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Documentation in an Elementary Classroom: A Teacher-Researcher Study

Pauline Mesher

Department of Integrated Studies in Education

McGill University, Montreal

A Thesis Presented to the Faculty of Education of McGill University

In Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

December 11, 2006





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ISBN: 978-0-494-32901-6

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ISBN: 978-0-494-32901-6

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Acknowledgements

The decision to pursue my PhD was the fulfillment of a life dream. I did this at a time in my life when I was able to focus my energies on a subject about which I am passionate about. The fulfillment of my dream would not have been possible without the help and support of many wonderful people.

At McGill University, I had the great fortune to connect with Dr. Lynn Butler-Kisber who became my thesis supervisor. The completion of this doctoral thesis is testimony of the dedication and commitment Lynn gives to her work. I am sure with every student pursuing studies at this level there are mountains to be climbed that require the ingenuity and determination of a wise supervisor. In my case the mountains were high and the climb slow but Lynn's strength and vision supported me every step of the way.

I am also aware of the strong make-up of the remainder of my doctoral committee. Professor Anthony Pare, Dr. Marianna McVey, and Dr. Vicki Zack have generously given of their time and support throughout my studies. Their efforts have been very much appreciated.

The students in my class deserve an immeasurable amount of thanks for joining me on the journey. They never ceased to amaze me with their knowledge, their insight, and their capacity to love. My year with them was a gift I will treasure forever. I also extend my thanks to the parents for allowing their children to participate in this study. Their interest and support was welcomed and appreciated. Thank you also to the staff of

the school who accepted me as part of the team and the school board staff who made it possible by letting me teach for the year.

To my friend and colleague Kelly, I owe a debt of gratitude for inviting me into her school. Her encouragement and support in every area knew no bounds and has continued long after I left her school. Kelly was a model principal and I feel privileged to have had the opportunity to work under a person of such quality and expertise.

Finally there are no words to express my thanks to my family for their unwavering support during my journey. My four children, Rob, Julie, Deborah, and Colette were with me every step of the way even when I was half way around the world. My husband gave me his unconditional love that sustained me and his limitless patience when I needed it most. My hope is that I have proven worthy of their faith in me and that my efforts in this research show them that dreams do come true.

Dedication

This thesis is dedicated to my daughter Julie Anne.

“believe in yourself as you have believed in me and all things are possible”

Abstract

The purpose of this study is to research the role of documentation in a cycle-two, year one classroom (Grade 3) in a suburban community in Quebec. As the teacher-researcher, my overarching question is to come to a better understanding of how documentation is carried out in the classroom. There are several questions that guide this research:

1. What kinds of documentation are used and what purposes do they serve?
2. What role (s) does the teacher play in the documentation process?
3. What role (s) do the children play in documentation?

For the purpose of this study documentation is any recording of or about classroom activities, students, or events influencing learning (Dahlberg, Moss, & Pence, 1999). Data forms included fieldnotes, video tapes, and classroom artifacts. I used complementary categorizing (Maykut & Morehouse, 1994) and contextualizing (Erickson, 1986, 1992; Merryfield, 1990) approaches for analysis, aided by the computer software program Atlas.ti (Muhr, 1997).

Three main categories of documentation were uncovered in the data. These are interactive documentation, reflective documentation, and process-oriented documentation. The activities that supported and sustained the creation of this documentation are explored in detail. The consequences of the documentation process resulted in what is described as an interactive classroom. The major conclusions concern the importance of communication cycles, flexible teacher roles, and the space provided for student participation.

Résumé

Le but de la présente étude est d'évaluer le rôle de la documentation dans une classe d'élèves de deuxième année du premier cycle du primaire (troisième année) en banlieue au Québec. En tant qu'enseignante et chercheure, je désire fortement mieux comprendre le processus de documentation au sein d'une classe. Plusieurs questions ont orienté ma recherche:

1. Quelles formes de documentation utilise-t-on et à quelles fins servent-elles?
2. Quel(s) rôle(s) l'enseignant joue-t-il dans le processus de documentation?
3. Quel(s) rôle(s) les enfants jouent-ils dans le processus de documentation?

Aux fins de la présente étude, le terme documentation signifie toute forme d'enregistrement concernant les activités organisées en classe, les élèves ou les événements qui influencent l'apprentissage (Dahlberg, Moss, & Pence, 1999). Les données peuvent être présentées sous forme de notes, de bandes vidéo et d'artéfacts provenant de la classe. Dans le cadre de mon analyse, j'ai utilisé les approches de catégorisation complémentaire (Maykut & Morehouse, 1994) et de contextualisation (Erickson, 1986; Merryfield, 1994), en travaillant à l'aide du programme informatique Atlas.ti (Muhr, 1997).

Trois des plus importantes catégories dans une documentation sont: une documentation interactive, une documentation réflexive et une documentation orienté vers le processus. Les activités qui supportent et soutiennent la création de cette

documentation sont tous explorées en détail. Le résultat de la procédure en documentation est ce qu'on décrit comme une classe interactive. Les conclusions majeures sont l'importance de cycles en communication, la flexibilité du rôle de l'enseignant(e) et le temps accordé pour la participation de l'étudiant.

Chapter One: Introduction

Classrooms today reflect the changing reality of mobile, inter-dependent societies where knowledge dominates, and technology is ubiquitous. Teachers are expected to cope with this reality and develop students who are multi-literate and upon graduation, become productive citizens. There is no simple solution to help teachers meet such high expectations. One strategy that has the potential to make a difference is documentation. Documentation, the recording of classroom life, is a strategy that changes how a teacher functions in a classroom and how the teacher might better relate to students and their learning needs. Through documentation, the teacher becomes a learner and uses documentation to better understand students and support the learning process. A teacher-researcher study, the systematic, intentional inquiry into ones own teaching practice (Cochran-Smith & Lytle, 1993), with its emic, insider perspective, can provide insight into how documentation is carried out in a classroom and how it affects teaching and learning.

The questions guiding this study were formed by personal and professional experiences as well as by a critical review of the literature on qualitative research, reflective practice, and documentation. I will explore how the research processes unfolded in this and subsequent chapters. My overarching question is: How is documentation implemented in a cycle-one, year-two classroom (formerly Grade 3) and what are the implications? More specifically I explore:

1. What kinds of documentation are used and what purposes they serve?
2. What role (s) does the teacher play in the documentation process?

3. What role(s) do the students play in documentation?

For the purpose of this study, I use the term documentation as defined by Dahlberg, Moss, and Pence (1999). Documentation is any recording of or about classroom activities, students, or events influencing learning. The recording can be done by writing, taping, or any other medium. Documentation also includes the reflections on the documented content. With these research questions in mind, this chapter begins with a description of the structure of my thesis. Then I share the personal journey, which fuelled my passion to explore documentation more deeply. Finally I will introduce and describe the context of my research setting.

The Organization of this Study

I have organized my work in order to share what I have learned as effectively as possible. As I am both the researcher and a research participant, this is a journey of discovery that helps weave the story together. The journey involves learning about, with, and from students as well as learning about myself as a researcher and as a teacher. Throughout the study I share my worldview and its influence on how learning unfolded in my classroom. I have also provided a space for the voices of the students who shared this research experience.

In Chapter Two, I rationalize the need for this study by reviewing relevant and recent research on documentation, qualitative research, and reflective practice. I establish the value of an inquiry stance in teaching, one that promotes reflection on teaching and learning. I examine issues in qualitative research with a focus on teacher research. My exploration into the literature on reflection highlights the importance of developing deep,

caring relationships with students (Noddings, 1988, 2001; Rodgers, 2002b). I conclude with concerns that emerge from the literature.

In Chapter Three, I describe the research methods I used in this study. I situate myself on the research landscape in a broad sense and then examine the issues of entry and ethics, trustworthiness, data collection, data analysis, and representation. The interrelatedness of the elements of the research process are acknowledged and considered on an ongoing basis. The process of discovery remains at the forefront throughout the study. Chapter Four is the first of three interpretative chapters that focus on in-depth, “thick description” (Geertz, 1973) and research findings by using both categorizing and contextualizing strategies for the analysis. I begin by framing the documentation process in the context of the major themes found in the data. Chapter Five consists of a series of visual narrative episodes (VNE), created by using a narrative approach to analysis. These are illustrative of the complexity involved in synthesizing information in the documentation process. Chapter Six weaves the themes together exploring how they function to create a reflectively explicit classroom. Finally, Chapter Seven explores the implications that can be drawn from this study and suggests some possible directions that future research might take.

My Interest in Documentation

The literature on teacher research is replete with recommendations about the need for researchers to “come clean” (Lincoln, 1995a) about their personal stance and frame of reference. A pivotal experience provided me with the motivation and passion for my research and illuminates the personal context I bring to this work.

I was raised with deep respect for teachers, and a belief that education was the key to success and economic prosperity. The only thing more important than this was a belief in God. Many experiences over the years have challenged these beliefs, particularly the notion of the universal goodness of schools and teachers. However, it was a pivotal experience 20 years ago that changed forever how I viewed educators. It freed me to question teachers, the education system, and sometimes to hold them accountable for not serving the best interests of children. This experience occurred long before I was professionally involved in teaching.

In the footsteps of my parents, educating my own children became an integral part of parenting and consumed a significant part of each evening for many years, especially because my children went to a French-language school and required help with the language when doing homework and studying for examinations.. The oldest of our four children is a boy, followed by three girls. Rob was very active youngster who struggled to focus and pay attention in school, which seemed to be typical of most of his male classmates. I realized early on that he did not approach learning in the same manner as his younger sisters did, but his report cards consistently reflected good grades. When he was 11 years old and in grade 6, I attended the usual first term, parent-teacher interview. As in other years, Rob had a good report card, but he never seemed to have exercise books or papers to reflect this. As parents, my husband and I wondered how he could do so well when we did not see any tangible products of the work being done. I questioned this at the interview and was shocked by the teacher's response. She was quick to suggest that if there was a problem it was mine, not Rob's. She felt our expectations were too high. The teacher pulled out his tests to show me the proof there was no

problem. Rob had done well in all tests, and exceptionally well in some. After I had finished examining his tests she reiterated that I was the one with a problem, and the interview came to a close. It was obvious to me at that moment that there was no hope that this teacher would help us unravel the mystery of our son's learning patterns. She obviously had very definite opinions about my son as a learner, and me as a parent. Her mind was closed to our son as a learner and to me as a concerned parent. The emotions I experienced that night ranged from shock, dismay, rage, abandonment, and finally determination. I decided if I could not get help at my son's school, I would have to seek it elsewhere. By denying my son the education he had a right to expect, this teacher motivated me to look elsewhere.

Over the next five months, my husband and I met with a prominent professor at a local university who acted as a consultant for a small number of children each year so he would stay grounded in teaching while working in his academic milieu. The term "attention deficit hyperactivity disorder" had not yet been coined, but this man suggested to us how it was manifested in our son. This wise man examined our son's writing and then described him to us in such amazing detail that we were left speechless. We could not believe how this man could know our son so well, yet teachers who worked with him daily could not see his learning difficulties. Since then, for over a decade and a half, understanding how teachers can overlook learning difficulties in students has been the focus of my career in education.

The result of our meeting with this insightful educator gave us a sense of hope for the future. Heartened by the vote of confidence in Rob's potential and our ability as

parents to help him achieve it, we left that office freed from the need to believe everything teachers said, and to accept that we, as parents, had to find a way to keep our son in the education system to avoid having him become one of society's failures. There was no magic answer for Rob's learning difficulties, only hard work and learning to adapt to a system that generally could not meet his needs because it did not recognize them. My experience in writing this thesis has made me consider in retrospect that Rob's learning style is similar to my own. Rob made it through elementary, then secondary school and finally through university with the support of our family and a few dedicated educators with whom he had the good fortune to work during each segment of his education. His graduation from university was one of the proudest days of our lives.

The passage of time and the growth of my children allowed me to consider options for avenues of personal growth and fulfillment outside my family. It was for these reasons that I returned to university. It was not my desire to become a teacher that motivated me, but rather to reconnect to the stimulating environment of academia. The demands of social work for evening and weekend work precluded it as an option even though I had the qualifications and experience to re-enter the profession. I considered a number of programs but settled on the one-year graduate diploma in education, and to my surprise, found from the first day of my practicum that this was where I belonged.

It took time for me to realize how my own personal experiences within the education system affected how I approached teaching. These experiences motivated me from day one to be more attentive to the learner. I listened to the students in order to understand their unique learning needs and how to enhance their learning experience.

My relationship with parents was also a little out of the ordinary because it is my conviction that parents are the strongest allies that students and teachers can have in school. I have always encouraged parents to act as advocates for their children because I believe no one else can carry this important role as well as they can. I pledged I would never let a parent walk away from me as a teacher and feel the depth of isolation that I felt those many years ago. I believe my job as a teacher involves knowing each student as completely as possible in order to effectively support his/her learning experience. I have learned over the years that the documentation process helps me achieve this goal. My thesis on documentation is the culmination of my journey. My work has involved moving from an implicit understanding that documentation is an important part of the teaching and learning process, to studying it in sufficient detail to make the process explicit and to reveal the role it has played in my classroom, and hopefully to contribute to the work of other educators as a result.

Early Involvement with Documentation

My first realization about the importance of documentation evolved from my experience in social work. After every therapeutic interview social workers are required to “write up” what transpires. There are two purposes for this type of detailed recording. One is for record keeping and the other is for understanding the interview process. It is this search for understanding through writing that documentation facilitates. The very act of writing “encourages/promotes deeper, more critical thinking than speech or mere internal reflection. The struggle to find words and make links in writing is the act of reflection and analysis.” (A. Pare, personal communication, August 17, 2006). Social

workers also learn that a review of a series of interview recordings often reveals patterns that are not evident in a single recording. The communication skills of, active listening close observation, and effective responding, required when working with clients became generalized ones for me that I began to use in all my relationships. It became evident almost immediately in my teaching that the skills of effective communication and recording were useful assets in the classroom.

Two particular experiences also contributed to my growing interest in further understanding the role that documentation can play in elementary education. The first experience occurred in my first year in teaching and reoccurred many times thereafter during my years as both a teacher and a principal. The second was the profound influence that my exposure to the Reggio Emilia Approach to early childhood education had on my views about the value of documentation in learning.

The first experience involved end of term report cards. I began to notice a pattern that occurred about two weeks before the date our reports were due when I realized my colleagues were frantically testing their children. I became aware of this last-minute testing when I was asked to keep an eye on a student in the hall who had missed a class test due to illness. The child was obviously still not feeling well and was struggling to complete her makeup test. I felt sorry for the child and left it at that, but then began to realize that many classes were involved in testing when it was close to reporting time. This kind of last minute testing is not representative of student learning any more than the test results produced by my son Rob were. For me, reporting time has always been an opportunity for communication with parents and a chance for reflection. What is very

important to me as a teacher is that report cards provide the opportunity for direct, simultaneous face-to-face contact with parents and students at the same time. I believe the ownership of the report card rests with the student. In my student/parent/teachers interviews I have always tried to help students communicate with their parents about their learning, to ask questions of me as the teacher, and most importantly, to set goals with me for the next term.

From discussions with colleagues and observations of their teaching I realized that while many teachers did take some notes in class, these notes tended to be evaluative rather than diagnostic. Most of the documentation was of an instrumental nature, that is, it provided information about what was work was done, and relied heavily on the results of end of term tests. What was most unsettling for me was to hear teachers discuss the many things they had done with students that they did not have confidence to use as a way of interpreting and demonstrating student results. Rather, they relied on pencil and paper tests to justify the grades on a report card. As mentioned, perhaps it was a lack of confidence or it may have been that these teachers just fell into this habit of assessment. When I became an administrator my experience was similar. In my role as principal I gained intimate knowledge of how teachers worked. The need to have a paper and pencil test to justify a grade on report cards is a crutch many teachers found difficult to relinquish even when they were doing wonderful and creative student-centered work in their classes.

In my experience in teaching I realized that the more I listened to students and noted what was happening in their learning, the more I was able to support their learning.

I remember one moment where being patient and listening taught me a lesson that will stay with me forever. My students were working on a mathematics problem. We were going over it in class. The problem was as follows: A farmer wants to fence his field. He has 14 feet of fencing and wants to insert the poles every two feet. How many poles will he need? Most of my students said he would need 8 poles. One student, Samantha, indicated her answer was 7. The class immediately objected saying that she was wrong. With a bit of encouragement, she struggled to explain how she calculated the answer, and how she put the fence in a circle and eliminated one pole. The students argued that a fence had to be straight, so I asked why? I learned so much that day about myself as a teacher, and how important it is to support and create a space for divergent thinkers. Samantha was the teacher at that moment, and she gave me time to reflect on what was happening in class. I realized that slowing the pace of the class was one way to help students learn.

After teaching for five years, I became a principal and struggled with teachers who followed this pattern of testing as the main way of accounting for learning. Even teachers who were doing interesting things in their classes would resort to testing before the reporting time. By relying so heavily on testing student strengths and weaknesses were often missed. I have always believed that a more inclusive portrait of students is needed to support individual learning needs. In our discussions, many teachers defended their actions by saying that it was what parents expected. It was clear to me that teaching practices are the result of the complex interaction of many factors including personal experience, cultural practices, and personal assumptions beliefs about education. Any

attempt to change teaching must accommodate the multiple facets that are involved in teaching and learning.

The other major influence in my developing interest in classroom documentation was my exposure to the Reggio Emilia Approach to learning. This occurred by chance while I was living in Australia. With time on my hands I volunteered at a local elementary school. My contact with the school coincided with an art exposition produced by four and five year old students. I was invited to come and view the works as a way of getting to know the school. What I experienced that night was an epiphany. The students had worked in ten mediums including paint, plaster, sand, and string, etcetera. The displays were beautiful and professional, with notes about each written by the teachers in addition to comments by the students themselves. Recorded oral reflections were available and made by students who could not write. The quality and range of work was exceptional, so much so that I was skeptical about whether or not it was the work of the four and five year old children. I expressed my amazement to the principal and she assured me that the students did all the work and she suggested that I should do some reading on the Reggio Emilia Approach to learning.

Reggio Emilia is a highly respected pre-school program that was developed in Northern Italy at the end of World War II (Gandini, 1993). It is based on the belief that every child is creative and competent. It incorporates a stimulating learning environment, a project approach to learning, and includes the documentation of learning as central components of this approach to education (Mesher & Amoriggi, 2001). Later I had the great fortune to spend a week at seven Reggio Emilia schools in Italy, and saw first hand

the role documentation played. The teachers at the Reggio Emilia schools I visited embodied the concept of teaching as research (Rudduck & Hopkins, 1985). This involves an inquiry approach to teaching where teachers and students engage in the study of a problem or topic of interest. Teachers documented all aspects of the learning process and used the documentation to help understand students as learners, and the learning process in which they were involved.

My personal and professional experiences in education and my exposure to an education system that produces and values documentation as an integral part of learning were key reasons why I decided to study documentation in my elementary classroom.

Chapter Two: A Critical Review of the Literature

The purpose of this chapter is to critically review the literature related to documentation in the classroom. In this review I examine the literatures of documentation, reflective practice, and qualitative research. The literature on documentation is limited. Most of it comes from the field of early childhood education, and more recently from the proponents of “authentic assessment”. Authentic assessment is assessment that directly examines a student’s performance on meaningful intellectual task, and reflects a move away from traditional short answer and/or multiple-choice tests (Wiggins 1990).

A review of the literatures of reflective practice and qualitative research is relevant because documentation forms integral components of both. The literature on teacher research, a genre of qualitative research (Kerlin, 2000), is also reviewed because it represents the melding of theoretical and philosophical objectives of both qualitative research and reflective practice, and is the research methodology I chose for this project.

Documentation

Documentation, the recording of relevant information about students and their learning is standard teaching practice. Tests and report cards are the most frequently used methods for informing parents of student learning, and for meeting the accountability requirements in school. However reporting and accountability are not the only purposes of documentation. Documentation has been used successfully to deepen the understanding of student learning, and to improve teaching because it promotes

critical thinking (Dahlberg et al., 1999; Engel, 1993; Perrone, 1977). The use of documentation to understand learning has the potential to be a rich resource for supporting all teaching practices. Much of the literature and research on this use of documentation focuses on early childhood education with just a few educators writing about its use in elementary education. Recently it has been in the area of authentic assessment where interest in documentation had been generated.

Early Childhood Education

Historically, in the field of early childhood education, close attention has been paid to children. Early childhood educators have developed documentation strategies to understand and help students learn. Helm, Beneke, and Steinheimer (1997) listed five benefits of classroom documentation in early childhood education. Documenting helps teachers build curricula that enhances thinking, informs teaching decisions, encourages teachers to be more responsive to special needs, communicates to children that their learning is important, and fulfills the need for accountability. These authors concluded that documenting student learning might be one of the most important skills a teacher needs to learn.

The significance of documentation for early childhood education programs is best exemplified in the work done in the Reggio Emilia schools in Northern Italy (Edwards, Gandini, & Forman, 1998). The Reggio Emilia Approach, as it is now called, was founded by Loris Malaguzzi shortly after the Second World II. According to Malaguzzi (1993), the goal was “to create an amiable school - that is, a school that is active, inventive, liveable, documentable, and communicative” (p. 9). It was founded on the

philosophy that education is based on relationships, communicative networks, and interaction between and among children and adults who support them. Interest in the Reggio Emilia Approach has focused on many of its impressive features such as project work. According to Katz and Chard (1996), its unique contribution to early childhood education is the use of the documentation of children's experience as a standard classroom practice. Documentation in the Reggio Emilia Approach involves multiple types of recording of students and how they experience learning. Written and visual documentation furnish complementary but different lenses from which to view the classroom learning experience. Writing immediately engages the teacher in reflection and analysis through the process of creating the written documentation, while videotaped documentation allows for the revisiting of the event, looking at it from a different perspective, and noticing things that may have been missed. Documentation used for discussion leads to a deeper understanding of the processes of teaching and learning for both students and teachers. Katz and Chard suggest six ways that documentation has contributed to learning. The first three focus on the child. Documentation contributes to the depth of a child's learning by providing a record of thoughts and feelings. It makes their learning visible, and it acknowledges that children's ideas and work are taken seriously. From the perspective of the teacher, documentation supports planning and assessment as it occurs continuously in the classroom, deepens the teacher's awareness of each child's progress, and makes it possible for parents to become more aware of their child's school experience. In a discussion on the value of documentation in the Reggio Emilia schools, Forman (1999) has pointed out that understanding does not flow from the documentation itself, but rather, from the reflection on it. He suggests that

“documentation creates an attitude of reflective practice, a memory aid for details, and a platform for discourse among teachers and colleagues” (p. 4). With inspiration from the schools of Reggio Emilia, many early childhood educators around the world have begun to use documentation as a tool for reflecting on pedagogical practice (Edwards et al., 1998).

Elementary Education

The value of documentation is not limited to early childhood education. Perrone (1977) has written cogently about the benefits of documentation as a process for both evaluation and personal/professional development. According to him, the quality of a teachers’ understanding of both herself and her students influences to a large extent what teachers do in the classroom. He has concluded that studying one’s own practice is the most fertile learning environment for teachers. In a later work, Perrone (1991) decried the use of standardized tests to assess learning, especially at the elementary level. He concluded that the teachers who documented classroom activities and student learning had more knowledge about students and learning than those who did not and were better able to respond to student learning needs. Carini (1973) made extensive use of documentation to demonstrate the learning that occurred in an entire school. She noted that documentation over time is most effective in illuminating learning.

Although these educators demonstrated the value of documentation for understanding more than three decades ago, there is little evidence of its widespread use in classrooms today. One reason for this may be the lack of research on how documentation is carried out in the classroom and how it affects teaching and learning.

The challenge facing educators is how to effectively manage and use the documentation on individual students in very busy and demanding classrooms. This research project seeks to contribute to some answers to these challenges.

Authentic Assessment

Changes in education are not limited to curriculum. The need for assessment practices that reflect knowledge construction by students has been recognized. Authentic assessment, defined earlier in this paper (Darling-Hammond, Einbender, Frelow, & Ley-King, 1993; Wiggins, 1990), is the term used to signify how student learning is appraised in pedagogies where meaning is the focus of learning. Some of the characteristics of authentic assessment are that it is embedded in curriculum and instruction, serves multiple purposes, and uses many sources of evidence and different kinds of indicators. Authentic assessment strategies such as portfolios, performance assessments, and documentation over time, provide concrete evidence of learning rather than traditional, de-contextualized methods such as short answer and multiple-choice answer tests. Authentic assessment research results (Bullens, 2002; Engel, Pulley, & Rybinski, 1993) have affirmed the value of this form of assessment. Engel et al. (1993) considers that these changes in education reflect a paradigm shift that places meaning at the center of learning.

Shepard (2000) on the other hand, characterizes current education practices as dissonant because she believes instruction is based on constructivist learning theory, while assessment continues to be based on the traditional objectivist learning theory. Constructivist learning theory posits that knowledge is socially and culturally constructed

while objectivist learning theory argues that knowledge is acquired and learned in small incremental pieces and subsequently integrated. Shepard suggests that the gathering and analysis of available evidence of learning, that is documentation, provides a more reliable picture of student learning than traditional forms of assessment. Dahlberg et al. (1999) have agreed that there has been a paradigm shift and describe documentation as a powerful tool for opening a space for other voices and perspectives in a meaning-based pedagogy like constructivism. That is, knowledge is understood to be created as the result of social and linguistic constructs (Denzin and Lincoln, 2000). In this learning environment instruction and assessment are understood to occur simultaneously.

