teacher to confirm and extend information on the role she played in scaffolding the students' reflective process. The questions for this interview can be found in Appendix D.

As part of a constant comparative model of analysis, collecting and analyzing data occurred almost simultaneously. This prompted me to write in my log about the relationship between the questions asked to scaffold reflection and the actual reflections produced by the students:

> I can't believe I almost ignored Mrs. V's scaffolds on the portfolio reflection pages! It's an interesting phenomenon; teachers ask their students questions to help guide the reflections, but the reflections do not always match the questions. Its interesting that a question can be coded as *task understanding* and the student reflective response is coded *affective, judgment*. Its interesting that the question data took me only a few hours to code, the themes jumped off the page and I had little cognitive dissonance about coding any of the questions compared to the complexity of the student reflections. At first I thought this was because of my experience with coding so many portfolio pages. But I think there is more to it than that. The teacher-planning component (the scaffolds eliciting reflective thoughts) for learning is clear-cut and neat and the actual

> learning and reflecting is very complex and messy. I need to return to the data I already have and to the classroom to observe specifically for the scaffolds Mrs. V uses and to see how these impact the students' reflection process. I think I am starting to understand what Creswell (2001) means by *conceptual ordering*
>
> Research log, May 4.

As a result, the themes emerging from analyzing the teacher's written scaffolds became the higher order codes I in turn used to collapse the student data. Once I had categories of reflective language I was able to discuss these in response to my first two research questions: *what is reflective language in grade two? And how do grade two students' reflections develop over time?* Originally, this is where I thought my research would end. However, discussions with Dr. Hadwin and reading the following quote by LeCompte and Pressle (1993), moved me further into this study:

> Ethnographers who simply describe what they see...fail to do justice to their data. By leaving readers to draw their own conclusions, researchers risk misinterpretation. Their results may also be trivialized by readers who are unable to make connections implied, but not made explicit, by the researcher (p. 267).

In analyzing the teacher's questions and the scaffolds she provided in the classroom, two more research questions emerged: *what is the role of the teacher in supporting student reflection? How can reflection be scaffolded in cycle grade two?* These additional questions initiated the higher order coding of the data referred to by Creswell (2001) as conceptual ordering.

Conceptual Ordering and Theorizing

Merriam (2001) described conceptual ordering as the process in qualitative research when concepts from the data begin to emerge into abstract categories, beyond the data itself. It was during this phase of analysis where relationships between categories was explored. While initially coding the data, different levels of sophistication in the student reflections began to cluster together. In order to be able to manipulate these categories of sophistication, I organized the data, drawing on examples drawn from the portfolios and conference for each student. It was at this time when within student case profiles were being constructed and confirmed by the teacher, technician and parent. Case profiles included demographic information such as the student's age and ethnicity. In addition, I composed what I referred to as a learning profile, including at least one anecdote from my research log that helped captured the personality and learning process of each learner. These anecdotes appear in the following chapter. Meanwhile, the teacher scaffolds were organized according to the degree of scaffolding they provided in guiding the students in their reflective responses.

In order to facilitate the process of conceptual ordering, I developed two visual diagrams, which helped me explore (a) the various factors related to the students' reflections and (b) a diagram, which helped me explore the factors influencing the scaffolding the teacher provided in the reflection process. These diagrams were also used to conduct the cross-case analysis and are included in the Findings and Discussion chapter.

The final analysis process in a grounded theory methodology entails the generation of a theory (Strauss & Corbin, 1998). This phase of the analysis involved the

exploration of relationships between the categories of student reflective language, the strategies students used to reflect and the interaction these elements had with the levels of sophistication of scaffolds used by the teacher. In this interpretive phase, I turned to self-regulated learning (SRL) literature to explore instructional elements of SRL teachers used to guide their students to become reflective thinkers, with a particular focus on scaffolding. As well as the developmental and socio-constructivist information on learning, language development and metacognition helped inform my interpretations of the interplay between the students' reflective language, the strategies they used and the role the teacher and class context played in this development.

LIMITATIONS

The nature of qualitative research is such that it is a highly subjective process. Despite the rigorous procedures of qualitative research, there are often areas where hindsight provides the researcher with a view of how things may have been done differently. Although many steps were taken to ensure the research process undertaken in this study would yield information that was trustworthy in relation to student reflection, there are certain issues I need to discuss in relation to methodological rigor. Limitations in this study primarily centred on the scope of data collection.

As mentioned earlier, six of the twelve grade two students were included in this study. One student was dropped due to the loss of a portfolio. Upon initial analysis of this student's term one and term two portfolios, this student may have represented a model case study for a highly reflective student. Not having this type of case study limited the breadth of potential analysis. In addition, the class for this study was purposefully selected due to ease of access to the site and importance of having a site where reflection was taking place in an on-going fashion. However, this was also a split class, whereby only the grade two students were considered. This limited the study in two ways. One, there were few grade two's to select from for the study. Had the study taken place in a full grade two, there may have been potential for more participants to be included in the study, thus broadening the scope and analysis. Two, the students in the other half of the split class were purposefully excluded from the study due to their young age and limited ability to communicate in writing. However, from a socio-constructivist perspective, the context of the split class may have had an effect on the grade two students' reflection

process. As there were times when the grade two's were on their own, the impact of the split class context was only briefly discussed during the teacher interview.

The final limitation in this study was my late entry into the site as a researcher. As described, I was familiar with the class, students and teacher prior to commencing this study. Nevertheless, had I entered the site in term one and two, the potential for more fully exploring various other elements, such as scaffolds the teacher may have used in the first half of the school year, would have been possible. This in itself would make for an interesting study.

Overview of Findings and Discussion

Using the combination of grounded theory and case study analysis provided a rich set of data from which emerged various interesting findings regarding reflection as seen in one grade two classroom with six unique young learners and their teacher. However, the richness of the data also posed a dilemma in terms of how to best report these findings in such a way that was both clear to the reader while at the same time, remaining true to the complexity of the findings. After various attempts and discussions with Dr. Hadwin, I decided to report the findings in a similar fashion to how this study unfolded. As such, in order to clearly communicate the complexity of this study, findings and discussions are presented in four chapters. The first results chapter provides individual portraits of each of the participants in this study. The remaining results chapters are organized according to the three research questions guiding and emerging from this study: (a) What is reflective language in grade two?; (b) How do these grade two students' reflections develop over time?; and, (c) What is the role of the teacher in

supporting student reflection? The first chapter introduces the six students and the teacher, providing a portrait of each in order to faciliate the reading of the remaining findings. Each of the first two questions present results uncovered in relation to reflective language and reflection development and draw on examples from each student to highlight similarities and differences uncovered. Throughout, I attempt to weave together the role of the teacher in student reflection with a particular emphasis on the role of the teacher in the final research question chapter which also points the existing literature for discussions related to this study.

INDIVIDUAL STUDENT PROFILES

The following section is intended to provide the reader with a portrait of each of the six students and the teacher. These portraits help contextualize the discussion of results related to the reflective language students used, as uncovered in this study. The student portraits were grouped into three sections (a) special needs learners, (b) first language learners, and (c) second language learners. Findings on reflection revealed certain common traits among students who shared characteristics common to these three groups and will be discussed later in this chapter.

Special Needs Learners: Ariel and Cathleen

Getting to Know Ariel: Her Individual Learner Characteristics

Ariel was an eight-year-old girl whose first language was English. She was the second of four children in her family. Her hair was shoulder length, and was kept in two braids, adorned with various colourful elastics at different points in my observation. Ariel experienced learning difficulties with reading and writing and the teacher confirmed that she was Dyslexic. She was the tallest student in the grade two class, and a year older than most children due to the fact that she repeated a grade. During the study Ariel turned nine years old. Ariel received academic support from the school resource teacher.

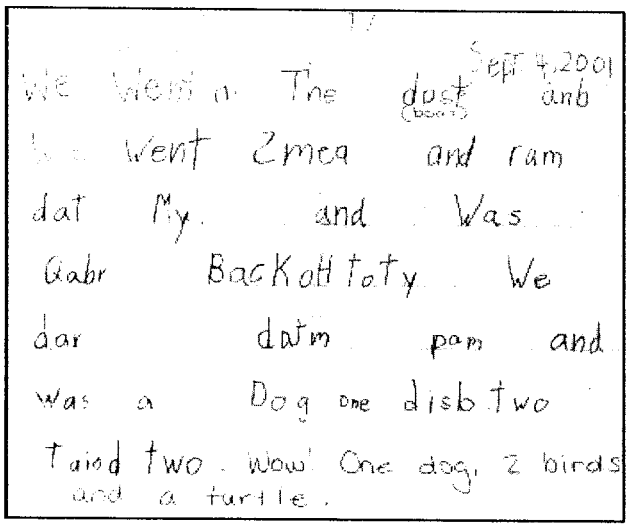
I first met Ariel the year before I began my research. So, when I walked into the grade two class, in my role as consultant, Ariel proudly stood up, pointed at me, almost accusingly and said, "I know you from before! What's your name again?" As with David, my name became the source of a conversation starter with Ariel, who, until the final term in grade two, could not remember my name and frequently asked me to remind

her when I came to the class. Difficulty with language recall is one of the characteristics of students with Dyslexia (Faust, Dimitrovsky & Shacht, 2003).

Ariel was a social girl who often appeared to be smiling and in a good mood. It was only during moments of extreme effort, such as when she was writing, that Ariel tilted her head to one side and replaced her smile with a stern look of concentration. Rarely did a large group discussion take place where Ariel did not participate. She often had something to contribute to class discussions and at times appeared to use these moments of verbal dialogue to clarify her own understanding by asking a question or reiterating what the teacher had said.

Mrs. Valerie described Ariel as a "trooper". In the span of the grade two school year Ariel went from barely being able to communicate her messages in writing to becoming a writer whose language could be understood by another reader. The classroom teacher attributed this progress to Ariel's determination to improve her writing and especially her spelling. See Figure 1 for an example of Ariel's writing from part one of the school year and Figure 2 for an example of writing from part two of the school year.

This little girl did not appear to allow her learning difficulties to stand in the way of her progress. One of Ariel's greatest assets was an ability to persist at a task until it was completed. With the support of Mrs. V, the resource teacher, and according to Mrs. V, Ariel's mom, Ariel was learning to use resources in the classroom, such as word charts and her personal dictionary, to help her with her writing. However, there were instances pointing to the fact that Ariel was conscious of her struggles with learning. Sometimes when trying to write a particular word, and spelling the word incorrectly, Ariel would

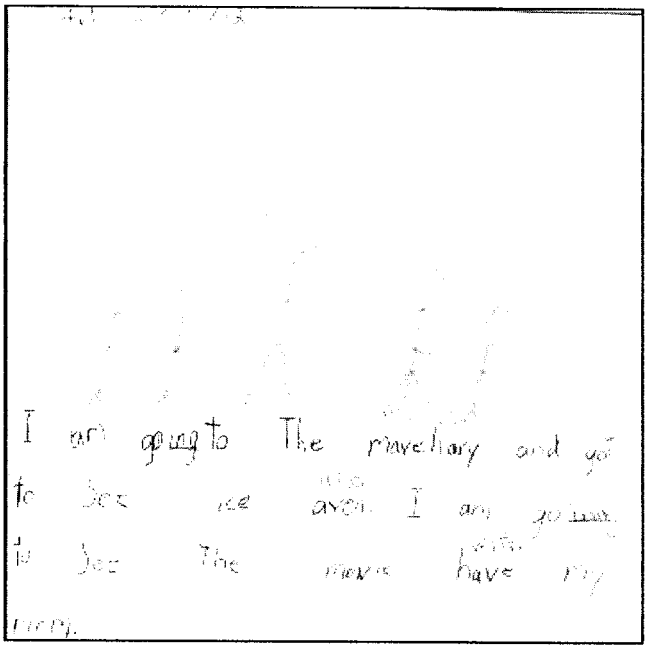


Sept. 4, 2001

We went on the boat and we went swimming and around that My and was [ ] [ ] We draw [ ] [ ] and was a Dog one birds two turtle two.

Teacher's comment: Wow! One dog, 2 birds, and a turtle.

Figure 1. Journal Part 1 of school year. Spelling is highly inventive and difficult to comprehend.



April 22, 2002

I am going to the movie and got to see Ice Age. I am going o see the movie with my mom.

Figure 2. Journal Part 2 of school year: Writing contains more elements of conventional spelling and communicates a clear message.

look back at her writing and berate herself, "I know this!" Dyslexia is a challenging learning difficulty for students who are learning to write. For instance, I remember writing this reflection after a morning spent with the class:

> It seems Ariel's desk is often covered with eraser dust. She bends over her work until her forehead is nearly resting on the desk. When I was walking around the classroom today and I reached the group where Ariel was sitting, Ariel covered up the story that she was writing, informing me that, "it's not ready yet." She waited for me to move away from her group before continuing her writing. When she had completed the story she put up her hand and said, "hey! Hey!" (I suspect that she had forgotten my name again), and waved me over to see what she had written.
>
> Research log, February 13

In a sum, the teacher confirmed my observations and explained that when Ariel wrote, this was the process that often occurred: Ariel would be writing and remember how to spell various words, relying heavily on initial consonant sounds to guide her. Then, when she would try to reread her own work, she realized that the word she had written was not the correct one. For instance, often, when Ariel attempted to write the word "what" she could quickly identify that *what* began with a *w* and would proceed to write *where* or *whale*, instead. Mrs. V described this frequently occurring process as Ariel knowing a range of words that, when she had to recall them to write, seemed to maintain aspects of their spelling, but lost their meaning. What Ariel could recall were the initial

sounds and then she simply completed the thought, with a word or string of letters that she could remember. Such a phenomena is documented in the research regarding Dyslexia (German, 1992; Lahey & Edwards, 1999). Regardless of the tremendous effort Ariel needed to put into every aspect of her learning, she continued to persist and her successes were celebrated often and with great pride by herself, the resource teacher, and Mrs. V.

Getting to Know Cathleen: Her Individual Learner Characteristics

Cathleen was an eight-year-old girl whose first language was English. She had straight, chestnut-brown hair that nearly reached her shoulders and bounced from side to side when she talked or moved around. Cathleen wore round-rimed glasses, sometimes causing her to scrunch her nose to push them back up. During my time in the classroom, Cathleen was one of the few students who used my name to greet me with a smile or hug or ask a question; to her I was *Miss Stephanie*. Cathleen was unique as a participant in this study in that she was born with Down syndrome. Cathleen was an accepted member of the classroom community and in many ways like the other girls in the classroom, chatting and playing together at recess.

Cathleen appeared to be a high functioning student with Down syndrome. She was a voracious reader and was often lost in a picture book or small chapter book during my afternoon observations. During silent reading time, Cathleen discovered early chapter books and was enamoured with the humorous series *Junnie B. Jones.* It was a pleasure to watch her read as she would sometimes speak the words out loud, smile or giggle at the funny parts and on occasion, jump up from her seat to ask Mrs. V, or a peer, sitting close by, for a word she was stuck on.

No on in the class seemed to have difficulty understanding Cathleen when she spoke. However, it took me several visits to become accustomed to Cathleen's pronunciation of words. She spoke quickly and at times muffled or blended sounds together. When she was not completely sure of what she wanted to communicate, her voice often dropped to a near whisper. Then, if I told her I could not hear what she was saying, she would bellow out her response, which often took me by surprise. This, she found humorous, and would burst into laughter. Mrs. V did not feel the same way about this type of behaviour and she asked Cathleen to apologize when such instances occured. Mrs. V commented that outbursts such as these were more common at the beginning of the school year, but had subsided considerably in the second part of the school year. The teacher credited the improvement to the interventions and collaboration with Cathleen's mother, who frequently communicated with the school team. I will take a moment here to diverge and discuss the role of Cathleen's mother as it did appear to influence Cathleen's reflective abilities.

Cathleen's Mom

On three occasions during my official observation periods, and several other occasions when I was in the school, Cathleen's mom (to be referred to as *mom* here on in) would drop by the classroom after the final bell. She touched base with Mrs. V to hear about how the day went or to discuss a particular situation that may have transpired. If there were an issue, altercation or success being discussed, mom would draw Cathleen's attention to the conversations to ensure that her daughter was listening to Mrs. V. She did this by calling Cathleen's name. In the case of negative reports of behaviour, mom would question Cathleen and wait for a reply. It was interesting to note the pattern of

questioning mom used with Cathleen to reflect on the situation being discussed. The content of the mom's questions differed depending on the situation but the flow of her questions seemed to follow a pattern. That is, first, mom would ask for an explanation such as, "What happened Cathleen?" Then, in the case of negative circumstances, such as one occasion when Cathleen called a peer "stupid", mom asked, "Is that how we talk to people?" Here would sometimes arise a contrary response from Cathleen. Mom would persist, repeating the question. The last part of the pattern was either a question asking Cathleen to reflect on how the other person felt when she behaved in a particular way or a goal setting question guiding Cathleen to think about how she could act differently the next time. Cathleen's mom appeared to use questions to keep Cathleen focused on the topic of conversation. Questions continued as part of the conversation pattern until it seemed mom was certain that Cathleen understood what had occurred and together with Mrs. V, they discussed solutions to the problem at hand or planned for celebrations when success was evident. The relationship between Cathleen and her mom appeared to add support to the reflection that was being developed in the classroom.

First Language Learners: Christine and David

Getting to Know Christine: Her Individual Learner Characteristics

Christine was an eight-year-old, English speaking girl. She had light brown hair usually worn loose and reaching the tips of her shoulders. Christine's face was home to many distinguishing freckles, which added to her charm. My relationship with Christine was friendly. She did not pay much notice to me when I was in the classroom, except at times when the teacher asked her to read me a story from her writer's folder. Her responses to my queries were always appeared well thought out and quietly spoken.

When I first began to observe Christine, I thought she looked rather sad, since smiles often needed to be coaxed out of her. After a few weeks with the class, I realized that she in fact was not sad, she was simply quieter than the other students in this study. One of the moments when I would notice Christine's quiet thinking was when she was involved in some artistic task.

Christine was a meticulous artist who enjoyed illustrating and colouring the stories that she published into little books. Figure 3 is an excerpt from one of Christine's stories and is an example of how the drawings she created were often vivid, providing visual cues contributing to her story content. In this example, the illustrated trees express the emotion of being left out. Christine was also an avid reader. On many occasions, as I sat in the peripherals of the classroom to document details about the various classroom routines, I noticed Christine discretely reading a book under her desk while the teacher was speaking or another activity was taking place. Mrs. V explained to me that she was aware of this behaviour. She described Christine as having a real independent streak and that "once she has an idea in her head, it is hard to change." So, once Christine decided to read, she read. Mrs. V and Christine had an understanding regarding this behaviour; after all, the teacher mentioned reading was not something she to discourage. However, Mrs. V did let Christine know that she was aware of what was going on under the desk. As long as the other tasks were completed, the teacher rarely interrupted the reading. One of

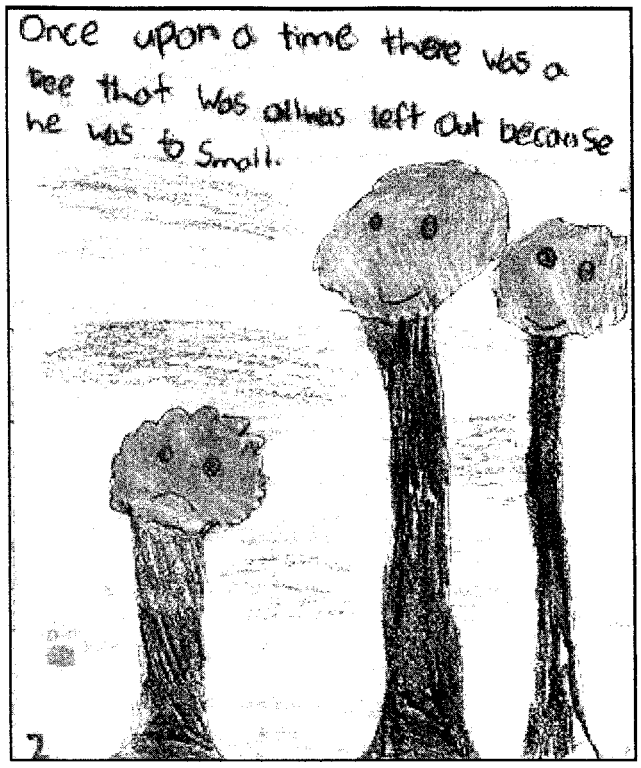


Figure 3. Christine's artistic drawing.

the reasons this arrangement worked with this student was due to Christine's seeming maturity for an eight-year-old.

Christine's serious nature projected an air of maturity that stood out from the other five students in this study. She was task oriented and appeared to complete work as assigned, opting to use other time for drawing or reading. Somehow Christine had learned what she liked, doing art and reading, and preferred to pursue these things whenever she had a moment in class. During an after school discussion, Mrs. V commented that Christine's preferences for certain tasks compared to others sometimes caused her to rush her work. Mrs. V stated she sometimes wished Christine would take the initiative to challenge herself with the assigned task, but other than encourage her, she

could say little else since Christine was a successful learner. Another aspect which reflected Christine's maturity was what Paris and Winograd (2001) would refer to as her *theory of schooling*. Christine was an astute learner who appeared to acquire learning strategies easily. She would listen to the teacher's instructions and follow through with ease or sometimes observer others and used their actions as models for her own learning. Unlike the other five students in this study, Christine rarely asked for directions from Mrs. V, but appeared to find other ways to answer questions she had. I wrote about her in my research log during an English Language Arts Writer's Workshop period taking place in third term.

> Today, the students were all working independently on the stories they started last week. While the teacher gave the instructions, Christine was in the washroom. When she returned, everyone was already working and Mrs. V was busy conferencing with a student. Unlike many of the other children, Christine did not interrupt the teacher to find out what she was supposed to do. Instead, she looked over at [ ] and then looked over at Marie-Eve. Christine then proceeded to take out her writer's folder and began to reread the most recent story [information text] that she had written about flowers. There was no hesitation; she simply began her work.
>
> Research log, April 24

Getting to Know David: His Individual Learner Characteristics

David was a seven-year-old boy whose first language was English. He had light brown hair and hazel eye. During my observations, David actively participated in

classroom activities sometimes raising his hand during large group discussions and other times interjecting his comments in between those made by his peers. Of the six students in this study, David seemed to be the most verbal during class time.