The function and use of documentation for utilitarian purposes, such as reporting and accountability, has a tradition in education, but the role of documentation for understanding has largely been limited to early childhood education. Documentation for understanding is the process of developing an in depth knowledge of students in order to support their learning. There is some evidence of documentation for the purpose of understanding at the elementary and secondary level where strategies like authentic assessment are beginning to be utilized. Although documentation for understanding has had a limited role in classroom teaching, it plays a pivotal role in other areas of education. Reflective practice and qualitative research are two areas where documentation plays a crucial role. A critical review of the literatures of both reflective practice and qualitative research provides the context for why a study of documentation in a classroom can contribute to knowledge of how to improve teaching and learning.

Reflective Practice

Reflection is an unusual way of thinking (Dewey, 1938). There are many definitions available but LaBoskey (1993) aptly incorporates many of the elements commonly attributed to reflection. She defines reflection as “a complex interplay of cognitive abilities, beliefs, values, attitudes, and emotions, which are employed within a problem-solving context” (p.25). I would add that reflection is not limited to problems but can be employed whenever we consider things or events.

Literature over the past two decades reveals the popularity of the concept of reflection and reflective practice in teaching (Calderhead & Gates, 1993; Valli, 1993; Zeichner & Liston, 1996). This popularity can be attributed to changes in education that recognize that knowledge/understanding is socially and historically constructed. Teaching methods have had to accommodate learning given this perspective. Reflection and reflective teaching practices have the potential to support teaching and learning in a dynamic and changing environment. Reflection is a deliberate mode of thinking which incorporates revisiting thoughts and experience. Revisiting offers the possibility of seeing the world from a different perspective which can in turn influence future responses. Many of the ideas about reflective thinking have their roots in the works of Dewey (1916, 1933, 1938). Dewey (1933) believed in experiential learning, viewed teaching as problem-solving, and recognized the need to be concerned with the moral dimension of education. He described and defined a way of thinking that supported his view of education. Dewey (1933) labeled this form of thinking, reflective thinking, and defined it as “active, persistent, and careful consideration of any belief or supposed form

of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (p. 9).

Although Dewey wrote cogently in the early 20th Century about the importance of developing teachers as reflective thinkers, this approach to teaching did not really challenge objectivism, the dominant teaching methodology of the times, until many years later (Atwell, 1987; Boomer, 1987; Britton, 1987; Bruner, 1960; Goodman, 1978; Graves, 1983; Rudduck & Hopkins, 1985). During the ensuing decades, knowledge was developed about human cognition in a range of disciplines such as cognitive psychology (Gardner, 1985), semiotics (Wertsch, 1991) and cultural psychology (Cole, 1996). Work in these disciplines, along with changes in society, have contributed to a resurgence of interest in reflective practice as a goal of education. This has occurred because traditional teaching strategies are no longer adequate for meeting learning needs in widely diverse student populations where knowledge is understood to be constructed rather than transmitted.

Most educational reform over the past two decades has been founded on constructivist learning theory, defined earlier as a theory that posits that all knowledge is socially and historically constructed. This theory of learning accommodates the diverse learning needs in classrooms because it recognizes the situatedness of learning. Teaching based on constructive learning theory and generation of knowledge within a naturalistic paradigm have been significant changes in education because these views have disrupted traditional approaches to schooling, and allowed for the re-emergence of teaching as

reflective practice. This re-emergence is closely associated with the work of Schön (1983, 1987).

Most literature on reflective practice refers to Donald Schön's books, "The Reflective Practitioner" and "Educating the Reflective Practitioner". They have become pivotal in the development of teaching as reflective practice (Tremmel, 1993). Schön helped identify and value the practical knowledge of professionals, including teachers. Practical knowledge is gained through experience and is often tacit in nature (Polanyi, 1964). Tacit knowledge is not part of the conscious mind but, nonetheless influences action. According to Schön (1983), this implicit knowledge, which can include experiential knowledge, cultural beliefs, and personal assumptions, plays a role in our response to the world.

Reflective practice in teaching requires redefining the role of the teacher. It calls for teachers to step back and view learning from multiple perspectives. Reflection provides the opportunity to accomplish this. Teaching in this manner requires guiding and coaching students' construction of knowledge. The traditional transmission model of teaching, that is, delivering a defined body of knowledge to passive learners, is no longer adequate in any learning situation, and certainly does not meet the needs of diverse learners. It is now understood that students come to school with culturally embedded knowledge that has an impact on what they are expected to learn in school. Prior knowledge and experience form the foundation on which students build new knowledge and make learning meaningful. An added factor in teaching today is that due to the global nature of society, intellectual, psychological, physical, and socio-cultural diversity

of students can be found in any classroom. Teaching in diverse classrooms means that teachers must possess pedagogical knowledge, content knowledge, as well as knowledge of their students and how they learn. When teachers learn about students and how to help them construct knowledge, they in turn generate knowledge about the teaching and learning process. This framework for education requires teachers to reflect and consider the consequences of their actions in order for optimal learning to occur. For these reasons, the goal of many teacher education and professional development programs today is to develop teachers as reflective practitioners (Risko, Vukelich, & Roskos, 2002).

Another prominent educator who was pivotal in the re-emergence of the concept of reflective teaching is Van Manen (1977, 1991, 1996). Van Manen approached reflection from a practical perspective, developing a typology of levels of reflective thinking. He defined three levels of reflection: self reflection, practical reflection, and critical reflection. Van Manen has suggested that critical reflection is the most significant dimension of reflection because it takes into consideration the larger issues in education, such as justice and equality. When applied to teaching, reflection at any level helps teachers improve practice because it affords the teacher the possibility of a deeper understanding of students, self, and the processes of teaching and learning. The concept of understanding through reflection has led to a belief that reflective thinking and practice produces better teachers (Risko et al., 2002; Rodgers, 2002a; Serafini, 2002; Valli, 1993; Wellington, 1996). How best to achieve this goal remains elusive, and continues to be the focus of widespread research and writing in education. Research on teacher education programs and research done by teachers on practice have made valuable

contributions to the discussion on reflection. Research and literature emanating from university teacher education programs have been at the forefront of efforts to define and understand reflection. The research conclusions (Risko et al., 2002; Valli, 1993) suggest that in spite of serious efforts focused on educating teachers to become reflective practitioners, the goal remains elusive for many. There is no single reason for this. It appears to be due to the complexity of reflective thinking. This research has produced results that have contributed in other ways to understanding reflection. Research based on teacher education programs has revealed that there are specific factors that influence the development of reflection. These include the mental models or images held by teachers (Calderhead & Robson, 1991; LaBoskey, 1993), the developmental nature of reflection (Reiman, 1999; Risko et al., 2002), and the predisposition to reflection (Giovannelli, 2003; Risko et al., 2002). Another result of this body of work is the development of various typologies (Hatton & Smith, 1995; Jay & Johnson, 2002; Valli, 1992; Wellington, 1996; Zeichner & Liston, 1996). A comparison of typologies reveals three common traits. The first is that the initial level of reflection appears to be focused on the effective and efficient management of the mechanics of teaching. The second is the recognition that unearthing personal beliefs and assumptions is part of the process of becoming a reflective practitioner. These beliefs and assumptions are what Schön (1983) referred to as tacit knowledge. It is significant knowledge because it forms part of individual teaching philosophies and influences action. Acknowledging and changing long-held beliefs are a challenging but necessary part of becoming a reflective practitioner (Brookfield, 1995; Bruner, 1996; Mayher, 1990). The third common element that these typologies share is the acknowledgement of the need for teachers to reach

beyond the individual classroom practices and personal agendas to reflect on broader educational issues from a socio-political perspective. This type of reflection is commonly called critical reflection. It involves questioning the purpose of schooling and the means by which these purposes are achieved.

Another perspective on reflection focuses on the philosophical foundation of teaching. According to Henderson (1992), a key characteristic of reflective practice is a caring ethic. An ethic of care is the moral basis of education according to Noddings (1988) and presumes teaching is based on relationship. Teachers express an ethic of caring through thoughtful interaction with children. Noddings (1984) wrote that when a “caring teacher asks a question in class and a student responds, she receives not just the response but the student. What the child says matters, whether it is right or wrong, and she probes gently for clarification, interpretation, contribution” (p. 176). Noddings (1988) has suggested that the moral aim of education remains valid today but requires a revised concept of morality, a morality of caring. The type of caring envisioned by Noddings is similar to a mother-child relationship. This type of caring is the natural desire to reach out to the other in a genuine manner as opposed to reaching out from a sense of duty. Elbaz (1992) has echoed Noddings call to promote the moral basis of teaching. She maintains that the moral voice of teaching is hope, attentiveness, and caring for difference. Like Noddings, Elbaz believes that teachers’ concern for children is grounded in relationship, in their connectedness to children. Van Manen (1996) states unequivocally that the concept of teacher as pedagogue assumes that he or she is motivated by a desire to care for the interests of children. Malaguzzi (1993) also believes education is based on relationship. He believes in the need for connectedness between

adults and children. He espouses a view of children as being rich in potential, as well as, strong, powerful, and competent.

Reflective practice is consistent with education based on caring relationships. Reflective practitioners develop an in-depth knowledge of students and this becomes the foundation for empathic relationships. Empathy is defined as “the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experiences of others” (Merriam-Webster, 2005). Empathy is understanding from the perspective of the other. Carkhuff (1969) wrote convincingly about the skills needed to develop caring relationships based on empathy. Carkhuff has suggested that teachers must learn to attend, to listen, and to observe students effectively.

A number of educators and researchers have proposed concepts to inform the discourse of reflection. Rodgers (2002b) coined the term presence, Tremmel (1993) uses mindfulness, and Elbaz (1992) draws on the word attentiveness to describe the state of being in the moment with students. Teachers who do this understand how students are experiencing learning because they take time to listen and value learning. It is a state of mind necessary for reflection.

Teaching as reflective practice refers to those teachers who take an inquiry stance in their teaching where they study their students, get to know them and how they think, then use this as the basis for teaching and learning. Reflective practice is built on an in-depth understanding of students gained through trusting relationships. Documentation plays a crucial role in the development of these types of relationships because it preserves what transpires and then permits revisiting events and reflecting on them. In doing this a

teacher develops a profound knowledge of students on many levels and uses this understanding to support learning. The dynamic, stimulating environment of the classroom is not conducive to remembering all that is important in the classroom, whereas documentation, in its myriad of forms, aids memory and provides the teacher with material on which to reflect. The challenge for teachers is to learn how to produce and use documentation effectively to support learning.

The literature on reflective practice paints a picture of teaching that demands much more of teachers than that associated with the traditional teaching roles. The inquiry stance of reflective practice means teachers continually question themselves and their teaching, study students, and struggle to understand how they learn. Documentation supports an inquiry stance in teaching. Teaching from this perspective is considered by some as synonymous with research but for others there are significant differences between the two. The case for distinction between inquiry teaching and qualitative research in the classroom can be found in the literature (Hammer & Schifter, 2001; Huberman, 1999; Lampert, 2000). Although these authors believe that each method of deepening understanding of teaching and learning can learn from the other, they argue that the scope and methods of research go beyond inquiry teaching. Teaching from an inquiry stance is a way of functioning as a teacher and although there is observation and note taking, its purpose is to encourage a teacher to be open in the learning environment, to pose questions, and to seek solutions to identified problems in her classroom. Qualitative research on the other hand utilizes a rigorous methodology and employs an emergent design to study some aspect of education, usually with the intention of making the research results public. The purpose of the inquiry determines the methods used. I

have chosen to use qualitative research as my methodology to study documentation in my classroom. I now turn to a review of the literature on qualitative research to explore the traditional role of documentation and how it supports meaning making.

Qualitative Research

Qualitative research is an umbrella term that covers a multitude of theoretical and methodological orientations of interpretive research. Although qualitative research is accepted as a legitimate form of knowledge creation, questions and challenges still remain. Issues around representation, reflexivity, validity, and voice bring the subject of documentation into focus.

Human progress hinges on the continuous development of knowledge and understanding of the human condition. Qualitative research is described as a fluid, multifaceted interpretive process engaged in for the purpose of creating knowledge (Denzin & Lincoln, 1994, 2000; Strauss & Corbin, 1998). Denzin and Lincoln (1994) define qualitative research as a naturalistic approach to studying a topic in context. "This means that qualitative researchers study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (p. 2). From this definition, qualitative research can be seen as situated activity that is interpretative and naturalistic in nature. It examines peoples' words and actions in narrative or descriptive ways closely representing the lived experience of the participants (Maykut & Morehouse, 1994). This humanizing of research through qualitative methodology suits the field of education which has widely adopted qualitative research as a method of inquiry (Bolster, 1983; Lampert, 2000). Its data sources are multiple and

include fieldnotes, observations, interviews, artifacts, and audio and visual recordings. These sources demonstrate that qualitative research, like all research, is grounded in the documentation process. It is documentation that is methodical, rigorous and trustworthy. The veracity of research is dependent upon the accurate collection and recording of data whether the study involves reactions to a new drug using quantitative research methods or the effects on family life as the result of hurricane Katrina using qualitative research methods. Documentation does not end here, but is the thread that continues through the research process making meaning and understanding possible. Qualitative researchers document the lived experience of others. Research participants are not considered objects to be studied. Rather they participate in varying degrees in the creation of knowledge about themselves and the context of their lives. The interpretation and representation of the lived experience of research participants have come under scrutiny because of the realization that knowledge is culturally and historically created (Bruner, 1996; Vygotsky, 1978, 1986) from multiple and competing perspectives. Careful and detailed documentation of research participants and events is the initial stage in the search for understanding what this information means to them and their lives. Qualitative researchers must also openly consider the issues of representation, reflectivity, validity, and voice, if their research results are to be considered ethical and credible.

Representation

Qualitative researchers must answer the questions of who the research participants are and how their experience can be represented authentically. Qualitative researchers are not objective observers, but rather are active participants in the choice of what is

considered important for the purposes of the research. Thus representing others is always selective and includes a particular perspective. Germaine in the discussion about research results is the concern about what knowledge is created and by whom, from what perspective, for what purpose and, for what use (Foucault, 1980; Freire, 1970; Lather, 1993). According to Page (2000), the question of representation has presented both an aesthetic and political challenge to conventions of qualitative research. Written text has been used most often to report research results, but now is understood to be a particular construction of, rather than a replication of, reality. Research reports that provide a certain perspective on what is studied are frequently represented as if they were objective portrayals (Van Maanen, 1988). The rhetorical nature of text has problematized the knowledge it presents. One of the results of recognizing the limitation of written text has been to seek alternate forms for representing knowledge. Arts-informed inquiry, including literary theory, visual and performance arts have become a source of thinking about the problem of representation (Clandinin & Connelly, 2000; Eisner, 1991, 2003; Lawrence-Lightfoot & Davis, 1997) and alternate ways of representing research. "Arts-informed research is defined by the presence of certain aesthetic qualities or design elements that infuse the inquiry and its writing" (Barone & Eisner, 1997, p. 3). These writers have defended the value of arts-informed research because its goal, like all research, is to further human understanding. Arts-informed research adds to understanding and improvement in education, because it involves multiple intelligences and evokes emotional as well as cognitive responses. One genre of arts-informed research that is prominent in education research is narrative inquiry (Clandinin & Connelly, 2000; Connelly & Clandinin, 1990; Rosenwald & Ochberg, 1992). Human

beings naturally reconstruct experience in the form of stories, so the study of narrative is the study of how humans experience the world. The storied lives of teachers and learners are reconstructed in narrative research with the goal of learning more deeply from them. The challenge to any arts-informed research is how to assess the quality of this type of work (Barone & Eisner, 1997; Bochner, 2000; Denzin, 2000; Denzin & Lincoln, 2000; Richardson, 2000). Arts-informed research must be measured against some standard to encourage growth and development in the field. The establishment of acceptable criteria for this genre of research is a work in progress (Richardson, 2000).

The question of representation has also spawned a political challenge. The problem of the manner in which knowledge is represented has been compounded by the question of whose views a text portrays. Critical theorists (Foucault, 1980; Freire, 1970; Shor, 1992) and feminist theorists (Belenky, Clinchy, Goldberger, & Tarule, 1986; Gilligan, 1982; Lather, 1993) have suggested that research discourse should be less about the knowledge created, and more about unmasking the dynamics of the power it represents. According to these theorists, who the researchers are, and who funds the research determine the research questions asked and eventually the voices heard. For them, explicating power structures should be the focus of qualitative research along with understanding local, and often marginalized groups. Research of this nature no longer silences others, but gives voice to their concerns as disenfranchised minorities. Putney, Green, Dixon, and Kelly (1999) have suggested that the disenfranchised in education have been important stakeholders like teachers, parents, and children whose voices have been silent. Putney et al. (1999) propose an open, critical dialogue with all stakeholders in the context of a study as way of moving forward with qualitative research. Lincoln

and Guba (2000) have gone further by proposing the inclusion of stakeholders in research efforts so that voices and perspectives can be represented. This type of research is referred to as participatory action research. Inclusion is at the grass roots level of participatory action research, research that provides opportunities to empower people, or research that lets others share their own narratives. These non-traditional forms of research may produce messy texts, but generate research results that are more democratic and more focused on the social goals of participants. This may be the most productive way of approaching change in education with all stakeholders as participants.

Reflexivity

Reflexivity is the process of thinking critically about the self as researcher (Lincoln & Guba, 2000). It is the conscious coming to know the self within the research process for the purpose of being able to understand others. Self-reflection leads to understanding what beliefs, values and world view the researcher possesses. This process raises awareness about biases that can influence us and affect one's ability to understand the meaning things have for others. Reinhartz (1997) suggested that the selves researchers deal with fall into three categories, research-based selves, brought selves (socially, historically and personally created selves), and created selves within context. Each self has a voice and needs to be interrogated for its influence on research choices. Researcher recognition of the multiple selves also sensitizes the researcher to be open to the multiple selves of others. According to Patton (2002), reflexivity or self-awareness has become a requirement of qualitative inquiry. He suggests that reflexivity occurs in three forms. There is self-reflexivity, reflexivity about those studied, and reflexivity about

audience. These forms when used together represent triangulated reflexive inquiry that provides a framework for sorting through researcher issues during all phases of the research process. Richardson (2000) and Lincoln (1995a) have included reflexivity as validity criteria for qualitative research. The question of how the subjectivity of the researcher influences the process of producing the text and the ultimate product needs to be evident to the readers/viewers if the work is to be considered credible or valid. For this reason, researchers must consider reflexivity as an integral part of the research process.

Validity

A question that must be answered by all researchers is whether or not research results are worth considering, in other words, if they are credible, and why. When qualitative researchers speak of validity, they are referring to qualitative research that is plausible, credible, trustworthy, and therefore, defensible. This perspective on validity is predicated on the notion that qualitative research is interpretive, that different interpretations are possible and definable, and research results reflect the multiple perspectives and the lived experience of participants.

After examining the many and varied discourses of validity, Lather (2001) concluded that “rather than exhausting the problem, all exemplify how the effort to answer the problem of validity is always partial, situated and temporary” (p. 244). She has proposed that the most promising discourse is the one that moves in the direction of eliminating the distinctions between validity and ethics. According to Lather, the line between validity and ethics became blurred with the creation of authenticity criteria such

as trustworthiness, member checks, etcetera. Guba and Lincoln (1989) coined the terms fairness and ontological (balancing viewpoints), educative (reciprocal learning), catalytic (fostering social action), and tactical authenticity (sharing knowledge democratically) as appropriate criteria for qualitative research. This conception of validity moved the discourse about the validity of qualitative research from a set of knowledge concepts to the situated context of inquiry. Lincoln (1995a) expanded this view by suggesting that quality criteria should be fluid and emergent within the research itself. This view of validity focuses on criteria that fuse rigor and ethics. Lincoln describes seven criteria for validity that are founded on the researcher/researched relationship. These include positionality (standpoint), community, voice (who speaks, for whom, to whom, and for what purpose), critical subjectivity (reflexivity), reciprocity (trust, caring between researcher and researched), sacredness (respect for all life forms that nourishes us as human beings), and sharing the privileges of research (economic and social recognition of research participants).

More than a decade of dialogue about how to assess validity in qualitative research has resulted in a consensus that the interpretive paradigm precludes establishing rigid criteria as measures of validity. In other words, validity must be considered from different perspectives depending on the research in question. The multiple criteria that have evolved contribute in various ways to the goal of ensuring that qualitative research results are credible. The relational and interpretive nature of qualitative research has led to the current understanding that validity must include ethical practices and that validity criteria should emanate from the research. This situated validity is considered a credible alternative to the already existing criteria for validity (Lather, 2001; Lincoln, 1995a).

Situated validity of qualitative research raises the question about the meaning of the study beyond the immediate research environment. The generalizability of research results has always been central to establishing validity in quantitative research, but has no currency in qualitative research. Qualitative researchers believe that the power of research to inform remains in the hands of the reader of qualitative research rather than being defined by the researcher. Donmoyer (1990) has proposed an alternate way of thinking about generalizability using schema theory. He believes that the single-case study permits readers to move beyond their conceptual boundaries by comparing similarities and differences in context. Riessman (1993) has agreed, suggesting that one of the goals in interpretive research is to learn about the general from the particular. Furthermore, evocative and alternative representations of qualitative, for example in arts-informed work, have promoted discussions about validity criteria. As a result there is growing consensus that no canonical approach to validity is possible (Eisner, 1991; Richardson, 2000).

Currently there is a focus on the intrinsic, ethical nature of all human research (Lather, 2001; Lincoln, 1995b; Scheurich, 1996). The definition of research ethics is broadened beyond how research participants are treated during the research to include consideration of the purposes of the research, the voices it represents, and the uses to which research results will be put. Transparency about who benefits from research and how, gives research participants the opportunity to make informed choices about involvement in the process. The focus on ethics brings to the forefront the issue of power and its influence on the researcher/researched relationship. For example, the power difference between teacher and student can never be totally eliminated but, it is critical to

acknowledge it and be conscious of its potential influence, especially when working with young children.

Voice

Voice is a complex, multilayered concept. Qualitative researchers work to understand and interpret the lives of others. The representations of this work, in text or other forms must be multi-vocal because no one perspective can adequately represent meaning for others. There is always a struggle to represent the researcher's voice, the participants' voices, and to express the voice created through the interaction of researcher and participants in the research process. Patton (2002) cautions that attention to voice applies not only to the intentionality of the voice of the researcher, but also to intentionality and consciousness about whose voices and what messages are represented in the final form of the research. Coffey and Atkinson (1996) make the point that qualitative reporting can describe dominant voices, or can "give voice" to otherwise silenced voices. Alternate forms of representation can help those reading the research 'hear' the voices more clearly such as by using poetry created in participants' own words (Butler-Kisber, 2002). Lincoln and Guba (2000) suggest that the practices of reflexivity and narrativity are essential to achieving a voice. Reflexivity raises the researcher's consciousness about unconscious influences in the research process. Narrativity gives voice to the storied lives of participants and allows them to become visible and audible through their stories.

The issues of reflexivity, representation, validity, and voice focus attention on the interpretive nature of qualitative research and the struggle to make the perspective of the

researcher transparent and the voices of participants heard. To do this the researcher must listen diligently and record carefully what research participants are saying while being conscious of personal biases. In this way biases can be accounted for when interpreting meaning. The genuineness of the multi-vocal reporting in qualitative research depends on the reflexivity of the researcher and the authenticity of the representation of research participants. It is incumbent upon each qualitative researcher to keep these issues at the forefront throughout the entire research process and to demonstrate how this has been done. Detailed documentation of all aspects of the research process provides the necessary transparency for ensuring credible results. The pivotal role documentation plays in both qualitative research and reflective teaching practice is exemplified in the literature on teacher-researcher which is the subject of the next section and provides another lens for my study.

Teacher-Researcher Inquiry

Teacher-researcher inquiry is the self-study of teaching practice. Baumann and Duffy (2001) have proposed that the numerous definitions of teacher as researcher work share the following commonalities: a) the teacher plays the unique role of active participant and researcher; b) the teacher reflects on her/his own practice and then takes action to improve practice; c) and the teacher as researcher utilizes a systematic plan and methodology for gathering and analyzing data. According to Cochran-Smith and Lytle (1993), this type of research is the systematic and intentional inquiry by teachers about their own school and classroom work that provides a unique perspective on teaching and learning. They propose that knowledge created by teachers studying their own practice is

qualitatively different from other types of knowledge created by educational researchers. The basis for this view is that teachers study learning from the inside. As teachers are an intimate part of the classroom, they ask questions an outside researcher might not think to ask. The practical knowledge created as a result is more concrete and contextually relevant, and takes into account the multiple factors such as the awareness of individual students and experience, the maintenance of momentum in the classroom, the consideration of alternative explanations and the constraints of curriculum that a teacher must deal with simultaneously.

In a review of a decade of work by the teacher-researcher movement, Cochran-Smith and Lytle (1999) defined three general, often overlapping categories of teacher-researcher work. These are personal inquiry, practical research, and social inquiry. Each type of teacher inquiry is defined by the primary objective of the research. Personal inquiry focuses on the improvement of practice, practical research deals with specific problems of practice, and social inquiry involves the study of practice with the aim of improving education. They suggest all forms of teacher-researcher inquiry necessitate reflexivity (reflection that focuses back on the self) and reflection (a way of thinking that considers the other).

Teacher-researcher study involves teachers in reflection about their own personal beliefs and teaching practices in order to understand more fully what is happening in the classroom. Teacher researchers consistently comment on the positive influence that inquiring into their own practice has on their teaching (Nuthall, 1999; Wells, 2001). These teachers have reported finding themselves listening to, and observing their students

closely, which has led to a deeper understanding of their practice and of how students learn and has resulted in actions to change aspects of their teaching practice. For example, Gallas (1992) changed traditional 'show and tell', a process directed by the teacher who asks a question, receives a response and then evaluates what has been said, into a dialogic learning experience among the children that was more meaningful and pedagogically sound. Davis (2001) and Donohue (2001) studied classroom meetings and changed classroom practices to respond to a new understanding of how students perceived meetings and how these teachers influenced student activity. Girod, Pardales, and Cervetti (2002) reported similar research results from teachers engaged in teacher-researcher work at both the elementary and high school level. They indicated that as teachers gained insight from reflecting on their teaching, they became inspired and worked to improve their teaching. Some other positive effects reported by teacher researchers are that inquiry produced reflection that slowed down their thinking, kept them from acting impulsively, and focused classroom teaching on learning (Cochran-Smith & Lytle, 1993; Newman, 1998; Newman, 1996; Noddings, 2001; Wells, 2001).

In spite of the current emphasis on voice in qualitative research described earlier the lack of student voices in educational research has been noted (Alton-Lee, Nuthall, & Patrick, 1993). Teacher-researcher inquiry, however, provides the opportunity for children to reflect on their learning as part of the research process (Wells, 2001; Zack, 1991, 1999). As a result, children become more aware of learning and their voices are represented in the research. The consequence is a broader, more inclusive perspective on how to support learning. My commitment to representing student voices in reporting research results can be found in Chapter Six of this document.

The most consistent finding in teacher-researcher inquiry reports is the transformative changes in teaching and learning that result from researching one's own practice. Teacher researchers engaged in reflection as part of the inquiry process, change their perspectives on teaching and they found the experience affected how they perceived themselves as teachers. As well, teacher researchers have noted how the reflection generated during the research remained as part of their normal teaching practices afterwards (Girod & Pardales, 2001; Peters, 1998; Wastie, 1998).

Zeichner and Noffke (2001) cite the re-emergence of reflective practice as an important influence on the development of the teacher researcher. The interconnection and interdependence of research and reflection are clearly visible in the work of teacher researchers. There is a broad consensus among educators that developing reflective thinking and an inquiry stance in teaching produces better teachers (Risko et al., 2002; Rodgers, 2002b; Serafini, 2002; Valli, 1992; Wellington, 1996). What is not clear is how to incorporate inquiry and reflection into the everyday activity of all classroom teaching. This study on documentation in an elementary classroom is an effort to deepen understanding on these topics.

Lampert (2000) has suggested how teacher-researcher inquiry raises important issues for the field of qualitative research. First is the potential for a change in ideas about who is responsible for producing professional knowledge. This type of research is praxis-guided research. Praxis is theory-infused action, or theory in action. The separation of the development of theory from the reality of practice defined the teaching profession for many decades and, as a result, the creation of knowledge has traditionally

been the domain of academia (Cochran-Smith & Lytle, 1993). The epistemological change from understanding knowledge as discovered, to understanding knowledge as created in context has helped to bring recognition to the value of practical knowledge. Teacher-researcher inquiry builds on theoretical knowledge to create practical knowledge and improves teaching and learning. Through this process teachers, and sometimes students, acquire a voice in the production of knowledge for teaching. In this type of research academia no longer dominates in creating knowledge about teaching and learning (Girod & Pardales, 2001). When injected with a critical stance, teacher-researcher inquiry has the potential to challenge the power relations, the established roles, and the direction of education and society in general (Diniz-Pereira, 2002; Freire, 1970; Girod et al., 2002).

Summary

The importance of documentation in early childhood education and its use in promoting authentic assessment are clear examples of the potential of this practice has for improving education. The fields of qualitative research and teaching as reflective practice both rely on multiple forms of documentation to support their objectives. Teacher-research inquiry, the study of ones own practice, incorporates the philosophy and objectives of both qualitative research and reflective practice and systematically utilizes documentation for specific purposes. This review of the literatures on documentation, reflective practice, and qualitative research demonstrates the value of documentation in teaching, learning, and knowledge creation. What seems to be missing from the literature is research on how to carry out and use documentation to improve

classroom teaching and learning. Accordingly, this study seeks to understand how documentation occurs in a particular setting and how this contributes to teaching and learning. I believe the answers to these questions will contribute to the field and help to improve education.

Chapter Three: Methodology

Situating Myself on the Research Landscape

The decision to pursue my PhD studies came at a time of change in my professional life. I had taken a year's sabbatical and was to return to my job as an elementary school principal. The first option I had for my PhD work was to resume my position as a principal and conduct my research in another teacher's classroom. The second option was to return to classroom teaching and to conduct research on my own practice. I chose the latter.

As mentioned earlier, teacher-researcher inquiry is a genre of qualitative research. In qualitative inquiry the researcher studies the lived experience of people and events with the objective of understanding what it means from their perspective. My topic, classroom documentation, focuses on the experience of documenting teaching and learning in an elementary classroom. To conduct the work I chose to do a qualitative study to try to understand my documentation processes and how they related to the everyday activity in my classroom.

As indicated in the previous chapter qualitative inquiry encompasses multiple genres of research within the qualitative perspective. Qualitative researchers approach their studies with a specific world view. This world view reflects a basic set of beliefs or assumptions that guides their inquiries. According to Creswell (1998), these beliefs can be broken down into five categories. They include assumptions about the nature of reality (ontological), the nature of knowing (epistemological), the role of values

(axiological), the role of language (rhetorical) and the process of research (methodological). In other words qualitative researchers view reality as subjective and multiple. They try to bring the researcher and researched closer together, use an emergent design to study topics within context, and communicate research results in reader-friendly language. Qualitative inquiry suits the needs and purposes of education in terms of accessibility and utility (Bolster, 1983; Lampert, 2000). To understand the lived experience of teachers and students, their everyday lives must be studied in context in order to reflect their multiple and varied perspectives. Qualitative methodology also uses multiple interpretations of research data with the aim of deepening understanding of everyday experience. In addition to the philosophical basis of interpretive research, qualitative researchers are also conscious of the need to explore and understand their own perspectives and how these influence the research process. As a qualitative researcher, I assume a constructivist perspective, recognizing the social and historical construction of knowledge and a critical perspective, acknowledging the need to address social and economic inequities that influence school success.

The basic premise of constructivism is that human understanding is shaped by cultural and linguistic constructs. Denzin and Lincoln (2000) describe constructivism from ontological, epistemological and methodological perspectives. They argue that there are multiple realities, that the researcher and researched co-create meanings, and that methods should be sensitive to each context. A constructivist stance assumes the world is socially constructed and is experienced as real by people who hold their own understanding of what it means. Patton (2002) suggests that constructivism has contributed to qualitative inquiry because it focuses on delineating and honouring

multiple perspectives, and values language as a social and cultural construction. It also recognizes how methods determine findings and acknowledges the importance of understanding the relationship between the investigator and the investigated. When studying education from a constructivist perspective, the multiple realities of students, teachers, administrators and other stakeholders all contribute to understanding how education occurs and how it can be changed.

In my teaching I take a constructive perspective. I encourage active student engagement in learning, recognizing that knowledge is co-constructed in the classroom. I am aware that multiple and competing realities of family, culture and society influence learning. Most importantly I work continuously to develop strong, caring relationships with my students.

I support active participation from my students in a variety of ways such as providing choices in learning, and encouraging students' reflection. For example, when the children are working in literature study groups they choose what they read and carry out assignments that are meaningful to them. They also engage in oral and written reflection about their learning (see Appendix A, Student Reflection Sheets). The reflection sheets in Appendix A are examples of reflections about the unit of inquiry on occupations that they had completed during the time of this study. Student reflections helped me consider the unit of study from the students' perspective.

My class was typical of the school in general with students coming from a variety of family groupings. Children came from traditional two parent heterosexual family units, blended families, single parent families, and blended homosexual family units. The

influences of family situations on student learning became evident very quickly. Jessie was a good example of the pressures both students and parents lived with as they tried to meet their family obligations. Jessie lived with her mother during the week and saw her father on weekends. Jessie's mom was unilingual and spoke only in French and was, therefore, unable to help Jessie with her English-language homework. As noted later in this chapter this school is part of the linguistic education system in Quebec where schools are classified as either French language or English language. EIS is classified as an English language school with a bilingual program that teaches both English and French as first languages. Jessie's dad was fluently bilingual and as a result helped her with homework on the weekend. This family situation made it unrealistic for me to expect Jessie to complete her homework by Friday each week as I did with the other students. It was important that Jessie and her parents understood that learning was the focus and not the submission date for homework. I only learned of the dilemma Jessie faced when I happened to inquire about her homework that was missing. After a quiet and private discussion we solved the problem by changing the due date to Mondays. Jessie agreed to discuss this with her parents and to have them contact me if there were any questions. It was a simple solution to what might have been a more complex problem.

Relationship building played a pivotal role in my classroom. Like all relationships, it takes time and effort to establish trusting relationships with students. As shown with Jessie, this is done by each small encounter that occurs between teacher and student and by taking the opportunity to show students you care when there is an occasion to do so. The unit of inquiry on occupations, mentioned above, provides another example. Units of inquiry about universal ideas are a mandatory in IBO

curriculum. These inquiry units explore a specific topic and approach it from multiple perspectives. Occupations was one of the topics for my grade level. After reading books on past and present-day occupations, the students interviewed three adults about their occupations and how they had changed over time. The books and interviews became the basis of classroom discussions, activities, and further work on occupations. In this learning situation the students and I alternated the roles of learner and teacher while they shared what they had gathered. The students were very engaged in the work because they had interviewed people who were significant to them. It was important that I made sure each student had the opportunity to share his/her experience and I attempted to personalize and celebrate what had been accomplished by recording the information for all to see. They felt acknowledged and important as a result. This was one way that I tried to nurture strong, caring relationships with my students. Like Noddings (1984, 1988), I believe this commitment to developing caring student-teacher relationships based on an in-depth understanding of my students is central to learning and reflects my constructivist perspective.

Critical theory has also influenced my research perspective. Patton (2002) believes a critical stance in qualitative research is very influential because it focuses on how injustice and oppression shape peoples' experience and understanding of the world. The education experience shapes children in more than academic ways. School is most often the first contact children have with the outside world and their experience of it influences how they understand the-world-at-large. The more positive this experience is for students, the better. Research into how to improve this pivotal experience can reap long term benefits for children as individuals and for society in general. Bogdan and

Biklen (1992) suggest that a critical research framework recognizes that all social relationships are influenced by power relations and must be taken into account. This is particularly relevant in situations where there is a wide power differential as in student and teacher relations. As students become more active participants in their learning and teachers more frequently assume the role of learner, this difference can be lessened. Unfortunately schools that empower students and engage them in their learning are not widespread (Nuthall, 2004). I believe the present study on documentation will help fill this void because the documentation process necessarily develops a deep understanding of students as individuals, requires teachers to assume the role of learner, and encourages reflection that improves teaching.

Critical constructivism, then, is a perspective that recognizes that students are individual learners who have diverse social and cultural knowledge and values that impact their learning, and that classrooms are not necessarily democratic learning environments. My orientation to critical constructivism is consistent with my choice of teacher-researcher inquiry as the genre of qualitative research. This type of inquiry, the study of one's own teaching practice, has been slow to emerge on the research landscape but "there has been growing support for its knowledge generating potential" (Zeichner & Noffke, 2001). Teachers are now becoming recognized as producers and mediators of educational knowledge rather than just consumers of it. Teacher-researcher inquiry investigates the insider view on teaching and learning, and provides a different perspective on what is studied than what is provided when research is conducted by an outsider. The knowledge created is practical and local and can be of immediate use, but it can also contribute to the evolving body of knowledge about teaching and learning.

Teacher-researcher inquiry is the most practical and contextually sensitive research that is likely to have a direct and significant impact on improving teaching (Clark & Moss, 1996; Nuthall, 2004). As mentioned earlier it reflects a variety of purposes and methods geared to meet specific goals. My interest in conducting teacher-researcher inquiry in my classroom was motivated by both a social and a political objective. From a social perspective the study of documentation includes all students and focuses on my responsibility to attend to each student's needs. From a political perspective conducting a teacher-researcher study highlights the reality of teaching in highly diverse classrooms.

Summary

In this section I have tried to position myself on the research landscape. I have provided a general description of my qualitative orientation and have broadly situated myself in a critical constructivism position. The various stages of the research process that make up the rest of the chapter: entry/ethics, data collection, data analysis, and representation are to be explored next with this positioning in mind.

Setting the Scene - An introduction to the Research Context

My decision to go back to teaching set in motion the process of returning to the classroom. The Director General of the School Board was very enthusiastic about my request and thought it was a promising move. He believed that having a principal return to teaching would provide a link between the teaching and administrative staff and help furnish insights that would not be possible from outsiders. This was particularly

important because of the current context of education reform in Quebec. Since 1999, a new education program, which I will elaborate upon later, known as the Quebec Education Program (QEP) has been gradually introduced into Quebec schools (Ministère de l'Éducation, 1999). This Director General was concerned that administrators who had not taught for many years would have difficulty understanding and providing the pedagogical support for the new program. He saw my move to the classroom as a way of alleviating some of these concerns.

In response to my request, I was offered a teaching position at the cycle-two, year-one level (previously known as Grade 3 before the curriculum reform) at Elias International School (EIS). For reasons of confidentiality EIS is a pseudonym. The school is named for the community in which it is situated. Elias is a small, suburban community in the greater Montreal area in the province of Quebec. EIS houses students from both the French and English linguistic school boards in the area. The education services in Quebec are under the direction of municipally elected English and French linguistic boards that oversee the implementation of the provincially legislated education program in schools under their jurisdiction. Both boards offer this international school experience under one administration. The context provides students at EIS with rich language and cultural learning experiences.

EIS is the only elementary school in the English board that meets the requirements of both the QEP and the International Baccalaureate Organization. Like all schools in Quebec, daily teaching and learning at EIS is based on the QEP mandated by the Quebec Ministry of Education, Sports, and Leisure (MELS). The QEP is predicated

on constructivist learning theory with builds toward cross-curricular competencies and life-long learning objectives. Cross-curricular competencies are generic competencies such as critical thinking and problem solving that cross subject lines and are believed to be important in preparing students to live in society. The constructivist learning approach is consistent with the educational objectives mandated by the International Baccalaureate Organization (IBO). The IBO also uses a constructivist approach to learning realized through units of inquiry or project learning where students study broad topics of interest to all societies in which the IBO has affiliated schools. The goal of the IBO is to develop the value of openness to the world at large in a perspective of cooperation and tolerance (Kauffman, 2005). Schools in Quebec are encouraged to develop IBO programs by the Société des Écoles d'Éducation Internationale (SEEI). SEEI is a cooperative support organization involved in the formation and evolution of international schools in Quebec. Although EIS meets the requirements to be designated as an International School, it remains a public elementary school in the Quebec education system. While considered an English language school, it offers a bilingual program of French and English, and follows the same education program as all other elementary schools. Evidence of this can be found in the fact that students can transfer into or out of EIS without difficulty.

I had two concerns with a teaching assignment at EIS. The first and more important one was that entrance requirements went along with the international school status. Students are required to complete screening tests for language and mathematics. I had wanted to teach what might have been a more diverse group of students to enhance the credibility of my study. The other concern was that fact that the principal of EIS was

a friend of mine. I addressed both concerns by openly discussing them with Kelly, the principal at EIS.

My concern about the type of school was allayed when I learned about the school and its mandate. As the only school in the board following both the QEP and the IBO program there is always an abundance of students wishing to attend the school. According to the school principal, the main objective of the entrance screening is to identify students who have serious learning difficulties. There were two reasons for this. First, because of the school's designation, there is no learning resource teacher assigned to the school. This means that students with serious learning difficulties do not have access to specialized help at EIS as they would in other schools in the board. The second reason is that the school follows two curricula and because of this there is an added academic demand on students.

I knew quite a bit about EIS and its community because I had lived and worked in nearby communities for over a decade. The school was situated within a lower socio-economic neighbourhood, and had served as a community school for many years. Due to declining enrolment and the potential loss of its place as a community school, the school governance sought a niche in the education market and chose to become an international school serving students not just from the local community but from surrounding communities as well. The students who belong to the local community have first choice in school placements. Students from surrounding communities make up the full complement in the school. The significance of these criteria is that only students in the school community have a right to transport to the school. Students from surrounding

communities must be transported by parents if they wish to attend. The student population reflects the broad base from which it is drawn. During my study, students came from a minimum of eight different communities.

EIS is a two story building that was constructed in the early 1960's within the suburban community of Elias. It is surrounded by private homes and a community park with a swimming pool. The school houses 22 classes, 10 operate mainly in English and 12 in French, with a total of approximately 550 students. Upon first entering the school, I was struck by the international flavour of the building. The school was bright and welcoming. The entrance hallway was decorated in an international theme with flags, maps, and murals depicting diverse cultures. Small flags from all the countries in the United Nations were mounted on the wall just above a painted globe. The school was and still is well maintained with the help of parents. It has a well stocked library, an up-to-date computer laboratory, and a student lunch room. It also has a daycare program before and after school. Daycare provides supervised care for all school aged children before school, at lunch period, and after school if their parents opt to use it. Approximately fifty percent of students access the daycare services at the school with many classrooms doubling as daycare rooms once the school day is finished. Over eighty percent of students remain at school for lunch.

The demographics of the school reveal a multicultural, multiethnic student body with the majority of students coming from upper-middle socio-economic backgrounds where both parents work. My class was made up of 15 girls and 12 boys. The following pie graphs provide further information about these students. Figure 1 represents the

percentage of students from different communities. Figure 2 represents the percentage of students attending school daycare. Figure 3 represents the percentage of first language of students and depicts basic information about my class. The information is consistent with the demographics of the English language sector of EIS.

Figure 1: Percentage of student from different communities.

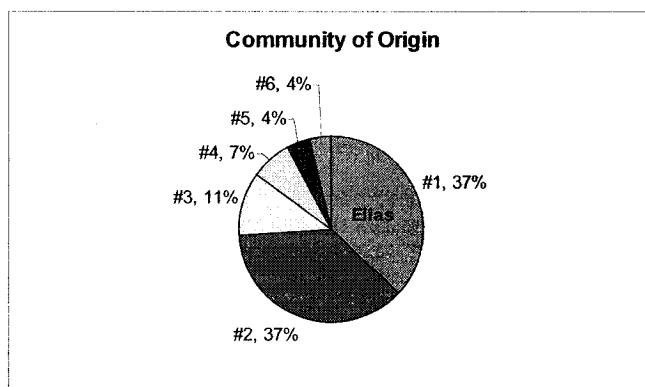


Figure 1 shows the distribution of students by community. The community of origin information is significant because only 10 of 27 students from my class were from the local community, and therefore entitled to transportation. The parents of the other seventeen students had to transport their children on their own. This indicates commitment on the part of parents to the value of the education at EIS. There are likely other factors involved in a decision to have a child go to a school outside the family neighbourhood (Bosetti, 2004), but transportation is usually a significant factor for all parents.

Figure 2: Percentage of students attending school daycare.

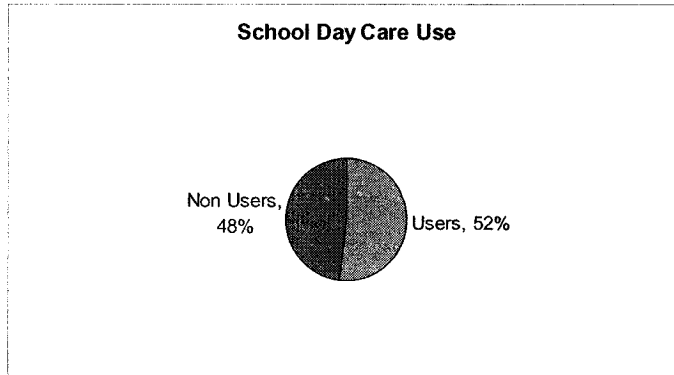


Figure 2 displays the daycare use of students. Daycare services are an obligatory part of Quebec elementary schools. Students are cared for by daycare staff an hour or more before school starts, at lunch time, and for approximately two-and-a-half hours after school. Because of space limitations at EIS, some classrooms doubled as daycare rooms. My classroom was one of those rooms. Over half of the students in my class used daycare services in the school. This number is consistent with the school board average for daycare use at its other schools. Homework is part of the daycare routine at EIS and can contribute to school success if parents regularly rely on this time for homework to be completed.

Figure 3: Percentage of first language of students.

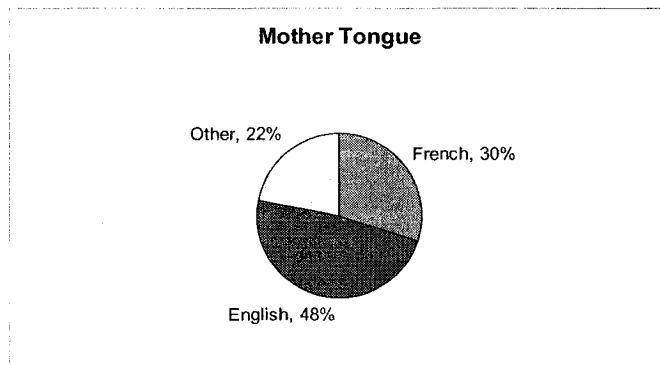


Figure 3 highlights language. More than half of the students had a language other than English as their first language. This means that the needs of second language learners had to be accommodated in the classroom. As mentioned earlier, the bilingual format of the school divides each day linguistically with both English and French taught as first languages. The languages are taught in this way because one of the expected outcomes of the IBO curriculum is that students become fluently bilingual. This means that students learn both French and English as first languages with no second language teaching being done at EIS. For my class, this meant that they had English instruction all morning and French instruction in the afternoon. The multicultural and ethnic diversity of the school integrated seamlessly with the objectives of the school, which were to provide an open and accepting environment in which to learn. Language teaching at EIS is based on the notion that students are multi-competent language users (Belz, 2003) rather than on a deficit theory of communication (Firth & Wagner, 1997). According to Belz (2003) the use of the first language in classrooms does not de-emphasize the acquisition of the second language, but rather accommodates the emergent second language learner's effort to communicate and be understood. Cook (1991) maintains that

the language learner must not be characterized only in terms of second language knowledge and competence, but rather must be considered a learner with intricate knowledge of a first language. This knowledge interfaces with the knowledge of the second language. The students used both French and English in my classroom, but there was no confusion about the language of instruction. Researchers have found that learners and teachers often rely on first language instruction in the classroom to aid comprehension, collaborate during group work, or meet other utilitarian needs. Belz (2003) suggests that along with utilitarian purposes for using a first language in second language classrooms, multiple language use may surface in playful, affective, or creative modalities. This was what occurred in my class on a daily basis. My videotape data contains many examples of children reverting to their first language when playing or struggling with a concept or challenging activity. The students at EIS learn language that is integrated into subject learning across the curriculum. For example students learned mathematics in English, but science in French. According to Gibbons (2002), students must have time and opportunity to learn subject-specific language if they are to be successful language learners. The bilingual program at EIS covers all elementary schooling so students have six years to become proficient in their second language whether it is French or English.

The day I received my assignment I visited the school to take an inventory of the contents of the classroom and to assess what I would need in resources to begin the year. My introduction to the school was probably very similar to that of any teacher who starts a new job. As the new teacher, my classroom was the smallest one on the second floor and completely bereft of books and material. The room contained 27 student desks, a

teacher's desk and a table with two computers. Therefore, the decisions about what I needed for the class were easy since I needed everything. In the weeks before school started, I began equipping my class and learning about the school and its resources. This exercise helped me get to know my colleagues and the school community in general. These early times spent in the library and computer laboratory proved very beneficial later in the year. Later in the paper I will return to this.

My usual schedule was to arrive at school an hour and a half before school began and to leave two hours after it ended. This gave me the opportunity to have contact with staff members such as the custodial and daycare staff who worked early shifts, and colleagues who arrived early. After school time allowed me to interact with students who would be doing homework in daycare (my classroom) and to take advantage of opportunities to talk teachers who did class preparations after school instead of before class in the morning. As a new teacher at EIS these informal chats were learning opportunities for me at EIS and blossomed into what we called "jeudi pedagogique." This is another topic that I will return to later.

My assignment was to teach English language arts, mathematics and religion to two, second cycle, year one classes, one in the morning and one in the afternoon. Both classes had 27 students with approximately an equal composition of girls and boys. The students changed classes at lunch time.

The IBO curriculum uses project learning as the basis for teaching and learning. This required close, cooperative work with my French speaking colleagues on three projects over the year. As mentioned earlier, this inquiry that is so integral to the IBO curriculum

is reflected in the Quebec education reform as well. This recent program (QEP) fosters an inquiry approach to learning and encourages teachers to incorporate the cross curricular-competencies (see previous page) into their project work. Ten days were set aside for the teachers of each level to prepare and plan the project work required to meet the IBO requirements. We divided up the unit so as to cover all aspects of each topic. While I was conducting my research, as mentioned previously, the topic of our inquiry was occupations. As with any unit of inquiry at EIS, students were expected to study the topic from multiple perspectives. This meant studying anything from understanding the meaning of the word “occupation” to the more conceptual understanding of the influence climate and geography have on the occupations created in a society (Erickson, 2002). For this unit of study, my class focused on how occupations change over time. Occupations were investigated from the point of view of the past, the present and the future. My colleagues and I worked collaboratively to be sure that students would make connections between work done on the unit of inquiry in both French and English language classes.