David took it upon himself to give me a new name once my role was adjusted from school board consultant to Concordia researcher in the classroom. On several occasions as I entered the classroom, trying to be discrete so as not to disrupt any activity which had already started; David would spot me and like the town crier, announce in the booming voice of a seven year old boy, "Watch out everybody! The spy from Concordia is here!" This new nickname became my persona with David who would at times remind me to get my paper and book (research log) so that I would be sure to document what he was saying. David was appeared to be a perceptive child; he often provided insight into discussions, which other students did not appear to have thought of. Ironically, the one thing that was predictable about David was that he was unpredictable. From his input to classroom discussions, his verbal and written reflections, to his behaviour and moods, I never knew what to expect from this little boy on any given day. I fondly remember writing about this outspoken, gregarious boy who, according to Mrs. V and the technician, required a good deal of daily attention from the teacher:

> David brought a great deal of humour to my observation today. He noticed that I was taking observation notes on the discussion between Robert and Marie-Eve. I was sitting to the left of the pair, out of their field of vision in order to capture some of their discussions. I could see David watching me and then I heard him whisper to his friends "Hey, watch her, when you talk she writes.

> When you stop talking she stops writing." Robert and Michelle stopped what they were doing and took a glance at me. I pretended not to notice, hoping they would continue their conversation and that David would turn back to his desk, no such luck. David continued, "try it, say something, you'll see." Robert, interested in the distraction, tried out David's theory, "I…[pause] want [pause]…to go to the [spoken quickly in one breath]…"I played along and wrote as he spoke, stopped when he paused between words. The three of them burst into giggles, finding the moment to be very humorous. Then I got up, smiled at the group, and moved around the classroom so that the three conspirators could get back on to the task of making selections for their portfolio.
>
> Research log, March 4

David appeared to use humour in order to seek attention in the classroom. However, Mrs. V commented that there were also other attention seeking strategies that were a source of problem for David at school. These included outbursts that were a frequent part of David's first few months in grade two. Mrs. V recalled that she was often required to take time after recess, lunch or gym class to speak with David to try and calm him down and discuss what evoked his reactions. At times, although only during one of my observations, David was out of the classroom with the behaviour technician, discussing strategies to help him express himself. The technician tried several behaviour modification plans. Mrs. V preferred David speak about his actions and feelings and that

they discuss alternatives. As the school year came to a close, Mrs. Valerie commented that David had made progress with his outbursts and altercations with peers were decreasing.

Second Language Learners: Marie-Eve and Robert

Getting to Know Marie-Eve: Her Individual Learner Characteristics

Marie-Eve was a seven-year-old girl who began grade two with only a few English words in her vocabulary. She was a Francophone student whose second language was English. Her blond hair nearly reached the middle of her back and made her easy to identify from a distance. She was a soft-spoken girl, who, according to Mrs. V, started off the school year feeling shy and sensitive about her limited ability to communicate in English. However, language did not seem to be a barrier when it came time to make friends, of which Marie-Eve had many. It was interesting to watch Marie-Eve learn the English language and to listen to, what I amusingly refer to as *Franglais*, a combination of French and English that Marie-Eve used when speaking with her friends. I reflected on this in my log when I returned home one evening after observing the class in the afternoon.

> ...I wanted to pay some attention to Marie-Eve today. When I was reading her paper portfolio from term one and two, I noticed that her written [English] language is really coming along well. When I first read her term one portfolio, I needed Mrs. V to help me out with a few of the entries which I could not make sense of [due to the inventive spelling]. Her *Franglais* is so interesting to listen to.

> She seems to have moved beyond her shyness of speaking English and is focused on getting her message across, regardless of the language. I wonder how/if this will impact her reflections in these last two terms?
>
> Research log, February 9

Marie-Eve tended to shy away from me in my first few visits. This made me feel very self-conscious, as I did not want to cause her any discomfort due to this research. So, during my third visit, when the students were selecting a response journal for their portfolios, I walked over to Marie-Eve and spoke to her in French. I asked her what the response she selected showed that she learned. Then, something interesting occurred, she smiled in her shy manner and responded to me in English. She explained that this response had good sentences and fewer mistakes than the other one she had written. After this encounter, Marie-Eve appeared more comfortable with me and would at times ask for my help with an activity if the teacher was busy with another student.

Getting to Know Robert: His Individual Learner Characteristics

Robert was a seven-year-old boy of Francophone parents. He had blondish-brown hair and was usually wearing a smile on his face. Like Marie-Eve, Robert also spoke French as his primary language, however he came into grade two understanding, speaking and writing English to some degree. Nevertheless, Mrs. V commented that the first few weeks of school were a little more precarious in that Robert was shy about participating in the class discussions and needed her reassurance when beginning tasks. This had changed considerably in the two last terms of the school year when I observed

the students. Now, Robert, although still gentle and shy at times, did not appear to hesitant about participating and offering his ideas to class discussions.

Robert was an introspective student, much like Christine. By the end of the school year, Mrs. V described Robert has having gained confidence in his written and verbal communication. I would consider Robert to be a bilingual student who, by term four, demonstrated ease in both languages. During my visits, Robert quickly became accustomed to me and often sought my attention as an audience for his many wonderful written stories. Mrs. V was surprised that Robert was willing to share his work with me because she considered him to be a little shy with other people.

Like Christine, Robert too was an avid artist. His journal book, which was designed such that the top section was blank for drawing and the bottom section lined for writing, always included drawings that accompanied the writing. Regardless if he used wax crayons or markers, Robert's drawings were saturated with colour to the point where the pages almost changed texture, seeming almost damp or waxy because of all the colouring. If one was not completely certain about what Robert's message read; a glance at his detailed drawings provided the remainder of the context. See Figure 4.

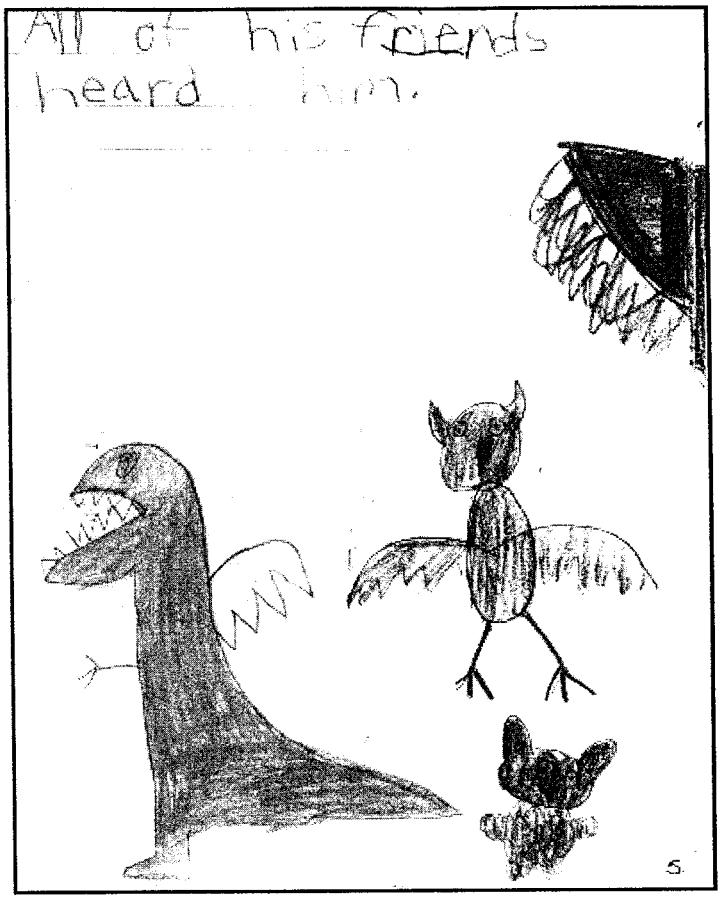


Figure 4. Robert's illustrations provide elaboration on who the *friends* are in his story. In this case, the friends are animals: a dinosaur, an owl, and a rabbit.

Getting to Know Mrs. Valerie: The Classroom Teacher

Mrs. Valerie was an experienced elementary teacher of seven years. She was in her early thirties and exuded a sense of calm, happy energy when you approached her. From a distance, you could mistake this teacher for a grade six student due to her petite stature. However, it would only take a moment of observing her in action with students to realize your error. This is a teacher who herself was a lifelong learner. Mrs. V attended many workshops both within and outside the school board and recently completed a

diploma program at McGill University. I asked her why she pursued these studies in the area of inclusion of special-needs students. Mrs. V's response was simple: she perceived a gap in her teaching that could be filled through the course work and discussions required of the university program. In my experiences as a teacher and consultant, some teachers blame or complain; instead, Mrs. V was a teacher who took action and sought information and solutions to issues arising in her classroom. This was the same approach Mrs. V employed with the new challenges posed by the Quebec curriculum, which included guiding students to become self-regulating, reflective learners.

Mrs. V greeted her students as they walked into her classroom with warm "good-mornings", reciprocated hugs that came her way, and prodded students with gentle reminders about hanging up coats and hats in the cloakroom; not to mention, reminders about emptying school bags before getting settled in for the day's routine. There were daily messages on the board directing the students with instructions to begin tasks as they arrived at their desks. Mrs. V harmonized the learning process in the classroom so that there was a feeling of calm, and also excitement that emanated as an atmosphere in the classroom. Soderman (1999) states "successful scaffolding is more likely if there is a rapport between teachers and learners" (p. 10). This rapport was evident in Mrs. V's classroom. In addition, this rapport extended to my relationship with the teacher who was always available to answer my questions, have a discussion to help me explore patterns emerging in the data or to validate sections of this document by providing feedback on the student profiles.

As you read the next three chapters responding to each of my research questions, I hope you will keep the above individual portraits at the front of you mind in order to better contextualize the findings uncovered in relation to student reflection.

FINDINGS AND DISCUSSION IN RESPONSE TO THE QUESTION: WHAT IS REFLECTIVE LANGUAGE IN GRADE TWO?

Process Used to Uncover the Reflective Language Used by Six Grade Two Students

Portfolios were collected over a full year in order to gather more instances of patterns of reflection. Analyzing reflections over the school year provided repeated evidence of emerging themes regarding student reflection. Although coding and analysis began as the portfolios were collected, the process of collapsing the data transpired over the period of several months and only after all four terms of portfolio data was collected. After multiple readings of the data it was evident that first level, emic codes shared common characteristics and could be grouped together into new categories. I created a table and grouped similar first level codes. This was an interative process and at times required returning to the student portfolios for verification and for further examples to ensure the emerging categories contained unique characteristics. Her is an example of the analysis process employed.

Documented in my code book were the following first level, emic codes: (a) like, (b) good, and (c) feel. *Like* was a code defined as student reflection that used the word *like* in a reflection or expressed a fondness for a particular aspect of learning. Some examples of reflections initially coded as *like* were "I *like* Bar graphs because they are easy ones"; "because I *like* it, because it's neat"; "I felt excited because I *liked* the reading part so much and pictures." *Good* was a code used to label student reflections that used the word *good* or expressed a student's positive description of a process or product of learning. Some examples of reflections initially coded as *good* were "I felt *good* because now I can read it without many mistakes," "I read *good* and I am proud I that I

read Jigsaw Jones," and "*Good* because I didn't have a lot of mistakes". *Feel* was used to code reflections that indicated a student's emotional response to a particular task or product of learning. *Feel* was a code that was usually coupled with other emotional language such as good, happy, nervous, or proud. Some examples of reflections initially coded as *feel* were "The book made me *feel* good because I really, really, really like pizza!," "It made me *feel* happy," "I *felt* good because now I can read it without many mistakes"; and "The book made me *feel* good because space is beautiful…".

Each of these three examples of emic codes shared common characteristics about affect and therefore re-organized into a category or theme labeled *affect*. This provided an opportunity to collapse the student data into broader categories. The language used to name the broader categories was no longer emic in nature. At this point in the coding process I could no longer find language employed by the students that best represented the new categories and I decided to use language I was familiar with from course work and readings in the area of self-regulated learning. This is a common practice employed in the grounded theory process once abstractions begin to be made (Creswell, 2001). At this point Mrs.V was asked to verify the definitions of the categories and to use these categories to code one portfolio. When our codes were compared, only two reflections out of 82 were coded differently, indicating a high level of reliability of 98% in the coding process. This inter-rater reliability contributed to the validity of the codes used in this study.

Six Topics of Reflection Emerge from the Data

Once the data was collapsed an interesting finding emerged regarding the language students used to reflect in a portfolio context. All six students reflected using

the same categories of reflective language. These categories were named *topics of reflection* and were labeled (a) task understanding; (b) skills and procedures; (c) affect; (d) judgment; (e) goals; and (e) effort.

Multiple Coding of the Topics of Reflection

Topics of reflection were the six categories of reflective language emerging from this study. Each written reflection in the portfolio focused on a particular aspect of learning. When students reflected on their learning they used language that indicated they were focusing on one or more topics of reflection. I was faced with a dilemma when rearranging the student reflections into the broader categories. Some reflections fell into two or more categories. For instance, in the previous example "I like Bar graphs because they are easy ones" this reflection was coded *affect* due to the emotional connection and use of the word *like*. However, this reflection was also an example of *task understanding* in that the student reflected on the reason for choosing to draw a Bar graph, instead of a Venn diagram. The reflection communicates the student understood the task of drawing a Bar graph and found this to be the *easy* one to draw out of the two. Concerned about remaining true to the data and not forcing any reflections into one particular category, the data required that multiple codes at times be applied to a single unit of reflection. The reason for this was students in grade two used few words to reflect, but those few words communicated many aspects of their metacognitive thoughts. Take for instance Marie-Eve's story reflection written in time 2 of the school year. She was prompted to reflect on how she could improve her stories in the future.

I can improve my next story by:

> Thincing to allwasw make colere for the tittle. And the cindegardin will like it better.
>
> [Thinking to always make colour for the title and the kindergarten will like it better.]

This reflection unit was labeled with three codes: (a) *task understanding* because Marie-Eve demonstrated an understanding of the importance of a title in attracting a reader to her story (the kindergarten students); (b) *skills and procedures* because she explained how she would improve her story (by colouring the title); and (c) *affect* because the reasons for her improvements were so that her audience would *like* her work. Selecting to label this reflection with only one code would not have provided a true portrait of the topics of reflection Marie-Eve used to reflect.

There were advantages and drawbacks to the decision to assigning multiple codes to data units. On the one hand, using multiple codes for one unit of reflection allowed me to remain true to the grounded theory process and to the data generated by the students, giving the students the benefit of the doubt when a reflection straddled more than one topic of reflection. On the other hand, multiple coding lead to limitations when interpreting the connection between the student topics of reflection and the prompts and questions used by the teacher to scaffold the reflections. This will be discussed later in this chapter.

In the following section I provide a brief definition of each topic of reflection identified in this study, drawing on a few examples from the grade two students' portfolios. Please note, whenever appropriate student examples are presented using original spelling, syntax and punctuation. Where it appeared the reader might have

difficulty with a word, the conventional spelling was included in square brackets. One additional note, see Table 1 for further examples of student reflective language used within each of the six topics of reflection. This table demonstrates how emic language was used to develop the abstract categories.

Defining the Six Topics of Student Reflection

Task understanding

Student reflections related to the topic of *task understanding* employed language defining the elements of an activity or skill used in completing a particular classroom task. Reflections within this category involved several aspects related to topic of task understanding. One, students reflected by describing the elements of the task. For instance, Ariel, the student with Dyslexia, reflected on whether anything made it difficult for her to listen to her peers during Book Talk: "No because you just sat and listen and keep your ears wide open." Her reflection indicated an understanding of what was required of her as a listener, *sat and listen...ears wide open.* She was able to define certain elements of the task of listening and this occurred throughout her portfolio.

Cathleen, the student with Down syndrome also reflected on her task understanding. However, when Cathleen described the elements of a task, she usually retold the steps she had taken in completing a task. For instance, when reflecting on her journal in time 1 of the school year, Cathleen wrote that her journals showed that when she writes she: "Idothedat [I do the date]. IdoMyPies [I do my periods]. Ido the clows ina I can write wors [I do the clowns and I can write words]." She was describing the

Table 1. Example of Student Language Used Within Six Topics of Reflection

Topic of Reflection	Emic language used by students
Skills & Procedures	Draw/Colour Write Study Talk Time Think Count Edit
Task Understanding	Hard Easy Nothing
Affect	Like Don't Like Funny Proud Feel Good Happy Is Like Think of Wish
Judgment	Know Learned I Can Improve Growing
Goals	Will I could
Effort	Try Try Best

elements of the journal writing task by enumerating the parts required of this task: writing the date, using punctuation, writing words and drawing a picture (*clowns*). When she reflected in order to set a goal for improving her work habits, Cathleen explained the steps of the task of coming inside after recess or lunch "in line be we quit [In line we be quiet]. In the lcoker room we put cours on the hauer [In the locker room we put coats on the hanger]." Once again demonstrating an understanding of what is required of the task of coming into the classroom from another location. Both examples demonstrated Cathleen's understanding of the elements of the tasks she was asked to complete.

A second aspect of task understanding involved students making a personal connection when reflecting on what they perceived to be the difficulty level of a task. One example was provided earlier in Ariel's reflection on why she selected Bar graphs over Venn Diagrams when organizing her math problem (*easy*). On several occasions Ariel reflected on the topic of task understanding, indicating her reason for selecting a book, a strategy or attributing her success to the *ease* of the task at hand. Take for example her reflection on her Book Talk. When Mrs. V asked her to reflect on how she selected books to read and report to her small group, Ariel responded "it looked easy to read. and it have nice pistures. [pictures]." The way she defined the task of selecting a book was based upon her criteria for an *easy* book to read. As Ariel struggled to read many books on her own, she was learning to select books in which she recognized some words and to her, these books were considered *easy*. Overall, *task understanding* topics of reflection included instances when students communicated their thoughts on the elements of a task, and made a personal connection to the level of difficulty of a task.

Skills and procedures

Student reflections related to the topic of *skills and procedures* employed language describing strategies or processes used for task completion. Skills and procedures were often related to a student's task understanding except instead of reflecting on the general elements of the task, the student reflected on what she or he actual did when undertaking the task. For example, David reflected on the strategies he used to help him study his spelling, he wrote "bran and Fingers. and dawnting [brain and fingers and drawing.]" Mrs. V explained that when she discussed this reflection with David she understood that he reflected that the process he used to study spelling was to use his brain (think) and fingers (he counted the number of letters in a word) and then he wrote the words. Another example of skills and procedures form David's portfolio occurred when David reflected on what he could do to ensure his homework was completed in the future. He responded "Don't waste time and try not to be sick and not get my granny mad." This is an interesting example of a process he planned to apply to completing his homework in that the reflection focuses on what he would *not* do. Certain student reflections communicated skills and procedures as the removal of a particular element, such as wasting time. This is also an example of how students used reflection to regulate their learning processes. In David's case, his reflection demonstrated that he understood he needed to use his time better when doing homework and his strategy was to not waste time. One final example of student reflection on the topic of skills and procedures came from Robert, the Francophone student's portfolio. Robert set a goal to keep his desk clean in Time 1 of the school year. When asked how he would achieve this goal he wrote in his portfolio: " I need a paper that Samyn is hacaung hi dsca. All look in

my aveday [I need a paper that someone is cleaning his desk. I'll look in my [desk] everyday." Robert's reflection indicated he would draw a visual clue of someone cleaning his desk as a reminder. He elaborated in his reflection that the procedure he would employ to learn to keep his desk clean (skill) was to *look in my [desk] everyday.* His reflection included two procedures or strategies to keep his desk clean. I was a little confused when I read Robert's reflection and required clarification from Mrs. V regarding his reference to the need for a paper. As it turned out, the class had discussed setting goals for the upcoming term and Mrs. V emphasized the importance of students finding a way to attain their goals. One of the ways identified by the students was to use a drawing to help them remember their goals. Drawing a picture was Robert's choice of strategy.

One of the other ways students reflected on skills and procedures was to communicate the need to seek help in order to accomplish a task. One example of this cames from Cathleen's portfolio when she reflected on what she would do the next term to help her study. Cahtleen's reflection read "My Mommy and Daddy will help me." Cathleen often mentioned her parents, the teacher or the technician when reflecting on skills and procedures. Cathleen received assistance from these adults on a daily basis and her reflections point to the fact that she was becoming aware that asking for help was a strategy for learning. In sum, reflections about *skills and procedures* were related to task understanding but also included instances of strategy selection, including help seeking, with specific reference made to *what* the student actually did during the learning activity.

Affect

Student reflections related to the topic of *affect* employed language describing an emotional response to the task, process or product of learning. Several examples were provided at the beginning of this chapter, during discussions of emic codes such as *like, good,* and *feel.* A slight variation of types of affective reflections were uncovered in the portfolio, these reflections communicated a personal connection or memory experienced by the students. For instance, through out the school year Marie-Eve made a personal connection to her pet dog when reflecting on her work. When she was asked to explain why she selected a particular journal for her portfolio she wrote: "I like my dog and I retd [writed] about me and my dog." Her reflection indicated an emotional rationale for selecting her journal based upon a personal connection she had to the content of what she had written. In contrast, when Christine reflected on the same issue she wrote:

> I think that what I rowt is funi *for example* [prompt from Mrs. V] boy he was hogri. But 2 minis aftre that. He wokt rit infront of 1 rosbere bed Jack was so hogre. Hayt ate all the rasberes on the bech.
>
> [I think that what I wrote was funny *for example* [prompt from Mrs. V] boy he was hungry. But two minutes after that he walked right in front of a raspberry bush. Jack was so hungry he ate all the raspberries on the bush.]

Christine's reflection was also an example of affect, focusing on the element of humor in her journal. From her reflection it appeared she valued humorous stories and the fact that she herself wrote a *funny* journal was her reason for selecting it for her portfolio. Not all

affective reflections were about positive emotions. For instance, when Christine reflected on how she felt after her Book talk presentation she wrote in her portfolio "I felt a litel nrvis [I felt a little nervous.]" However, such instances were few and appeared in particular in relation to how students felt about presenting their books. Although the instances of negative affect were few, it would be an interesting topic of study as to why students did not employ negative affective language, maybe they did not think it appropriate to include such reflections in their portfolios? Overall, *affective* reflections included instances of emotional language, which were at times an indications of satisfaction, humour or concern related to a task or process.

Judgment

Student reflections related to the topic of *judgement* employed language describing how they evaluated themselves in terms of what they are able to do or based on their progress in comparison to themselves, or to other external criteria. Often, reflections employing language of *judgment* began with an imperative statement such as *yes*, *no* or *I can* or *I learned.* For example, Marie-Eve wrote about her progress in writing at the end of the school year and stated that she felt "Good because I didn't hav alote of mistacs [Good, because I didn't have a lot of mistakes.]" She made a definitive statement and evaluated her progress to be good based on the fact that she made fewer mistakes than she used to. This reflection demonstrated Marie-Eve was able to reflect on her work and compare her progress to her earlier work, making a comment or judgment on what she noticed. Another interesting example from Marie-Eve's portfolio was a reflection on her progress in journal writing from September to April. She communicated:

> I didn't use my pieriedyid so much. And now I use them. And I rite more then before. And before I rote the worde and like this *end.* And now I rite like this *and.*
>
> [I didn't use my period so much. And now I use them. And I write more then before and before I wrote more words and like this *end* and now I write it like this *and.*]

She was able to judge that her journals have changed because she wrote more and her spelling was more accurate.