Summary

The site of my teacher-researcher study was Elias International School. It is an elementary school in a small suburban community in Quebec. The school follows both the Quebec Education Program prescribed by the Ministry of Education, Leisure, and Sports, as well as the International Baccalaureate Organization curriculum. The programs were complementary with both their foundations situated in constructivist learning theory. The site of my study was a cycle two, year one class of twenty seven

(27) eight and nine year old boys and girls. I was offered a teaching position at EIS after requesting a teaching assignment for the year in order to conduct my research rather than returning to my position as an elementary school principal.

Entry and Ethics

Entry to the school was facilitated by my relationship with the principal. She and I had previous contact as administrative colleagues. I arranged access to the school with keys and alarm codes so I could come and go outside of regular school hours. The access to the school during silent hours helped me prepare my classroom and learn to operate the computer laboratory on my own time. I was aware from the outset that easy access to a site can sometimes produce other limitations if the researcher then becomes beholden to the wishes and/or perspective of the particular “gatekeeper”. This was never the case during my time at EIS.

My choice of teacher-researcher inquiry facilitated the use of my class as a research site. From the outset, I recognized that my first responsibility was my role as teacher. My role as researcher had to fit into the reality of my classroom rather than the reverse. My initial concern was to inform parents that the research would not interfere with my teaching or the fulfillment of curriculum requirements. To allay any concerns about my dual roles of teacher and researcher in the classroom, I contacted each parent by letter (see Appendix B, Introduction Letter to Parents) with an explanation of who I was and what would happen during the year. I felt a responsibility to inform parents before the school year began in case they did not want their children in a class where research was being conducted. This letter gave them the option to request a change of placement

for their child. There were no requests for a class change. I also sent a letter to each student at the same time, to introduce myself as one of their teachers (see Appendix C, Introduction Letter to Students). Both letters served the purpose of initiating and building relationships with the parents and students.

My integration into the general school community was a smooth and pleasant experience. I believe there were two reasons for this. One was my habit of arriving early at school each day and working late after classes had finished. As indicated earlier, my early arrival allowed me to get to know the daycare and custodial staff who are so important to the running of the school. They aided me in many small ways in setting up my classroom and informed me about issues that were important for them to be able to do their jobs effectively and efficiently. For example, the daycare worker talked about the difficulties of using classrooms as daycare rooms. In talking about this with them, I was able to understand how to help my classroom transform into a daycare space more easily.

The custodian spent many hours installing hooks for outdoor clothing and back packs outside each classroom. He informed me how their use really facilitated his work in cleaning the school. Thus I made sure students routinely used the storage that was available to them. My early hours also allowed me to meet and get to know the teaching staff on an individual basis. In the beginning they helped me access school resources and to learn what was available, and when. They quickly learned about my interest in the use of technology for learning and often used me as a resource when they had questions or difficulties in this area.

The other event that helped me settle into my new job was associated with the supervision of children outside class time. I volunteered to do daily duty after school at the yard entrance for students who walked or were picked up by parents. My covering of this yard duty for the year eliminated one small task that other teachers would have had to do on a rotational basis. The staff members were surprised at this gesture on my part, and all were quite vocal in their appreciation. The bonus for me was that I got to know the children and parents very well.

My computer skills also helped me integrate into the small groups of 6 daycare teachers. Through a project initiative at the school board level, I applied for and received money to teach this group of teachers how to make and use power point presentations so they could use them and teach their students how to make and use them as well. This was a very successful project. Both teachers and students learned to use the power point program and in the process of doing this a bond was build among the group.

I had decided not to begin my research until the last term, April 17 to June 22, so that I could get myself back into teaching, establish my relationships with my students, and get general teaching and learning structures and routines into place. As a result, my energies in the first three terms were devoted to getting to know my students, the school, and to doing the best job possible. At the end of the first term I had the opportunity to meet each parent and to answer any questions or concerns about the upcoming research project. Before the research began in the final term of the school year, I also communicated by letter with each parent. The timing of the study had allowed me to build relationships with students and parents. Trust between a teacher and her students is

built through time and effort (Rodgers, 2002a). I believed that by building relationships and trust my study would reveal deeper understandings and would be ethically grounded. For these reasons I scheduled my research for the last term of the school year.

Before beginning the study I applied for and received a McGill Certificate of Ethical Acceptability for human research. A letter explaining the research and outlining that participation was voluntary, that anonymity would be assured, and that participants were free to withdraw at any time, was sent to each family. All documents were translated into the French language for Francophone parents (see Appendix D, Ethics Forms). I spoke with my students in class about the issues of participation, confidentiality, and anonymity and had them bring the letter and permission slip home to their parents. I indicated that pseudonyms would be used to preserve anonymity. The permission slip required the signature of both the parents and students, and I encouraged the parents to discuss the proposed research with their children before signing to give consent. As research participants, I wanted to provide space for student voices and tried to include them in the research decision making wherever possible.

I received twenty-six signed permission slips within two days of sending the forms home. One permission slip was returned unsigned accompanied by a letter from the parents. They had decided that they did not wish to have their child participate. I respected the decision of these parents. I had made it very clear that the research would not interfere with normal classroom teaching, so the fact that one student was not participating meant that just a few adjustments had to be made on my part, but none on the part of the student or parents. The adjustments had to do with the transcribing of

fieldnotes and videotapes. I did not include any documentation on this student as part of my data, but used it for normal teaching and learning goals. In my analysis, as I had permission to videotape students for teaching purposes in my class, the child was on the videotapes like all the other students, but I eliminated all of these sections from my research data. None of this student's work was or is part of the data used in the study. The only activity this student did not participate in was a videotaped reflection session held on the last day of the research project. I asked the students to volunteer and put the numbers 1 to 26 on the board, instead of 1 to 27. This student did not sign up. Until that day, the class was not aware that one student was not participating. When they asked who it was, I told them it was not important and to respect the privacy of this student. Nothing was ever mentioned again. The student either did not realize she/he was not included, or chose to keep this information private. I believe that because the research was so integrated into my regular classroom practices that the opting out of a student was of no consequence to either to my research or my teaching. I videotaped and documented this student like all others in the classroom, but used the information for teaching and learning purposes only. Since the routines of note taking and videotaping activities were part of my classroom from the outset, a climate of trust had been established and transformation into the "research mode" was seamless. As is customary all my research participants had the right to refuse to participate from the beginning, or to withdraw at any time during the research process. Thankfully no student withdrew during the study, but had this occurred, I believe I would have been able to accommodate such a decision. One student did join the class during the period of the study, and he and his parents

agreed to participate. The assimilation of this student into the class and study was uneventful.

Data Collection

Data collection, both what is collected and how it is collected, as well as the philosophical orientation of the researcher need to be considered in relation to the research questions. As mentioned earlier, my intent on doing teacher-researcher inquiry was to conduct research in an everyday teaching environment with all the demands and expectations that are found in any classroom. Fieldnotes of classroom activities, videotaped segments of language arts classes, and written reflections appeared to be appropriate methods of exploring the role documentation played in my classroom. I also collected and analyzed student artifacts to help confirm and or disconfirm what emerged in the work. This helped to add depth and, I believe, persuasiveness to the work. It enabled me to show rather than tell what happened in the classroom. Finally, I interviewed the students to ensure their voices were represented in the research, and to help confirm and/or disconfirm what I was finding. I believe these multiple forms of data collection which were then triangulated in the analytic process add to the credibility of work.

Fieldnotes

I began taking fieldnotes on the first day of my study and continued throughout the project. I used spiral-bound notebooks to record observational fieldnotes on one side and reflection and questions on the other. I recorded these notes at a table that was

located either at the front or back of the classroom. I began each morning with a 15 minute period of uninterrupted, sustained, silent reading, or USSR. The USSR period each day established the importance of reading, provided students with time to read books of their choosing, and afforded me the opportunity to observe and conduct reading conferences with students. I used this time to observe and record as much detail as possible not knowing what might turn out to be significant. I also used some of this time to conduct reading conferences. After each conference I would record fieldnotes about what had occurred. I also followed this procedure for taking fieldnotes during uninterrupted, sustained, silent writing or USSW which I instituted in the classroom during the time of the study. The USSW period fostered student writing on topics of their choice, and provided more time for individual student/teacher writing conferences. This additional language arts time came about because of a change in the school timetable. It is mandatory in the QEP to offer religion courses in schools. The religion courses finished on May 1st and until the end of the year this period of time was devoted to language arts in my classroom. This was an important pedagogical decision because the students did not have enough time in language arts classes to accomplish the curriculum goals in writing. I also conducted writing conferences during class and recorded fieldnotes about what transpired.

The students were interested in my fieldnotes and some asked to read what I was writing about them when they noticed what I was doing. I always let the students read my notes about them and each time this happened they seemed to be satisfied with what I was writing. My fieldnotes were descriptive observations of what was happening with no judgment or evaluation. I showed only what was written about the individual student

who made the request. The request to read my fieldnotes occurred only two or three times over the research period. I also used post-it notes to record my observations. I used these when writing in the observation journal was not practical. For example while I was moving around the class when students were engaged in independent work, post-it notes were the easiest and most unobtrusive method of recording what was happening and the pad could be stored in my pocket until needed. These notes were later expanded upon when I entered them onto the computer and saved them in a research file.

Finally, I made observational notes about student work, both class work and homework. These notes were written when I edited student work or reviewed homework. I created a spreadsheet for the purpose of tracking student work and wrote notes in the comments text box. The use of a spreadsheet allowed me to get a quick overview of these data and gave me a system to link to and easily revisit the more detailed commentary I had recorded. My notes in Appendix E (Sample Spreadsheet) show the short cryptic notes. The excerpt below shows an example of more detailed commentary.

(06/03/01) [Janet has been reading books with a comic twist lately. She enjoys mystery and horror but on the lighter side. This reflects her sense of humour. She will often tell jokes with double meanings. Her playful voice is becoming more evident in her writing, ending this response with a question. I have encouraged her to continue to experiment with her writing and to delve a little deeper into what the stories mean to her. Writing mechanics are well established. There are a few spelling errors. Whent and whith –the extra h is a common error for students. The double vowel errors freze- loked reminds me to highlight this sound/symbol relationship to the class as I find this frequently in their writing.]

I gave feedback to students directly on their written work and kept track of progress on the spreadsheet. For example, I would read and edit the reading responses students gave for homework and write a comment or pose a question about what had been written. I then would use the spreadsheet to record that the homework was completed, and note strengths and weaknesses in the student's work. I would later review all the comments to search for patterns in student learning. This helped me decide what specific skills needed to be taught directly and to whom. Appendix E is a sample spreadsheet with comments.

Reflective Data

As part of the research process, I reviewed my notes and videotapes daily, and wrote reflections on teaching and learning issues that seemed salient to my classroom teaching. These reflections helped me gain insight into my role as teacher and to deepen my understanding of students and their learning. The following is a sample reflective memo that helped me reach the students who needed more help.

(04/19/01) [Ki-Chin is a quiet, slow moving student. He is slow to get on task whether in math which he loves or in language arts. His cursive writing is very good and his mechanics, grammar, and spelling are great for his grade level but his productivity is very low. He writes a minimum of sentences and does not express emotions or give opinions. His work is usually very factual. He just seems to have a very difficult time expressing himself in written and spoken form. Based on the story he wrote, I doubt if he understood what I wanted, nor what I was trying to help him understand. I need to try again.]

Videotaped Data

The use of a video camera in my classroom had been a regular part of our activities so the first day of videotaping for my research was not very significant for the students, but it was for me. I experienced a heightened sense of urgency. I wanted to ensure that the videotaping would be successful and as inclusive as possible. The first day of gathering videotaped data was uneventful and a sign of things to come. Initially, I had considered using a technician to videotape my work. After a few days I realized that introducing a new person into the research context would require adaptation and accommodation for both me and the students. When I reviewed the first videotape I felt satisfied that I could continue the work without a technician. The placement of the camera on a tripod and the use of the features of the camera for close ups or more distant shots were acceptable for my purposes. The camera had a wide angle lens that permitted the recording of a large portion of the classroom, but it also automatically refocused on the activities at a table when I turned the camera in that direction. The decision to do my own videotaping required specific planning and the consideration of many classroom factors. My objective was to record the everyday activities in my classroom. To achieve this I needed to place the video in as unobtrusive a place as possible, to arrange it so that I did not have to attend to the camera once it was set up, to make sure voices were audible, and to ensure that I videotaped as wide a spectrum of students and their activities as was possible with one camera. I decided that the best placement for the camera was at the back of the classroom near an electric outlet where I did not have to rely on a battery. The camera was placed next to a small table with four chairs. For the period of research this setting was used to take fieldnotes, to conference with students, and for student group

work. The video camera remained focused on the class except for when there was activity at the table. When the activity was there, whenever possible, I turned the camera to focus on the table.

Each day before class I set up the camera and performed a sound check. My only attention to the camera during class was to turn it to focus on activity at the table. To enhance the audio on each videotape I purchased an external microphone that I placed on the small table. This worked very well. About half way through the research period the weather became very hot and the classroom became almost unbearable. An air-conditioner was installed in the window near the spot where I placed the camera. I tried videotaping from the front of the class, but found the visual quality of the video unacceptable due to the lighting conditions. I returned the camera to its original place in the back of the class. The air conditioner added to the ambient classroom noises which affected the quality of the sound on the video, but I accepted this as the reality of taping in this context.

A separate videotape was used for each day of taping. This was done to guard against recording over used tapes and to facilitate the management of the videotaped data. The only language arts period not taped was thirty minutes of library time each week. There were two reasons for this. The first was a problem of logistics, and the second had to do with the volunteer library staff. The library at EIS was small and crowded with books. There was no central place in which to put the video camera that was safe and useful for taping. Volunteers changed regularly so I would have had to involve all

volunteers in the research and felt the difficulty of doing this was greater than the potential benefit to my work. In lieu of videotaping, I recorded fieldnotes.

Each evening I reviewed the videotape that had been recorded that day while making a back-up copy on VHS. My reflections on what I saw informed my teaching decisions. Reviewing the tapes each day provided me with a second look at the daily activities and students at work. It also helped me see things I had missed in class. Activities for the following day were often tailored to support specific teaching objectives I found from reviewing the videotape. For example, when I viewed the videotape of students working in small groups on the unit of inquiry on occupations, it reinforced what I felt intuitively. I realized the students needed more support to complete the assigned activity, so I reviewed it with them the following day and they were able to complete the activity successfully.

As in all qualitative research, the design is emergent and responsive to the context and the data being collected. This was the case with my decision to videotape interviews with students at lunchtime. I believe young students need to be heard and understood as extensively as possible. In an effort to provide more space for student voices about their learning, I constructed a simple open-ended interview protocol on reading and writing (Appendix F, Interview Protocol). The interviews were carried out during lunch time over a two-week period and varied in length from 5 to 12 minutes. The protocol helped to focus the interviews, ensure all students were treated in the same manner, and helped limit the time of each interview. The disadvantage of adhering to the protocol was that I

did not delve into some interesting but not particularly relevant comments raised by the students in the interviews.

Artifact Data

The third form of data collection was comprised of student artifacts. Student artifacts included work completed in class or at home, and as well as student portfolios. Student portfolios were a compilation of pieces of student work chosen by the student and/or the teacher. I hypothesized that an analysis of these documents would aid in understanding teaching in my classroom and enhance the persuasiveness of the research.

Data Analysis

Data analysis is a non-linear activity that is interconnected with all aspects of the research process. Data analysis occurs simultaneously as data are collected. This is clearly evident in teacher-researcher inquiry. There can be no real separation of teacher and researcher roles. As data were collected and reviewed, it influenced the decisions I made for future teaching. A good example of this occurred during a poetry assignment.

Poetry is a genre of writing with which students are familiar even at this grade level. As part of the IBO curriculum, we had completed a unit of inquiry on poetry earlier in the year so I felt comfortable in giving a poetry assignment as part of a literature project the students were doing. The assignment was to create a poem based on the novel they were reading. As a change, I chose poetry because the students had experience in writing poems, and it was an assignment that could be polished and exhibited in the time that was available. Four students had particular difficulty with this

assignment. It was not until I reviewed the videotape at night that I realized just how much difficulty they were experiencing and that I had not responded to them in an open, accepting manner. I was afraid the message I seemed to be giving these students was that they were failures because they could not or would not do what I asked. I experienced guilt and felt remorse for my insensitivity to their needs. It was my reflection about what I saw in the videotape that motivated me to reach out to them, and to find other ways to aid them. I decided that I would first let them know that I was concerned that I had not understood their difficulty with the assignment and to start again where they were in the assignment. I believe I was much more receptive to the students the next day, putting their needs before my goal to have all students complete a poem based on the novel. Lawrence's story in Chapter Five illustrates this point. Insights gained from reflecting on the data each day were of immediate use in my teaching practice.

Analytic Strategies

I chose to use both paradigmatic (categorizing) and syntagmatic (contextualizing) strategies to analyze my data. The most commonly utilized paradigmatic strategy is the coding and categorizing of data or the constant comparison approach (Maykut & Morehouse, 1994). Data is sorted into categories based on the similarity to or difference from other data. Conceptual categories are developed that make the meaning of different segments of data explicit and the analysis proceeds. I chose to use this method for categorizing data. Through on-going comparison, the data were distilled into descriptive categories and ultimately more conceptual themes that revealed the meaning in everyday activity. As I refined categories I was able to see relationships and patterns across

categories I had created from the data. This rigorous and systematic analysis of the data led to the development of propositions, or “rules of inclusion,” arrived at inductively. Rules of inclusion provide a framework for clustering chunks of data with similar meaning. For example, the category of “assessment documentation” referred to all documentation related to the assessment of students, classroom activities, teaching strategies, and self-assessment. I inductively arrived at a proposition that summarized the meaning contained in these patterns. The rule of inclusion, stated as a proposition was: all assessment documentation highlights the present but provides direction for the future. Assessment documentation is concerned with the current learning activity and includes a future direction that learning might/will take. The following data excerpt is an example.

(29/06/01) [Sam’s reading aloud is halting and lack fluidity, but he continues to take risks by sounding out words and looking for context clues. His confidence in his reading is growing. The shared reading he is doing with his partner seems to be having a positive affect on him so I encouraged him to continue. I let him know about the new books that are available from which he could make his next reading choice.]

The volume of data collected in qualitative research makes data management a significant concern for researchers. Recognizing that this would be the case for me I decided to use a computer software program for the analysis. The first hurdle was choosing a program that would meet my needs and that I could learn to use in a reasonable length of time. Coffey and Atkinson (1996) suggest that contemporary software can be used to implement and develop all analytic approaches. In the years

since this article was written, many advances in technology have occurred and early concerns about problems in using computer software in qualitative research have been addressed. For example, early programs focused on the sorting and retrieval of data while new programs make explicit conceptual links that are often implicit in analyses. Current programs allow a user to choose from a variety of possible types of connection between data. A researcher can choose from a list of possible relationship words or phrases, such as: is the cause of, is part of, is different from, is similar to, or the user can create her own connections as they emerge from the data. I chose the program ATLAS.ti (Muhr, 1997) because it incorporated all the features of competing programs and could also accommodate videotaped data. ATLAS.ti has a number of functions that encourage the analyst to create explicit links among elements through the use of super codes or network editors. Network editors (Appendix G, Graphic Representation of Network Editor) graphically represent relationships that can be modified on screen. As the analyst, I used the editing function as a heuristic device for exploring relationships among categories or concepts. It allowed me to easily access any category with its codes which could then be compared to any other category. ATLAS.ti has powerful ways of searching for text. It is also an especially useful tool for explicating and visualizing conceptual patterns and links among them. The other important feature of the ATLAS.ti software is a feature called hypertext. It allows the researcher to interact with text in a non-linear manner. The reader can follow or create diverse pathways through text which then has the capacity to support novel forms of representation. For example, I was able to search the data for the patterns of classroom documentation and assessment. The results could be accessed whether they were in the fieldnotes or in memos and could be

displayed on screen one at a time, or printed in their entirety. There was, as a result, no limit to the queries that could be searched in the data.

Before the formal data analysis could be started with the help of ATLAS.ti, I had to input all data into ANSI format so it could be accepted as principal documents in the software program. ANSI format communicates to the software program how the text is structured such as in terms of sentences and paragraph breaks. This required technical manipulation of the data so it would not end up as a continuous stream of text with no formatting. All principal documents were numbered and named according to the day and date they were taken. Also included as principal documents were any scanned files such as activity artifacts that I felt were important to be included as data. By putting these data into the computer I was able to reconnect with the data sets as a whole and to read them in their entirety before I began the process of coding. As a result, I felt connected to the data and more comfortable about using a software program to aid in the analysis. A computer program, regardless of its technical sophistication, cannot analyse data. This is always the researcher's task. It just facilitates retrieval and helps make links.

The coding process involved close reading of the data, segmenting chunks of data and assigning an appropriate code names. Later during the analysis, the ATLAS.ti program allowed me double click on a code and bring up the text associated with the code no matter where it was situated in the data. The speed of data retrieval after it has been entered and coded is one of the positive aspects of this program. Coding proceeded this way through all the research data. Once the basic coding was completed, I was able to contrast and expand the data through the use of a network editor and in so doing

developed conceptual categories that gave deeper meaning to the data. The process can be made more explicit by examining how I proceeded with the theme of conferences. I began by creating a network editor called conferences. As mentioned earlier, network editor is a tool in ATLAS.ti that permitted me to traverse the data and bring together in one place coded data for comparison. I then imported all the codes, memos and principal documents that were related to conferences. There were many individual reading and writing conferences that took place for example during USSR and USSW. These were identified with the code RC (reading conference) and WC (writing conference) and a student number. I then decided to look more closely at these conferences and was able to do this by creating a network that included only these codes. This simplified the visual display but allowed me to access the original data so I could confirm or disconfirm the links I was making. I began to understand the meaning conferences with students had in my classroom. They gave me insight into student learning, influenced the student teacher relationship for better or for worse, and provided the opportunity for documenting what transpired. Data coding was time consuming even with a software program. There was no limit to the number of codes and they were easily visible on the screen because the lines denoting the coded passage were color coded. This permitted me to use student numbers as codes. As explained later, this proved very helpful when I re-contextualized the data to create visual narrative episodes for individual students.

Next I began to look for similarities in categories and collapsed a number of them as I created rules of inclusion that allowed me to put chunks of data together. I interrogated these categories to examine what kind of documentation was going on. Then I focused on those data that were related to documentation and re-categorized these data

using descriptive codes. I merged the descriptive codes into broader codes that included environment, decision-making, windows on learning, students, parents, assessment, accountability, reflection, relationships and choices then teased out the dimensions in these patterns. I clustered these into broad categories and worked at eliciting conceptual terms to show how these patterns functioned. This resulted in three main categories of documentation. I named these categories interactive documentation, reflective documentation, and process-oriented documentation and will discuss these in more detail in Chapter Four.

It was this coding of the data that enabled me to recognize patterns and to re-contextualize data and interpret its meaning in these ways. Coffey and Atkinson (1996) point out that coding reorganizes data and involves a certain amount of information loss because of the loss of context. Segmenting and coding data is not the only way to understand its meaning. Contextualizing strategies, strategies that approach the data as a whole, such as narrative analysis (Riessman, 1993, Clandinin & Connelly, 2000), portraiture (Lawrence-Lightfoot & Davis, 1997), and arts-infused mediums (Eisner 1991) allow the researcher to look at the same data from a fresh perspective. These two different ways of approaching data, categorizing and contextualizing, are considered complementary and perhaps preferable to the use of only one form of analysis for research purposes (Coffey & Atkinson, 1996). Maxwell and Miller (1992) make a very good case for the complementarity of these strategies suggesting that alternating between the two strategies during the analysis helps to deepen it. My experience in this study, having used both categorizing and contextualizing strategies, supports this point of view.

I decided to construct what I came to call visual narrative episodes (VNE) of students to complement the interpretation of the data gained through categorization. Visual narrative episodes are short videotaped segments of specific student learning events that I created from the video data. I first examined all the data to gain a holistic perspective of it. Then I constructed student profiles looking for situations that were representative of learning experiences in my classroom. I chose the students based on informal criteria. I wanted boys and girls, a variety of learning situations embedded in the classroom context, situations in which students expressed their own views, and video episodes that were of a length and quality that would engage viewers. I created the visual narrative episodes by reviewing the videotaped data on each child and narrowing my choice to three students who fit the criteria I had established. Then I began to construct the video episodes with the aid of a video computer software program called Pyro-Pro. This program allowed me to feed the video segments directly from the camera on to the computer. Once this was done, I was able to work with the video segments directly. After multiple viewings of the video segments, I created a narrative storyboard that framed the three learning episodes on digital video disks (DVD). Each narrative begins with the student communicating a learning difficulty, continues with a discussion about the learning difficulty, follows with use of learning scaffolds, and ends with student reflections. A detailed explanation of the VNEs is the subject of Chapter Six. The video narratives are included on DVDs in Appendix H. The DVD can be played using windows media player or on a DVD player.

Summary

In this chapter I have tried to describe my methodology in the context of my theoretical framework as a constructivist/critical researcher and the research site where I have worked. Ethical concerns form the foundation of my research. Conception of the trustworthiness of research rests more and more in the moral/ethical domain (Lather, 2001; Lincoln, 1995a). I have explained how even before I started the research, I began the process of involving parents and students as partners in the research. I had the freedom to choose when to conduct my research during the school year and I chose to do it during the fourth school term ensuring trusting relationships had been established with students and parents. The multiple forms of data collected contribute to the persuasiveness of my interpretations. Using both categorizing and contextualizing strategies offers the possibility of gaining a deeper understanding of the meaning in the data. Computer aided analysis of the data facilitated the management of a large amount of data and acted as a heuristic device that I used to uncover connections and relationships. Finally, the methods chosen to represent research interpretations are a matter of the researcher's choice and I have tried to portray the meaning of the research experience as representatively and respectfully as possible. Chapters Four and Five describe my understanding of the meaning of documentation through categorizing the data while Chapter Six describes the visual narrative episodes that I used as the contextualizing strategy for understanding more about student learning. Chapter Seven concludes with some issues raised by the study on documentation, and suggestions for future research.

Chapter Four: Framing the Documentation Process

In this chapter I report the results of analysing the data using a categorizing strategy (Maykut & Morehouse, 1994). I identify the types of documentation, explore the circumstances that contributed to their creation, and then consider the consequences of the documentation in terms of teaching and learning in this classroom.

Types of Documentation

As mentioned earlier following the transcription and inputting of the data into the Atlas.ti program, I began a close reading of the entire data corpus and selected all data related to documentation. Documentation, as I defined it for this study, is any recording of or reflection about classroom activities, students, or any event influencing learning. I first categorized the data for the types of documentation used. I employed descriptive notions of documentation based on the widely used vocabulary of teaching such as responses to homework, letters to parents, observation sheets, etcetera. Figure 4 is a summary of the types of documentation I used in my classroom.

Figure 4: Types of Documentation

Documentation			
Type	Produced by	Purposes	Description
Agenda	Teacher	communication, discipline	notes to parents, lights for discipline code
Agenda	Students	information, communication	writing homework, showing discipline code
Agenda	Parents	communication, responses, requests	short notes, signatures
Fieldnotes	Teacher	information, reflection, understanding, decision making	research journal, post-it notes, observation sheets
Letters	Teacher	communication, relationship building	letters of explanation, progress, thank you, homework
Letters	Parents	communication, explanation	thank you, declining participation in research
Portfolios	Students	representations of learning, assessment, accountability, communication, reflection	representative work samples, reflections
Portfolios	Teacher	representations of learning,	chosen pieces
Reflections	Students	reflectivity, meta-cognition	oral, written reflection sheets
Reflections	Teacher	insight, understanding, reflexivity, decision making	oral, written, reflective memos
Responses to student work	Teacher	communication, relationship building, instruction	homework, classroom work
Spreadsheets	Teacher	monitoring, reflecting, assessing, communicating, accountability	sheet with multiple text boxes
Student work	Students	practice, demonstrate learning, personal expression,	all genres of work
Video Tapes	Teacher	observing, understanding, reflection, decision making	Mini DV tapes

An explanation of each type of documentation in Figure 4 will help provide the context for their meaning. Some documentation, such as letters or student work, require little or no explanation as these are standard forms of documentation used by all teachers. Other documentation types such as agendas or portfolios, although familiar to teachers and students in classrooms today, require explanation about how they were used in my particular context. One type of documentation, the spreadsheet, may be unfamiliar so I will explain it in more detail. Finally the fieldnotes, videotapes, and reflection documentation are the formal ways I used to collect research data. These methods of documentation were not unknown to the students because note taking and the use of the video camera in class were a usual part of my teaching. The difference for the period of study was the rigour with which I accomplished this documentation.

Agenda

The agenda was the every day communication tool used by students, parents, and teachers at EIS. The use of an agenda was mandatory at EIS because it was employed as a behaviour monitoring system. Appendix I shows a sample page. The agenda for each day had three pictograms in the left hand corner and a limited space for writing. The pictograms were used to communicate behaviour difficulties. The middle face was coloured orange if there was a minor behaviour problem, while the one with the sad face was coloured red to indicate major problems. The smiley face was reserved for exceptional behaviours that warranted special recognition for behaviour that had a positive effect in the school. The person who coloured in the face wrote the note in the agenda to explain. Every school and daycare staff member was responsible for

monitoring and holding students accountable for their behaviour by making use of the agenda.

In my class, the students, parents, and I had defined responsibilities with regard to the agenda. The students were expected to copy homework into it each day, to inform parents of behaviour difficulties if indicated in the agenda, and to bring to their parents' attention any notes or letters from school. Parents used the agenda to communicate via their signature that the homework was completed and that they were aware of any behaviour problems. They also used it to communicate with me via written notes in the agenda. As the teacher, I verified that homework was written, checked for parents' signatures, and communicated with parents as necessary. The agenda served as a continuous documentation of daily life in the classroom throughout the year and proved to be an effective interactive tool because all three primary stakeholders in my class had specific responsibilities associated with it.

Fieldnotes

The fieldnotes taken during the research period followed the format of making entries into the research journal on one side and allowing the facing page to be used for reflections and other ideas. As mentioned earlier, when I was not able to use the journal, I resorted to other methods of jotting down cryptic notes on observation sheets or on post-it notes that were later transcribed.

Letters

Letters were a recognized documentation strategy for communication between school and home. During the period of research I sent letters to parents about the progress of the research and I received a letter to inform me that a student would not be participating in the research. The letters I sent provided information to parents and gave them the opportunity to ask questions or raise concerns about what was happening in the classroom.

Portfolio

The student portfolio makes visible, in a public way, the effort and progress students have achieved in school. The creation of the portfolio is considered one of the more authentic ways of representing learning (Darling-Hammond et al., 1993). Portfolios were part of the reporting process at the end of each term at EIS School. The students and I, separately and together, picked representative pieces of work to be placed in the portfolio. These pieces were often accompanied by a reflection sheet indicating why a student chose the piece. Multiple drafts of pieces were frequently included so that the progress was evident. The portfolio helped students realize that they were accountable for their work and that producing their best work was the goal. The pieces for the portfolio were representations of student learning over time. They communicated to parents the effort the students had expended in school and provided an opportunity for reflection on the part of the teacher, students, and parents.

Reflections

Reflection documentation were my thoughts and ruminations about what was happening in class and my efforts to understand their meaning. In it I explored many different aspects of teaching and learning for a variety of reasons, and sometimes revealed underlying beliefs and assumptions at work in my actions. Two examples of my reflections follow.

(05/04/01) [Kay confuses me. She reads very well for a grade three student and writes accordingly but sometimes does very sloppy work and does not complete homework when not closely monitored at home. Perhaps the monitoring is too close and she needs to have more autonomy.]

This reflection concerns a bright, motivated student who seemed to slack off. Sometimes her work was very well done while other times I was surprised by the poor quality. I expected that since she had the ability, she would produce. This was not the case with this student, and I realized it required more monitoring on my part to keep her on track. I had made assumptions about this student that were not true. This realization helped me change my approach to supporting her learning.

(05/07/01) [Alton-Lee, Nuthall, and Patrick (1993) are New Zealand educators who have studied student learning in the classroom extensively. This article refers to students needing three interfaces with a concept for it to go into long term memory. If not, they do not make the necessary connections to remember the information. The students made connections for their own lives. I tried to build connections in class, as well as, with reading.]

This reflection refers to a specific article I had read that included a discussion about helping students make connections that support learning. I was very conscious of this in the unit of inquiry on occupations because I was concerned about making this topic relevant for my group of 8 and 9 year olds. We read books on various occupations and shared a range of personal experiences to which they responded enthusiastically. The objective was to help students understand the wide variety of occupations people engage in, why specific geographic locations support different occupations, and how all work contributes to the quality of life we have. I also had students engage in complementary activities including conducting interviews at home about occupations, working in groups to categorize occupations, and finally investigating a job of their choice. These processes not only engaged and advanced student understandings, but they also gave me more insights into their learning and how to support it. I also worked with students to help them learn to reflect. Sometimes it was as a closing activity where students were asked to share how they had worked or what they had done. Other times it was a written reflection. These student reflections added a metacognitive dimension to their learning that furthered my own understanding of them, and helped me be more open to alternate ways of seeing things in class.

Responses to Student Work

I believe that all classroom work should have a purpose and I communicated this philosophy to the students early in the year. I acted on my belief by responding to their work on an individual basis. This maintained a continuous flow of information between me and my students. My responses varied depending on the piece of work. Responses to

journals were meant to encourage self-expression and develop writing skills. All other work was responded to from the perspective of the quality of instruction and the motivation that was apparent with the view of continuous improvement. Editing work in class often elicited a response from me that required direct instruction and/or an effort on my part to motivate students. As I edited in class, I would take the opportunity to teach relevant rules about syntax, structure, and other aspects of language that would be useful to particular students. In other words, I tried to relate these kinds of “mini-lessons” to specific problems as they arose. The use of the inquiry approach, which was a requirement of the IBO curriculum mentioned earlier, helped make the purpose of work apparent because these learning opportunities were structured as part of a bigger and meaningful unit of instruction.

Spreadsheets

My experience with computers exposed me to many programs that were used to organize and manage vast amounts of information. As a teacher I worked with a great deal of information about the 27 students in my class. To be useful to me this information had to be in a format that made it easily accessible, flexible, and manageable. Spreadsheet programs meet these requirements, so I decided to use one for my class. A spreadsheet is a sheet of paper with multiple text boxes that can be manipulated in many ways. Rows or columns can be enlarged, reduced, deleted, or hidden, and numbers can be tallied electronically to name a few possibilities (Appendix E, Sample Spreadsheet). It is a management tool borrowed from the business world that has found widespread use in other domains, and more recently education. My initial use for the spreadsheet was to

compile identifying information on students such as names, addresses and contact numbers. I built on this base and added information that was helpful to my teaching. Because columns can be hidden, this identifying information always remained available to me, but could be hidden from view as I used the spreadsheet for other purposes. The sample spreadsheet in Appendix E has two columns hidden. They are columns A and B. These columns contain identifying information that is confidential. The column C, titled numbers, indicates that column A and B are hidden from view.

Some of the major roles for which I used the spreadsheet were tracking homework and assignments, recording notes on learning progress, communicating to students, reflecting on learning over time for each student, and making decisions about teaching. The spreadsheet provided me with a week's worth of information on each student and also provided a profile of the entire class. For example, a perusal of the spreadsheet in Appendix E tells me that student # 11 did not hand in any homework for the week. It also tells me that most students were not correcting their errors in the reading responses and those students who did seemed to demonstrate higher levels of writing skills. Both these observations required that I communicate to the class in general, and to some students in particular, about what I saw happening. When I reviewed the notes in the comment column, it allowed me to see patterns in student learning that required direct instruction and intervention. As a documentation tool the spreadsheet was a flexible, manageable way to record and use information about students and learning that informed my teaching.

Student Work

This category of documentation included all the work students created both in school and at home. There were a wide variety of ways in which students represented their work. These included written, oral, and visual representations.

Videotapes

The video tapes provided documentation with the context intact. The review of these tapes each day helped me see anything I might have missed and to get a broader perspective of all classroom events. The use of video to document classroom activities added depth to my knowledge and understanding of what transpired. The pace and demands of classroom teaching are formidable. The video camera provided an extra pair of eyes that allowed me to look again at what students said or did. During the period of study I used the video camera each day during language arts period which ranged from 30 to 90 minutes depending on the day's schedule.

All the types of documentation in Figure 4 served multiple objectives that were interconnected and interdependent. Student/teacher and student/student interaction over work provided a continuous flow of information about students and learning that deepened my knowledge of individual students, the quality of work they produced, and held students and me accountable. The next section of this chapter delves into how I went about creating this documentation.

Implementing the Documentation Process

Once I named the types of documentation in descriptive terms, I expanded and collapsed the descriptive categories re-naming them in terms of their function. To do this I created rules of inclusion. These are propositional statements that define what can be included in a category. This process resulted in three documentation categories that I identified as interactive documentation, reflective documentation, and process-oriented documentation. Interactive documentation created two-way communication. It included letters, spreadsheets and agendas. Reflective documentation provided material I used to revisit classroom events. This included fieldnotes, videotapes, and written reflections. Process-oriented documentation was evidence of ongoing interaction about learning. It was comprised of student work, responses to student work, and portfolios. All three categories were closely interrelated, but for purposes of gaining a deeper understanding of how documentation was functioning in my classroom, they were treated separately. As I continued to interrogate these conceptual categories to understand how they functioned in the classroom, I teased out activities that seemed to contribute to the documentation process and grouped them according to their purposes. I identified the activities as “preparation activities”, “organizing activities”, and “routinizing” activities.

Preparation Activities

Preparation activities were defined as those events that supported student learning and enabled me to be more effective and efficient as a teacher. This broad definition allowed for the inclusion of a wide variety of activities. Some activities occurred outside the period of research but had an indirect influence during the period of study such as

letters to the parents and students early in the year to inform them of the impending study. However the preparation activities I am addressing here are those that actually occurred during the period of study. These were associated with teaching and learning, or those that facilitated the research process.

Preparation activities normally associated with the responsibilities of teaching, such as daily lesson plans and furnishing necessary resources to implement these plans were tracked and categorized as part of my data. Even the everyday, normal teaching functions such as reading everything the children were reading took on new dimensions when included in the data. The following story is evidence of how very ordinary preparation allowed me to be open how students were experiencing learning. The context of the incident was the occasion of my observation of a group of four students discussing minor problems in the novel *Dear Mr. Henshaw* (Cleary, 1982). The students were struggling with this. Jeremy suggested that a minor problem was that the author did not write back to the main character, but the group did not agree on this. He then proposed that a minor problem was the loss of the dog. The students in the group agreed and included this in their assignment sheet (Appendix J, Novel Assignment). This short exchange provided me with information about the comprehension level of the students and their ability to interpret the story they were reading. The interchange highlighted Jeremy's engagement in his reading. I was aware that Jeremy was not a particularly strong reader in English so was gratified to see his progress in reading comprehension. I also realized that detailed knowledge of what students were reading helped assess student progress.

Beyond the ordinary preparation activities, there were activities that occurred in my classroom on a regular basis that held special meaning. These activities were responding holistically to homework at the end of each week and returning it to students on Monday morning, writing homework on the board before students arrived for class, and reviewing videotapes and fieldnotes on a daily basis.

Responding to homework referred to when I reviewed it for the week and communicated about it to each student in the form of a written response. It went beyond the immediate responses I gave to work on a daily basis and allowed me to step back and look at a student's work in a more complete way. My responses included direction for improving the work and positive comments to motivate. As part of responding I recorded information about the work on the spreadsheet (Appendix E, Sample Spreadsheet). Reflection on these notes over time helped me see patterns that informed my teaching decisions. The timing of the homework review at the beginning of the week was meant to help focus students for the week ahead. It also provided me with time to address the lack of homework completed from some students. Responding to the homework prepared me to connect to each student and helped me think about each student's learning strengths and needs. Although I responded to homework in the usual fashion each day, it was the "second look" of all homework for the week that provided me with a more holistic overview of each child's progress.

Writing homework on the board before the students came to class in my estimation occurs quite regularly in classrooms. So at first it seemed to be an insignificant and mundane task. When I took a closer look, I began to understand its

significance. Performing this task before the students arrived welcomed the students into an active learning environment and freed me to do other tasks. The third preparation activity and one I would imagine is less common in classrooms, that of, reviewing videotapes and fieldnotes allowed me to take a fresh perspective on classroom events, provided me with information I might have missed in class, and gave me the opportunity to rethink teaching decisions. This suggests that educators might consider how videotaping and/or fieldnote-taking might become a more integral part of teaching.

The second category of preparation activities concerned the research process directly. It involved communication with parents about the research and the acquisition and maintenance of material resources needed to collect data. I wrote letters to the parents to inform them of when the research began, and continued to update them on the progress during the period of study. The letters kept the lines of communication open with parents and provided them with information about the research that they could share with their children. The video equipment I used for the research also required preparation each day to ensure quality in both sound and picture. This was done before students entered the classroom and dismantled each day when the classroom was empty. In this way my time in class was not diverted to my needs as a researcher to collect data. Upon reflection I realized that all preparation activities created opportunities for me to be more available to students because they freed time and/or provided me with valuable information that helped deepen my understanding of students and to support their learning.

Organizing Activities

Organizing activities concerned the material resources in the classroom. Appendix K (Classroom Layout) shows how the classroom was arranged. I provided books, arranged desks, made space for conferencing, procured an air conditioner, and created display space for student work. The classroom layout demonstrates how the students were the focus in this classroom and how organizing the class in a particular way reflects this. In order to demonstrate this, two aspects of the physical environment in the class are highlighted. The first is to note that although there are only 27 students in the class, there are 28 student desks. The reason for this is that one student expressed difficulty in getting individual work done in a group and preferred to have his desk on its own. The student's learning need was accommodated but there was also a place available for him to participate in a group without moving his desk each time. I used this desk and other empty desks on a regular basis to sit with the students when they were working. This gave students an opportunity to interact with me from the security of their learning space. I learned about Heidi's comic book writing skills during a visit to an empty desk in Heidi's group. One of the students was away sick so I took the opportunity to sit at his place. The students were discussing their comic strips when one student asked me if I knew that Heidi had already created a complete comic book. Heidi shyly reached in her desk and brought out the comic book she had created with another student. I reflected on this incident later and wrote the following memo about it.

(06/05/01) [I was amazed at the quality of the comic creation Heidi showed me. The story was logical and complete and the drawings were superb. I was aware that Heidi loved to draw but had no idea the skill she

had already acquired at 9 years old. She is so quiet in class that unless I draw attention to her she takes no place at all. All of her work is of the highest calibre. It is only in her speaking that she struggles and it is not a language thing. Although she was shy to talk about the book, she was enthusiastic when she did. Based on that I asked if she would be willing to share the book with the class along with her co-author. She agreed and will do it tomorrow. This is an authentic opportunity to have Heidi speak out loud and I have not found it easy to get her to do this. I will be interested to see how it goes but feel confident that I am not putting too much pressure on her when she has someone else to share the spotlight with.]

The other aspect in the classroom organization that I think is worth noting was the placement of the teacher's desk in the corner. This was a symbolic gesture on my part to diminish, in some small way, the power differential in my class. The placement of the desk precluded me from sitting at it because it separated me from the class. I used the desk as a repository for material and sat at the table used by students for group work and by me when I needed it. This worked well because much of my time was spent moving among students and being available to them as they worked. These aspects of the classroom, the extra desk, and the placement of the teacher's desk, are just two examples of how the class was organized based on the perceived needs of students. As my understanding of student needs deepened the learning environment in the classroom changed in response to changing needs. For example, I changed the seating arrangement when I recognized particular student needs that could be more appropriately met. Jane was one such student. She was less distracted when seated by a student who was passionate about reading. Even on the final day of the study the classroom was re-organized to accommodate reflections by the students on the video. The students had the

privacy they needed to speak on their own and the set up ensured a high quality of both audio and video. In summary, although each organizing activity was not necessarily atypical of what might be found in other settings, it was the opportunity to examine them together that gave heightened meaning to their value.

Routinizing Activities

The third group of activities I uncovered were activities that I call 'routinization' activities. Routinizing required the establishment of daily and/or weekly routines that provided a framework on which students came to depend in the classroom. Routine activities were not cast in stone but occurred as a regular pattern of class work interrupted only for exceptional classroom or school events. Copying homework from the board or USSR were daily activities, while going to the computer laboratory and library time were weekly scheduled activities. The importance of these routine activities went beyond the issues of consistency and security for students. These activities opened up space for other things to happen at the same time. I knew I needed to 'bend time' (Senge, 1990), that is, to accomplish more than one thing at a time. Routine activities in class made this possible. For example, while students were copying homework from the board, I was able to complete administrative tasks. When this task was completed, students read silently (USSR) for 15 minutes and this allowed me to observe the class and conduct conferences with students. I was able to bend time to be with the students on an individual basis. Routine activities provided consistency and security for students while freeing me to connect to students as individual learners.

Taken together, these activities, preparation, organization, and routinization, suggested a common thread that was evident in my classroom. These activities freed-up time that enabled me to focus on individual students and to document what was happening. It was in these one-to-one interactions that I came to know students on a deeper level and to document my expanding knowledge base. Having time to talk to, to write about, and to reflect on how students were experiencing learning was possible because of the time opened up by these activities. They created a learning environment that supported documentation. The consequences of the documentation were multiple. It provided material on which to reflect, influenced teaching decisions, contributed to a classroom culture of assessment and accountability, but most importantly the data showed that it provided windows on learning and fostered the building of strong relationships between my students and me. An exploration of these consequences is the subject of the next section of this paper.

Consequences of Documentation

Reflection, decision making, assessment, and accountability are integral to teaching. All teachers to some extent engage in these activities so I will only briefly address their role in this classroom by giving some concrete examples. The two other consequences of documentation, windows on learning and relationship building will be examined more closely because of their importance in the unfolding of learning in my classroom.

Reflection

All my documentation became a resource to improve both my teaching and my learning when I used it for reflection. Reflection is a mode of thinking that considers more than actual events and fosters a more inclusive review of situations with the possibility of considering alternate perspectives. Reflection was a necessary part of my teaching because the future only became illuminated when I looked back with a purpose. The purposes were varied but it was always done to gain understanding. Sometimes I reflected to understand myself better, other times it was to solve a problem in the classroom, still other times it was done to improve some aspect of teaching or learning for students. I engaged in review and reflection because I believed I could learn from it. As in most classrooms, so much occurred that it was beyond my ability as the teacher to attach meaning to everything. I believe that reflection added a dimension to my teaching that in some ways compensated for this human limitation.

One of my most poignant insights into myself as a teacher and the importance of effective communication came from reviewing and reflecting on a short interchange with one of my students in the context of the entire class. I use this story as an example of the value of reflection, but it could just as appropriately be interpreted from the perspective of relationships. The exchange occurred when I was reviewing with the whole class the requirements of a final assignment for the novel study groups mentioned earlier. I went over the purpose of the assignment and the criteria on which it would be judged. The students had four choices in this assignment. These included a character sketch, an outline of major events in the story, a story map, or a letter to the author about the

positives and negatives of the story. I fielded questions from the students and shared examples of each type of assignment. The following exchange occurred in class when one of my students came to me with what she considered was a completed assignment while I was addressing the whole class.

[Katie - Here is my letter. (Katie hands me a single piece of paper folded in quarters with a short two sentence letter to the author about the book (Appendix L, Katie's Letter)

Pauline- But this is not a letter, it is a note.

Katie- But I wrote to the author.

Pauline- Is this your final copy of the assignment?

Katie- Yes.

Pauline- Are you sure this is what you want to hand it as your final assignment?

Katie- (hesitates, appears ambivalent about what to say)

Pauline- (I use the pause to speak to the class about acceptable quality assignments. I then reiterate what I expected from the students in their assignment)

Pauline- Are you sure you want to hand this assignment in?

Katie- (hesitates) No. (With her head down she takes the card back and returns to her seat)]

Reviewing this incident on video allowed me to step back and consider it from multiple perspectives including Katie's, the class in general, and effective communication

skills. Katie had completed the assignment early and wanted to share it. This did not turn out well for her because I did not think it was an acceptable assignment and I made this clear to her in front of the class. For the class, sharing work publicly became a high risk activity in this situation. From a communication perspective it was not a positive event. My words to Katie suggested she had the choice of handing it the assignment but my tone and message to the class communicated another message. My analysis of this exchange with Katie was that I had put my need to be sure the class understood what was expected ahead of Katie and her learning needs at that moment. Knowing that effective communication requires attending and responding directly to the student does not always translate into action. I had not communicated effectively with Katie. Reviewing the videotape raised my consciousness to be vigilant about how I communicate at all times with students. It also helped me reflect on Katie as a student. Katie had excellent oral skills and wanted to be heard. Writing was more of a challenge and although I wanted her to put more effort into the writing, my approach was viewed as a challenge and she became oppositional. This manifested itself in her refusal of my help on the assignment and the fact that she handed in the assignment unchanged from when she originally gave it to me in class. I tried on two occasions to open a discussion with Katie about the assignment. The first time I asked about her progress on the letter she told me she was working on it at home. The second time she was unable to produce it from her desk. When I finally examined the assignment, to my surprise Katie had submitted the original letter she wrote to the author (Appendix L Katie's Letter). Although I found the content appropriate, the writing mechanics fine and the presentation acceptable, it did not meet the requirements of the assigned task. I met with Katie to discuss the fact that she had

not changed her work. She said she had lost the new letter and handed in the original. The dynamics of this incident and its outcome allowed me to be more introspective. While I do not think it was my practice to reprimand a student in public, the ramifications of this type of incident are profound. It helped me recognize where I needed to improve my communication skills, and reinforced my belief that understanding and supporting student learning is a complex undertaking.

Reflection requires the mindset to see in a different way what you have experienced. When I was able to do this, the result was more insight, personal growth, and better teaching decisions. As mentioned earlier, all teachers reflect upon their teaching experiences. It is in understanding the purpose of reflection and the use to which new insights are put that contributes to teaching and learning in a classroom.