Another way students indicated judgments about their learning was to compare themselves to someone else. David provided an example when reflecting on the best thing about a story he wrote:

> The picther's because Iv Rine droiing for a very long time I omost drow like my DaD.
>
> [The pictures because I've been drawing for a very long time I *almost draw like my dad.*]

His basis for judgment was that his pictures were the best part of his journal because they were almost as good as the pictures his father draws. David used his father's work as the standard against which to compare and assess his own work.

Sometimes students made judgments that their work did not need any improvement. For instance, at the end of a Social Sciences project when Robert constructed a diorama of a wolf's habitat, Robert was asked to write about what he would change in his habitat if he had a chance. He responded "I am proud of my wrok [work] because it took a lot of ideas to do my habitat. I do not have to change anything."

Christine also evaluated that some of her portfolio work needed no improvement. For example, while reflecting on her role as a listener she indicated: "No difikultis [difficulties]. I do not ned [need] to work on next time", or when completing her book talks: "I always did it on the weekend." One might question whether judging one's work as not needing any changes indicated that task criteria were satisfied, or that the student did not understand the criteria for improvement. Mrs. V and I discussed this issue and she perceived that with these six students, it really depended on the context of learning. This question should be explored in future research. Overall, *judgment* topics of reflection included instances of student statements or evaluations about their learning progress or products of learning based upon comparisons of their own work or external criteria.

Goals

Student reflections related to the topic of *goals* described what they wanted to do in order to improve in a particular area of their learning. These were forward reaching reflections where students used language to project what would come next in their learning process. As well, goal setting reflections often employed evaluations in that students first had to identify and judge their progress or product before determining what steps to take to work towards their objective. When goal-setting, students often drew on language that demonstrated task understanding or named skills and procedures they would employ to achieve their goal. However, goals also emerged as a separate category because these reflections were statements of action towards some element of improvement. For the most part, goal setting reflections were few in number. Instead, goal setting was a process the students and teacher explored together as a class. For instance, in Time 2 of the school year, Mrs. V invited the class to brainstorm one goal

they could all work toward in order to improve. After a large group discussion a list of goals was brainstormed. The students voted on one goal: to learn all their math facts to 12. Mrs. V then invited students to think about *how* they were each going to attain this goal for themselves. However, as there were instances of goal-setting reflections in all the student portfolios, this code was maintained. One example of goal setting emerged from Ariel's reflection on what she would do differently the next time she presented. She wrote:

> I fell hape because I Spok loubly. I bet show pictures.
>
> [I feel happy because I spoke loudly. *I better show [the] pictures.*]

She evaluated using affective language (*feel happy*) and then set a goal for the next time by stating she better remember to *show the pictures*. This was a standard the class had discussed regarding the role of the presenter. That is, presenters should try to show the pictures from the book or personal drawings so the audience could better understand what you were presenting.

I did not come across any literature on whether children with Down syndrome are able to set and work toward goals. However, with the help of her technician Cathleen was able to set goals and she worked very hard to attain them. In her first term portfolio the technician helped Cathleen reflect on what she could do better the next time she was listening to her peers make a presentation in a small group. The technician scribed what Cathleen said: "Look at the people face." And, during my observations, Cathleen was able to sit, listen and ask questions during presentations. In discussions with Mrs. V and the technician, this was a goal the three of them had worked towards since September.

Overall, *goal* topics of reflection included instances of statements of direction where students identified areas they wanted to take action in improving.

Effort

Student reflections related to the topic of *effort* employed language describing attempts made during a learning process. Effort was the topic of reflection least drawn upon by the students in their portfolios. However, effort did appear at least once in each of the six portfolios and was a source of discussion in the classroom, therefore it was maintained in the data set. One instance was when Ariel reflected on why she selected her journal for her term one portfolio: "I drawing a picture. I trying my best and I writing the date." Ariel reflected on the fact that she tried *her best* in composing the journal she selected and uses the amount of effort as criteria for her selection. Overall, reflections about *effort* topics included instances of students discussing the degree of exertion perceived to have been applied towards the completion of a task.

Summary of Six Categories of Reflective Language Employed by These Grade Two Students

All six students, regardless of their individual learning characteristics reflected using language form the same six topics in both Time 1 and Time 2 of the school year. Each topic of reflection consisted of variations within that particular category that were demonstrated by different students at different times in their portfolio. However, these variations all remained within the six topics of reflection that emerged from the portfolio data. In response to the question: what is reflective language in grade two, this study identified six common topics of reflection used by the participants in one particular grade two classroom (a) task understanding; (b) skills and procedures; (c) affect; (d) judgment;

(e) goals; and (e) effort. Although the categories of reflection were distinct, students often drew on more than one category of reflective language when communicating their metacognitive thoughts in writing. These six categories are also discussed in the literature on Self-Regulated Learning as important aspects of the learning process (Zimmerman, 2000; Perry, 1998). Uncovering these similar patters of reflection across students and time, lead me to the question: *Why were these six students' topics of reflection similar to each other?* This question led me to a closer exploration of the role of the teacher.

Teacher Structural Scaffolds in the Portfolio Guide Student Topics of Reflection

It was in exploring the student reflections in the exploratory case study at the commencement of this thesis that I began to consider that there was a link between student reflections and the role of the teacher in the reflection process. Moreover, when the six portfolios demonstrated these students reflected within the same six topics of reflection, I was surprised. Although I did not have predetermined categories of language grade two students used in their portfolios, I had expected some discrepancy in these categories due to the diverse selection of students in this research study. This commonality between six students pointed me to the need for a separate analysis of the teacher prompts and questions in the portfolio. This moved this study beyond a content analysis of student reflections to an exploration of the supports provided by Mrs. V to help six students construct their reflections.

Mrs. V's Purpose in Using Prompts and Questions to Focus Student Reflection

Although students reflected informally during classroom discussions, the only time reflections were documented in writing were when students selected items for their portfolio. Mrs. V used prompts and questions to guide the students' written reflections in

the portfolio. I referred to these reflection guides as *structural scaffolds,* and elaborate on this concept in the final results chapter. These structural scaffolds took the shape of reflection tools and were completed by the students periodically during each school term when selections of work were made for the portfolio. Students selected an item for their portfolio, such as a journal, story, math problem, project, or art work. They then completed their written reflections using a reflection tool provided by Mrs. V, which consisted of prompts and/or questions. Once the reflection tool was completed students attached the paper to the front of the work sample selected for the portfolio. The process of how these selections occurred played an important role in developing student reflection and will be described in the final results chapter. See Appendix E for some examples of reflection tools developed by Mrs. V.

Interviews with the teacher and analysis of the paper portfolio reflections revealed that over the four terms, the prompts and questions focused on the same six topics of reflection as had the student reflections: (a) task understanding; (b) skills and procedures; (c) affect; (d) judgment; (e) goals; and (e) effort. The teacher data was initially coded using the themes emerging from the student reflections. Interestingly, the teacher prompts and questions were easily coded. Each scaffold fell into one of the six distinct categories under the topics of reflection identified in the student reflections. As such, each prompt or question was coded only once. After the teacher data was coded, I returned to the student reflections to verify the codes in relation to the coded prompt or question. However, many student reflections maintained two or more codes per unit of reflection. Over the course of the school year, Mrs. V provided 82 prompts/questions to scaffold the students' reflections in the portfolio. These prompts/questions had a purpose in scaffolding the

students' reflections within one of the six topics of reflection. Each topic of reflection is revisited below, this time from the teacher's perspective.

Purpose of Task Understanding Scaffolds

Prompts or questions focusing on task understanding tried to elicit responses from the students that demonstrated students could define the elements of a task by making personal connections to the task. For example, "Did anything make it difficult for you to do your job as a listener?" This question attempted to guide the students to reflect on the component of the task of listening to peers during book talk presentations. The components of the task were discussed on several occasions with the students. Mrs. V wanted to know if the students had internalized any of the aspects of this important classroom learning process and if they could make connections with their own experience of being a listener and the broader understanding of the task of listening to peers.

Purpose of Skills and Procedures Scaffolds

Prompts or questions focusing on skills and procedures tried to elicit responses from the students that demonstrated students could describe an approach, process or strategy employed during the learning process. For example, "What strategies do you use when you get stuck on a word?" Such a question guided the students to reflect on what approach they used during the reading process if they came across a word that interrupted their reading comprehension.

Purpose of Affect Scaffolds

Prompts or questions focusing on affective aspects of learning tried to elicit responses from the students that demonstrated students' personal connection, feeling, opinion or reaction to a learning event. For example, "I am proud of my reading because"

was a prompt used by Mrs. V to guide the students to reflect on the successes they had as readers.

Purpose of Judgment Scaffolds

Prompts or questions focusing on judgment tried to elicit responses from the students that demonstrated students could evaluate their process, progress or product of learning by comparing themselves to others, to criteria established by the class, or to their own previous competence. For example, "Look at your journal from September and the one from April. How has your journal writing changed since September?" This question guided the students to reflect on the elements of their journal writing that had developed since the beginning of the school year. Scaffolds focusing on judgment encouraged students to self-evaluate their learning.

Purpose of Goals Scaffolds

Prompts or questions focusing on goals tried to elicit responses from the students that demonstrated students could look ahead and identify the next steps required in their learning process. For example, "What do you need to improve?" This question guided students to identify an area of learning that they perceived needed further development.

Purpose of Effort Scaffolds

Prompts or questions focusing on effort tried to elicit responses from the students that demonstrated students could make reference to the attempts made during the learning process. For example, "Do you put a lot of effort in doing your homework? How?" This question guided students to reflect on what effort meant when related to homework with the how portion of the question leading to possible reflections on skills and procedures or task understanding. It should be mentioned that this last category of reflection prompts

and questions appeared the least often in the portfolios, but effort was discussed by the students and arose in classroom discussions, therefore was maintained in the data set.

See Table 2 for a list of prompts and questions per category of reflection used by Mrs. V in Time 1 and Time 2 of the school year. In addition, see Table 3 for the frequency of each prompt or question (scaffold) category in Time 1 and Time 2 of the school year.

Table 2. Teacher Prompts & Questions Within Topics of Reflection

	Skills and Procedures
Time 1	• I will improve by • I can improve my problem of the day by: • I can improve my next story by • I decided to put this activity in my portfolio because • I will get help from • My strategy is • This is how I will achieve my goal • Did you try to understand what the speaker was saying? How? • How did you find how many in all? Write about it. • Write a math sentence. What strategy did you use to solve this problem? • Write about one strategy you used to add. How did the strategy help you? • What strategy will you use to help you study next term? • How will you keep track of your data?
Time 2	• I can improve my next story by: • What do you still need to do to complete your habitat? • What did you learn about how to make your habitat? • List the strategies that you used to help you learn your math facts. • What did you learn from writing a science report? Draw what did you during each step of the report. • What strategies do you use when you get stuck on a word? Make a list. • What strategy will you use to help you study next term? • What strategies could you use to make sure you complete all your homework next year? • Can you give proof of using a strategy? Describe what the proof is.

Task Understanding	
Time 1	• The easiest part is • The hardest part is • I chose this book off the shelf because • It was easy for me to • It's easy for me to • The easiest part of the problem solving for me is • The hardest part for me was • The hardest part of the problem solving for me is • What kind of graph will you use and why? (bar graph or Venn Diagram) • Did anything make it difficult for you to do your job as a listener? • Do you recommend this book? Why? • How would you describe yourself as a reader? • What are some of the topics studied this term in science? Write or draw about three. • *How did you feel after your presentation?** What would you have done differently?
Time 2	• What have you learned about your animal and its habitat? (e.g.: I have learned that my animal lives in a swamp and eats fish). • Do you recommend this book? Why? • If you had to make another pamphlet like the one you made on your province, what the 3 most important things that you would need to remember to do? Draw the three most important things in these boxes and explain each drawing. • Is it important to edit (double check) your work? Why? • What did you do to change this journal from your worst to the best? Write the steps that you did in order. • Reflect on your role as a listener. • What tips would you give someone in grade 1 about how to pick a good book to read?

Note. * The italicized question appears under a different category.

Affect	
Time 1	• I am proud of my reading because • I am proud of • I felt _____ when I presented! • My favourite character in the story was _____ because _____ • The activity I liked the best was • The best thing about this story is • This is my response (what did the book make you think and feel?): • I liked working with • How did you feel after your presentation? *What would you have done differently?** • How did you feel before your presentation?
Time 2	• The best thing about my story is • Now that the habitat is finished, how do you feel about it? *Is there anything you would add or change to it? Why? (e.g.: I really like my habitat, especially my den. Next time I would add 3 seals to the ocean and make a polar bear trying to catch a seal).** • This is my response (what did the book make you think and feel?)

Note: * The italicized question appears under a different category.

	Judgment
Time 1	• This journal shows that when I write I • I selected this journal because • I chose this book off the shelf because • My story shows that I learned to • One thing that I have learned about circus is • This is what I learned about solving problems • What are you doing well in book talk? • How do you feel you did this term in spelling? • I learned how to • This is what I learned about solving problems • I decided to put this activity in my portfolio because
Time 2	• My story shows that I learned to • How do you feel you did this term in spelling? • Look at your journal from September and the one from April. How has your journal writing changed since September • If you were the teacher, what would you say about your journal in term 8? • Did you complete all your book talks? If yes, what did you do to make sure that all your book talks were done? If no, what got in the way of you completing some of your book talks? • *Now that the habitat is finished, how do you feel about it?*).* Is there anything you would add or change to it? Why? (e.g.: I really like my habitat, especially my den. Next time I would add 3 seals to the ocean and make a polar bear trying to catch a seal

Note. * The italicized question appears under a different category.

	Goals
Time 1	• I will work on • My goal is to improve the following work habit • One thing I can work on for my next presentation • Things you will work on for next time • What can you work on for the next time? • What do you need to improve?
Time 2	• Which part of book talk do you need to improve? (response, colouring, speaking loud,…) Why?
	Effort
Time 1	-
Time 2	• Do you put a lot of effort in your homework? How? Is it done on time?

Note. The dash (–) Indicates no data for this cell.

Table 3. Frequency of Teacher Scaffolds Within Topics of Reflection

	School Year		
Topic of Reflection	Time 1	Time 2	Total
Skills & Procedures	13	9	22
Task Understanding	14	7	21
Affect	10	3	13
Judgment	11	6	17
Goals	6	1	7
Effort	0	1	1
Total Questions	54	27	81

Decrease on Number of Reflections from Time 1 to Time 2

It was noted that the number of prompts or questions provided in Time 1 and two of the school year decreased from 54 to 27 (Table 3). Thereby the number of reflections written by each student also decreased. Mrs. V provided three reasons for this decrease in written reflections. One, the last two terms of the school year were slightly shorter in time with spring break occurring one week and the last month of the school year taken up with many field trips and school wide activities. Two, students worked on larger projects in the second half of the school year, thus reflecting less frequently on smaller, individual tasks as they had in the first part of the school year. Last, Mrs. V sensed the students were tired in the final term and often opted for verbal reflections, not requiring that everything

be documented on a reflection tool. As such, this study points to a need for further research to explore whether the number of reflections students write impacts the topics under which they reflect.

Connections Between Student Topics of Reflection and Teacher Categories of Scaffolds

One of the most interesting findings uncovered while researching the language students used to reflect in this grade two classroom was that students employed the same six topics of reflection as the teacher used to scaffold their reflections. Moreover, that these six categories remained the same during Time 1 and Time 2 of the school year. It appeared the prompts and questions Mrs. V provided to scaffold the six students' reflections encouraged students to focus their metacognitive thoughts within particular categories. It was noted that each teacher prompt and question fell into only one topic of reflection, evidence of this can be seen in Table 2. However, the student reflective responses often diverged and employed language from more than one topic of reflection. For instance, during Time 1 Ariel reflected on her role as a listener:

> *Did you try to understand what the speaker was saying? How?*
>
> Yus I bieuar hst to speaker bal likeas at He.
>
> [Yes I better listen to speaker by looking at him.]

Mrs. V's question was trying to ellicit information from Ariel regarding *the skills and procedures* required for Ariel to listen. Ariel's response required she reflect on whether she did or did not listen, thus needing to make a *judgement* on her learning (*yes*). Moreover, she also described her listening process (procedure) and what she did while listening (*listen to the speaker by looking at him*).

A second example stemmed from Cathleen's portfolio. When reflecting during Time 1, Cathleen was asked to describe her learning progress in relation to math problem solving:

This is what I learned about solving problems:

I can cout with my foger and my beahnd.

[I can count with my fingers and my brain.]

The prompt guided her to make a *judgment* on her learning and the language Cathleen used indicated she was able to judge what she *can* do. However, she also extended her reflective thought by describing the *procedure* she employed while problem solving *(count with my fingers and my brain)*. Her concrete example was Cathleen's way of providing proof for her judgement. Out of the six students, Cathleen's reflections were coded with the least number of multiple codes. When Cathleen wrote her own reflections they were usually brief, employing few words to communicate her thoughts. When her reflections were guided or scribed by the technician, Cathleen was able to expand her reflections by providing greater detail:

I selected this journal because...

Cathleen:	Its rilly rilly good.
	[It's really, really good.]
Technician:	*Why is it good?*
Technician scribes for Cathleen:	'Because I did a nice job on my picture.'

When the portfolio reflections were analyzed in Time 1, there appeared a close relationship between certain categories of teacher scaffolds and student categories of reflection. For instance, in the categories of *skills and procedures*, *task understanding, affect, goals* and *effort* the teacher and student data matched quite closely in terms of frequency within each topic. See Table 4. One divergence was identified in Christine's reflections where she employed more *affective* language than was being scafolded and at a higher frequency than the other students. The one exception in relationship of topics of reflection between Mrs. V and the six students was in the category of *judgment*. 20.57% of Mrs.V's scaffolds were coded as judgment. However, each student employed the language of judgment to reflect at a greater frequency than the teacher scaffolds: (a) Ariel, 39.62%; (b) Cathleen, 34.88%; (c) David, 40.39%; (d) Christine, 35.14%; (e) Marie-Eve, 51.06%; and (f) Robert, 36.36%. (See Table 4 for a summary of Mrs. V and the students' frequency and percentage of reflection per category.) It would appear that one of the reasons for the discrepancy in the category of *judgment* was due to the fact that students often began reflections on the other topics of reflection with a an evaluative statement such as *I can*, *I did*, or *yes*. In order to reflect on their task understanding or on a skill or procedure, students needed to make a judgment on what they accomplished, as was indicated in Ariel's reflection on her role as a speaker and Catheleen's reflection on problem solving.

When the portfolio reflections were analyzed in Time 2 a difference began to emerge in the relationship between certain teacher scaffolds within topics of reflection

Table 4. Frequency and Percent of Student and Teacher Topics of Reflection

		Time 1							Time 2						
Categories		Mrs. V	Ariel	Cathleen	David	Christine	Marie-Eve	Robert	Mrs. V	Ariel	Cathleen	David	Christine	Marie-Eve	Robert
Skills & Procedures	*f*	13	16	12	18	11	14	11	9	5	7	14	11	10	8
	%	24.07	30.19	27.91	34.62	29.73	29.79	25.00	33.33	21.74	36.84	42.42	35.48	45.46	25
Task Understanding	*f*	14	15	10	14	12	15	14	7	12	5	12	14	12	15
	%	25.93	28.3	23.26	26.92	32.43	31.92	31.82	25.93	52.17	26.32	36.36	45.16	54.55	46.88
Affect	*f*	10	12	13	12	15	14	9	3	7	4	10	9	3	9
	%	18.52	22.64	30.23	23.08	40.54	29.79	20.46	11.11	30.44	21.05	30.3	29.03	13.64	28.13
Judgment	*f*	11	21	15	21	13	24	16	6	4	7	19	15	10	11
	%	20.57	39.62	34.88	40.39	35.14	51.06	36.36	22.22	17.39	36.04	57.57	48.39	45.46	34.38
Goals	*f*	6	5	5	8	5	2	6	1	1	3	6	5	2	3
	%	11.11	9.43	11.63	15.39	13.51	4.26	13.64	3.7	4.35	15.79	18.18	16.13	9.09	9.38
Effort	*f*	0	2	1	2	2	0	1	1	1	0	1	0	0	0
	%	0	3.77	2.33	3.85	5.41	0	2.27	3.7	4.35	0	3.03	0	0	0
Total reflections or scaffolds*		**54**	**53**	**43**	**52**	**37**	**47**	**44**	**27**	**23**	**19**	**33**	**31**	**22**	**32**

Note. *f*equals frequency of reflection codes assigned to units of data. A unit of data for students was a reflection response and a unit of data for the teacher was a question or a prompt (scaffold). Some units of student reflection were coded with multiple codes. Teacher scaffolds were coded with only one code.
*Please note, because some student reflections were identified with multiple codes the total number of reflections is not equal to the number of occurances of reflections per category.

and student topics of reflection. Unlike Time 1, when there was a close approximation between the scaffolds and student reflections, in Time 2, student reflections were not as closely related to the teacher scaffolds. (See Figure 5 and Figure 6 for a comparison of percentage of topics of reflection for Mrs. V and the six students.) In most cases, students employed reflective language from the six topics of reflection more frequently than they were scaffolded to do so, following is one example. Mrs. V provided the students with an opportunity to reflect on *affective* aspects of their learning in 10.71% of the prompts or questions she posed in time 2. However, students used *affective* language in their reflections at a greater frequency than was being scaffolded: (a) Ariel, 30.44%; (b) Cathleen, 21.05%; (c) David, 30.3%; (d) Christine, 29.03%; (e) Marie-Eve, 13.64%; and (f) Robert, 28.13%. One exception, Marie-Eve's frequency of affective reflections closely matched Mrs. V's. Such patterns were also true for *task understanding* and *goals*. Five of the six students also reflected more frequently on the topic of *judgment* than was scaffolded by the teacher, the exception was Ariel who employed this topic of language less frequently. Four of the six students also reflected more frequently on the topic of *skills and procedures* than was scaffolded by the teacher, the exceptions were Ariel and Robert who employed this language less frequently. The final topic of reflection was *effort*, but due to the limited data on this topic of reflection it was difficult to draw conclusions for either Time 1 or Time 2 of the school year. Please refer to Table 4 and Figures 5 and 6 for detailed summaries for each participant's topics of reflection Time 1 and Time 2of the school year.

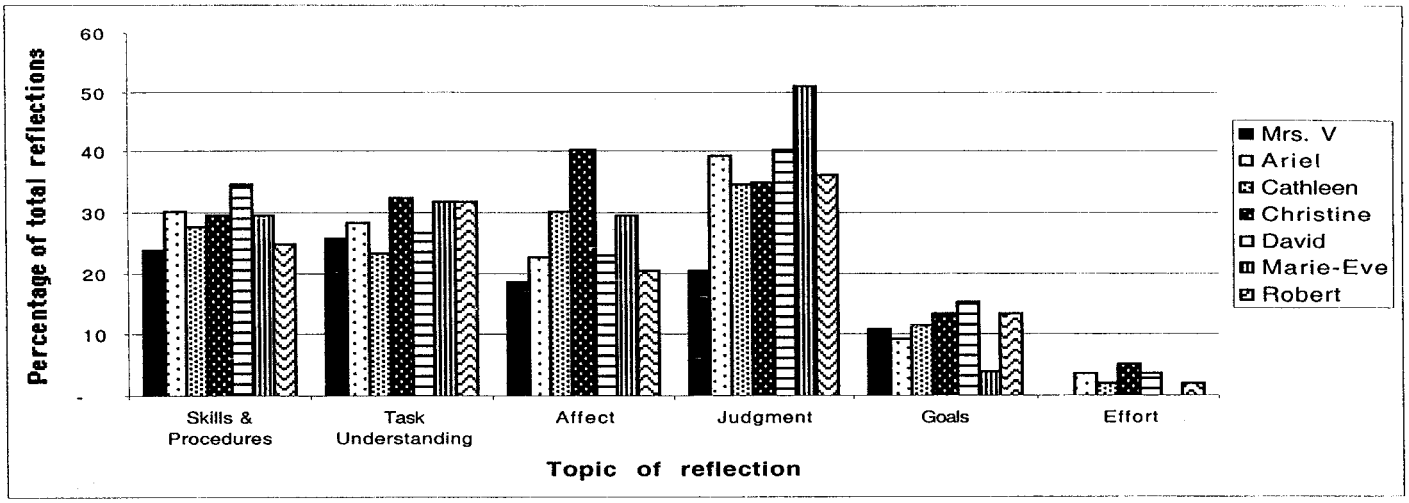


Figure 5. Percentage of Topics of Reflection Time 1

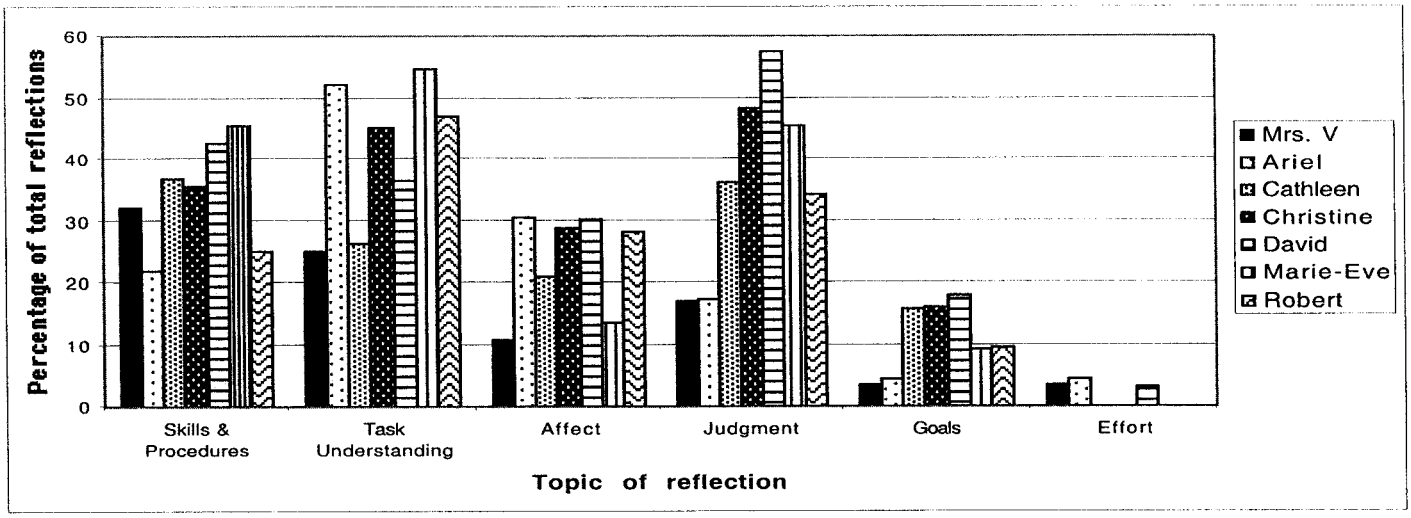


Figure 6. Percentage of Topics of Reflection Time 2

Summary of Findings: What is Reflective Language in Grade Two?

Overall, there was a relationship that emerged between the topics of reflection provided in the teacher scaffolds and the topics of reflection students used to reflect. The same six categories emerged from the student reflections as the teacher scaffolds. Due to the complexity of multiple codes used for the student data, and the fact that each student wrote different numbers of reflections, it was not possible to draw a statistical conclusion on the degree of relationship between the teacher scaffolds categories and the student reflection categories. However, it appeared that the language Mrs. V employed to guide her students' reflections guided them to reflect on particular aspects of their learning, employing language from six topics of reflection. The use of multiple scaffolds within varying topics of reflection explained why these six students used a range of reflective language that went beyond *I like it*. It was also noted that in Time 2, with a few exceptions, students reflected by drawing on the six topics of reflection more frequently than was being scaffolded by the teacher. The reasons for this increase pointed to the need for further exploration of the development of student reflection.

What is reflective language in grade 2?

I begin with a definition of reflection provided by several of the participants during a class discussion in response to the question *what is reflection* that took place in the last few weeks of school:

Mrs. V: Reflection is the opportunity for students to see *how* they have learned, and therefore use that information for further learning.

Marie-Eve: Think back.

Ariel: What I need to do better.

David: Tell you what I learned.

Knowing about reflection and knowing how to express one's metacognitive thoughts necessitated the construction of a common reflective language in grade two. The reflective language in Mrs. V's classroom was (a) language students used to express their metacognitive thoughts when communicating about their learning process, progress, or products. The reflective language in grade two was also (b) the language Mrs. V used in scaffolding the students' reflections. Using a grounded theory approach, after all the data was coded and analyzes, six categories of reflective language emerged. These categories were described in Mrs. V's case profile and included: (a) task understanding; (b) skills and procedures; (c) affect; (d) judgment; (e) goals; and (e) effort. Interestingly, each of these categories is present in various models of Self-Regulating processes (Zimmerman, 2000). For a few examples of student language used to generate these categories, see Table 16. All students reflected within the first five categories, using language that emphasized reflections on (a) task understanding; (b) skills and procedures; (c) affect; (d) judgment; and (e) goals. The final category of *effort* was maintained in the coding process due to its prevalence in the SRL literature and due to the fact that students did discuss the importance of effort in the classroom and five of the six students made some attempt to reflect on their effort.

There appeared to be a relationship between the language students used to reflect and the category of reflection scaffolds provided by the teacher. Two exceptions emerged regarding this relationship. One, even thought no questions were asked regarding effort in the first part of the school year, five students reflected on their effort in part one of the

school year. The second interesting finding was that prompts and questions focusing on *judgment* were used to scaffold reflection 14.59% in part one of the year, and 17.25% in part two of the year, out of all the written scaffolds. Yet, in general (with the exception of Ariel's term two reflections) students reflected using language reflecting a *judgment* far more frequently than was being asked of them. Although there is no one to one correlation that was uncovered between structural scaffolds provided in the portfolio and the written reflections produced by students, it is interesting to note that all six of the grade two students in this study were reflecting *beyond I like it.*

There was some concern expressed in the literature that self-regulating one's learning was a complex, abstract process that could not be coordinated by younger learners (Pressley, Forrest-Pressley, Elliott-Faust, & Miller, 1985; Winne, 1997; Zimmerman, 1990). However, the individual case profiles provided evidence to the contrary. Each student's portfolio, regardless of the individual learner characteristics, provided evidence that young learners were able to reflect. Moreover, that these reflections were not only focused on *affective* elements, as was expressed by teachers at workshops, but instead were diversified across five to six reflection categories. For an overview of frequency of reflection within the six identified categories, please see Table4.

The Data Guides the Study

Comparison of Time 1 and Time 2 Frequency of Reflections

Each of the six students demonstrated slight variations in the frequency of topics of reflection in their portfolios over the course of the school year. Appendix Fcontains a graph detailing the frequency of topic of reflection in Time 1 and Time 2 of the school

year for each student. Although there were minor exceptions, most students' topics of reflection remained within 10-15% of each other between Time 1and Time 2. This posed a problem regarding addressing the second research question on the *development* of student reflection. The data indicated that in the course of a school year, these six students' topics of reflection categories did not change. No new categories emerged during Time 2. In addition, with a few exceptions, there was little difference in the frequency within each category per student. Yet, at the same time, there was a discrepancy in Time 2 between the student reflections and the teacher scaffolds. Moreover, as the data was analyzed, I began to question student reflections that were coded with the same code, but appeared to be qualitatively different. For instance, refer to David's reflections in Figures 7 and 8:

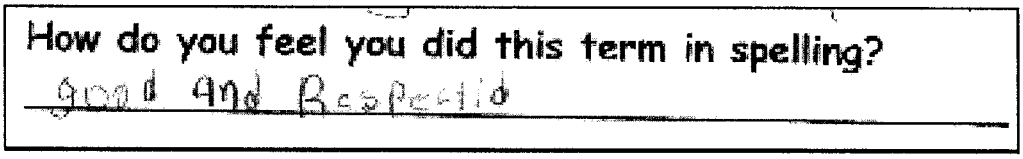


Figure 7. David' vague language used to reflect on his spelling progress in time 1 of the school year.

Note. David's reflection reads: "good and respected".

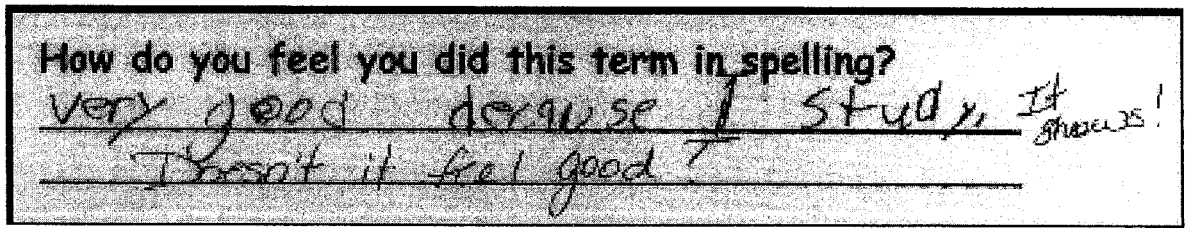


Figure 8. David's more precise reflection, employing a language feature (rationale) for his affective response, time 2 of the school year.

Note. David's reflection reads: "very good because I study."

David's reflection in Time 1 employed affective language to reflect on a question asking him to make a judgment on his learning. He also used affective language to reflect in the example from Time 2. However, in this second reflection David added a rationale for his affective response: *because I study*. Such elaboration emerged repeatedly as a pattern in many of the student reflections and pointed to the need for this study to continue beyond the findings of student reflective language categories. The findings indicating these students reflected using language from six topics of reflection provided insight into *what* language students used to reflect; while at the same time bringing to the surface the question of *how* students in grade two reflect. Hence, the need for a second research question*: How do student reflections develop over time?*

FINDINGS AND DISCUSSION IN RESPONSE TO THE QUESTION:

HOW DO THESE GRADE TWO STUDENTS' REFLECTIONS DEVELOP OVER TIME?

Following the open-coding and axial coding of data this study progressed into the next phase referred to as *selective coding*. Axial coding was the second phase of grounded theory methodology employed to uncover the six topics of reflection in the previous chapter. During this phase first level codes were categorized into themes. For instance, first level reflective language codes such as *like, love, funny, happy* etc. were regrouped into an abstract category labeled *affect*. As such, each of the first level codes became descriptors, or instances of a broader theme of reflection category, a topic of reflection. The third phase of grounded theory drawn upon for this study was *selective coding*. This phase of coding involved the exploration of the reflection themes and the relationships between these themes. As mentioned in the previous chapter, reflective language emerged into six predominant themes: (a) skills and procedures; (b) task understanding; (c) affect; (d) judgement; (e) goals; and (f) effort. The main relationship identified between these themes was the level of sophistication of methods, or *ways* students employed their reflective language. That is, although students reflected on similar topics, there were differences in the sophistication of their reflections over time.

Students demonstrated a variety of ways to reflect throughout the school year. *Ways of reflecting* were defined as students' approaches to communicating their metacognitive thoughts during reflection activities. Each unit of data now went though a new phase of coding to uncover the ways students reflected in their portfolios. Seven ways of reflecting

were identified to be common among the six students. Unlike the topics of reflection, it was only possible to use emic codes to begin the labelling process for certain themes. For instance, many student reflections employed the use of the word *because*: "The drawing *because* I like the way I did the dog;" "No, *because* I like the book;" and "...writing *because* you have to copy it." Such reflections were coded using the students' language, later to be grouped into an abstract category named *language features*. However, when students' employed *vague* language to express their reflective thoughts, this did not consist of specific words. In such cases, once the student samples were grouped together based upon a particular common trait, the examples were explored to see what that trait was. This is described in greater detail below.

To help clarify the categories a constant comparative process was employed. The ways of reflecting were compared to ways that were identified as sharing common characteristics. As well, each emerging category was compared to the next. During this process I asked myself *is example the same or different* when compared to another category. A constant comparative approach to coding data is documented in the research as one way of adding validity to categories when using a grounded theory methodology (Creswell, 2001; Glaser & Strauss, 1967). Next is an example of the process I employed to uncover the *way* students reflected in their portfolios.

Following is an example of how the category for *vague* reflections was identified. When Christine reflected on how she would attain her work habit goal in Time 1 of the school year she wrote "I will use a paper and put it up on the wall." Her reflection indicated a *procedure* she would try in order to attains her *goal* (the first part of the reflection sequence was a goal setting reflection). When Robert reflected on whether he

would recommend a book he read he wrote "yes, because I like pizza." Or, when Cathleen reflected on why she liked her book she commented "it was a really good story." Each of these examples employed reflective language that left the reader to interpret the meaning of the reflection. As such, such reflections were labeled *vague*. Had Christine's reflection employed precise language she might have used words such as *a picture of someone saying shh to help me remember to be quiet in the locker room.* Or, Robert might have indicated that there was a connection between his preference for pizza and the fact that the story he read mentioned pizza. Moreover, Cathleen might have included a description of what she considered to be a *good* book. Needless to say, when I inquired with Mrs. V regarding vague reflections, she was easily able to fill in the context of what the students meant, either because she had had discussions with them or because she shared the context of learning on which the students reflected. In terms of coding such instances, it was not possible to use emic language so instead, a descriptive label was used to define the various examples of *ways of reflecting* falling into one category. Once the coding was completed, seven ways of reflecting were identified: (a) vague language, (b) visual representations of language, (c) retelling, (d) echoing, (e) using negative operators, (f) audience awareness, (g) language features. There was one other group labeled *off track.* did not appear that frequently in the portfolios and included instances where students reflected in an unrelated manner to what was being asked of them. This was not a strategy taught or that appeared to be necessarily drawn upon purposefully by the students. Instead this was a way students reflected when they were not sure what to reflect on. Reflections coded as *off* usually did not make sense when read in conjunction with the prompt or question preceding them. For instance, when David

reflected on what strategy he would use in math, his response was "no more fighting at recess." The reflection did not appear to match the scaffold. I kept a frequency count of these types of reflections but they were removed from the data since I could not code the specific language in those reflections. Each way of seven ways of reflecting is discussed in the following section.

Ways of Reflecting Emerging from the Six Portfolios

A *way* of reflecting included *how* students used language to communicate metacognitive thoughts about their learning. Sometimes a category was a strategy students employed, such as applying a *language feature*. But other times, the way represented a manner of using language, rather than a purposeful approach. During explorations of the language students used to reflect it was uncovered that when students reflected on their learning they used language indicating they were focusing on *one or more* topics of reflection. Much was the same in terms of coding the data for the *ways* students reflected. Some reflections fell into two or more categories. For instance, Robert reflected on the best thing about a story he wrote in Time 2 of the school year:

> The wolves holowing to the moon because I am stteing on the wolfe. And also because I think the baby wolves are fanny for kintergenten.
>
> [The wolves howling to the moon because I am sitting on the wolf and also because I think the baby wolves are funny for kindergarten.]

This reflection was coded *retell* because Robert recapped what occurred in his story. However, this reflection also contained an example of *language features* in that Robert

employed the word *because* and provided a rationale for why he thought this story was his best. One final code with which this reflection was labeled was *audience*. Robert indicated that the story was his best because the *kindergarten* found it to be funny. This reflection provided an example where a student used several *ways* to communicate reflective thoughts, in this case to make an *affective judgment*. As with the codes for topics of reflection, the students' reflections often necessitated the use of multiple codes to identify the many ways they used language to reflect.

As with the topics of reflection, there were advantages and drawbacks to this using multiple codes for identifying the ways students reflected. On the one hand, using multiple codes for one unit of reflection allowed me to remain true to the grounded theory process and to the data generated by the students, giving the students the benefit of the doubt when more than one way was used to reflect. On the other hand, multiple coding lead to limitations when interpreting the connection between the students' ways of reflecting and levels of sophistication of teacher scaffolds. This will be discussed in the final chapter.

In the following section I provide a brief definition of each way of reflecting identified in this study, drawing on a few examples from the grade two students' portfolios

Defining the Seven Ways of Reflecting

Vague Reflections

Vague reflections included instances of students employing language that was general and open to many interpretations. Several examples were already provided earlier from Christine's, Robert's, and Cathleen's portfolios. Another characteristic of

reflections labeled *vague* were reflections that used short or single word responses. For instance, when Marie-Eve reflected on what she could improve on the next time she listened to a presentation, she wrote "nothing." When Mrs. V prompted her by writing "because" in Marie-eve's portfolio, Marie-Eve continued with a vague reflection indicating "I did all of it." Vague reflections leave it up to the reader to interpret the context and meaning of the reflection. In this case, the reader has to piece together what Marie-Eve meant by *all of it*. Another example of short reflections being labeled *vague* occurred in Ariel's reflection on what strategy she would employ to attain her goal of learning her addition facts. She wrote: "tokens." There is no indication of what she meant by *tokens* or how she would use these to help her attain her goal. Although she was able to identify the tool she required she remained vague as to how she would use the tool.

An interesting pattern emerged in terms of reflections coded *vague* was the relationship between this code and the use of prompts to scaffold the reflection. Although I will elaborate on the role of the teacher scaffolds later in this chapter, a brief discussion is merited while describing the category of *vague ways* students communicated language. It appeared that the more structured the scaffold, such as a sentence prompt, which provided students with language to begin their reflections, the more vague the language students employed when reflecting. Consider Christine's reflection on a creature report she wrote. The prompt read "It was easy for me to" and Christine continued with "read." The question that arose after reading Christine's reflection was *why* was it easy for her to read. One word reflections rarely provided insight into students' thoughts. Another example from Christine's portfolio was her reflection after a math unit on money, the prompt was "The activity I liked best was" and Christine wrote "I like to dot." Her

reflection completed the prompt, in that she named an activity; but was vague in terms of why she liked this activity. It appeared that these types of prompts often produced reflections short, vague reflections, rather than scaffolding clear windows into students' metacognitive thought.

A second interesting aspect about reflections coded *vague* was uncovered in the development of the second-language learner's reflections. Marie-Eve and Robert employed vague language consistently in Time 1, Marie-Eve 65.96% and Robert 42.86% of the time. However, by Time 2 the instances of vague language decreased by more than half in both cases, Marie-Eve 22.73% and Robert 17.25%. A similar pattern was uncovered in David's reflections. The decrease from Time 1 to Time 2 in David's use of vague reflections was 59.19% to 26.67%. (See Table 5) Perhaps Marie-Eve's and Robert's (second language learners), comfort with the English language increased over time and resulted in them reflecting using less vague language in Time 2 of the school year. Samway and McKean (2002) commented that second language learners benefit from time to play with contextualized language so that they can then use this language to express "complex notions and abstract ideas" (p. 65). Marie-Eve and Robert had a school year to play and learn with the English language and it appeared to impact the language they used to communicate in their portfolios. David's movement away from the use of vague language, seemed harder to explain.

Table 5. Frequency and Percent of Total Ways Student Expressed Their Reflections in the Portfolio

		Time 1						Time 2					
Categories		Ariel	Cathleen	David	Christine	Marie-Eve	Robert	Ariel	Cathleen	David	Christine	Marie-Eve	Robert
Vague	*f*	23	11	29	4	31	18	12	5	8	4	5	5
	%	44.23	29.73	59.19	10.81	65.96	42.86	54.55	27.78	26.67	12.91	22.73	17.25
Visual	*f*	1	0	2	2	5	2	0	0	0	0	0	0
	%	1.93	0	4.09	5.41	10.64	4.77	0	0	0	0	0	0
Retelling	*f*	15	13	8	9	12	10	3	11	10	9	7	13
	%	28.85	35.14	16.33	24.33	25.54	23.81	13.64	61.12	33.34	29.04	31.82	44.83
Echoing	*f*	2	3	2	9	6	3	2	4	5	4	3	9
	%	3.85	8.11	4.09	24.33	12.77	7.15	9.09	22.23	16.67	12.91	13.64	31.04
Negative	*f*	1	3	6	4	6	2	1	2	5	3	2	3
	%	1.93	8.11	12.25	10.81	12.77	4.77	4.55	11.12	16.67	9.68	9.09	10.35
Audience	*f*	1	1	1	0	2	1	3	5	3	1	3	4
	%	1.93	2.71	2.04	0	4.26	2.38	13.64	27.78	10.00	3.23	13.64	13.80
Language Features	*f*	13	10	18	12	19	20	12	5	19	19	14	20
	%	25.00	27.03	36.74	32.44	40.43	47.62	54.55	27.78	63.34	61.29	63.64	68.97
Total reflections		**52**	**37**	**49**	**37**	**47**	**42**	**22**	**18**	**30**	**31**	**22**	**29**

Note. *f* equals frequency of reflection codes assigned to units of data. A unit of data for students was a reflection. Some units of student reflection were coded with multiple codes.