Decision Making

Decision making is a complex, idiosyncratic process involving the conscious and unconscious mind (Mayher, 1990). Teachers are required to make multiple decisions each day, often on a moment's notice. My data revealed that reflection on documentation informed most of my teaching decisions. The following are two examples of how this occurred. The first example is how my decision to organize skill-building, mini-lessons on writing was rooted in my spreadsheet documentation (Appendix E, Sample Spreadsheet). It was here that I documented the writing skills of my students. Over time I saw patterns develop. Some students needed only to continue expanding their writing horizons while others needed work on basic punctuation and grammar. Grouping students according to their learning needs helped focus on what they needed to learn

while encouraging them that other students share the same difficulties. The decision to create skill-building, mini-lessons proved to be an effective strategy for focusing students on writing skills. I saw evidence of the transfer of learning from the group work in the students' writing and they were anxious to continue working on this activity on a regular basis. For example, some students who were working on learning to spell high usage words by heart began keeping track of how many words they were successful in remembering each time they met. One student explained how she realized that she could spell almost the entire group of 100 words correctly if she stopped to think about how to spell them, but when rushing made many errors.

The second example concerned my decision to teach students about collage. The job inquiry presentations from the project on occupations required reading and writing time that exceeded the time allocated for this. Editing with each child informed me as to where they were in the process of completing the work. I recognized that the effort to produce a text on the occupation they had chosen had not left much time to spend on a visual presentation needed for the exposition. We had planned to share their work visually. They needed something to help make the presentations vibrant and colourful. The result was a decision to do a lesson on collage and to provide the magazines so students could create their own collage around the occupation they were studying. This was a very effective activity and one the students really enjoyed. The level of activity the students engaged in while creating their collages and the standard of work in resulting posters used for the exposition were clearly evident on the video.

I understand the complexity and idiosyncratic nature of decision making. In order to make teaching decisions that fit my students' needs, I knew that I must first understand what those needs were. I received input from my students by way of work products. I also listened to individual students and reflected on all the information I had gathered. It was then that I made decisions that I hoped would fit their needs. The decisions were the best I could make with the information I had at the time. It was the synthesizing of the continuous flow of information about students and learning that supported the appropriateness of decisions or provided a basis for revision and change. This continual process of review and evaluation based on changing information, apparent in my documentation process, became the foundation for a culture of assessment and accountability in the class.

Assessment and Accountability

Assessment and accountability are cornerstones in the education process. All teachers carry out these responsibilities as part of their role as teachers. Assessment in my classroom carried a broader definition than is traditionally used. It included teacher assessment, student assessment, self-assessment by the students and the teacher, peer-assessment, along with assessment of activities and teaching. The project approach, a component of the IBO curriculum mentioned earlier, supported this view of assessment. From the beginning of the year the students and parents were informed that all work would be assessed because it encouraged a learning environment of continuous improvement in the classroom. Assignments were multiple, diverse, and always had a component of student choice. Rubrics (Appendix M, Rubric Sample) were developed in

class and used by me and the students to assess the quality of work. The continuous cycles of communication about learning infiltrated all classroom activities and extended to the home, through the use of the agenda. I was accountable to the students for how they were performing, and the students were accountable to me in their efforts to improve. Both the students and I were also accountable to administration and parents for overall school progress which took the form of a classroom portfolio, a formal report card, and student/teacher/parent interview.

As indicated earlier, assessment was not limited to the students' work. Self-assessment by me and my students and assessment of classroom activities were part of the classroom culture. Students wrote reflection sheets that often contained elements of assessment (Appendix A, Student Reflection Sheets). I was continually assessing the quality and learning value of activities I had chosen for students. Some activities proved to have excellent learning potential, while others seemed to have less. The following is a memo I wrote assessing the unit of inquiry on occupations the students had just completed and illustrates the continual need to assess the quality of teaching and activities.

(05/31/01) [The content of the presentations for the vast majority did not show a comprehension of the concept of an occupation. I did not know how to move the students to this arena. What comes to mind now is the question I could have posed to them. The question is – How is this a job? The web we made a few weeks earlier would have been a good starting point. For each of their choices I think now I could have helped them make more connections by a simple questionnaire that they could have answered from the knowledge they had gained. How is being a

skater a job? How is a bank worker a job? It is easier to see how I could have helped the students now. I knew something was not quite right at the time, but didn't find a successful way to intervene and challenge their thinking].

Assessing classroom activities provided meaningful information that I used in trying to improve my teaching. Assessment also extended to me as the teacher. What was happening in class, how it seemed to affect students and me as the teacher, were questions foremost in my mind. Assessment in my classroom was continuous and all encompassing with learning as the end objective.

Windows on learning

I borrowed the concept "windows on learning" from Helm, Beneke, and Steinheimer (1998). Windows are frameworks from which to understand the meaning of documentation. The window on learning in my study was the documentation that occurred during USSR. This was the 15 minute period each day devoted to silent reading in the classroom. My fieldnotes during USSR were factual, with minimal interpretation. The following excerpt from my fieldnotes is representative of the type of notes taken. All names are pseudonyms.

(Wed. May 2A text) [Grayson asks what 'screen door' means. Susan asks about Transylvania? I notice Mary Anne writing. I remind her to read. Lawrence comes to talk about bowling. Allan comes to show a diagram of the Nile river which we are studying in the after school program. Grayson is back with another question. Mini and Mary take turns going back to the library shelf. Susan needs clarification on 'smiles mysteriously'.]

The wealth of information I gleaned from this time each day was an epiphany for me. I had feared that I was not learning enough about students by documenting the same activity each day, but chose to continue because the time was available and the routine was established. Also it was the only consistent block of time I could count on to have the students engaged in a silent activity where I could freely observe them with few interruptions and had time to talk to individual students about their learning. My epiphany was that I derived much of my knowledge about how students learned from this documentation, and my reflection on it continually deepened my knowledge and/or made me question my understanding of the students. What appeared to be routine and very familiar information became unique and interesting when I looked at it more closely and over time. I have chosen the stories of two students to illustrate how reflecting on the daily observational notes for these students helped me question what was occurring and to dig deeper.

Emmie was a bright nine year old who displayed very strong skills in writing, both in the mechanics and in terms of creativity. Often she did not seem to concentrate during the daily reading period, frequently changing books and choosing books below her reading level. I noted this and spoke to her about it but received little by way of response. I wondered if she was having difficulty but reflected on the high quality of her oral reading in class. I noticed that when writing she appeared to be deeply involved in the task. Over time, I realized Emmie enjoyed writing much more than reading and often would write during reading time. The opportunity to approach her again about her reading occurred in the library when she was searching through the young children's books instead of choosing a book at her level. I asked her what her favourite children's

book was. She did not have a favourite, but her baby brother did. She shared with me that she had a young step-brother to whom she read each night, so she often chose these books during our library time. Emmie indicated that having to deal with a step-sibling was not easy and that it helped to put her feelings in writing. I learned that it was not the mechanics of reading that Emmie struggled with so much as other interests that competed for her attention. I supported Emmie's efforts on her brother's behalf but encouraged her to read for herself and to continue to use writing for self-expression. What I learned about Emmie was an important lesson for me. It was that exploration of my observations of repeated behaviours in students was what allowed me to understand their learning and to support it.

Allan's story is another illustration of how the consistent documentation of an activity over time deepened my understanding of him and how to support his learning. Certain students asked comprehension questions during silent reading time while others simply read quietly. I encouraged students to use any strategy that helped them improve their reading, including asking me for help during USSR. Allan did this very frequently and over time it became apparent that although he needed clarification of words, his main purpose was to share. He loved to discuss what he was reading. Discussions with Allan revealed that enjoying reading was a new experience for him. It was as if a new world had opened up and he wanted to share it. Understanding this about Allan helped me see his talking about books in class and in the library period from a different perspective.

There were many stories in my class like those of Emmie and Allan that had their genesis in my fieldnotes during USSR. This window on learning for each student allowed

me to view many aspects of learning that proved to be pivotal for my understanding of each student. From this documentation process I knew many of the specifics about each student's reading and the type of books they enjoyed. The *Captain Underpants* (Pilkey, 2000) books are an example of leading from behind, that is knowing what students enjoyed reading, then creating activities that built on this strength. The *Captain Underpants* books are a comedy series in which two elementary students create a superhero. The students enjoyed these books immensely and often shared their reading of them with their peers. It was this documentation of these behaviours that led to a decision later to have the students create their own comic strips. That proved to be an engaging activity that extended the knowledge of writing.

Reflection on these fieldnotes over time helped me understand the meaning of what I observed. James's story is illustrative of the value of observing and documenting behaviour while recognizing that these activities must be not be interpreted in isolation. James was a warm, friendly Francophone student who was struggling with English. His primary interest was in action books and video games. He frequently changed books during USSR and often could be seen daydreaming. James had chosen *Sarah Plain and Tall* (MacLachlan, 1985) for his novel study group. These were groups of students reading the same novel who then discussed the book and completed assignments on it. I was concerned about James' reading comprehension and requested a reading conference with him during USSR. James surprised me with his level of detail and understanding of the book. I wondered if his mother was reading it to him at home, but he assured me that he had read the book on his own. His level of comprehension and obvious enjoyment of the story helped me step back and realize how much I needed to be in touch with students

about how they are experiencing learning. James may not have been a consistent reader during silent reading time but, when I held him accountable for required reading he demonstrated effort and ability.

Video documentation during USSR provided another view through this window of learning. When I reviewed the videotape of the day I often picked up things I had missed in class. For example I noticed that Judy, a student who was easily distracted when reading, seemed to stay more focused on her reading when seated by Arleen. Arleen was a student who was seldom distracted from her passion for reading. I noted this for when we reorganized the classroom seating arrangements. The video review also heightened my awareness of how I was able to document conferences that I held during USSR. My habit of writing in my research journal immediately after a conference is a frequent image on the videotapes with students respecting this time by waiting to speak to me. The window on learning provided by this documentation during this class time contributed invaluable information that deepened my knowledge and understanding of student learning. This knowledge also contributed to my evolving relationships with the students to which I now turn.

Relationship Building

As mentioned earlier, the relationship-building process began with my first contact with the students and their parents via letters of introduction and continued through the period of study particularly in the one-to-one interaction between me and my students. My professional and personal experience influenced my consciousness about the need to work at building trusting relationships with students. I was mindful of the

power differential in the student teacher relationship and sought to diminish this gap by the physical arrangement in the classroom and by working on developing respectful, trusting relationships with the students.

From my perspective as a caring teacher and trained social worker, building meaningful relationships of any type is the result of empathetic understanding gained from effective communication. Building strong, trusting relationships with my students therefore required both empathy and effective communication on my part. Empathetic understanding comes from a deep knowledge of students as individuals. I sought to develop this level of understanding by communicating effectively with the students. Effective communication (Carkhuff, 1969) is defined as being able to attend, listen, observe, and respond directly to the student. When I talked to students, as much as possible, I made an effort to make eye contact, to focus on the student, and to take in all the information they were giving so I could respond from a basis of understanding. I believe all interpersonal encounters can be meaningful, and I tried to make sure this happened each one-to-one interaction with students.

One-to-one interaction between teacher and student fell into four general groups. These included student initiated interaction during USSR, formal student/teacher conferences, informal student/teacher interaction such as editing, and finally all other one-to-one encounters where sharing occurred. Answering each question during silent reading time is an example of first type of one-to-one student teacher interaction. I decided that if it was important enough for a child to come to me during silent reading, that it deserved my complete attention. The students spoke quietly in respect for others

who continued to read and returned quietly to their seats. Some students never asked a question during this time, while others, like Terry did so daily. I was usually seated at the classroom table so was able to have eye contact with the students and I listened and answered their question directly. The quality of the interaction seemed more important than the amount of time I devoted to the questions. Many of these encounters could be measured in seconds. What I believe I was communicating to the students was that I could not only listen and answer their questions, but also that they, as students, were important to me.

The student/teacher conferences were a more formal one-to-one interaction usually initiated by me. They lasted between three to seven minutes and focused on some aspect of the student's reading or writing learning. The conferences had many purposes including assessment, accountability, inquiry, support, guidance and instruction. Some of the most poignant moments between me and my students occurred when I gave the student time to think about a learning dilemma that had emerged. The importance of the student/teacher conferences is made more explicit in Chapter Five on visual narrative episodes.

The informal one-to-one student/teacher interaction occurred continually as students worked in the classroom and usually had a pedagogical goal. These encounters were the most difficult to document because they occurred in the midst of evolving classroom events. It was at this time that I used post-it notes to help me remember salient information about students and their learning.

The final type of student teacher interaction usually involved the sharing of personal experiences such as one when Mary showed me her swimming medals. Although not pedagogically oriented per se, I considered these encounters important and gave them my full attention. Other times I created opportunities for building relationship during one-to-one sharing. For example one of the students, Sam, was particularly interested in football and played on a local team. While it was a small gesture, Sam appreciated my question to him after the American Super Bowl when I asked his opinion of the field goal that ended the game. After that he could be counted on to share his sports stories with me.

Connecting directly with students and their interests was only part of the relationship building process. The information I gained through reflecting on documentation contributed to this. It provided me with the opportunity to consider all the information I had available about students, influenced my responses to students, and my teaching decisions as well. The stories of two students demonstrate how the continuous flow of information about students must be taken into consideration to build solid relationships.

I begin with Tamara's story. Tamara was a tiny, quiet, sensitive student who was very considerate of other students. She seemed to stay in the background of most classroom events but was the first to offer help if it was needed and often noticed things that others missed. One example was when one of her friends was late for class, she copied the homework on a separate sheet so her friend would not miss it. Although she was working at it, Tamara's reading and writing skills continued to be a challenge. I had

an opportunity to step back and consider Tamara from another view point when I reviewed a videotape of a day's events. This was a segment where Tamara and another student were working on producing a comic strip. It provided me with insight into Tamara's learning and reinforced my belief that she needed activities to build her confidence. On the video, Tamara and Liz disagreed about the spelling of the word "families". Tamara spelled it correctly while Liz spelled it "familys." Liz confidently said her spelling was correct. Tamara quietly changed her word. This made me realize how important it was help Tamara build confidence in herself as a learner. I sought out opportunities to make this happen, and found having her read with a less proficient reader had a positive effect on her.

The second story is Susan's. Susan was a quiet, shy nine year old who was a new student at EIS. Her parents were recently divorced and her time with her father was usually on the weekend. Monday mornings were often disorganized times for Susan with items misplaced between homes. By listening to her explanation about why she was missing her books, I came to learn about the interesting places and things she discovered on her weekends with her dad. My interest seemed to encourage Susan to share more in her journals and to ask more questions during USSR. I reflected on the fact that this was Susan's first year at EIS and that adjusting to her new family situation and a new school made this a challenging year for her. My response to her on Monday mornings reflected my understanding of her reality.

Both stories are illustrative of the complex, dynamic nature of classroom teaching and the individual nature of the learning experience for each student. Relationships based

on trust were built during each contact time, and continually changed as new information became available. Documentation provided the information on which to reflect as I searched for meaning and understanding of how my students experienced learning. The complexity and nuances of the documentation process as it unfolds in the classroom is difficult to demonstrate in text. For this reason I turn to a contextualizing strategy in Chapter Five to explore more fully how it unfolds in interaction with students.

Summary

In this chapter I described how I used a categorizing strategy (Maykut & Morehouse, 1994) to explore the meaning in the data. I began by determining what types of documentation were used in my classroom. From an interrogation of these descriptive categories I was able to move to more conceptual categories that illustrated the function of the types of documentation that emerged. The data revealed there was interactive documentation, reflective documentation and process-oriented documentation. All three conceptual categories were closely interrelated and interdependent. Activities were uncovered in the data that revealed how documentation processes were implemented. These occurred in preparation activities, organizing activities, and routinizing activities. The consequences of implementing documentation was that it fostered teacher reflection, influenced decision making, contributed to an assessment and accountability but most importantly, it provided windows on student learning and helped build deep, trusting relationships between me and my students. In Chapter Five I describe the contextualizing approach I used to examine my data more holistically.

Chapter Five: Visual Narrative Episodes

In this chapter I turn to a contextualizing strategy that added depth to the meaning and interpretation of the data. Employing a narrative analytic process, I returned to the data and viewed it from the perspective of the students. The richness of the videotaped data suggested a visual representation of student stories would be more compelling than text alone. Using models of narrative structures as a guide, I created visual narrative episodes (VNE) that were representative of what happened in the classroom. I conclude the chapter with textual summaries and discussions of each episode.

The use of the categorizing strategy in Chapter Four uncovered the types of documentation used and how they functioned in my classroom. There were multiple consequences of this documentation that supported teaching and learning. Documentation encouraged reflection, contributed to assessment and accountability, informed teaching decisions, provided windows on learning, and aided in building strong student/teacher relationships. What was missing was what happens to children when this process is in place. To get a sense of that, I returned to the data and used a narrative/contextualizing analytic process.

I reviewed the data and began to see how conferences appeared to be a pivotal point from which to follow what happened to a particular child in class. I then culled the strands of activity in which the children were involved that related to the conference. I extracted these excerpts and put them together in a series of clusters that began to suggest how these activities were related. I decided at this point that these clusters, when more refined, could be very helpful in further demonstrating how the results of my

documentation were reflected in my interaction with students. I proceeded to identify all student/teacher conferences and selected excerpts in the data that appeared to be related to the conference. A cluster of excerpts from the data concerning Mary, one of my students, is included (Appendix N, Structuring the Narrative). It is an example of how I focused on individual students, beginning with a student/teacher conference, and then searched for data that was related to the conference in some way.

I reviewed the data and began to see how conferences appeared to be a pivotal point from which to follow what happened to a particular child in class.. In the example already mentioned, Mary's lack of oral communication is the most salient event in this conference. What became apparent immediately was how much more compelling the visual data was. It was at this point that I made the decision to piece together renditions of these episodes and use text to provide a contextual backdrop and a place for discussion.

Narrative Models

The use of narrative to represent research results is now a familiar approach in qualitative research. Story is how we communicate what is important in our lives (Clandinin & Connelly, 2000; Connelly & Clandinin, 1990; Rosenwald & Ochberg, 1992) and as such is a natural way to communicate about research. Narratives are meaning-making structures that preserve and respect research participants' way of constructing what is significant to them (Riessman, 1993). There are a variety of textual narrative structures to use as models. Some examples are narrative scenes (Merryfield, 1994), narrative vignettes (Erickson 1986), and vignettes or profiles (Seidman, 1998).

Each narrative structure has unique features in how they are constructed, but all have the same goal of trying to communicate the meaning and interpretation of the data.

Merryfield's narrative scenes are constructed as brief sequences of events that include reflections and dialogue. Erickson's vignettes draw upon salient events that provide a snapshot of the lived experience for the research participants. Seidman's profiles are more extensive constructions of stories across the research data. Each of these narrative structures are potentially useful integrative devices for reconstructing and communicating key phenomena in the data and interpretations of them in a study (Miles & Huberman, 1994; Seidman, 1998). The narrative models I have mentioned here are all textual representations of research results. As mentioned, I also used text as a way to contextualize my narrative episodes, but due to the richness of the video data, decided to create visual renditions of the episodes.

The literature on the use of videotaped data for presenting research results is scarce. Some proposals of research methods using videotaped data (Cobb & Whitenack, 1996; Erickson, 1992; Powell, Francisco, & Maher, 2003) provided helpful information for working in this way. The literature does contain cautions for researchers and consumers of constructed narratives or similar representations of research data (Erickson, 1986, 1992; Merryfield, 1990). Erickson cautions that there is a risk of creating vivid, convincing reports or videos that are not true to the lived experience. In constructing textual narratives, the researcher can put words in people's mouths. This is less likely when using videotaped data given the richness of the information, but there is still the possibility of fracturing the video data and reconstituting in different ways that might not be faithful to the particular event. Any type of narrative structure, including visual ones,

can produce concrete focused stories that are vivid, compelling, and persuasive. The question to be answered is whether or not they are representative. Multiple stories suggest credibility because of repeated examples of similar experiences. I have used this strategy in creating my visual representations. By reviewing the entire corpus of video data of approximately 37 hours, I reassured myself that the visual narratives I was creating were representative and not just the most sensational or unique. Erickson (1986) points out that even the most richly detailed narrative is just a representation of the event, not the event itself. This is the case with the video data. The interaction and events can be seen in the limited context of that moment in the classroom. Decisions about how much video to use and what is left behind makes the video narrative a construction, rather than the total experience in real time and context. I was conscious of these factors as I crafted my video representations to interpret and represent the data.

Using the textual narrative structures and information about video data as a foundation, I constructed a type of narrative structure I call visual narrative episode (VNE). Episode is defined as “an incident in a narrative, one part of several, in a serial story” (Hawkins, 1986). VNEs are story-like structures crafted from videotaped data segments. I believe these are representative examples of incidents that occur regularly in everyday classroom life. The episodes are fashioned with the same purpose as the textual narratives mentioned earlier I reviewed the data and began to see how conferences appeared to be a pivotal point from which to follow what happened to a particular child in class.. Seidman (1998) has suggested that constructing narrative structures such as profiles or vignettes, and here I include my VNEs, is an effective way of sharing analysis and of adding meaning and contextual richness to the analyzed data. As a narrative

structure, each VNE is a representation of the lived experience in my classroom. It conveys to the reader and/or viewer the meaning of the experience from the student and teacher perspectives. The VNEs reveal some of the nuances of the classroom context, and provide a space for student voices that add credibility to the research.

The decision to create a textual summary of the VNE respects the fact that this thesis is in a textual form and some readers may not have easy access to technology for viewing the DVD. The text and the DVD are meant to be complementary rather than a duplication of the same information. The textual version includes a brief resumé of the narrative episode in context, followed by an interpretation of the episode from my perspective as the teacher. It is in these explanations that the complexity and nuances of role of documentation are made explicit.

Revisiting Ethical Issues

Ethical questions in the research, especially research involving children, were always in the forefront of my work. The use of DVD technology for the video narratives raises ethical questions that go beyond those of textual narratives. Assuring anonymity by a name change is not really relevant when students can be seen (Pirie, 1996). At the start of my study, I obtained informed consent to have the classes videotaped but deeper ethical questions came to the forefront when I decided to use DVDs as part of the thesis. I contacted the parents of the students who became the subjects of the DVDs to seek their consent, and offered to screen the DVDs with them. The parents of the students who were inadvertently caught in the background were also contacted to give their permission for the DVDs to be included in the thesis. My goal was to construct visual narratives that

were representative of classroom life and illustrative of the complexity of the themes uncovered in the data. The VNE also provided space for students to be both seen and heard, which is a very powerful way of portraying them. For this reason, I was careful not to cause harm or embarrassment to my students by what was included in the VNEs.

Constructing the Visual Narrative Episodes

The earlier coding of the data for individual students paved the way for me to return directly to the videotaped data associated with each student. I began by reviewing the videotaped data for each child, searching for segments that depicted learning situations and were representative of what occurred in my classroom. I identified the range of variation in the interactions recorded on the videotapes, then established what was typical and atypical. Finally, I chose student/teacher conferences as the framework for the episodes. There were multiple reasons for this choice. First, conferences were typical occurrences in my classroom. This meant that there were many examples from which to choose. Each conference provided a personal learning situation of an individual student and opened doors to other links in the data. The conference can best be described as the anchor point from which I was able to trace a learning episode.

The multiple conferences I reviewed seemed to unfold in the following manner. The students and I sat at a small table which was used for a variety of purposes. We were in close proximity to each other allowing for a sense of privacy and intimacy while remaining in the classroom. We spoke in quiet voices. The conferences were brief, ranging from 90 seconds to 7 minutes. I studied the conferences for similarities and differences and found a pattern. What the conference videotapes illustrated was a pattern

of communication of a learning dilemma between me and a student followed by a discussion. It culminated in an agreed upon strategy that helped students move forward in their learning. Once I decided that the framework would be the student/teacher conferences, I created criteria to facilitate the process of choosing which conferences to use. I decided that the conferences had to deal with an idiosyncratic learning situation for the student. In other words, the subject of the conference had to be focused on a specific learning need of the student. Also the videotaped data had to be rich enough to include an entire story structure. This was a critical criterion for the choice of conferences I could use because there was only one camera in the classroom. This limited what could be videotaped at any one moment in time. For example in some instances a conference could be heard, but because the camera was not focused on the teacher and student, there was not a videotaped component to it. Finally, to be effective, the auditory and visual dimensions of the conference had to be of satisfactory quality. This aspect of the process caused me to deal with issues concerning credibility. My study was conducted in a classroom where I was both teacher and researcher. The student/teacher conferences occurred while the other 26 students in the classroom were engaged in independent activities. The videotaped conferences reflected the reality of the classroom. Sometimes the classroom was relatively quiet, while other times student chatter or the noise of the air conditioner interfered with the sound quality of the participants in the conference. I had conducted conferences in all classroom environments. The dilemma I faced was whether or not to reduce the background noise on the videotape in favour of better sound quality in the conference. I decided not to interfere with the audiotaped quality because to do so, I believe, would misrepresent the reality of classroom life. To preserve as closely as

possible the authentic classroom environment, the audiotaped segments remained untouched and I opted to insert verbatim text onto the DVD for any compromised audio portions in a VNE.

I chose three conferences that came closest to meeting my criteria. I then searched for other video segments that added depth and clarity to the conferences I had chosen, and finally, I included videotaped segments of the students reflecting on learning which I felt provided an added dimension to the VNE. Appendix O (Crafting Annie's Narrative) is a sample of the process I used to choose videotaped segments to construct a coherent narrative. I then turned to technology to help me craft the stories.