*Please note, because some student reflections were identified with multiple codes the total number of reflections is not equal to the number of occurances of identified per category.

In contrast, Cathleen and Ariel remained the most consistent in their frequent use of vague language throughout the school year. Cathleen employed vague language 29.73% of the time in Time 1 and 27.78% of the time in Time 2. Ariel employed vague language 44.23% of the time during Time 1 compared to 54.55%e during Time 2. Further research is required to explore the role these students' learning difficulties played in their consistent use of vague language. The last student, Christine, also employed vague language at approximately the same frequency in both times of the school year: 10.81% and 12.91% at Time 1 and Time 2 respectively. Unlike Ariel and Cathleen, Christine used vague language at a low frequency in both times of the year. As a result, the same conclusion could not be drawn as was for the special needs learners. In fact, of the six students, Christine's reflections were coded the least frequently for vague language. One reason that may be attributed to this finding is the fact that Christine started the school year with a proficiency with the English language which helped her communicate in writing. Further discussions of language development in relation to this way of reflecting will be explored later in this chapter.

Visual Representation of Language

Visual representation of language was a strategy employed by a few students. Visual representations included the expression ofthoughts using drawings or symbols. Using the combination of words and symbols is quite common for emergent writers (Campbell Hill, 1999). Students did not make use of this strategy very often to express their reflections and Cathleen did not use this strategy at all. See Table 5. Ariel, David, Marie-Eve and Robert did use visual symbols on a few occasions in term one, but none of

the students communicated using symbols in the second part of the school year. Here are a few examples:

David: I love the story because it is my favrit atist. ♥ I lok the bw He hos
[I love the story because it is my favorit artist. I like the book because.]
A kcow mor hings *What?* No klosing my 👁
[I know more things *What?* No closing my [eyes.]]

Robert: I yus O to and I yus O to put in all the O I put 2 3 4
[I used O [circles] and I used O [circles] to put all the O [tokens] I put 2 3 4.]

Marie-Eve: It's harder for me to Do 11+11

When using visual representations to complete reflective thoughts, students usually replaced a few words with symbols or images they could draw.

Retelling

Retelling included instances of naming the task or recalling the sequence of steps taken in completing an activity. Retelling was approached in various ways depending on the learners. Ariel and Cathleen, the special needs students, appeared to use retelling as a way of explaining their learning or recapping their learning steps. For example, in Time 1 Ariel was asked to reflect on her understanding of addition. When responding to the question "How did you find how many in all? Write about it" Ariel' s reflection read "I kabit fa ma havs" [I copied it from my hands]. She retold what she did to *find how many*

in all. The meaning of her reflection was that she used her fingers to count and add. But, Ariel did not appear to recall the word for counting so instead she wrote *copied*. Retelling was a strategy Ariel used throughout the school year as a way of communicating her reflective thoughts. Patterns in her reflections point to the fact that Ariel needed to retell a learning event in order to express her thoughts as she was not always able to find more abstract language to express the meaning behind her actions. As mentioned in her profile, language recall is one of the challenges faced by students with Dyslexia. As such, *retelling* helped Ariel use language she was familiar with and appeared to facilitate her communication of reflective thoughts.

Retelling was also an important way of reflecting for Cathleen for whom recalling of past events sometimes appeared to cause her difficulties. One of the strategies Cathleen employed in her portfolio was to *retell* the process of a learning event. In Cathleen's case, *retelling* often involved naming the activity or a few short words explaining what she did during the activity. For instance, when reflecting after a unit on the circus, Cathleen responded to the prompt "My favourite circus activity in class was" by naming the activity "Clown face." She did not elaborate on the activity, but instead named the actual task she completed. The experienced teacher and classroom special-education technician were skilled at scaffolding Cathleen's thought processes in order to help her recall a certain event or activity so that she could then reflect. Prior to writing her reflections, Cathleen often responded verbally in a dialogue with her technician who then prompted her to write down what she said, and at times the technician would scribe for Cathleen. One of the prompts the technician was repeatedly overheard using with Cathleen, to activate her prior knowledge and experiences with a task, was "tell me what

you did." *Retelling* the steps of the activities helped Cathleen to reflect. Moreover, the retelling process appeared to influence the language Cathleen used in her written reflections which in turn helped Cathleen to think about her learning process. One example of this was when Cathleen was asked to reflect on a journal she selected for her portfolio:

> This journal shows that when I write I…
>
> Idothedat. IdoMyPies. Ido the clows ina I can write wors.
>
> [I do the date. I do my periods. I do the clowns I can write words.]

Her reflective response is concrete and recaps the steps she takes to write a journal. These steps were often discussed with the technician, who then asked Cathleen questions about her learning such as, "what comes next."

All six students employed the use of retelling as a way of communicating reflective thoughts in Time 1 and Time 2 of the school year. See Table 5 for a breakdown of frequency for each student.

Echoing

Echoing was a reflection strategy that included (a) instances of students repeating Mrs. V's language as used in the classroom or within the written prompt or question, or (b) quotes students provided from their own work within their reflective responses. One example of echoing Mrs. V's language occurred when Marie-Eve was asked "Did anything make it difficult for you to do your job as a listener?" and her reflection was "no cas I did my job [No, because I did my job]." Marie-Eve echoed the language Mrs. V used (i.e. *do your job*) when praising students for *doing a good job* or when inquiring with small groups to see if they were on task by asking *are you doing your job*.

The second characteristic of echoing invloved student reflections that included quotes from their own work. This was a strategy students employed to provide greater detail and precision to their reflections. Moreover, giving proof was a reflection strategy frequently discussed prior to students making selections for their portfolio and reflecting on these selections. This will be elaborated on during discussions on the role of the teacher in the next chapter. Echoing tended to increase the sophistication of students' reflections.

One example that highlights an increase in sophistication by using an echoing strategy can be drawn from Marie-Eve's portfolio. Compare the following two reflections:

> *Time 1*
>
> I write a sentunse [sentense] and I put a period at the and [end]. I write the date."
>
> *Time 2*
>
> I didn't use my periedyid [periods] so much. And not I use them. And I rite [write] more then [than] before. And before I rote [wrote] the worde *and* like this *end.* And now I rite [write] like this *and.*

This second example demonstrated Marie-Eve's use of *echoing* her work to give an example of why she thinks her journals have improved. She quotes her misuse of the word *end* from a journal she wrote in Time 1 and compares this to a journal in Time 2 where she was using the word *and* correctly. See Table 5 for the frequency at which the six students employed echoing in their reflections.

Negative Operators

Negative operators were employed in two ways by students. One, negative operators often were used as an indication that the students could not identify anything requiring improvement in their learning: "nothing;" "nothing, I did it all;" or "I am proud of my wrk [work] because it took a lot of ideas to do my habitat. *I do not have to change anything.*"

David's portfolio highlighted yet another application of a negative operator as a way of communicating something in a reverse fashion. Instead of reflecting on what can be done, a negative operator in this instance communicated instead what would *not be* done in order to progress. To clarify, here is an example from David's portfolio when he reflected on how he could improve his story writing the next time he worked during writer's workshop: "Not colouring out of the lines and take my whole time instead of wasting it." Interestingly, David explained how he could improve the colouring of his illustrations by telling what he would *not* do the next time (i.e. *not colouring out of the lines*). He continued with a positive reflection, noting he should use all his time to work, but concluded with a negative statement (i.e. *instead of wasting my time*). Another example of negative operator occurred when David was asked to define what remained to be completed for his habitat diorama:

> *Now that the habitat is finished, how do you feel about it? Is there anything you would add or change? Why? (e.g. I really like my habitat, especially my den. Next time I would add seals to the ocean and make a polar bear trying to catch the seal.)*

I wont [won't] put paper on the top of my habitat. I fell [feel] good of my work because I am feeling good and happy.

He described what he would *not* do to his habitat (i.e. *I won't put paper on top*), but he did not elaborate to explain what he would do to complete the project. This pattern of reflectionwas noticeable in David's classroom language and supported with examples within his portfolio. In discussing this with Mrs. V, we attributed David's language use to be a result of some of the behavioural difficulties he was having in school. That is, when David was "in trouble" he was often asked what he did and what he will *not do* in the future. This appeared to impact David's reflections and the language he used to express his metacognitive thoughts. However, this negative way of reflecting was also demonstrated by other students in this study who did not have behavioural difficulties:

Marie-Eve: *I can improve problem of the day by...*
not tocing my teacher ses I em dowing well aredy
[*not talking*, my teacher says I am doing well already.]

Ariel: *Which part of book talk do you need to improve? (response, coloring, speaking loud,...) Why?*
Work on my rade to not rate my name on the bate because beane my mom no yana bane
[Work on my writing to not to write my name on the back because maybe my mom no want to believe me.]

Overall, *negative operators* included instances of students indicating they had nothing to improve or instances whereby students reflected explaining what they would not do to improve.

Audience

Audience awareness included instances whereby students made reference to others who either viewed their work or for whom they were trying to produce work. The major difference between verbal and written forms of reflection was identified by Kavanaugh (1991) as the presence and absence of an audience. When communicating thoughts verbally, the students had an immediate audience who provided clues or a scaffold when a message was unclear by using gestures, facial expressions or providing a prompt. This afforded them an opportunity to clarify the meaning or sense of what they were trying to communicate. As such, when students began to identify a *virtual audience* for their work, an audience they had in mind when producing stories or completing certain activities, their reflections became more sophisticated and included elaboration in terms of criteria and language precision. For example, Robert's used reflective langauge that communicates his awareness of an audience for his work. Here is an example of Robert's audience awareness during Time 2:

> *Which part of book talk do you need to improve? (response, coloring, speaking loud, ...) Why? [teacher scaffold]*
>
> I need to put the author because I did not put the author on my book talk. Because the people have to no [know] ho [who] is the one that. And I have to spece [speak] laterace [louder]. Because my lesnesse [listeners] have to here [hear] me.

This response demonstrated several features about Robert's reflection. One, he was aware of the audience's needs when he was presenting his Book Talks. Two, he was able to judge his presentation abilities based upon the criteria established by the class [i.e.

putting your name on your book talk so people know who wrote it; speak loud so your listeners can hear you.] A second example of audience awareness occurred when Robert wrote a story about wolves to read to another kindergarten class. The grade two students read weekly with kindergarten students, either trade books or their own writing. When asked to reflect on the best element of his story Robert responded: "The wolves holowing [howling] to the moon because I am sitting on the wolf and also because I think the baby wolves are fanny [funny] for kindergarden [kindergarten]." This reflection highlighted Robert's understanding of the task of writing a story for a younger audience, he used humour as a writing strategy, and it also demonstrated his awareness of audience and Robert used this knowledge of audience to monitor his writing process. As in the above examples, audience awareness seemed to elicit criteria for a task that was expressed by students in their reflections, helping them to provide greater details to express why they made certain decisions in their learning process. This stategy was not used at a high frequency by the students, however each student did employ this strategy at least once during Time 2. To see the frequency this strategy was employed by the six students please refer to Table 5.

Language Features

Language features were words used by students that helped them expand the content and meaning of their reflections. One language feature included the use of a *rationale* such as *because*. Students who provided rationales or examples for their reflective statements were better able to communicate about their learning. Take for example Ariel's reflection from Time 2 on her journal writing. Mrs. V asked: "How has your journal writing changed since September?" Ariel's written reflection was

> I improved my writing because I writing more I you to and and I pat period ofle a saent colors nice [I improved on my writing *because* I writing *more*. And, I put periods after a sentence. Colors [are] nice.

She did not end her reflection by simply stating *she had improved.* Instead, she elaborated by offering a rationale, using *because* to continue her thoughts. The word *because* is the most common language feature that appeared in all students' reflections. Some insight to the reason for this can be drawn crom observations of classroom discussions between Mrs. V and the class. One of the common questions Mrs. V posed her students when reviewing the criteria for writing their reflections was *why?* During one of my observations of a class discussion taking place in late February, I observed as Mrs. V reviewed the criteria for writing a reflection, in this instance, on a book talk selection:

> Today, the class reviewed criteria for the portfolio selection on a book talk they wrote this term. It's interesting how Mrs. V and her class share certain common routines and language. This language is almost an exaggerated *game* that everyone finds funny but important at the same time. Today was a good example when Mrs. V began one of the language games she played when she wanted to remind the students to include rationales in their reflections, not just to say they like something. Just before the students were ready to get up to return to their desks with a new reflection tool to help them reflect, Mrs. V asked them "what's going to happen if you write 'I like this book talk, it is good? What am I going to say?"

> The majority of hands shot up and students called out over each other *because* and *why*. "Very good, I'm going to ask you...*why* do you like it and *why* is it good." When Mrs. V says the word *why* it is drawn out and the students chime in, almost mockingly, as thought they already know this.

As such, this language and preparation for writing reflections appeared to influence the six students in that all students used language features at an increased frequency in Time 2, with the exception of Ariel whose language features remained essentially the same (see Table 5)

A second strategy employed by the students was the use of *qualifying language* features. Students included *qualifiers*, such as *more, less,* and *a lot*. Qualifiers placed emphasis within a reflection, at times indicating the degree to which something had changed or was completed. Qualifiers appeared to be attempts made by students to make sense of the different levels or criteria of a particular learning task or process or helped students make judgments about their learning based upon qualities they deemed important, such as *listening more close* than they had before. For instance, "I try because I write *a lot*." Ariel was reflecting on the effort she made to write journals in Time 1 and she applied two *language features* to add emphasis (a) a rationale, *because*; and (b) a qualifier, *a lot*.

Other language features employed by various learners included instances of the repetition of words or letters within a word to add emphasis. For instance:

> Cathleen: *I chose this journal because...*
>
> Its rilly rilly good.

[Its really really good.]

David: *This is what I learned about solving problems:*

I lerned to rat the Hole sentins the Hooooooooooo-ooo sentins.

[I learned to write the whole sentence. The whoooooooooooo-ooole sentence.]

Cathleen applied the technique of repeating the word *great* to add emphasis to how much she liked the book. Whereas David used exaggeration to add emphasis by repeating the letter 'o' in the word *whole* to focus the attention of the reader that he could now remember to read the entire sentence of a word problem before trying to solve it. All in all, using language features was a way students reflected in order to provide a rationale, to qualify or to emphasize what they were trying to write about their learning.

In general, most students employed a greater of ways of reflecting in Time 2 compared to Time 1. There were two exceptions; both the use of visual representations and vague language decreased from Time 1 to Time 2. However, a decrease in the use of visual representations, and vague language, marks an improvement in the use of clear and targeted reflective language.

Conclusion on the Language and Development of Reflection of Six Grade Two Students

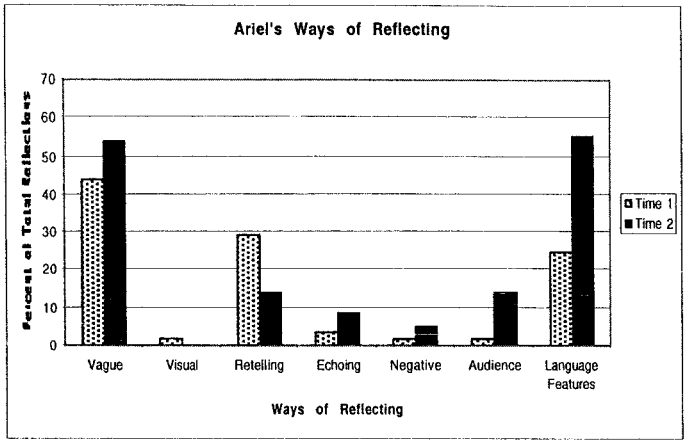
The previous two chapters reported that six students in grade two reflected within six *topics of reflection* and employed seven *ways* of expressing their metacognitive thoughts. The students in this study had opportunities to reflect in writing as documented in their portfolios. Writing was described in the earlier literature review as a system of

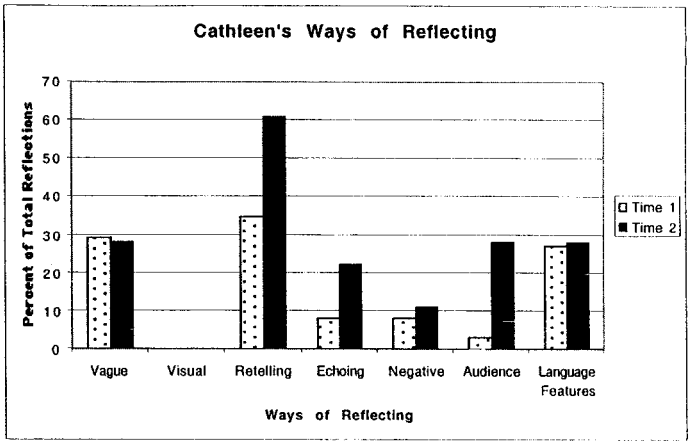
complex symbols. Writing is complex because it is one step removed from verbal communication. Kavanaugh (1991) decribed writing as more than simply speech written down. In turn, Wink & Putney (2002) ascertained that words and writing were second-order representations. That is, written words represent the spoken form of a words which in turn represent the object or activity rather than directly representing the object or activity itself. Put simply, writing is one step removed from thought and as such, is the most complex form of language communication (Vygotsky, 1962). Because writing can change the way we organize and communicate our thoughts, it is said to *mediate* our thinking. In this study, the six students used language to mediate their reflections. On the one hand, students in collaboration with the teacher, used language to organize their thoughts within six topics of reflection. From a socio-constructivist perspective, the role of the teacher's prompts and questions were influential in helping students organize their reflections. The interaction between Mrs. V and the six learners supported these students' development of reflective language. This support was described as *structural scaffolding* in the form of prompts and questions designed by Mrs. V to help the students focus on a particular topic of reflection (to be described further in the next chapter). The interactions and scaffolds provided an opportunity for students to develop their language skills and helped them move from external sign systems, such as discussion to internal sign systems, such as reflection (Vygotsky, 1962). Several interesting findings emerged in relation to reflective language and reflection development

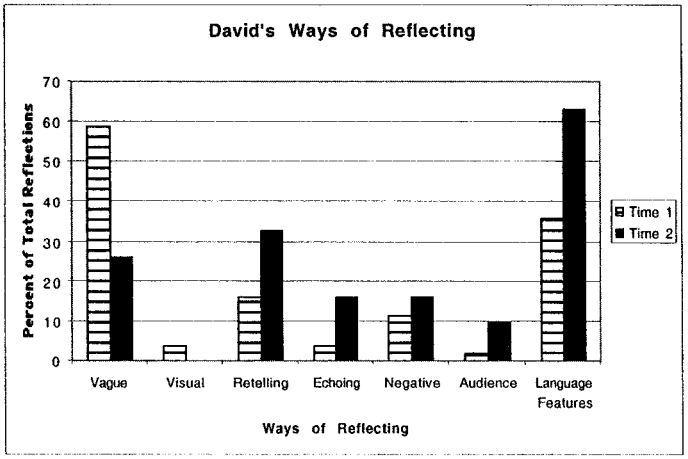
The first finding emerged from initial analysis of student reflection which revealed six topics of reflection. This finding was of interest due to the fact that all six, diverse learners reflected on the same six topics. The one-thing students had in common

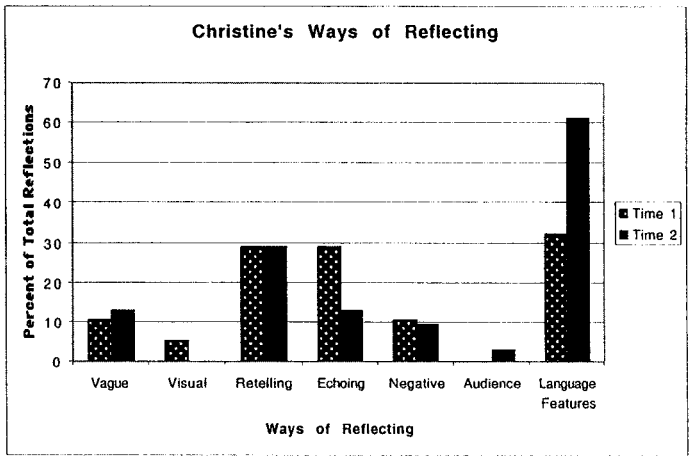
was they were all in the same classroom with the same teacher. It appeared that the role of the teacher, a socializing agent in the classroom, was instrumental to these findings. This finding was confirmed upon further exploration of the teacher scaffolds, prompts and questions, provided to students during the reflection activities emerged into the same six topics of reflection. As such, it appeared that the categories of reflective language for these students was dependent upon the social context in which learning was taking place. Vygotsky (1962) perceived language development as a fluid process between the learner and the environment. Based upon the findings on the topics of reflection uncovered in this study, it would appear that the same fluid process existed in relations to these young students' reflective language development.

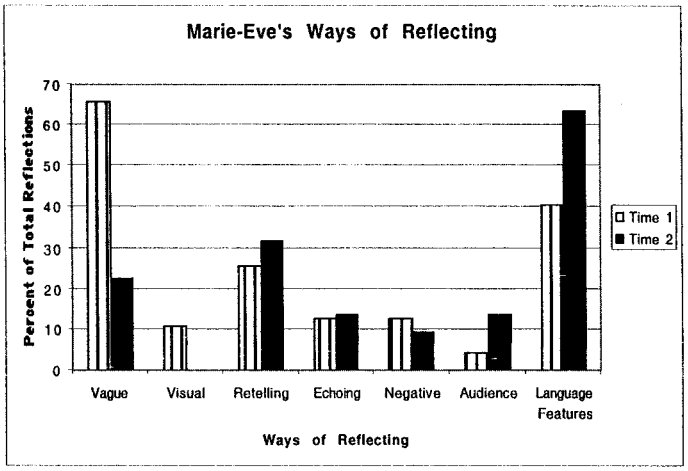
The second interesting finding emerged from the change over time in student reflections, which indicated that reflection did develop from Time 1 to Time 2. It appeared that the more techniques or *ways* students employed to reflect, the more developed their reflections appeared. Please refer to Figures 7 for the change in ways of reflecting per student. In their research, Tierney et al. (1998) noted the development of reflective language was demonstrated through greater amounts and breadth of comments. In fact, in their study of writing portfolios the researchers noted student reflective communication developed in five main ways: (a) number of comments increased; (b) comments focused on more specific aspects; (c) comments became more focused on both personal and community expectations; and (d) students began to notice growth through comparisons with previous work; students' abilities to evaluate their total performance.











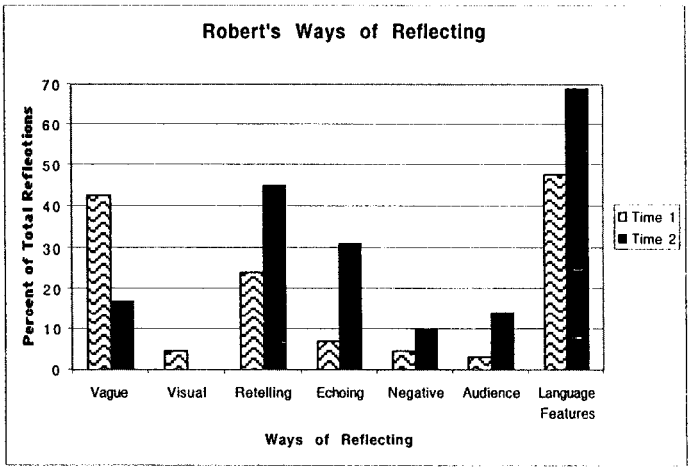


Figure 7. Time 1 and Time 2 Ways of Reflecting.

These five findings correspond with the findings of this study. For instance, with the guidance of the teacher, the language students used to reflect in their portfolios focused on specific aspects or topics of learning. Students drew upon one or more topics to communicate about their learning. The higher the frequency of topics and the higher the frequency of techniques (ways) students employed in a reflection, the clearer their thoughts appeared in writing. Two exceptions occurred related to increased use of ways of reflecting. One, as students employed *less* vague language, their reflections became easier to read and left the reader with a clearer understanding as to what students were communicating about their learning. The other exception was in regards to the use of *visuals* in the place of words. Campbell Hill (2001) described the writing of students in this phase of development:

> Developing writers use beginning, middle and ending sounds to make words...sometimes called inventive spelling or phonetic spelling. At this stage students spell some high frequency words correctly. Students often interchange upper and lower case letters and symbols...and experiment with capitals and punctuation. Students are able to read their own compositions aloud immediately after writing, but later may not remember what they wrote.
>
> (p. 47)

Employing symbols and signs emerges at an earlier phase in the writing development process. For this reason, as the school year progressed it appeared students' writing also developed. The development of their ability to communicate in writing appeared to also influence the development of their reflections. It was nor possible based upon the data

collected for this study to distinguish between writing development and reflection development. This study points to a need to explore this issue in greater depth.

No two students' reflection techniques changed in the same way. All six students, regardless of their individual learning characteristics employed various techniques in their written reflections. Each way of reflecting consisted of variations within a particular category that were demonstrated by different students at different times in their portfolio. These variations all remained within the seven identified ways of reflecting emerging from the portfolio data. Although the techniques students employed were distinct, students often drew upon more than one *way* of reflecting when communicating their metacognitive thoughts. This supported findings by Tierney et al. (1998) who stated that an indicator of reflection development was the increased in the number of comments students wrote. In response to the question: how do these grade two students' reflections develop over time, this study identified seven techniques students employed in the way they reflected in their portfolios and noted that there was an increase in frequency in the techniques students drew upon from the seven identified ways of reflecting.

Uncovering this second layer of similarities amongst the students lead me to once again explore the role of the teacher in influencing the ways students used reflective language. The next chapter addresses the third and final research question: What is the role of the teacher supporting student reflection?

FINDINGS AND DISCUSSION IN RESPONSE TO THE QUESTION:

WHAT IS THE ROLE OF THE TEACHER IN SUPPORTING STUDENT REFLECTION?

Summary of Findings: Mrs. Valerie's Role in Supporting Student Reflection

The title of this study is *Going beyond I like it in a portfolio context: Scaffolding the development of six grade two learners' reflections.* Several factors were uncovered during this research, which helped explain how this particular group of young learners' reflections emerged into categories of reflective language and demonstrated the use of various ways of reflecting. Mrs. V played an integral role in the way student reflection was socially constructed in this grade two classroom. In the following chapter I explore the role she played in scaffolding her students' development of reflective competence.

The Role of Mrs. V in Reflection: Scaffolding Learning

In this study I uncovered two broad categories of scaffolding used by the teacher to guide her students in their reflection processes. The first category refers to what I consider to be the more common or traditional scaffolds, which I labeled structural. Structural scaffolds were those supports employed by Mrs. V, which provided what Tharp & Gallimore (1988) described as "qualitatively different types of assistance...with increasing or decreasing 'directiveness'" (p.352). Subcategories of structural scaffolding uncovered in this study included (a) physical scaffolds, and (b) contextual scaffolds. The second broad category of scaffolding uncovered was labeled procedural scaffolds. These included subcategories of (a) social interaction between peers and between Mrs. V and the six students; and (b) the ebb and flow of teaching and learning. Please note, due to

constraints of the length of this document it is unreasonable for me to elaborate on each structural and procedural scaffold employed by Mrs. V. I will highlight the most predominant ones drawn upon by the teacher.

Structural Scaffolds

Structural scaffolds were defined as supports provided by Mrs. V for students. This category of scaffolds fits traditional definitions of scaffolding as structures or graduated supports (Stone, 1998). These supports were usually the same for all learners and intended to provide guidance to the students in the absence of someone being there to guide the learning moment. Sub-categories of structural scaffolds included the (a) physical environment of the classroom, which supported the learning process, and (b) through the use of portfolios as a structural context for reflection.

The Physical Classroom Environment as a Structural Scaffold

As I began to walk into this grade two classroom in my role as a researcher, I noted certain physical structures playing an important role in scaffolding student learning. Research points to the importance the classroom environment plays in students' becoming self-regulating learners (Perry & VandeKamp, 2000; Zimmerman, 2000). Zimmerman (2000) ascertained "a key feature of a social cognitive model of self-regulation is the interdependent roles of social, environmental, and self-influences" (p. 24). As such, several physical environmental conditions were uncovered in Mrs. V's classroom, which supported the students in their reflection process.

One physical structure was the arrangement of the classroom. The students' desks changed positions every few weeks. Sometimes, the students sat in small groups of four. Other times, the desks were grouped side by side in clusters of two or three, making a

chevron type shape. Regardless of the configuration, what became clear after my first two months of visits was the physical classroom setup reflected a classroom environment, which encouraged peer dialogue and exchange. Here is an excerpt of a typical exchange heard between Mrs. V and her students during writer's workshop time:

> The large class meeting has ended and the students return to their respective desks. Robert does not go to his desk, instead he approaches Mrs. V. In a whispered voice, (I think he is trying to be quiet because the group discussed the need for them to sometimes need quiet to think when they write) he asks Mrs. V: "Can I go with [ ] to her desk to do my book?"
>
> Mrs. V: Sure, what are you going to do?
>
> Robert: My pictures.
>
> Mrs. V: Your illustrations?
>
> Robert: Yes, my illustrations...[pause] I want to use her markers. And she wants me to show how I draw.
>
> Mrs. V: That's very nice of you to show her, make sure you also have time to get your work done.
>
> Robert: [beaming] Okay. [He gathers his writing folder, his drafts, his pencil case under one arm and lifts his chair with the other arm, precariously makes it to the other end of the room to sit at the same desk with his friend.]
>
> Research log, April 14

The students often collaborated to work on their books, to solve math problems, or to work on projects such as the habitats they built as part of a social sciences project. By the month of May, I noticed various students would move to work with a peer without asking permission of the teacher. Mrs. V did not appear to mind this initiative taken by the students; however, she did often require the pair or small group to explain their rationale for needing to work together for the given task. If it appeared the collaboration was turning out to be more social, and the group did not appear to be on task after repeated questioning or reminders, Mrs. V asked students to return to their own desks, such an instance occurred only twice during my observations. The physical layout of the class and the fluid movement scaffolded the students' learning process in several ways. One, by providing them with choices in defining their physical environment. Two, by providing students with an opportunity to dialogue while they worked and to collaborate to complete a task. Thereby using language for learning on a daily basis. Another physical feature of Mrs. V's classroom was the resources made available to the students.

When I walked into the classroom, on my right, one of the long walls supported a series of cork bulletin boards running the length of it. As one might expect of a grade two classroom, each bulletin board was brightly painted, in this case, with a purplish hue, and outlined with various scalloped borders which added aesthetic appeal. As a consultant, I considered these boards as mere backdrops to what was occurring in the classroom. But, as a researcher, I began to pay closer attention and noticed the content of each board had a pedagogical purpose in the learning transpiring in the classroom. For instance, one board housed a large map of numbers. The class was using this map in conjunction with a storybook to count the first hundred days of school. Sometimes, when the students lined

up for recess or lunch near this bulletin board, I would notice a small group point and touch the map and begin to chant the numbers in unison. This board was essentially used for whole class activities, as a visual prompt to support the particular activity, at this particular time of the year it was used for counting. Scaffolds such as the counting board provided visual prompts for emerging readers and writers who could rely on the image as well as language to make sense of what they were seeing. Another interesting structural scaffold was on a bulletin board further down on the same wall.

This second board contained samples of published storybooks written by the classroom students. The books were handcrafted using folded and stapled sheets of legal size paper and each had a string running through the centre and was suspended from a pushpin on the bulletin board. I was particularly taken with this display as the colours students used to illustrate their covers were very bright with little white space left on the cover. When a dozen books hung randomly the board reminded me of an art gallery display. During writer's workshop and silent reading times when the students worked on composing, revising and publishing stories or read books, one or two students would walk up to the bulletin board and take down one of the student created books to read. In talking with Mrs. V I discovered there were classroom discussions in the first part of the school year regarding these books. Mrs. V explained she wanted the children to learn about writing different types of books from one another. Furthermore, for the authors, the students themselves, it was validating to have someone read their story and to have a *real* audience who could provide comments. "You should see their faces when someone chooses one of their books, they just beam" Mrs. V, beaming herself, commented to me while explaining this bulletin board. Mrs. V elaborated and said that in the first part of the

school year, she made a conscious effort to invite and remind the students to read each other's stories: "I sounded like a broken record, reminding them over and over about the books." However as the school year progressed, I did not hear Mrs. V remind the students. Instead, the grade two's appeared to go to the publishing bulletin board and select books to read or to use as a model if they were writing a similar genre. In having the books placed on a string for easy removal and viewing, Mrs. V provided the students with a resource they could use for reading and to guide their own writing process. Moreover, when producing the books the physical display provided a reminder that there was a *real* audience who would read the author's work. Some may question this physical display and deem it as being insignificant. Nevertheless, the portability and access for students, (the books hung rather low and clustered near the bottom of the bulletin board within arms reach of a grade two student), made this physical structure a unique physical scaffold. Having resources available and knowing how to find and use resources is an important step in the self-regulating process (Perry, 1998). In essence, Mrs. V scaffolded the students' reading and writing process by providing a physical structure to organize resources used by the students as models for reading and writing. Nancie Atwell (1992) echoes the importance student work models and access to classroom resources play in the reading and writing process. Moreover, it was noted in an earlier chapter that students commented on the importance of audience in their reflections. Referring to an audience provided students with the language they needed to discuss criteria for their stories. Although students did not employ the use of the word *criteria*, they reflected by referring to what their audience liked or appreciated about their stories.

The last feature of these bulletin boards was found on the board closest to the front of the classroom. At first glance, this last board always seemed to be a mess with chart papers hung at all angles, some barely being supported by one remaining thumbtack. I had to crouch down on my heels in order to be at eye level with these poster-sized papers. One day in late February I asked Mrs. V if she would like a hand with these charts and I volunteered to hang them up around the classroom, thinking she had not gotten around to doing this:

Mrs. V: No, Stephanie, I don't want them up on the walls.

Me: Why not? They look so messy here and some of them are dragging on the floor, look, this one even has a foot print on it!

Mrs. V: Very funny! [she gets a thumbtack from another part of the bulletin board and affixes the drooping corner.] The kids use these all the time, if I put them high up they can't read them.

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As with the published books, these charts were a resource made available to the students through their physical placement, at eye level. The students frequently made use of these charts on their own, as well as Mrs. V who guided students to use the charts during their writing and reflection processes. As well, in analyzing the student portfolios, a pattern emerged where students *echoed* language that was familiar to them in the classroom when writing their reflections. There was a lot of emphasis in all the students' reflections on the structures of writing, such as capitals, punctuation and spelling. It appeared that

the criteria on the charts influenced student reflections. During several of my observations when students were making selections for their portfolios I would notice the children get up from their seats and walk over to the charts, flipping through until they appeared to find one they were looking for. Then, the students would return to their seats and continue their reflections. After several observations of students going back and forth I asked Marie-Eve what she was doing. She explained that she wanted to check what they, the class, had talked about writing their journals. When I asked her what was on the chart she said "things to remember when we write." It appeared that having the charts available for the students to refer to during reflection activities provided a structural scaffold to help students with their reflections.

In addition to physical structures, which provided scaffolding through resources and facilitated peer interaction, the second *structural* subcategory of scaffolding employed by Mrs. V to support student reflection was the use of portfolios.

The Portfolio as a Structural Context for Reflection

In the context of this study, the portfolio was described as a purposeful selection of student created work that demonstrated learning processes and outcomes as well as students' reflective insights on their learning progress (Graves, 1992; Routman, 1997; Sunstein, 2000; Tierney et al., 1998). The relationship between the student portfolios and reflection in Mrs. V's classroom was such that the portfolios provided students with a structure and context for reflection. On the one hand, the portfolios were a place where students documented their reflections in writing; and on the other hand, the portfolios were used as a context for verbal reflections during the student-led conference at the end of term two. This notion of the portfolio as a context for scaffolding reflection is

reiterated by Soderman (1999) who describes the portfolio as "a vehicle for ongoing, collaborative reflection between the student, teacher, and parent(s)" (p. 188). In terms of developing reflective competence, the role Mrs. V played in organizing the portfolio as a context for reflection was instrumental in grade two.

Degrees of Structure Used to Scaffold Reflection

In addition to providing various *categories* of reflective prompts and questions over the four terms, the Mrs. V also scaffolded students' reflections by varying the *degree* of structure within the six categories defined earlier. In analyzing the teacher prompts and questions, a qualitative difference emerged between prompts and questions within one topic of reflection. For instance, when analyzing the *affective* prompts and questions I compared these two scaffolds: "I felt _____ when I presented" and "How did you feel before you presented?" Although both were trying to elicit an affective reflection, each scaffold employed a different degree of structure. The first example prompted students to fill in a one-word response to complete the reflection sentence. Whereas the second question provided some structure by contextualizing the student's reflection by using the word *feel*, but still left room for the students to draw on their own language to communicate what they felt. As such, I continued the analysis process and regrouped the teacher prompts and questions for each topic of reflection. The question I asked myself during this analysis process was: *How is the wording of the prompt or question scaffolding the students' reflection?* When the prompts and questions were regrouped within each topic of reflection, three levels of scaffolding sophistication were identified and labeled: (a) structured scaffolds, (b) semi-structured scaffolds, and (c) open-ended scaffolds. These are described below.

Structured Scaffolds

The most concrete supports were the *structured scaffolds*, which guided learners with a structured framework for reflecting. These consisted of instances of sentence starters or prompts that guided the students with the reflective language required to complete a reflective sentence. For example, "The best thing about my story is", and "I can improve my next story by". Both of these examples were structured prompts providing the students with the reflective language needed to formulate metacognitive thoughts regarding the work accomplished. Structured prompts were often anchored in a specific experience or context, and required one word or simple responses rather than full sentence strings of thought; consequently limiting the number of possibilities for reflective responses. As a result, structured scaffolds used to guide the students' reflections encouraged students to reflect on a concrete aspect of their learning, by providing the language of reflection to begin the written reflection process, and hence, limited the amount of writing required by the students.

Semi-Structured Scaffolds

The second category of reflection scaffolds was labeled *semi-structured scaffolds*. Semi-structured scaffolds guided learners with a semi-structured framework for reflecting which was a combination of concrete and abstract questions. These included open-ended questions that were, followed by a prompt, reminder, or example of how the student could respond. For example, "Did you try to understand what the speaker was saying? How?" and "What have you learned about your animal and its habitat? (e.g.: I have learned that my animal lives in a swamp and eats fish)." These types of questions provided a semi-structured scaffold for the students to formulate their reflections. They

started with more general open-ended questions and followed through with more specific prompts inviting the students to elaborate on their reflections. As a result, the semi-structured scaffolds were often anchored in a specific activity or experience but also guided the students toward abstractions in their reflective responses.

Open Ended Scaffolds

The third category of reflection scaffolds was labeled *open-ended scaffolds*. Open ended scaffolds guided learners with open-ended questions which were posed in such a way that the students' reflective responses were not guided with a prompt or reminder, but simply helped the student focus on a particular aspect of the learning process. For example, "Reflect on your role as a listener", and "What strategy will you use to help you study next term?" These questions were open to varying reflective responses from the students and were not leading in terms of the reflective language they used to respond. These scaffolds did not require a reflective response to be anchored in a specific instance or example. Students were guided in their reflection to deal with an abstract concept (e.g., listening, learning, strategy), and aggregate their experiences across specific activities. Such scaffolds encourage reflective language that could only be expressed through a string of thoughts or words. As a result, the open-ended scaffolds focused more on general processes rather than prompting with specific concrete examples and thus elicited students to write more detailed reflections.

These scaffolds were on a continuum that proceeded from concrete to abstract. See Table 6 for a break down of frequency of structured, semi-structured, and open-ended reflective scaffolds. In addition, Figure 8 demonstrates that Mrs. V used more structured written scaffolds in Time 1 (51.86%) compared to Time 2 (7.41%), indicating

Table 6. Frequency of Scaffold Sophistication per Topic of Reflection Category

	Time 1			Time 2		
Topics of Reflection	Structured	Semi-structured	Open-ended	Structured	Semi-structured	Open-ended
Skills & Procedures	7	4	2	1	5	3
Task Understanding	8	5	1	0	5	2
Affect	8	2	0	1	2	0
Judgment	3	4	0	0	5	1
Goals	2	1	3	0	1	0
Effort	0	0	0	0	1	0
Total questions per sophistication category	28	16	6	2	19	6
Total scaffolds		54			27	
% of scaffold sophistication in Time 1 & 2	51.86%	29.63%	11.12%	7.41%	70.37%	22.23%

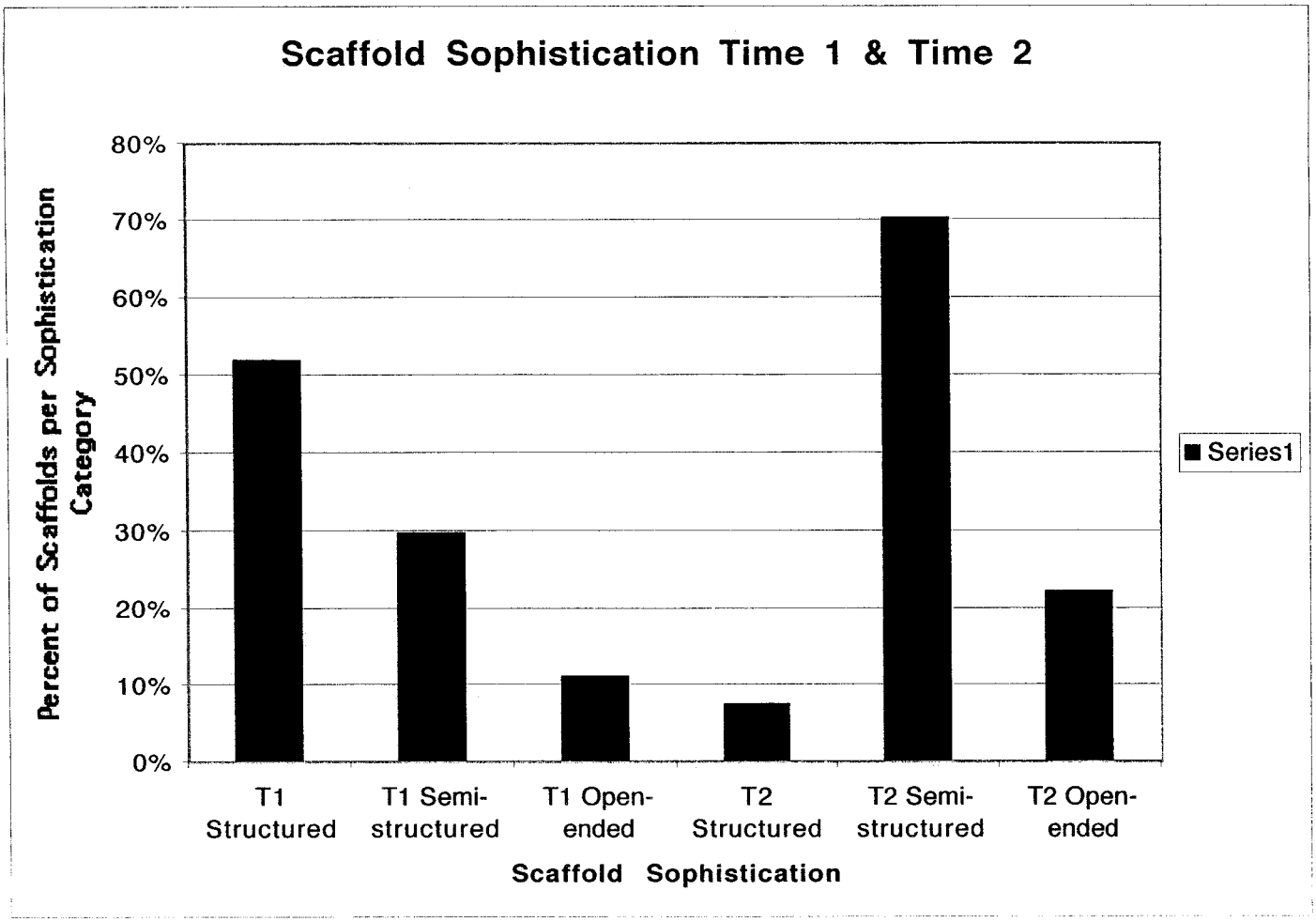

Figure 8. Scaffold Sophistication Time 1 and Time 2

a drop in the number of structured questions and prompts used to guide students to reflect within the topics of reflection. Another change in scaffold structures was in relation to the semi-structured prompts and questions. Mrs. V employed semi-structured written scaffolds 29.63% in Time 1 and 70.37% in Time 2. This indicates an increase in the use of semi-structured scaffolds, which are higher in sophistication than the structured scaffolds. The last change is less pronounced in terms of the use of open-ended questions. Open-ended questions were provided 11.12% in Time 1 and increased

to 22.23% in Time 2. Overall, there was a movement from Time 1 to Time 2 where teacher's written scaffolds moved from concrete to abstract, from primarily structured to open-ended questions. At the same time, as was seen in the chapter on student reflection development, in Time 2 many students began to employ a higher frequency of ways of reflecting. Although the data from this study is not such that a correlation can be drawn between the sophistication levels of teacher scaffolds and the development of student reflection, it can was noted that open-ended questions encouraged reflective language that could only be expressed through a string of thoughts or words. As a result, the open ended scaffolds focused more on general processes rather than prompting with specific concrete examples and thus appeared to elicit more sophisticated reflections. This preliminary finding with six portfolios and one teacher would lend itself to future research studies exploring the relationship between teacher scaffolds and student reflection development over the school year.