For the construction of the episodes I used the software PyroPro for video editing. I encountered a steep learning curve in order to be able to make effective use of this program, but the impact of actually hearing what students have to say, rather than reporting it, was ample compensation for the effort expended. I studied the three conferences and built a storyboard that fit all three episodes. The storyboard consisted of the following segments: communicating a learning dilemma, discussing a learning dilemma, scaffolding a learning dilemma, and subsequent student reflections. A sample storyboard can be found in Appendix P (Sample Storyboard). I used the editing function of the computer program to fine tune the videotaped segments and added text where necessary. Finally I copied the three episodes on to separate DVDs. To help place each VNE in context and to aid in understanding their meaning I created a guide (Merryfield, 1994) that applies to all three episodes.

The VNE guide is comprised of five items.

1. The episodes are the result of final analysis of fieldnotes and videotaped data.
2. The episodes were developed from the findings. They were constructed so that the reader can step into classroom life and learn about the multiple realities of learning in my class.
3. The episodes include events that occurred over the research period.
4. The episodes involve idiosyncratic learning situations for each student involved.
5. The students depicted in the stories are actual participants in the research and involve events that actually occurred.

Textual Narrative Episodes

Grayson's Story: Choosing the Best Learning Environment

The first narrative episode concerns Grayson, an eight-year-old male student for whom English was a second language. Grayson was a consistent worker in class and completed his homework with the support of his parents. The academic goal for Grayson was to become a fluent reader and writer in English. He had come to my class with very good oral skills in English.

I noticed that Grayson read inconsistently during USSR. Some days he read quietly, while other days he flipped pages, changed books, and generally squandered the silent reading time. On the day in question, I noticed that Grayson was not reading, even

though he had a book in front of him. I requested a conference and asked that he bring his book. Instead of taking the book he had had in his hands, Grayson went into his desk and retrieved the novel he had chosen to read for novel study group. I asked why he was not reading but got only a shrug of his shoulders. After some questioning and silence, Grayson told me that he liked to read out loud and read at home this way. I offered to him the choice of going into the hallway to read so he could read aloud without disturbing others, but he declined my offer at that time. A few days later Grayson came and asked to go outside and continued to do this on many occasions. Later in an interview about reading and writing, Grayson admitted to me that he liked to read but that he would pretend to read sometimes during silent reading time depending on the day.

Discussion

At first glance, the reading conference with Grayson was brief, to the point, and productive. Grayson told me why he was not reading on this day. He liked to read out loud. His need to read this way was easily accommodated in the hallway and I gave him that choice. Although he did not use it on that particular day, he did use it on many other occasions. What is not evident in this interchange between Grayson and me is the journey involved in building such a trusting relationship that meaningful communication could happen at any time. Some deconstruction is necessary to understand how this level of relationship came to be. First, the book Grayson had in his hands and was flipping through was a book he had already read. Grayson had talked to me about how he and his Mom had read this book together. When I noticed that he had this book and did not seem to be reading it I used that moment to ask him for a conference. The time for a

conference was available because as mentioned, USSR was a daily occurrence in our classroom. This was time where students were engaged in reading their books and where I observed, documented, answered questions and conferenced with students as needed. The non-reading behaviour triggered my focus on Grayson. When I asked Grayson to bring his book to the conference he did not take the book he had been holding. Rather, he retrieved his *Dear Mr. Henshaw* (Cleary, 1982) book out of his desk to come to the conference. This was interesting to me because I knew from observing Grayson's novel study group a few days earlier that he had been reading *Dear Mr. Henshaw*, and had demonstrated good comprehension of the story, and seemed to be enjoying it. Taking the *Dear Mr. Henshaw* book out of his desk to bring to the conference indicated to me that he knew this was the book he should have been reading, or that I expected him to be reading.

The table where I conducted conferences is what I like to think of as neutral territory in the class because it was often empty and could be used by me or the students. It was a small table so when I was seated next to a student we were physically close and did not have to speak loudly to be heard. This lent an air of privacy to the conferences and respected the other students' need for quiet during reading time. I established eye contact with Grayson and communicated to him that I knew he was not reading and that I wanted to know why. Although he shrugged his shoulders at first, indicating he did not know why he was not reading, I persisted in my questioning. I communicated to Grayson that it was important that he know why he was not reading and I encouraged him to think about this. I allowed this to sit with Grayson, letting silence become part of the communication. This use of silence often opens up space for students to share their

views. When Grayson told me he liked to read out loud, I did not push him to go outside but wanted him to know that it was an option. I then moved on to discussing the book *Dear Mr. Henshaw* with him. I did this because having shared something important about his reading style with me; I felt it should be his choice to opt for a different reading environment, and not my choice to insist on it. I respected his choice. Several days later, when Grayson came to ask me if he could go outside to read, my answer was simply “yes you may”. Nothing more needed to be said because we understood each another. Grayson leaving the class with a book in his hand did not seem to be of interest to anyone else. I would like to believe that this was because my students all had their own personal relationships with me so Grayson’s departure from the class was not their concern.

Alternate interpretations of this conference are possible. Perhaps Grayson told me the first thing that popped into his head about reading just to break the silence and to get me to back off, or perhaps he disliked the book but did not want to tell me this. I suggest the explanation I have detailed here seems most plausible because of the contextual information available to me, and also because Grayson had asked to go outside to read on other occasions. Grayson demonstrated that he was developing metacognitive skills by knowing his reading environments made a difference to his reading, also in his admission to me that he sometimes read and other times he only pretended to read.

I believe my communication with Grayson was based on a deep knowledge of him and my desire to go beyond the surface of his behaviour in order to understand the reason for his inconsistent reading habits. I also wanted him to understand why he was not reading and gave him a chance to think about this. The opportunity to communicate

about something meaningful in terms of Grayson's learning could only have occurred because of the strength of our relationship. His honesty was refreshing, and his trust in me to accept his learning style allowed him to ask to leave the class to read on many other occasions.

Annie's Story: An Inside View of a Second Language Learner

Annie was a shy, soft-spoken eight-year old. Her first language was French and there was a limited amount of English spoken at home. Both parents worked outside the home so Annie attended the school daycare program both before and after school. She was a hard-working student who liked to please.

From observing her in class I recognized that Annie was having a difficult time with her reading on a particular day. I noticed this because of the body language she displayed while seated at her desk. When I asked her for a conference her body language demonstrated even more clearly that she was not feeling good about talking to me about her reading. Annie's head was down as she walked to the table where I sat and she put her face in her arms almost as if to hide. I asked her what was wrong and got only a shrug. Through a series of questions, I learned that Annie was having a very difficult time reading in English and was not enjoying it at all. She told me that she did not read English at home. The fact that Annie verbalized her difficulties was a big step for this shy student.

I suggested the use of SoundPrints (Senecal, 2000) books as an alternate source of reading material. SoundPrints is a program based on short trade books with a science

theme. The text of each book is printed separately so the student can highlight words they do not understand. Annie chose a book on animals called *Big Tracks, Little Tracks* (Selsam, 1991).

In our conference the next day Annie's body language was much more open and positive. She had worked hard at the reading, and had highlighted words that she wanted to understand. When given time to process her knowledge, Annie was able to read most of the words she had highlighted and knew the meaning of many of them. I recognized quite quickly that Annie needed a reading partner to sustain her progress in reading English. I suggested that during daycare homework hour, one of the other students could help her with the highlighted words. We brainstormed about which students went to daycare with Annie and determined that Heidi was the student Annie would like to receive help from during daycare homework time. This was arranged easily with the daycare staff.

Annie later communicated to me in a reading and writing interview (Appendix F, Interview Protocol) that she never read at home in English and very seldom read in French. Annie explained to me that she thought in French and this made the process of learning to read and write in English difficult for her. I believe Annie expressed eloquently the struggle second language learners experience as they attempt to learn English. Annie's desire to become competent in English was demonstrated to me on many days when I witnessed her and her learning partner quietly working on various books in the hallway.

Discussion

The importance of monitoring body language becomes very apparent in this episode. My response was to reach out to Annie in a reading conference. Her difficulty in reading English and her admission that she was not reading any English at home resonated with me because I knew the family had been through a stressful ordeal. In other circumstances, I would have contacted the family and suggested some strategies to help Annie, but instead I chose to offer help that was sustainable in the school environment. I suggested a reading intervention program because I had taken the training in the program and had access to the books and text reproductions. Annie's dedication to working on her English reading was inspirational. The choice of a learning partner during daycare proved to be a long term, sustainable solution to her learning dilemma. Interestingly, Heidi was a very good choice as the student tutor, not only because of her strong reading skills but also because she was shy. She was a very bright, creative student who struggled to speak loud enough to be heard. The ten minutes spent each day during daycare to help Annie with her reading proved to be mutually beneficial because it gave her confidence to speak.

My approach to Annie's dilemma was to support her to attain the objective of becoming bilingual. When I reflected on this decision, I realized there are other ways of viewing this situation. The most obvious one may have been to suggest that Annie change to a French language school. This might have been an easier option for Annie in the long run. Another factor to consider was that Annie was a student who liked to

please. Perhaps I put more pressure on her by expecting her to work with another student.

My decision not to contact the parents was a considered one. It may have been more helpful if the parents had been made aware of their child's difficulty. I had to weigh the decision to inform the parents and increase already existing stress, or to try to resolve the problem in school. In this case I chose the latter, while cognizant that home support is an important criterion for school success. Heidi was also a consideration. Although she agreed readily to work with Annie, and I knew it would not be a difficult academic task for her, I knew the oral component of the task would be. Apparently the benefits outweighed the risks, and I was pleased to see them working happily together.

I knew Annie as a shy student who was adverse to taking risks, and who did her best to please her teacher. Her admission that she was not reading at home was brave of her and I recognized this because of what I knew of her. As with Grayson, she trusted me with information that made her vulnerable and together we found a path forward.

Lawrence's Story: The Poetry Dilemma

Lawrence was a bright, out-going nine-year-old student who struggled with learning, particularly with writing. As a final assignment for the novel study they were finishing, I had asked my students to write a poem about the story.

I chose poetry as a final assignment for a number of reasons. Earlier in the year these students had completed a unit of inquiry on poetry, working in both languages on the unit. The students also often chose to write poems in other classes or during writers'

workshop because it requires less writing than prose. The poetry assignment was greeted with enthusiasm as usual by most. Lawrence was not one of these students.

At the time, Lawrence was reading the novel *Henry and Ribsy* (Cleary, 1982). He was about half way through the book. The work he showed me was prose, not poetry, and did not seem to make sense. In a writing conference with me, Lawrence and I discussed the work. Lawrence seemed reluctant to leave our conference to continue his work on the poem. Sensing this reluctance, I concluded he had not finished reading the book.

Lawrence was a student who enjoyed talking about ideas rather than writing about them. I knew it was important for him to be successful in writing in order to build his confidence in himself as a learner. Although for some poetry is a difficult writing genre to acquire, Lawrence had had experience in writing poetry, and I believed the cryptic form of poetry would lessen the overall demands of the task. Rather than change the assignment for him I changed the book on which he could base the work. I knew how much he enjoyed *Amber Brown* (Danziger, 1995) and felt that by writing a poem about this book, he could devote his energy to writing rather than trying to remember what the book was about. I wanted him to be successful at a writing task in order to build his image of himself as a writer.

Lawrence returned to his seat and worked on the poem. He came back for editing and again his poem lacked logic and structure. I worked with him and as he read it to me he self-corrected. When he reached the point where he could write the poem as a polished piece I suggested he type the poem and then hang it up for display for others to

see. I knew that Lawrence loved to work at the computer so my suggestion relieved him of the onerous task of rewriting his poem by hand. Needless to say, Lawrence was pleased to type his poem (Appendix Q, Lawrence's Poem).

Lawrence shared some insights about his experience with writing in my class when he did his oral reflection on the videotape on the last day of the research period. He expressed himself with enthusiasm saying that he had learned to like reading and writing this year. I was delighted when he added with the confidence of a student who was engaged in his own learning that he knew he would succeed that year.

Discussion

The daily classroom silent reading period was how I really got to know Lawrence as a learner. Of all the students in the class, it was he who asked the most questions and shared his ideas and his reading most often with me. During any fifteen-minute reading period, Lawrence would come to me between three and eight times to ask for clarification about what he was reading, for the definition of a word, or just to share some thoughts about his work. Although he always had a legitimate question, his purpose seemed to be more a desire to talk and share. It was during one of these short interchanges that Lawrence talked about his difficulty with writing, especially reading responses. He described it as a memory problem. A strategy using post-it notes seemed to help. Lawrence's lack of productivity in writing and his love of conversation were understandable when looked at from a family perspective. In my two short meetings with his dad I learned that Lawrence's family believed that life experiences produce the most meaningful experiences. Lawrence's father told me that he often took his son on trips

and discussed what they experienced at great length. It helped me understand where Lawrence's vast store of general knowledge stemmed from, and why he loved to discuss things.

I believed the poetry assignment was within Lawrence's capabilities and that he needed to succeed at it to improve his image of himself as a writer. It was for these reasons that I gave him the option of writing a poem on a previous book I knew he liked and had completed. This removed the barriers of not having finished *Dear Mr. Henshaw* or not having understood it as well as necessary to complete the assignment. Writing became the academic objective. His later reflections about his progress in writing helped me think about my decision to challenge Lawrence in writing the poem, and that although difficult at the time it produced a sound pedagogical result.

An alternate perspective on Lawrence and his learning style could be considered. Perhaps Lawrence needed more help with creating poetry. Alternate strategies I could have chosen include providing models of different types of poetry for reading, pairing him up with another student working on the same book, or getting Lawrence to articulate more fully his difficulty with the poetry assignment. My strategy was to be firm with him but to be available to work with him frequently. Perhaps the most compelling evidence that Lawrence needed challenge and support was that he finished the poem, and that he seemed to feel good about himself as a learner. Carrying that mind-set into a new year of school bodes well for how Lawrence will face the challenges a new school year brings.

I believe that the three conferences with these students can be compared to an iceberg. They were short in duration with results that were small when taken from the perspective of student learning in general, but the foundation on which the conferences were based was far reaching. It was a foundation that was built over time. It included classroom practices that provided space for meaningful communication and the building of trusting relationships between me and my students. The dynamic nature of classroom teaching means that working with students in this way does not happen accidentally. It must be planned for, anticipated, and acted upon where possible. Documentation played an integral role in how this happened in my classroom. In the next chapter, I explore more fully how this unfolded in my classroom.

Summary

This chapter reports the results of using a contextualizing strategy to analyse and deepen understanding of the interpretations of the data. I returned to the data specifically connected to students to explore what was happening from their perspective. The density and compelling dimensions of the videotaped data encouraged me to use it to represent what was happening with students. I returned to the literature for models of narrative structures on which to build and created visual narrative episodes of three individual students. The basis of the episodes was student/teacher conferences about an individual learning dilemma. These VNEs were preserved on the DVDs that are included as part of this chapter. The chapter concludes with the use of text to contextualize the episodes. In Chapter Six I explore more fully the classroom context in which these episodes occurred.

Chapter Six: The Reflectively Explicit Classroom

The previous chapters laid the foundation for understanding documentation in my classroom using two different analytic strategies. The use of the categorizing strategy in Chapter Four revealed the kinds of documentation I used, how they functioned, and what the consequences of these were in my classroom. Chapter Five added depth to my understanding by using a contextualizing strategy to produce visual narrative episodes (VNE). The VNEs and accompanying text showed how the documentation process related to actual children's work and learning. The VNEs, illustrative of the reality of the classroom, showed the quality of student/teacher relationships and the windows on learning. Each of these analytic strategies uncovered knowledge about my class that was meaningful, but it was seeing the two of them together, two perspectives on one situation that produced a holistic picture that was not possible from one perspective alone. It was in synthesizing both views that I understood the classroom as a vibrant, evolving system, or what I call a "reflectively explicit" classroom. In this chapter I explain the meaning I attribute to the term reflectively explicit classroom and the roles I played in creating and sustaining this learning environment.

A reflectively explicit classroom is one where the learning journey of the teacher and students can be found in the classroom documentation. Documentation formed the backbone of my teaching. The categories of documentation, interactive, process-oriented, and reflective, as well as the VNEs, represent what I did as the result of documentation. I looked again at these from the perspective of the roles I played as a teacher in these processes, and the picture of the reflectively explicit classroom began to

emerge. A caveat is important here. As mentioned earlier, the categories of documentation are closely interrelated and interdependent. This is the same for the different roles I assumed in the documentation process. They are treated here separately for the purpose of clarity but in the reality of the classroom they are closely interconnected.

Teacher Roles

All teachers assume a variety of roles in the busy changing world of classroom teaching. These teaching roles incorporate but are not exclusive to being a guide, a mentor, a nurturer, a comforter, a disciplinarian, and a facilitator to name a few. I assumed all these roles in my classroom teaching, but took on additional ones that were framed by the documentation processes in which I engaged. After looking once again carefully at the various forms of documentation and corresponding roles I assumed as a result, three themes emerged. In interactive documentation I assumed the role of orchestrator. In process-oriented documentation I took on the role of tutor, and in reflective documentation my role was that of an envisioner. I will describe each of these roles and how they contributed to the creation of a reflectively explicit classroom.

The Role of Orchestrator

Interactive documentation, such as the use of agendas and spreadsheets, was the documentation that connected me holistically to the student and included life in school and at home. It deepened my understanding of the student as part of a family, living in a particular community, possessing certain knowledge and experience, and as having a

variety of interests and much more. The Collins Dictionaries (HarperCollins, 2000) defines interactive as follows: 1 allowing or relating to continuous, two-way transfer of information between a user and the central point of a communication system, such as a computer or television, 2. (of two or more persons, forces, etc.) acting upon or in close relation with each other; interacting. Together these definitions describe interactive documentation. The students and I, acting alone and/or together, continuously transferred information back and forth for the purpose of learning. My role in this documentation process was as an orchestrator, a person who manages and directs information and communication with students. As an orchestrator I moved beyond the classroom to understand the larger context of the student's life. Juan's story is an example:

Juan's mother had written in his agenda some weeks earlier that the family would be moving soon. Juan's work habits were inconsistent over this period but he did enjoy the inquiry on occupations and worked hard on his presentation. Unfortunately the family moving day coincided with the "occupations exposition" and Juan was visibly disappointed that he would miss it. I felt this was important to Juan's learning so I arranged for him to make his presentation to two classes the following day, and for these students to briefly share their presentations to him. The two classes gave Juan the opportunity to see what students had done in other classes had created and many students in both classes had expressed a desire for more time to see the expositions.

In the context of my classroom, it was because I could carefully compare information and could tease out the nuances that helped me differentiate and contextualize the learning for each student as I did in Juan's case. The following list

contains some pieces of information extracted from documentation about Juan from his agenda, fieldnotes, and reflections that informed my decision to create a pedagogical situation to meet Juan's specific need. This is context of Juan as an individual learner.

- He is learning English as a second language.
- He needs authentic oral experiences for his language development.
- He has worked enthusiastically on this project and practiced his presentation.
- He expressed his disappointment that his mother had been unable to come to school to share her occupation when a small group of parents did presentations.
- He has stayed focused on his work when his home life was disrupted with moving preparations.

The key to a deeper understanding of students through interactive documentation was communication. Each contact with a student and/or parent created a communication cycle. The phrase communication cycle, as it applied to my classroom, refers to the continual interchange of information between the students and me that affected both teaching and learning. Documentation facilitated and sustained these communication cycles, deepened my understanding of students, and connected me to their lives outside the school. Mandy's story is an illustration of a communication cycle.

As mentioned earlier USSW (uninterrupted, sustained, silent, writing) was a time when students wrote for a sustained period of approximately 15 minutes on topics they chose. Mandy had chosen to write a story about cats and came to me for editing. When I

read her first complete draft I realized Mandy was caught between writing a piece of fiction about a lost cat and her experience when two cats came to live at her house. I recognized this because Mandy was using her own name and her sister's name for characters. Mandy's story began as the story about a family moving and forgetting the cats and then went on to share how she and her sister hated to move to their new home. I began our discussion about the story by asking Mandy if the story was about something that had actually happened or if it was a piece of fiction. She did not answer me directly saying only that it was a story about cats. I had Mandy read the story aloud to me using different character names. Mandy recognized that there was something wrong but was puzzled to explain the problem. I probed a little further by asking why she had used her own, and her sister's name for the characters in the story and Mandy began to open up by telling me it was something that had happened to her. Through a number of quiet discussions the real story of an unhappy moving experience and finding two kittens came out. I helped Mandy tell the factual story to me orally so she could write about it. Mandy and I met on many occasions over a two-week period, editing and revising her piece of writing. The writing acted as a means for her to explore a difficult time in her life. Our interactions supported her in expressing herself through the story and the polished writing piece was a satisfying conclusion to her efforts. These communication cycles provided on-going and often new information that became part of my knowledge and understanding of students and helped me find ways to support their learning.

As in Mandy's case, the communication cycle kept the flow of information going and contributed to a more holistic and nuanced understanding of each student. Individual pieces of information on their own were useful, but when combined with other

information over time, a deeper meaning was frequently uncovered. In my role as orchestrator, I synchronized systematically the pieces of information I had, and as a result, was able to produce a clearer picture of what a student needed.

My class, like most others in EIS, had many students from culturally diverse backgrounds. I worked at learning about their cultural backgrounds so I could understand how it affected their learning. My role as orchestrator in interactive documentation helped me piece together these small but influential pieces of information. The wide cultural and ethnic diversity that can be found in most classrooms today makes acquiring this information a challenging task. Some literature suggests that it is a significant factor in school success that students identify themselves in what they study at school and that teachers need to find ways for students to feel connected (Cummins & Schecter, 2003). This requires a wide range of resources that may not be readily available to teachers. Other literature insists that students must be exposed to the majority culture and encouraged to participate and how to fit in (Delpit, 1995). Differing views reflect the multiplicity of ideas in our pluralistic society and suggest a need to encourage openness at a young age in school. I believe the openness begins with the teacher getting to know their diverse student populations on an individual level. My role as orchestrator allowed me to do this in my classroom.

The Role of Tutor

Process-oriented documentation included all the documentation connected to student work, portfolios, etcetera, as well as my responses, which in language arts took the form of editing and responding to all of their work. I saw as a result of the study how

my role in process-oriented documentation resembled that of a tutor. By this I mean instruction was individualized/differentiated to address specific student needs. I often interacted with individual students about specific pieces of work. I circulated constantly among the students to be available to them, and to intervene where I felt it was necessary. I also had other documentation easily accessible for comparison which helped me tailor my help to meet different needs. My role as tutor frequently involved direct instruction on a one-to-one basis, and instructional detours (Cazden, 1988) unique to a specific child. It also involved scaffolding learning as was illustrated in the VNEs, as well as other teaching strategies such as modeling how or encouraging work on computers, or creating unique learning opportunities such as having student read to younger students. My tutoring activities were all focused on accommodating individual needs to optimize learning. This role required a “hyper-focus” on individual students. The process-oriented documentation enabled me to assume this tutoring role so that I could give my complete attention to individual students by “being in the moment” with them.

Being in the moment was referred to earlier in this paper in Chapter Two, as the mental state of being available physically and psychologically to another person. This level of communication is difficult to achieve and does not occur all the time (Elbaz, 1992; Rodgers, 2002b; Tremmel, 1993). The more often it happens, the more effective the communication becomes because it deepens understanding, and influences, learning, and builds relationships. The VNEs in Chapter Five are illustrative of being in the moment. Being in the moment is not a matter of time as much as it is a matter of being able to put aside all other distractions to focus on a child at a particular moment. It is difficult to achieve but as Tremmel (1993) suggests, it is a goal worth striving for. My

tutor role enabled me to practice being available to students in such a manner. The tutoring role required me to be easily accessible to them both physically and psychologically and to communicate with them effectively. This required me to be in the present with a student, to suspend my own frame of reference, and to listen to and respond directly to the student from a basis of understanding. As the VNEs illustrate I worked frequently on a one-to-one basis with students for short periods of time, usually 1 to 3 minutes while the remainder of the class was actively engaged in independent activities. I suspended my own frame of reference as much as possible so that I could listen and understand from the perspective of the student. Individualized instruction requires this focus.

The consequence of individualized attention for students is that each encounter is meaningful on some level. I believe the extensive knowledge that I had about all my students heightened my sense of responsibility to meet the individual learning needs of each one of them. Individualizing learning in this manner does raise some issues. These issues center on the attainability and sustainability of this type of learning environment. To develop a profound knowledge of students, time must be spent documenting and reflecting on the information gathered. Time is a finite commodity, and in the dynamic world of the classroom there never seems to be enough of it. Adding more expectations to an already overburdened situation does not bode well for success. From the sustainability perspective, this type of learning environment requires skills that not all teachers necessarily possess, and requires teachers to work in a manner that is often different from how they were prepared as teachers. I have heard many teachers say over the years how they cannot find the time to work individually with children and/or are

unable to manage the rest of the class if they do. What I believe this study illustrates is that differentiating instruction in this way is entirely possible when a system of documentation is in place. However this does not change the reality that teachers face highly diverse student populations who require a large variety of teaching strategies in an effort to help them succeed. Changes in teaching roles as the result of documentation may be one of the most promising ways to meet this challenge. The next section suggests how this might be accomplished.

The Role of Envisioner

Reflective documentation in this study refers to the process of reviewing and synthesizing all information that could help me support and facilitate progress in student learning. The data helped me see my role in the reflective documentation process as an “envisioner”. I use the word envisioner because it means to visualize, to imagine something different (Merrian-Webster Online, 2005). This was my role in reflective documentation. I had to find the deeper meaning, look at things and events from different perspectives, and to envision possibilities. In doing this, I imagined possibilities that were not immediately apparent and drew insights from this process that influenced action. When assembled, all the documentation in my classroom became a source of reflection and provided a synthesizing lens. An experience in the computer laboratory demonstrates this point.