Please refer to the table below for examples of the teacher prompts and questions and how these were categorized into structured, semi-structured, and open ended scaffolds within each the six topics of reflection.

Table 7. Teacher Prompt & Question Sophistication within Categories of Reflection Scaffolds

	Skills and Procedures		
	Structured Scaffolds	Semi-Structured Scaffolds	Open Ended Scaffolds
Time 1	• I will improve by • I can improve my problem of the day by: • I can improve my next story by • I decided to put this activity in my portfolio because • I will get help from • My strategy is • This is how I will achieve my goal	• Did you try to understand what the speaker was saying? How? • How did you find how many in all? Write about it. • Write a math sentence. What strategy did you use to solve this problem? • Write about one strategy you used to add. How did the strategy help you?	• What strategy will you use to help you study next term? • How will you keep track of your data?
Time 2	• I can improve my next story by:	• What do you still need to do to complete your habitat? • What did you learn about how to make your habitat? • List the strategies that you used to help you learn your math facts. • What did you learn from writing a science report? Draw what did you during each step of the report. • What strategies do you use when you get stuck on a word? Make a list.	• What strategy will you use to help you study next term? • Can you give proof of using one of these strategies? Describe what the proof is. • What strategies could you use to make sure you complete all your homework next year?

	Task Understanding		
	Structured Scaffolds	Semi-Structured Scaffolds	Open Ended Scaffolds
Time 1	• The easiest part is • The hardest part is • I chose this book off the shelf because • It was easy for me to • It's easy for me to • The easiest part of the problem solving for me is • The hardest part for me was • The hardest part of the problem solving for me is	• What kind of graph will you use and why? (bar graph or Venn Diagram) • Did anything make it difficult for you to do your job as a listener? • How would you describe yourself as a reader? • Do you recommend this book? Why? • What are some of the topics studied this term in science? Write or draw about three.	*How did you feel after your presentation?** What would you have done differently?
Time 2		• What have you learned about your animal and its habitat? (e.g.: I have learned that my animal lives in a swamp and eats fish). • Do you recommend this book? Why? • If you had to make another pamphlet like the one you made on your province, what are the three most important things that you would need to remember to do? Draw the three most important things in these boxes and explain each drawing. • Is it important to edit (double check) your work? Why? • What did you do to change this journal from your worst to the best? Write the steps that you did in order.	• Reflect on your role as a listener. • What tips would you give someone in grade 1 about how to pick a good book to read?

	Affect		
	Structured Scaffolds	Semi-Structured Scaffolds	Open Ended Scaffolds
Time 1	• I am proud of my reading because • I am proud of • I felt _____ when I presented! • My favourite character in the story was _____ because _____ • The activity I liked the best was • The best thing about this story is • This is my response (what did the book make you think and feel?): • I liked working with	• How did you feel after your presentation? *What would you have done differently?* * • How did you feel before your presentation?	–
Time 2	• The best thing about my story is:	• Now that the habitat is finished, how do you feel about it? Is there anything you would add or change to it? Why? (e.g.: I really like my habitat, especially my den. Next time I would add 3 seals to the ocean and make a polar bear trying to catch a seal). • This is my response (what did the book make you think and feel?)	

	Judgment		
	Structured Scaffolds	Semi-Structured Scaffolds	Open Ended Scaffolds
Time 1	• This journal shows that when I write I • My story shows that I learned to • One thing that I have learned about circus is	• This is what I learned about solving problems • What are you doing well in book talk? • How do you feel you did this term in spelling? • I learned how to	-
Time 2		• My story shows that I learned to: • Now that the habitat is finished, how do you feel about it? Is there anything you would add or change to it? Why? (e.g.: I really like my habitat, especially my den. Next time I would add seals to the ocean and make a polar bear trying to catch a seal). • How do you feel you did this term in spelling? • Look at your journal from September and the one from April. How has your journal writing changed since September • Did you complete all your book talks? If yes, what did you do to make sure that all your book talks were done? If no, what got in the way of you completing some of your book talks?	• If you were the teacher, what would you say about your journal in term 8?

	Goals		
	Structured Scaffolds	Semi-Structured Scaffolds	Open Ended Scaffolds
Time 1	• I will work on • My goal is to improve the following work habit	• One thing I can work on for my next presentation	• Things you will work on for next time • What can you work on for the next time? • What do you need to improve?
Time 2	–	• Which part of book talk do you need to improve? (response, colouring, speaking loud,…) Why?	–

	Effort		
	Structured Scaffolds	Semi-Structured Scaffolds	Open Ended Scaffolds
Time 1	–	–	–
Time 2	–	• Do you put a lot of effort in your homework? How? Is it done on time?	–

Note. The dash (–) Indicates no data for this cell

Procedural Scaffolds

As mentioned previously, the second broad category of scaffolding uncovered was more in line with current discussions in the research; this category was labeled *procedural* scaffolding. Procedural scaffolds included aspects of *how* the teaching and learning process transpired in Mrs. V's classroom. The data for this category emerged from my observations of the teacher and six students in the classroom and through discussions and interviews with the teacher. Procedural scaffolds were identified as social interactions and the process of how these interactions transpired to support the learning and reflection in the classroom. These included subcategories of (a) social interaction between peers, and between Mrs. V and the six students; as well as, (b) the *ebb and flow* of teaching and learning.

Social interaction between peers and between Mrs. V and the six students

I noted the important role language and communication played in the development of student reflection in Mrs. V's classroom. Although the arrangement of the physical environment was identified as *structural* scaffolding for learning, the interactions resulting from the structure were also *procedural* in nature in that discussions were a form of scaffolding for reflective thought. As mentioned in an earlier chapter, Bruner (1990) ascertained that humans used language to help develop their knowledge in a dynamic, interactive way, using language within their cultural settings to help them develop their thoughts. Moreover, the link between verbal speech and thought is such that speech structures support the structures of a child's thinking (Vygotsky, 1962). From this perspective, Jones & Brad (2002) ascertained language acts as the interface for higher order thinking.

Talk was prevalent in Mrs. V's class. Moreover, the talk, or communications I observed were almost without exception, multi-directional. On the one hand, Mrs. V would speak with the students to explain a task, give directions, or provide clarification; and she modeled the language required to undertake a task. For example, when introducing the students to writing a character sketch, Mrs. V modeled the process she would use to write a character sketch, employing a talk-aloud approach, modeling the language required for the task. This type of talk was directed to the students. Talk directed at students sometimes occurred when a new concept was explained, a direction was being given or Mrs. V recapped or reviewed an activity. On the other hand, Mrs. V also provided instances when the communication was a dialogue used to construct understanding or meaning. For instance, one common strategy Mrs. V employed was the use of questioning to establish criteria for a task. During discussions about *what makes a good journal* Mrs. V encouraged student participation in establishing the criteria for a good journal:

Mrs. V: Okay, we have been writing journals for a long time. Who can tell me one thing about writing a journal? [all but two students raise their hand] Yes, David.

David: Remember to put periods.

Mrs. V: Okay, good. When we write we remember to put a period at…[waits for someone to

chime in, several students complete the sentence with a range of replies *the end, at the end of a sentence*].

David: We put a period, or one of those other things [he makes motions in the air, drawing something with his finger].

Mrs. V: Who knows what David is drawing?

Marie-Eve: I know the word in French.

Mrs. V: Okay [laughing] what is it in French?

Marie-Eve: *Point d'interrogation.* [Almost simultaneously, most of the class shouts out: question mark!]

Mrs. V: Okay, good everyone. So, one of the things we learned about writing is to put a period or question mark at the end of a sentence. Who knows the name for all those things that we put at the end of a sentence?

Christine: Punctuation. [Marie-Eve echoes the word].

Mrs. V: Yes, good, punctuation. Periods, question marks, commas, all those things are called punctuation. [etc.]

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Such dialogue moments were bi-directional and involved interactions between Mrs. V and various students. Needless to say, it would have been simpler for Mrs. V to *tell* the students, or talk at them to explain the criteria for a journal. However, in discussions with the teacher, it became clear that the dialogue was an integral part of the learning process providing her with insights as to how each learning was understanding and developing. According to Mrs. V:

> When I ask the kids to build criteria, and I ask them questions like 'who can tell me what your job is during book talk', their answers give me a good idea who understands what they are supposed to do and who may not be too clear. Then I can follow up later with that student. Also, they get to hear what other people are saying and this helps them learn to use the words we use to talk about things.
>
> Research log, April 3

This dialogue was one way Mrs. V managed scaffolding in a large group while still keeping individual student needs at the front of her teaching.

One final procedural scaffolding process, involving dialogue, was the interactions between peers. As stated earlier, there were many opportunities for students to work in collaboration in this classroom. Sometimes these collaborations involved the completion of a task, such as making a habitat or solving a math problem; and other times the collaboration was part of the process but not the product of learning. That is, most often students would sit in proximity of one another, or get up from their seats to speak with a peer. These interactions involved working on parallel tasks with individual products, such

as writing a story or a reflection, but involved collaborative discussions during the task. Once again, having an opportunity to use language to help them learn, building their knowledge and vocabulary to help them think.

All of these examples of social interaction, (a) the teacher talk; (b) the dialogue between the teacher and students; and (c) the peer interaction, were identified as procedural ways of scaffolding learning and language development in grade two. Vygotsky's (1962) theory of socio-constructivism ascertains when students interact socially with each other, and with others, this supports their developing language in that they are able to make the transition from external sign systems to internal systems. Moving from external to internal systems of thought is a part of the reflection process.

This last section on the role of Mrs. V in scaffolding her grade two students' reflection will elaborate on *how* structural and procedural scaffolding came together in one particular grade two classroom, putting into question the need for a new metaphor to describe the scaffolding process.

What is the Role of the Teacher in Student Reflection?

This study adopted several lenses to explore student reflection in grade two. One of these lenses was provided by the socio-constructivist paradigm. The second lens was from the Self-Regulating Learning model. Both of these pedagogical perspectives pointed to the important role that socializing agents, such as an adult, play in the learning process (Paris & Paris, 2001; Perry, 1998; Schunk & Zimmerman, 1997; Vygotsky, 1962). The role of the teacher in the grade two classroom was integral in scaffolding the development of student reflection in grade two. Two main categories of scaffolds were identified. The first category was *structural scaffolds*, which included (a) the physical

layout of the classroom and (b) the portfolio as a context for student reflection. Subcategories of structural scaffolds within the portfolio included structured, semi-structured and open-ended scaffolds used to guide student's written reflections. A review of the literature explained that the structural scaffolds employed by Mrs. V consisted of the more traditional elements of scaffolding, involving structures and degrees of support. The second category of scaffolding identified in the classroom was the use of *procedural scaffolds*. Procedural scaffolds encompassed current views in the literature on the role of process and teaching practices and their relationship to student learning. There were numerous procedural scaffolds identified in Mrs. V's grade two classroom that necessitated a new metaphor to replace the connotations associated with s*caffolding*.

Scaffolding: A Changing View of a Complex Metaphor

To some degree, scaffolding learning in the ZPD lends itself to the metaphor of a *scaffold*, eliciting images of a construction scaffold used to support workers so they can reach parts of a building they would otherwise not be able to work on. As such, the key to Vygotsky's (1978) notion of working in the ZPD is that learners receive support, which is gradually removed as the learning moves from interpersonal to intrapersonal, or from *other* to *self*-regulation. However, lately, the scaffolding metaphor has come into question in the literature with concerns that the metaphor of *scaffolding* may not capture the complexity of the *meaning* of scaffolding (Biemiller & Meichenbaum, 1998; Butler; 1998; Donahue & Lopez-Revna, 1998; Sullivan-Palinscar, 1998; Reid, 1998; Scruggins & Mastropieri, 1998; Stone, 1998). Sullivan-Pelinskar (1998) expressed her critique of the traditional definition of scaffolding by providing some extensions to the metaphor:

> There is a sense in which, as we have become increasingly comfortable using scaffolding as a verb, we have stripped from the word its subject and object. ...*Contexts and activities*, not just individuals scaffold learning
>
> (p. 370).

Stone (1998) also offered elaboration for the scaffolding metaphor, due to his concern that the current definition places extensive emphasis on task completion, excluding the complexities of the processes of learning; he suggested the metaphor be expanded to encompass elements of instructional practices and teaching models, which play an integral role in scaffolding student learning. In the case of this study, I uncovered two broad categories of scaffolding: *structural scaffolding* and *procedural scaffolding*.

Tharp & Gallimore (1988) criticized these type of traditional scaffolds as being too limiting due to the fact that it is the adult, or knowledgeable other, who directs the learning; whereby the "principal variation in adult actions are matters of quantity—how high the scaffold stands, how many levels it supports, how long it if kept in place" (p. 34). Although these authors have addressed a valid concern regarding traditional notions of scaffolding, I turn to Stone & Reid (1994) and Stone (1998) for a rationale for the validity of the *structural* scaffolds employed by Mrs. V in the process of supporting six grade two students to develop reflective competence:

> I share with many constructivist-oriented psychologists, including those influenced by Piaget and Vygotsky, the view that knowledge construction is an ongoing process of integration and consolidation. One possible implication of this premise is that *the*

final effects of a scaffolding interaction may not be evident for some time after the interaction [emphasis added]

(in Stone, 1998, p. 353).

From this perspective, the construction of reflective competence is an on-going, cyclical process and the full benefits of the structural scaffolding employed by Mrs. V may not be fully evident at the end of the school year. Students may demonstrate continued growth in their reflection abilities at the commencement of the following year, which, may be attributed to some of the structural scaffolds employed by Mrs. V. For this reason, although notions of scaffolding as graduated supports appears to be falling out of favour in current research, it was evident in this study that these type of traditional scaffolds played a positive role in student reflection and thereby merited discussion. However, even the new discussion in the literature on the changing role of scaffolding did not offer suggestions which were suited to the complex, dynamic interplay of structural and procedural scaffolds uncovered in Mrs. V's classroom. Hence, this final section attempts to explore a new metaphor to explain the role Mrs. V played in the six students' reflection development.

Ebb & Flow of Teaching and Learning: Redefining the Scaffolding Metaphor

The new term I began to employ to describe the interplay between Mrs. V and her students' was the *ebb and flow* of teaching and learning. The metaphor emerged from a classroom process used to begin almost every learning task. Here is what transpired. Mrs. V invited students to join her at the back of the classroom where there was no furniture, and students left their desks and gathered together on the floor. I referred to this seating area as the *group meeting* place. The movement was evidently an ingrained aspect of the

classroom routine by the second part of the school year when I began my observations, as the entire process occurred almost by magic. All Mrs. V appeared to do was go and sit in the meeting area and several students would quietly get up from their seats and join her there. Soon after, other students noticed and also came to the area. Sometimes Mrs. V extended and invitation, asking students to bring something to share with them, or to bring their portfolios. Once the students were all seated, a variety of events took place at different times during my observations. At times, the students were given directions to begin a new task. On other occasions students came to the group meeting with a journal to share. Or, Mrs. V guided students to build or add to a criteria list for a particular academic area. This group meeting generally lasted anywhere from five minutes to fifteen minutes. Afterwards, students stood up and moved back to their desks to begin or continue their individual tasks. When the time was elapsed, sometimes it was time for lunch or recess, or a change of teacher if it was French class time, Mrs. V invited the students to the meeting area for a second, brief meeting to recap the learning that occurred. Once again, the students flooded to the area, eager to share. Watching the wave of students move to and from their desks reminded me of the ebb and flow of the tide. As I began to closely observe the role Mrs. V played in the classroom, I noticed that she too came and went, approaching and leaving students as they worked. Her interactions with small groups and individual students were such a part of the classroom routine, such a discrete process, that it was almost missed in my observations.

Much like the ebb and flow of the tide, during times when students returned to their desks, Mrs. V approached students and provided supports as required and then gently moved away, leaving students time and room to try things on their own.

Sometimes, Mrs. V stopped after a discussion with a student and addressed the class in a quiet tone, asking students to "stop…look…and listen." Regardless of the level of talk in the classroom, an almost immediate hush would follow. Mrs. V used this moment to share a particular aspect of a student's work she had noticed during a conversation:

> …if the students are writing their journal and I see something great I'll just say oh and can everyone *stop, look and listen* and I'll say Marie-Eve wrote a *title* for her journal, isn't that fantastic, now I know what her journal will be about. Then they'll continue writing and every time I see something like that I'll say it out loud, oh, Christine, terrific I see that, um, your picture really goes with your journal so now I have a visual, ah. My hidden agenda is that children respond well to praise. So if I'm praising someone for something she just happened to do automatically, she will likely try it again and might remember to write a title next time, too. As soon as I mention something, I'll see three or four students that same day writing a title [pause] and then when we share our journals I'll mention it again, if you just keep mentioning it, it'll become important to them.

This process occurred numerous times during my observations. It was humorous to hear the students chime in and echo what seemed to be magical words, *stop, look, and listen.* This process reminded me of being at a beach and standing at the edge of the water. Suddenly, the water moves in from the ocean and is ups to your knees, giving you enough support to try and swim, and then it edges back out, and is gone again, having moved you

a little deeper into the ocean. In the end, it is up to you if you choose to swim or stand. When Mrs. V intervenes and models student work she provides a new direction for students who are ready to expand their repertoire of strategies. And like the ocean, she continuously *flows* incase you might be in need of guidance and she ebbs in case you appear ready to try something on your own.

As I analyzed the ebb and flow of teaching in learning in Mrs. V's classroom, I construct a diagram to try and communicate the many factors influencing this process. This diagram serves as a visual summary for the emerging metaphor attempted in this study to replace the previous, constraining notion of scaffolding. Please refer to Appendix G.

The Challenge of Scaffolding Learning to Meet the Needs of All Learners

The combination of structural scaffolds and procedural scaffolds provided a balance between scaffolding large groups of learners and individual learner needs. Many of the structural scaffolds provided an infrastructure required to support reflection for large groups of learners, these structures were like the ocean shore, although the grains of sand changed over time, the shore remained a solid ground that students could rely on for guidance. The structures put into place, such as having tools and resources such as the criteria charts and student-created books, available to students, provided models and guidance in the learning process. The physical arrangement of the classroom invited students to seek help from other people and not rely solely on the teacher. As such, structural scaffolds provided a reliable, consistent support system students easily relied on to guide their own learning when Mrs. V was busy with another student, or when the help required could be regulated by the learners themselves. Such structural scaffolds

afforded Mrs. V the time and opportunity to interact daily with each student on an individual basis.

The continuous ebb and flow of teaching and learning was one of the ways Mrs. V orchestrated support for students when they were reflecting on their learning. In the teacher's own words, here is the process used during the ebb and flow of the reflection process:

> Once we decide what we are selecting that day [for our portfolios] I give the students a guided sheet for reflection. We sit down together and we talk about our criteria again, we bring it up, we talked about all those things that made, for instance, a *good* journal. Because, if I go right to asking the 'what did you do well in this journal', a lot of them will say 'nothing', or 'it's good', or 'I like it'. So instead, I sometimes model what I would do, [by talking outloud] 'if I had to pick this journal, I would say, oh this is good, oh I noticed you have a title here, oh you wrote the date, oh your picture matches, ah, you have a nice clear message, ah, you wrote you have a period, oh you used an exclamation point for the first time,' I would mention a bunch of things.
>
> Students will also have an opportunity to sit with a friend, they've done this too, and they can share the journal, show them and tell them all the things that they think they've done well. At this age I'm note sure, I think at this age they need the guidance. But, I will say, the process is easier now [term 3], we don't have to go

through such a lengthy process to get to the reflection, it happens a lot faster, their words are clearer, they become more precise, they start picking one thing to improve, they really narrow things down, umm, they become better at it.

Summary

Many factors were identified that played a role in the reflection process of six grade two students. The combination of individual learner characteristics and the structural and procedural scaffolds orchestrated by the teacher all played an important role in the language and strategies students used to express their reflective thoughts. The importance of a socio-constructivist classroom where much talk occurred was central to many of the processes used to guide student's reflection processes. The *ebb and flow* of teaching and learning extended to practices used to guide the development of student reflection competence and provided the guidance needed so that all learners, first-language, second-language, and special-needs learners were able to reflect at varying degrees of sophistication. *Scaffolding the development of grade two learners' reflective language* made it possible for six grade two students to *go beyond 'I like it' in a portfolio* learning environment.

Mrs. V has the Last Word

In a final interview, I asked Mrs. V what she thought her role was in scaffolding the six students' reflections in this study. She looked at me with some hesitation and humbly stated:

I don't know...we talk a lot, we discuss a lot and I think that's the big thing, and, and I don't have any written proof or anything on

> paper to show for it, but we talk a lot about it, we talk about our learning, we talk about what makes a good journal, we're big on criteria…I think that's really important, if you talk with your students.

Well Mrs. V, you have your practices and your knowledge. I am not sure if the correct word for the findings of this thesis is *proof*. Instead, this thesis is a source of information that may provide us with the language we need to further discuss what language young students use to reflect, how reflection develops over time, and what the many roles of the teacher are in this learning process.

CONCLUSIONS

The temptation is strong to bring this lengthy endeavor to a quick end and to turn the page one final time and close this chapter in my academic career. However, in order to meet the need to finally harmonize my cognitive and emotional tug-of-war between practice and theory, it is important to bring this thesis, and my process, full circle. As such, I will briefly explore the implications of this study on theory, research and practice with a forward looking glance to what may proceed from this study. Finally, I conclude this thesis, the same way it started, with a personal closing reflection.

Implications for Educational Theory

Theoretically, the reflective language and strategies these young learners used to reflect and thus self-regulate provided a foundation for further exploration on the topic of young learners and SRL. There is a range of literature that discusses various models of SRL and how older learners use these models. However, this literature is scarce in the area of SRL and young learners. As such, this study contributed to theory in several ways. One, by exploring the role of social interactions on the reflection process in one grade two classroom. Socio-constructivist theory was used as a lens through which to explore the many dimensions of reflection. This study uncovered two categories of scaffolding, structural and procedural, perceived to play a role in the reflection process. Moreover, findings indicated the importance of talk in the classroom in helping students construct their knowledge and communicate about their learning. Along the same lines, it was uncovered that the socially constructed language of reflection in the classroom played an influential role in helping students express their metacognitive thoughts.

In terms of the theory of self-regulated learning, this study helped contribute to knowledge about young learners, providing evidence that with the support of social others, young students are able to reflect, and thus self-regulate to some degree. Findings also bring into question definitions of self-regulated learning when related to young learners. Pointing to the need further explorations in order to explore the movement from *other* to *self*-regulation and the structures and processes that support this development.

Implication for Research

Findings from this study highlight the importance of classroom research. In the months I spent reading it became evident that, with the exception of Nancy Perry and a few of her colleagues, studies often explore issues related to the generalities of SRL, but few delve into the messiness of classroom contexts to answer questions raised by teachers and other researchers. *How can teachers' guide student reflection? What is the relationship between the scaffolds provided by a teacher and the level of sophistication of student reflection? How does reflection develop in young learners*? The complexity of the topic of reflection necessitates that future studies consider a range of factors influencing the learning process. This study identified a need for such work on many levels such as questioning what the role of the teacher was in student reflection. There is a need for investigations of classroom practices that are conducive to SRL with young learners and these studies need to be reported in such a way that the language and content is accessible to those working most closely with young learners.

On another note, diverse student populations need to be represented in the research produced by the educational community. Researchers must consider populations that reflect the realities many teachers face on a daily basis and include these students in

their studies. This study uncovered an exciting finding in Ariel and Cathleen's portfolios, which pointed to the fact that these two students were able to reflect, despite having various learning difficulties. Such literature is scarce and leaves practitioners searching for answers on how to help special needs learners in integrated classrooms.

On a related note, there is a need for practitioner-researchers to present and communicate their work. Teachers appreciate research and theory that reflects some of their own practices and that is accessible in terms of the language in how it is written. This study attempted to maintain a sense of formality expected of a thesis, without drawing upon too much language that might alienate readers unfamiliar with various literature or terms. As I complete these last few pages I find myself questioning the purpose of completing a graduate degree, to produce an archival document whose dialogue ends at the defense. A thesis should become the first step to other conversations, a step towards exploring questions in a classroom context. As such, I feel there is an accountability for practitioner-researchers to make attempts at publishing their findings so that their research is accessible to teachers working in the classroom, seeking answers or suggestions to some of their questions. If we believe in a socio-constructivist model of learning, then we too must help construct each other's knowledge.

Implications for Practice

This classroom based research provided and opportunity for the teacher to review and improve upon her practices and share scaffolding strategies with other teachers. As such, I hope the findings of this study help teachers gleam from the *ebb and flow* created by Mrs. V in her classroom. I encourage educators to take risks in their own practices,

maybe trying to adapt and apply some of this teacher's scaffolding approaches in their classrooms.

Knowledge that all students use reflective language across a range of categories can serve to inform classroom practitioners of the importance of considering the intention behind a prompt or question provided to facilitate student reflection. If one wants students to reflect beyond *I like it* then teachers may want to select scaffolds that might elicit reflections that are not only affective. Although it was not the intent of this study to *generalize* findings, I do invite teachers to borrow and modify the prompts and questions employed by Mrs. V, thereby *transferring* information gleamed from this work and making connections to your own settings. Thereby moving the theory generated from this study and bringing it full circle, back into practice.

In addition, the findings in this study guide pre-service teachers and those governing bodies whom structure university programs that prepare these teachers. The need to prepare teachers for their role in a socio-constructivist curriculum, in the province of Quebec, is essential. This study highlighted the many practices of one teacher, which played a pivotal role in guiding student reflection.

Last, I implore other graduate students to share their research processes within their documents. I included many tables, figures and detailed descriptions of the process I employed to conduct this study. One, this was one way by which to address issues of validity. But another reason was to provide trace evidence for others interested in exploring similar topics. Graduate work and research sometimes feels like a mystery, where reading about theoretical processes leaves novice researchers reaching for concrete examples to scaffold their own learning process. I hope this study helps someone else

who may be interested in drawing on a combination of grounded theory and case study methodologies.

Future Directions

Findings demonstrated that young students could develop reflective language that goes far beyond *I like it*. At the same time, the study pointed to the need for further research on: (a) how young students' reflective language develops over time, and (b) the role of the teacher in this developmental process. Questions remain regarding student reflective language development. *Is there a relationship between general literacy development and reflection development? Is there a correlation between the sophistication of structural scaffold provided in the portfolio and the sophistication of student reflection? And, on a different level, is language a tool for thinking or is thinking a tool for reflecting*? Moreover, this study also hints at ideas of the notion of modes of reflection. *I wonder if Christine and Robert were guided to combine their artistic talent and their reflections if this would be a process or new way of reflecting that would emerge in their portfolios? Moreover if Ariel had an opportunity to verbalize and maybe record her reflections, would this facilitate her learning process? Do learning styles impact the way students reflect?*

This study highlights the need for instructional design practices to help develop tools and processes to help teachers help students develop as reflective, self-regulating learners. For Mrs. V, can she now draw on the data from this study to determine if her students' reflections are developing over the school year? Would other teachers benefit from a reflection continuum, which provided indicators or milestones of reflection development? Or, is reflection development and reflective language too highly bound to

the context in which it is constructed to generalize? As it turns out, three questions were identified to help guide the exploration of reflection with six grade two students and their teacher. The results left traces of evidence in response to those questions while generating many more, yet to be explored.

Closing Reflection

As with any good piece of writing, there is a story within the story. This was a story about one classroom, a teacher and six students and the reflection process. The other story was that of the researcher writing the thesis, me, grappling with the many dimensions of being a practitioner-researcher. I can't say that the push and pull became any easier as I neared the completion of this study. But I can report that I think I achieved my goal at finding a balance between practice and theory. I think the process and attention to validity helped me become a researcher, while never compromising or dismissing what I knew as a teacher. My experiences contributed to the uncovering of the exciting findings in this study: categories and ways of reflecting as well as the many roles of a wonderful teacher played in the reflection process.

I think the best part of the thesis process, and the entire graduate studies process was the conversations. Formal or informal during various course work, discussions always left me thinking, sometime seething with feelings of resentment for theory I could not find myself in, and other times exhilarated to discover and learn from others. In the last few months discussions with my committee members, Miranda and Richard, helped me see things in a new light, sometimes unsettling me with questions I had not considered and other times guiding me with suggestions. The departure of my supervisor, Allyson Hadwin, brought about a new level of dialogue through email. Our written conversations

provided me the time I needed to reflect and make sense of the topics we discussed. I am starting to discover my preference for expressing myself in writing, as one may have ascertained by the length of this thesis! I sometimes wonder if I would have had the same insights into my research without the written conversations.

There were times when I questioned my choice to write a thesis instead of completing an internship. There were many times when I was ready to give in to the feelings of uncertainty, confusion and exhaustion, considering dropping the study all together. But the sub-text, the story within the story of this thesis provided me with the motivation to continue. For this, and for all those who understood my need to tell and live the two stories, I am thankful. :)

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Appendix A

Letter of Consent for Parents and Students

Stephanie Vucko
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(450) 672-4010 (ext.: 4712)

January 28, 2002

Dear Parents,

My name is Stephanie Vucko and I am a graduate student at Concordia University in Educational Technology. I am also a pedagogical consultant at Riverside School Board and former elementary and middle school teacher. Your child knows me as Ms. Stephanie, the person who comes and helps them with their Digital Reading Portfolio on the computer.

In my various roles over the last few years I have noticed the important role that reflection plays in students becoming successful life-long learners. Over the years, I discovered that there was a language specific to reflection that students began to use, as they became more competent at analyzing their learning through their portfolios.

It is from my classroom experiences and working with various classroom teachers that I would like to look at the language students use more closely, this time from the point of view of a researcher. In order to do so, I need your help, and the help of your child to undertake this task.

The research process will involve a few simple steps in collecting information:

- Analyze students' portfolios.
- Interview Mrs. Valerie.
- Classroom observations of students working on their portfolios
- Video students explaining their portfolios to their parents at parent-teacher interviews. (Please note, for those who prefer not to be video-taped, and audio-recording may be used instead).

I will then take a look at the information I have collected and identify patterns in the language that students use when explaining their portfolios. If further information is required, then these steps may follow:

Let me assure you that at no time will this study interfere with your child's learning process. I hope that you will consider taking part in the study. Please read the attached consent form with your child and return it to Mrs. Valerie: **February 1, 2002**.

Respectfully yours,

Stephanie Vucko

Appendix B

Parent and Student Participant Consent Form

Describing One's Learning: Self-Reflective Language that Grade 2 Students Use When Writing In and Explaining Their Portfolios--Research Study

Procedures

The research study will take place with the grade 2 students in Mrs. V's class. Student-parent conferences will be video taped during second term parent-teacher interviews. The students' portfolios will be borrowed for a weekend and photocopied terms 2 and 4. As well, Mrs. V will be interviewed. The initial process will only take 1 evening. Afterwards, classroom observations of the students selecting and reflecting on items for their portfolios will take place. These observations will be discrete and not interfere with the day-to-day functions of the classroom routine. It is possible to participate in certain parts of the research and not in other parts. Please select the parts that you and your child would like to take part in. Once the information is collected a report will be written and made available to all participants. I will be available the evening of Parent-Teacher interviews to respond to any questions that you may have.

Purpose

I have been informed that the purpose of the research is as follows: to study the self-reflective language that grade 2 students use when writing in or discussing their portfolios

Conditions of Participation

- I understand that I am free to withdraw my consent and discontinue my participation, and the participation of my child at anytime without negative consequences.
- I understand that my participation and my child's participation in this study is CONFIDENTIAL (i.e., the researcher will know, but will not disclose any identities)
- I understand that the data from this study may be published or used as part of a larger research study on the topic of portfolio or reflection at a future date.

Parent(s)

I have carefully studied the above and understand the process of the study. I freely consent and voluntarily agree to participate in this study.

Parent(s) or Guardian(s) name(s) (please print)	***Signature(s)***
(1)_____	(1)_____
(2)_____	(2)_____

Child's name (please print) _____ Date _____

Student	Parent	
☐	☐	*I give consent for my child to take part in the entire research.*
☐	☐	*I give consent for my child to take part only in the parent-conference.*
☐	☐	*I would like to be audio-taped and* ***not*** *video-taped for the parent-conference.*
☐	☐	*I give consent for my child to be observed during classroom portfolio selections.*
☐	☐	*I give consent for my child's portfolio to be photocopied.*

Student

I want to participate in the research in the areas that I checked off above.

Student's signature: _____

Appendix C

Teacher/Technician Participant Consent Form

Describing One's Learning: Self-Reflective Language that Grade 2 Students Use When Writing In and Explaining Their Portfolios--Research Study

This is to state that I agree to participate in a program of research being conducted by Stephanie Vucko of Educational Technology of Concordia University.

A. Purpose

I have been informed that the purpose of the research is as follows: to study the self-reflective language that grade 2 students use when writing in or discussing their portfolios.

B. Procedures

The research study will take place with the grade 2 students in Mrs. Valerie's class. Student-parent conferences will be video taped during second term parent-teacher interviews. The initial process will only take 1 evening. Afterwards, classroom observations of the students selecting and reflecting on items for their portfolios will take place. These observations will be discrete and not interfere with the day-to-day functions of the classroom routine.The students' portfolios will be borrowed for a weekend and photocopied terms 2 and 4. As well, Mrs. Salvatore will be interviewed. The interview will last one hour and the time and location will be selected by the teacher. In addition, the interview will be audio-taped and the researcher will also take notes. Once the information is collected a report will be written and made available to all participants. I will be available the evening of Parent-Teacher interviews to respond to any questions that parents and students may have.

C. Conditions of Participation

- I understand that I am free to withdraw my consent and discontinue my participation at anytime by informing the researcher, without negative consequences.
- I understand that my participation in this study is CONFIDENTIAL (i.e., the researcher will know, but will not disclose my identity)
- I understand that the data from this study may be published or used as part of a larger research study on the topic of portfolio or reflection at a future date.

Participating Teacher/Technician

I have carefully studied the above and understand this agreement. I freely consent and voluntarily agree to participate in this study.

Signature: _____ Date _____

Appendix D

Question Prompts for Teacher Interviews

Interview 1

What is your definition of *reflection*?

How do you know when students are being reflective?

What are some strategies that you use to help students be reflective about their learning?

What does a *reflective* classroom environment consist of/look like?

What reflective oral language do you hear students using when they explain their portfolios?

What written reflective language do you see in the students' portfolios?

What role do you play in the students' self-reflection process?

How do you help students to become self-reflective?

Interview 2

What is your definition of reflection?

What is the purpose of reflection?

How did you know when students were becoming better at reflecting?

What language would they use?

How was reflective language constructed in the classroom?

Some research states that self-reporting is usually inaccurate, that learners are not always able to reflect accurately or honestly. What is your opinion and experience with grade two students in relation to this statement?

What do you do to manage reflection?

Appendix E

Teacher Tools to Help Scaffold Student Reflection

Name: _____ **Date:** _____

Cycle 1, Term 8

Evaluation: Me as a Reader

Reflection

How would you describe yourself as a reader?

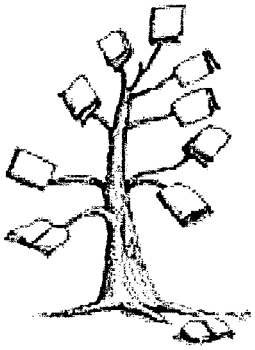
_____

_____

_____

_____

_____



What strategies do you use when you ge stuck on a word? Make a list:

- ☑ _____
- ☑ _____
- ☑ _____
- ☑ _____

Colour in the book to show how much you like reading.
1 books means **not at al**
10 books means **a lot**.

What tips would you give someone in grade 1 about how to pick a good book to read?

_____

_____

_____

Teacher's Evaluation

Name: _____ Date: _____

Cycle 1, Term 8

Evaluation: Journal, Then and Now!

Reflection

What did you do to change this journal from your worst to the best?

Write the steps that you did in order:

worst

best

_____

_____

_____

_____

_____

_____

_____

_____

If you were the teacher, what would you say about your journals in term 3

_____

_____

_____

Parents: Please write a few comments on your child's progress in journal writing this year.

Teacher's Evaluation

Parent's Evaluation

Name: _____ Date: _____

Cycle 1, Term 3

Evaluation: Math Telling Time

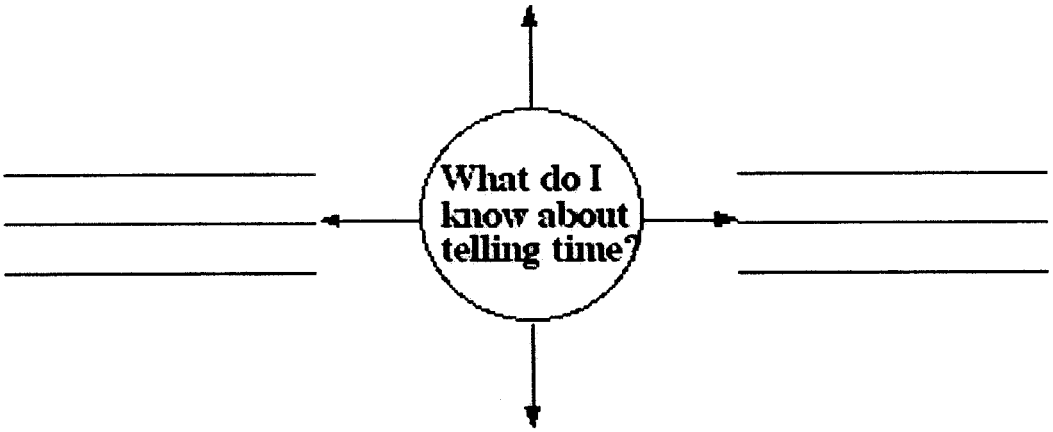
Things written in ◯ were what I knew about time when we started.

Things written in ◯ are the new things that I have learned about tim

_____

_____

_____



_____

_____

_____

Teacher's Evaluation

Name: _____ **Date:** _____

Cycle 1, Term 8

Evaluation: Math Facts

This term we set a class goal to learn our.....
Each of the students was responsible to try and meet this goal. Along th way we discussed which math strategies can help us to learn our facts. These strategies can be used at any level in school and it is important to continue discussing and practicing them with your child.

Did you reach the class goal of.....

- ☐ YES
- ☐ ALMOST
- ☐ NO

List the strategies that you used to help you learn your....

_____

_____

_____

Can you give proof of using one of these strategies?

Describe what the proof is.

_____

_____

_____

Place the proof in your portfolio.

Teacher's Evaluation

Name: _____ Date: _____

Cycle 1, Term 8

Evaluation: Book Talk, Homework

All year we have been working on book talks as part of developing reading, response to reading, and presentation skills. As well, book talk was meant to teach the students responsibility for completing homework. As your child moves on to cycle 2, responsibility for school and home work will become an increasingly important factor in their education.

How much effort did you put into your book talks to make sure they were your best work?

Always my best **So-so** **I can do better**

- You were expected to complete one book talk a week during the year.
- This means that you should have XXX booktalks in your duotang.
- On the bar graph below, colour in the number of booktalks that you completed this year.

Did you complete all your book talks? YES NO

If **yes**, what did you do to make sure that all your book talks were done?
If **no**, what got in the way of you completing some of your book talks?

_____

_____

_____

What strategies could you use to make sure you complete all your homework next year?

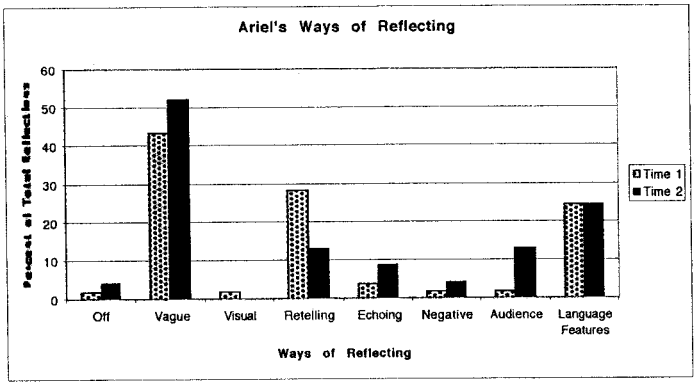
_____

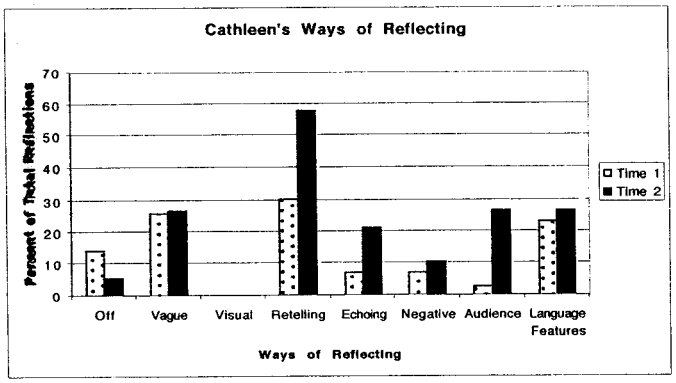
_____

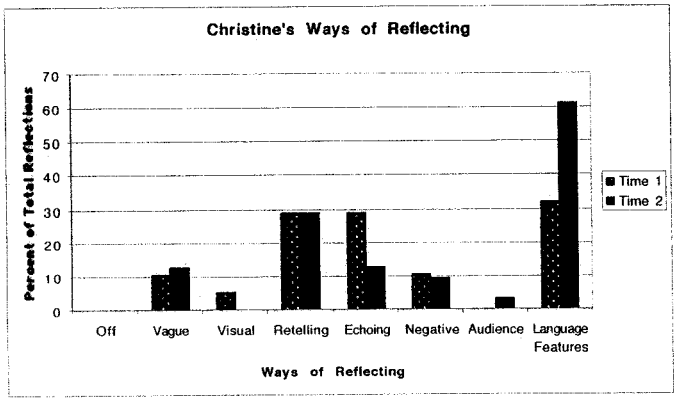
Teacher's Evaluation

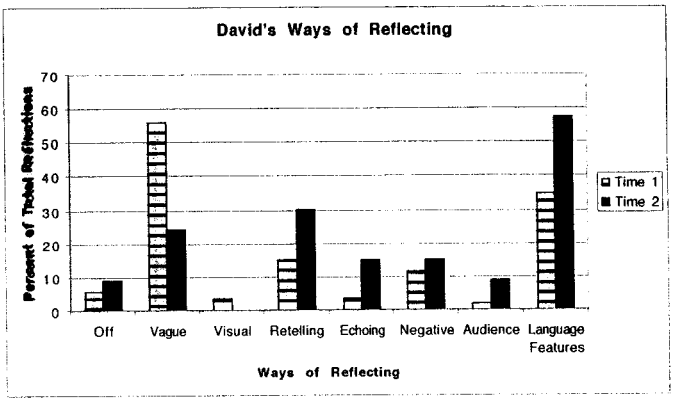
Appendix F

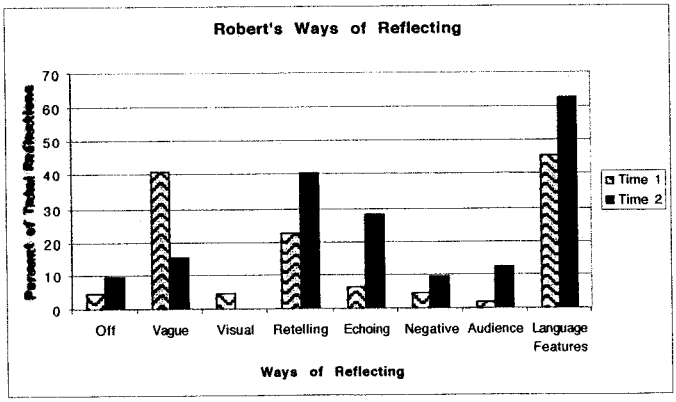
Ways of Reflecting,

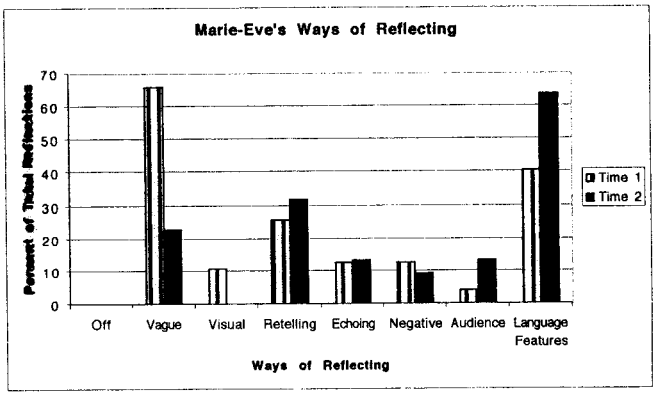












Appendix G

Ebb and Flow: Factors Influencing Reflection