The students were typing thank you letters to parents who had made presentations to the class for our unit of inquiry on occupations. There were problems with the printer and some of the computers did not work. I was frustrated with the mechanical

breakdowns and also because I felt that the time spent in the computer laboratory was not the most productive use of learning time. I asked the students about their experience that day and had them write reflection sheets about learning in the computer laboratory. A review of the videotaped data and of student reflections about this portrayed a very different experience from mine. Their experience was much more positive than I had anticipated. They shared how they looked forward to going to the laboratory, how they were learning a great deal about the use of computers such as how to save a document and find it again, and how computers offered much more than just playing games. This led me to reflect on my expectations for learning in this environment. I recognized that I had put my need to have students become computer literate quickly before my students' needs to learn at their own pace. My goal had overshadowed what they needed. Reflection on the students' written and videotaped reflections helped me understand this, and to envision ways for improving it. With input from the students, we created a hierarchy of tasks that they needed to use the computers easily and effectively. It forced me to spend the time developing a solid foundation on which to learn the more complex tasks that students would be expected to learn later on. These reflections enabled me to grow personally and professionally in the area of technology literacy.

The concept of growth is integral to teaching and learning. My envisioner role in the reflective documentation processes required that I not only take a second look at events and experiences that synthesize all available information, and consider other possibilities, and work towards them. It was in revealing other possibilities and acting on them that I was able to promote growth. I include two instances here of what I interpret as growth. Cary's story is one of emotional growth and the development of

metacognitive thinking on his part. Dana's story demonstrates an instance of my own personal and professional growth.

Cary's Story

Cary was a very intelligent, hard working student who enjoyed learning and most of the time found it relatively easy. I noticed on a few occasions that Cary could become very discouraged about a task he found difficult. When I asked if there was a problem he would shrug it off and say no. On one occasion, while working with two other students, his frustration showed in his body language. He placed his head on the desk and had a defeated look on his face. The students looked surprised and both sat down next to Cary.

I found my way to this group and asked if they needed help. Cary raised his head and said that the activity was impossible. The activity required the students to categorize the occupations of the nine adults they had interviewed. I recognized that he and his partners misunderstood the task and reminded them of the examples we had done in class. This opened the door to a discussion about how to handle difficult learning situations. The students said they hated not being able to complete tasks on their own. They felt stupid. It was Cary who came to me later to tell me how frustrated he had been on another task and that he felt like a failure because he had abandoned the task in favor of an easier one. He told me he had decided that when that the next time he felt like this he intended to ask for help before quitting. Cary was showing signs of emotional growth in being able to discuss a problem he was experiencing, and was also becoming metacognitive about his learning. As I saw students grow in multiple ways, I also found

myself changing as the result of my interaction with students. The story of Dana illustrates this.

Dana's Story

Dana was a quiet, hard working student who came from a culturally diverse family background. She had been working very hard on a story she was writing, often asking for help with vocabulary. I encouraged her to polish her story so she could publish it in the class. She told me her parents would be very pleased with this and that perhaps her report card would then be good enough at the end of the year for the family to make the visit to Hong Kong they had missed at Christmas. I inquired as to why they had missed their trip and to my horror Dana told me it was because her report card had not been good enough. Dana told me this story in a very matter-of-fact manner. Although I was taken aback by what she told me I said nothing, and encouraged her to continue working hard. I reflected on this conversation later and include a brief segment here.

(05/25/2001) [To say I was surprised when Dana mentioned the missed trip would be an understatement. I know Dana is a very serious student and I had no reason to doubt her explanation for the missed trip. I related the story to my colleagues to get their perspective and they corroborated my experience with similar stories. It would appear that there are cultural expectations that I need to understand, respect, and work with, without compromising what I think are important educational goals. I wonder why Dana's mother did not contact me if she was so upset? Was she afraid to approach me? Is there a language barrier with the parents? I am feeling

very sad for this child especially if there is any thing I could have done to prevent this from happening.]

My reflections on this situation were lengthy. I suspected there might have been more reasons for the cancelled trip than Dana knew. I realized that she seemed to have internalized that it was her fault. From my perspective, Dana was doing well as a student who was learning three languages, English and French during the week, and Chinese on the weekend. According to Dana, from her parents' perspective, she was not doing as well as she could. This incident had a powerful effect on me. It made me conscious of assuming I knew enough about my students and their cultural backgrounds. I was operating from my world view, but it became very apparent how different beliefs can be. These ideas are most often unconscious (Bruner, 1996; Mayher, 1990) so until we become aware that we are thinking a certain way, change is not likely. Reflective documentation provided the opportunity for me to take a step back and to examine my own beliefs and ideas about parenting and children. The idea that parents would place the responsibility of a family trip on the shoulders of an eight year old child was not part of my world view. This reflective process I engaged in broadened my perspective and allowed me to envision ways of bridging the different perspectives. I began this process by opening a dialogue with my students about what school meant to them. I had the opportunity to meet with Dana's mom on two occasions during the period of this study, but unfortunately there was no opportunity to discuss this subject. I spoke further with my colleagues about this incident and we devised a plan to include a detailed discussion about report cards and school expectations in the "meet the teacher night" at the

beginning of the next school year. It was a place to start to become more knowledgeable and inclusive of all cultural perspectives.

Considering the Reflectively Explicit Classroom

I began this chapter with a definition of the reflectively explicit classroom as one where the learning journey of the students and teacher is founded on documentation. Documentation without reflection is an exercise devoid of real meaning in terms of deepening understanding students and learning. Reflection on teaching and learning is not new, or perhaps not unusual activity for many teachers. All teachers engage in some form of reflective thinking as they consider how to help students learn. There is a range of levels of reflective thinking (Hatton & Smith, 1995; Schön, 1987; Van Manen, 1977) from the technical reflection of how to teach a better lesson, to the more critical consideration of how school and teaching promote a certain view of the world. Some teachers engage in reflective thinking intuitively and at a level that extends to the critical. Reflective thinking is valued for its potential to improve teaching and learning, but teaching as reflective practice has been an elusive goal for teacher education programs to achieve. Perhaps this is because all teachers in some way reflect on their teaching, so the promotion of reflection in a more structured manner seems redundant or inefficient. I suspect excellent teachers intuitively connect to students and try to meet their individual learning needs. The challenge is to find a way to help more teachers reflect in a more systematic manner and on a deeper level so that they understand the individual needs of their students, then try to meet them.

My notion of the reflectively explicit classroom is that it is composed of documentation types that necessitate corresponding teacher roles. Interactive documentation requires the teacher to be an orchestrator to actualize its potential. Process-oriented documentation requires the teacher to be a tutor to individualize students. Reflective documentation requires the teacher to be an envisioner so that the possible can become the reality for each student. Operating in these roles forced me to feel a sense of responsibility for each child because of my steadily growing awareness of their needs and differences. These needs and differences included the intellectual, social, and emotional dimensions of each child. This situation required me to work toward the possibilities that I envisioned. It also fostered metacognition, understanding how our own learning takes place, for both my students and for me. As a result, I would argue that what I have described as a this reflectively explicit classroom was a learning environment that was equitable, caring and democratic.

Summary

The reflectively explicit classroom reveals the learning journey of the students and the teacher through documentation. The documentation processes, interactive, process-oriented, and reflective required me to assume corresponding teacher roles that supported differentiated student learning. The roles were orchestrator, tutor, and envisioner. Together these created a learning environment where the needs of students as individual learners were the center of activity.

The role as orchestrator in interactive documentation allowed me to learn about each child through effective communication cycles that I used to develop a holistic

understanding of each child. The tutor role in process-oriented documentation fostered the development of a profound knowledge of each student by being present with them in the moment. The envisioner role in reflective documentation saw what was possible for each child to move forward in learning. I believe my consistent and extensive use of documentation helped promote both students' and my growth, and helped us engage in explicit and productive teaching and learning. In the next and final chapter, I suggest some ways documentation for understanding can be encouraged and supported in other classrooms.

Chapter Seven: Implications

In this concluding chapter I take the opportunity to highlight the salient aspects of my study, discuss some of the limitations of the work and then turn my attention to consider the implications of the study. I conclude the chapter with some questions educators might ask themselves about classroom documentation.

In my thesis, motivated by personal and professional experiences, I sought to study how documentation which is understood as, any recording of or about classroom activities, students, or events influencing learning, was carried out in my cycle-two, year-one classroom and what it meant to my teaching and learning. Specifically, I wanted to explore the kinds of documentation that were created, and how the students and I were implicated in the documentation process.

I used the literatures of documentation, reflective practice, and qualitative research as lenses to explore the concept of documentation. The literature on documentation itself revealed that it is used and valued mainly in early childhood education to learn about children and to aid in teaching them. There is also some evidence of documentation now being used in schools through practices such as authentic assessment where learning is evaluated in multiple ways over time. The literature on reflective practice demonstrated how documentation was an integral part of learning to think reflectively. The lens of qualitative research provided insight into how documentation is used to collect and analyze research data, which results in knowledge being generated about phenomena. Using this knowledge base I decided to employ qualitative research for my study on documentation.

I chose teacher-researcher inquiry as my methodology because I wanted an inside view of documentation in the classroom, and because I felt that this perspective carried more currency with the teachers who might read my work. As the teacher researcher, I investigated my own teaching practice while fulfilling all the responsibilities of a classroom teacher. The researcher role in teacher research gave me freedom over the choices I needed to make about research issues, but it also required that I balance the dual roles of teacher and researcher.

I gained access to my site by accepting a teaching assignment in a cycle-two, year-one classroom (Grade 3) at Elias International School. The students and I became research participants in the study of documentation during language arts period. The study was conducted in the final academic term of the year, which consisted of 8 weeks. I chose this time of the year to conduct my study so that my relationship with my students, and classroom routines would be well established. Classroom note taking and the videotaping of classroom activities were a normal part of my classroom practices so that the commencement of the study was not all that different from what went on everyday in my classroom.

I collected a variety of data including fieldnotes, videotapes of classroom activities, and classroom artifacts. I used both categorizing and contextualizing strategies for analysis. For categorizing, I relied on the Maykut and Moorehouse (1994) version of the constant comparative method which allowed me to fracture the data, establish categories, and tease out themes that emerged. The contextualizing strategy I used involved creating visual narrative episodes based on the work of Erickson (1986, 1992)

and Merryfield (1994). I did this by reviewing the videotaped data and by piecing together learning episodes of individual students. These VNEs portrayed the nature of student teacher relationships, and were examples of real learning situations for students.

The analysis revealed the types of documentation I used and how they functioned in my classroom. Three major categories of documentation emerged in the analysis. Interactive documentation resulted from a continual flow of information between the student, the teacher, and the home environment that contributed to a holistic view of each student. Process-oriented documentation represented the individualizing of each student's learning needs. Reflective documentation was the synthesis of the disparate pieces of documentation into a comprehensive whole that provided subsequent directions for teaching and learning. Visual narrative episodes (VNE) were created from videotaped data to get at the nuanced meaning of the data not possible through the categorizing strategies. The VNEs also demonstrated the effects documentation had on actual students. The documentation categories and the VNEs were the result of analyzing the data from two different perspectives. The juxtaposing of these perspectives produced a picture of my classroom as a reflectively explicit learning environment that I then examined more closely for the roles I played in these processes. The roles I assumed corresponded to the types of documentation created. It became apparent that in interactive documentation I assumed the role of orchestrator, in process-oriented documentation my role was a tutor, and in reflective documentation my role was an envisioner. The roles I assumed and the documentation created served one main objective which was the meeting the needs of students as individuals. The underlying premise of my classroom teaching and the passion that motivated this thesis is my belief

that student needs take precedence in the classroom. Documentation was what I used to help guide my efforts to achieve this objective.

Lessons Learned

The nuanced meaning of documentation became clear to me in this study. The literature tells us very generally that documentation of classroom activity is a means to record what is happening, to reflect on this, and then to find ways to help children move forward in their learning. It is also a way for teachers to be accountable. While I knew this to be true going into my study, it was only after the careful analysis of the documentation that I used in my classroom that I was able to see much more specifically how the documentation process actually worked in everyday activity.

Interactive documentation, the result of recording the continuous flow of information between the teacher, the students, and the home environment, immediately gave me a more holistic understanding of each child. It created cycles of communication that continued to build this understanding. Process-oriented documentation, or the one-to-one interaction between each student and me, allowed me to understand the needs and differences in each child, and to explore ways to scaffold learning and/or create instructional detours. Reflective documentation permitted me to imagine possibilities. I was able to fuse the disparate pieces of documentation and put the learning of each child in context and I envisioned possibilities and implemented them to enhance learning. These different forms of documentation occurred concurrently in my classroom and the interconnections became explicit by review and reflection on all documentation.

Reflection helped me uncover and interpret what the documentation meant and to make teaching decisions accordingly.

The reflection a teacher does is not limited to the students and activities but extends to the self. Self-reflexivity unearths assumptions and beliefs that are part of a teacher's world view and which influence how a teacher acts. It is only in bringing these to the conscious mind that they can be explored and changed if needed. The use of documentation also forces the teacher to assume very systematic and organized ways of recording what students do, and as a result, it helped respond to their needs. Also it helps to make intuition more explicit and to relate reflection and action to context.

The types of documentation, written and visual provide different learning opportunities. Written documentation allows the teacher to revisit what has transpired and to reconsider what has occurred from a more distant perspective and in a space that is outside of ongoing classroom activity. Visual documentation on the other hand, does these same things but also allows the teacher to consider events in context. It permits the vicarious reliving of the actual event in terms of the words, non-verbal cues, and actions. These contextual cues contribute additional understanding of the meaning the events have for those involved.

Documentation, whether it is done by teachers or researchers has a common purpose. Its use aids in understanding teaching and learning. Teacher researchers use many of the same processes involved in documentation as classroom teachers do, but the intensity and focus is different. Researchers gather information, analyze it, and produce new understanding of phenomena, often for public scrutiny. In addition the research

focuses very specifically within a certain time frame, and as a result, it produces a deeper level of understanding of the specific phenomena under study. Classroom documentation by the teacher covers the entire learning situation, including students, activities, and all aspects of the learning context. This documentation fosters an inquiry stance in teaching and I believe it should become an embedded and everyday activity in the classroom if equity and inclusiveness are part of our educational goals. I have learned, from doing teacher research, how valuable it is to focus on a specific aspect of classroom life during a defined period. In a sense it is a more intensive and heightened form of documentation that yields even more benefits for teachers and students. While initially both documentation and teacher-researcher inquiry require investments of time and energy to establish the processes involved in the work, my study has shown how this can become quite routine and has illustrated how much it can contribute to the well being of the children and to the growth of the teacher.

Finally, if teachers were to pick one documentation form to add to their teaching repertoire I would suggest videotaping a consistent period of classroom time each day that can be revisited on a regular basis. The result would produce a window on learning that can be reflected upon from various perspectives with remarkable results. I believe the full potential of the now familiar video camera to act as a teaching and learning tool has yet to be realized.

Limitations

Insider/Outsider Perspectives

Teacher research means that the researcher is part of the context of the study. On the one hand, being part of the site provides immediate and insider knowledge that enhances understanding. On the other hand, it can have the effect of being so close to the work that there is the potential for overlooking aspects of the site that an outsider would notice immediately. In essence a teacher researcher must constantly try to “make the familiar strange” (Cochran-Smith & Lytle, 1992) in order to avoid simplistic or narrow interpretations and/or to jump to conclusions too quickly. I have shown how the use of reflective memos can help to reduce this tension.

Single Site/Subject

A single site, one classroom study that is conducted over one semester necessarily does not reveal what it might, had it been possible to extend this study over one, or even several years. However, I believe this intense focus on the particular in context with multiple data forms, gave a depth of understanding that I believe makes the work both useful and accessible. The methodology used, teacher-researcher inquiry, provides a unique inside view of classroom processes that can only be obtained through single site studies. The time frame of the study is representative of the learning environment with a definite beginning and end to the semester, which is a dimension that adds credibility to qualitative work.

Student Voices

I had rich written and visual data portraying student activity and responses to their work, some short, videotaped interviews with all children about their reading and writing, and videotaped reflections from each child at the end of the study. Student voices were represented in the study results through textual examples, verbatim excerpts, and the VNEs. More student voices could have been included if I had reviewed segments of the videotaped data with students. This would have contributed to my understanding of the student perspective and influenced subsequent teaching decisions. If I were to do the work again I would include student perspectives as an ongoing component of the research process.

Generalizability

Frequently, qualitative researchers are criticized because of the lack of generalizability in the work. The generalizability, or the ability to recreate a study and replicate its findings is not the goal of qualitative work. Qualitative researchers study phenomena in context and believe that all contexts are different and therefore produce different results. In place of being able to generalize research results, qualitative researchers use other criteria to substantiate the credibility of the work. The triangulation of multiple forms of data, the use of different analytic strategies, “rich” data, and low-incidence referents, such as verbatim data, the incorporation of reflexivity, and the emphasis on ethical processes and relationships all contribute to the trustworthiness/validity of studies. I would argue as Donmoyer (1990) does, that the usefulness of these studies is that they give a rich portrayal of the particular. This can be

used by others as a way of juxtaposing, comparing, and contrasting the work with other contexts and adopting whatever aspects are relevant and/or useful.

Future Research

Additional research is needed on documentation if it is to gain credibility as a way of working in classrooms that will improve teaching and learning. There are many avenues this research can take. More teacher-researcher studies are needed with teachers, at different grade levels, and for varying periods of time. Studies using other research methodologies such as, participant observation or ethnography, can also contribute to the knowledge of the processes of documentation that teacher research cannot give. Studies that provide both inside and outside views of the documentation are important in providing a complete picture of the processes involved. Alternate research methodologies could explore the topic from different perspectives, and add to the knowledge about it.

Knowledge created from individual studies needs to be substantiated by longitudinal studies that track the same students over multiple years to understand the effect of documentation over time. Schools where looping (Little & Dacus, 1999) occurs, that is, where teachers follow the same students for more than one year would be appropriate sites for study. There is also the possibility of following the same students with different teachers. This is probably the most difficult research to undertake because it requires a pool of classroom teachers who all engage in documentation as a regular part of their teaching practice.

Other research topics can contribute to knowledge about documentation and its role in teaching and learning. These are studies with a specific focus. Communication skills were clearly important in the documentation I did in this study. Research into these and other skills that are used in documentation could be beneficial in teacher pre-service education and professional development programs. Also studies of documentation in other subjects, such as in mathematics or in social studies, would add to the knowledge base on documentation. More and varied empirical studies on documentation would help to build a body of practical knowledge on documentation that would be particularly useful.

The final area I suggest that would be fruitful for further study is the relationship that exists between documentation and reflection. Reflection is a powerful way of thinking because it is non-linear and meshes the intuitive and logical thinking processes without the limits of temporality. There are many studies on reflection already available, none are focused specifically on the connection between documentation and reflection. Studies at the intersection of documentation and reflection would result in knowledge about the effect of different types of documentation on development of self-knowledge and of student understanding. Studies in this area would also reveal ways of engaging the intuitive mind that would result in productive and effective strategies that would benefit teaching and learning. For the immediate future, I believe my study will provide a basis for discussion because the context and content of the study should resonate with and be accessible to teachers.

Reflective Questions

As teachers our mission is to produce the next generation of literate citizens. There is no shortage of suggestions and programs about how to achieve this goal. There is a lack of in-situ strategies that apply to all students, to all situations, and to all teachers. Documentation enables teachers to reach every student, in every situation, and it is only the teacher who can do it, and actualize its potential to aid student learning.

I conclude this chapter with a few questions that I have had to ask myself many times during the period of study. I include them not because they are the only questions teachers should ask themselves, but because they are questions that require introspection about documentation. The answer to these questions can open doors for discussion and ways of thinking about documentation.

Documentation

Do I document each student equitably in terms of time spent and the quality of the the documentation?

Do I use different forms of documentation?

Do I document students in a variety of situations, alone, with a peer, in groups, with the teacher?

Do I document at least one activity or time period consistently each day?

Do I encourage reflection in students?

Reflection on Documentation

Do I review and reflect on documentation regularly?

Do I reflect on the documentation of each individual child regularly?

Do I reflect on the class as a group making note of patterns that emerge?

Do I make changes in my teaching as the result of reflection on documentation?

Self Reflexivity

Do I reflect about my self in relation to students, and events in the classroom?

Do I uncover assumptions and beliefs that I did not realize I held?

Do I see changes in myself as the result of reflection?

Do I see changes in my relationship with students as the result of reflection?

Do I reach out to colleagues to get additional perspectives to enhance my reflective possibilities?

Summary

The goal of my research project was to study documentation in a year-one, cycle-two classroom to come to a better understanding of how documentation was carried out in the classroom. The questions that guided my research sought to explore the kinds of documentation created, how they were used, and the roles the teacher and the students played in the documentation process.

Documentation in this classroom was ubiquitous and student focused. Through the use of both categorizing and contextualizing strategies I explored the meaning of the

documentation processes that occurred. The categorizing of the data revealed multiple types of documentation that fell into three main categories, interactive, process-oriented, and reflective documentation. I then used a contextualizing strategy to create VNEs that demonstrated the classroom context for actual students. Fusing the two perspectives, I was able to take a more circumspect view of the classroom and my role in the documentation processes. In this reflectively explicit classroom my predominant roles in the documentation processes were as an orchestrator, a tutor, and an envisioner. The role of the students was as active participants in the classroom and in their own learning processes.

The implications of my study suggest that documentation is a powerful way of working in the classroom with the potential to act as a change agent for teaching and learning. More in-depth and different studies are needed in individual classrooms and over longer periods of time to support these findings.

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Appendices

Appendix A – Student Reflection Sheets

Date: 11/15/15

REFLECTION SHEET

1. Definition
 A graph is a set of vertices (or nodes) connected by edges.
 It is a mathematical structure used to represent relationships between objects.
 It consists of a set of vertices and a set of edges connecting them.
 The vertices are represented by dots or circles, and the edges are represented by lines or arrows.
 Graphs can be undirected (edges have no direction) or directed (edges have a direction).
 They are used in many fields, including computer science, biology, social networks, and transportation.

Draw a picture of the symbol that most interests you.

Name: _____

Date: _____

JOB INQUIRY

REFLECTION SHEET

This reflection sheet should include your thoughts on the entire unit of inquiry, including all the work you accomplished.

I think it was good because
you get to see the job and the
rest of the things that are in the
unit. I think it was a good idea
to have a reflection sheet. I think
it was a good idea to have a
reflection sheet. I think it was
a good idea to have a reflection
sheet. I think it was a good
idea to have a reflection sheet.

Draw a picture of the exhibit that most interested you.



Appendix B – Introduction Letter to Parents

Appendix C – Introduction Letter to Students

August 23, 2000

Dear Students,

You don't often receive letters from your future teacher but this year is different. My name is Mrs. Mesher and I will be one of your teachers for the school year 2000-2001. I will be teaching mathematics and language arts in English.

I hope you are having a wonderful summer. One of my holiday activities is reading. Have you found time for reading over the summer? To put you in the frame of mind for returning to school, I would like you to think about what you are interested in studying this year. Find a few quiet moments to think about what interests you and write down two or three topics. Your ideas and suggestions are very important to me as your teacher, and will form the basis of the projects we work on in class this year.

Have a great time these last few days of summer vacation and I look forward to meeting you when school begins.

Your future teacher,

Mrs. P. Mesher

Appendix D – Ethics Forms

Appendix E – Sample Spreadsheet

<div> <div>Next</div> <div>Previous</div> <div>Zoom</div> <div>Print...</div> <div>Setup...</div> <div>Margins</div> <div>Page Break Preview</div> <div>Close</div> <div>Help</div> </div>								
Homework Grade 3AA			Week of May 7, 2001			KEY: 1 = completed 0 = incomplete		
	C	D	E	F	G	H	I	J
1	Numbers	Reading Response	Rewrite	Comments	Corrections	Reading Record	Media	Journal
2	1	1	1	1 short but well written			1	1
3	3	1		1 interesting response, writing mechanics well established			1	0
4	4	1		1 Response not logical, opinion minimal, Subj-verb agreement			1	0
5	5	1		1 well written response but needs work on self-expression	1	1	1	1
6	6	0	0		0	0	1	1
7	7	1		1 response well written but needs work on verb tenses	1	1	1	1
8	8	1		1 well written with few errors- (had help, perhaps) Need to encourage more opinion				
9	9	0		1 basic level of English writing, needs to work on verbs, opinion missing	0	0	1	1
10	11	0	0		0	0	0	0
11	12	1		1 response too short in content and opinion	0	0	1	1
12	13	1		1 verbs need work	1	1	1	1
13	13.1	1		1 well written, paragraphs needed	0	1	1	1
14	14	1		1 writing lacks focus, punctuation needs work	0	1	1	1
15	15	1		1 well written, careless spelling sloppy writing, minimal content	1	0	1	1
16	16	1		0 content	0	0	1	1
17	17	1		0 unclear, little effort	0	0	1	1
18	18	0	0		0	0	1	0
19	19	1		1 many spelling errors, no opinion, too many details	0	0	1	0
20	20	1		1 short, many errors in spelling and grammar	0	0	1	1
21	21	0	0		0		1	

Appendix F - Interview Protocol

Reading / Writing Interview Protocols

STUDENT _____ **DATE** _____

READING QUESTIONS

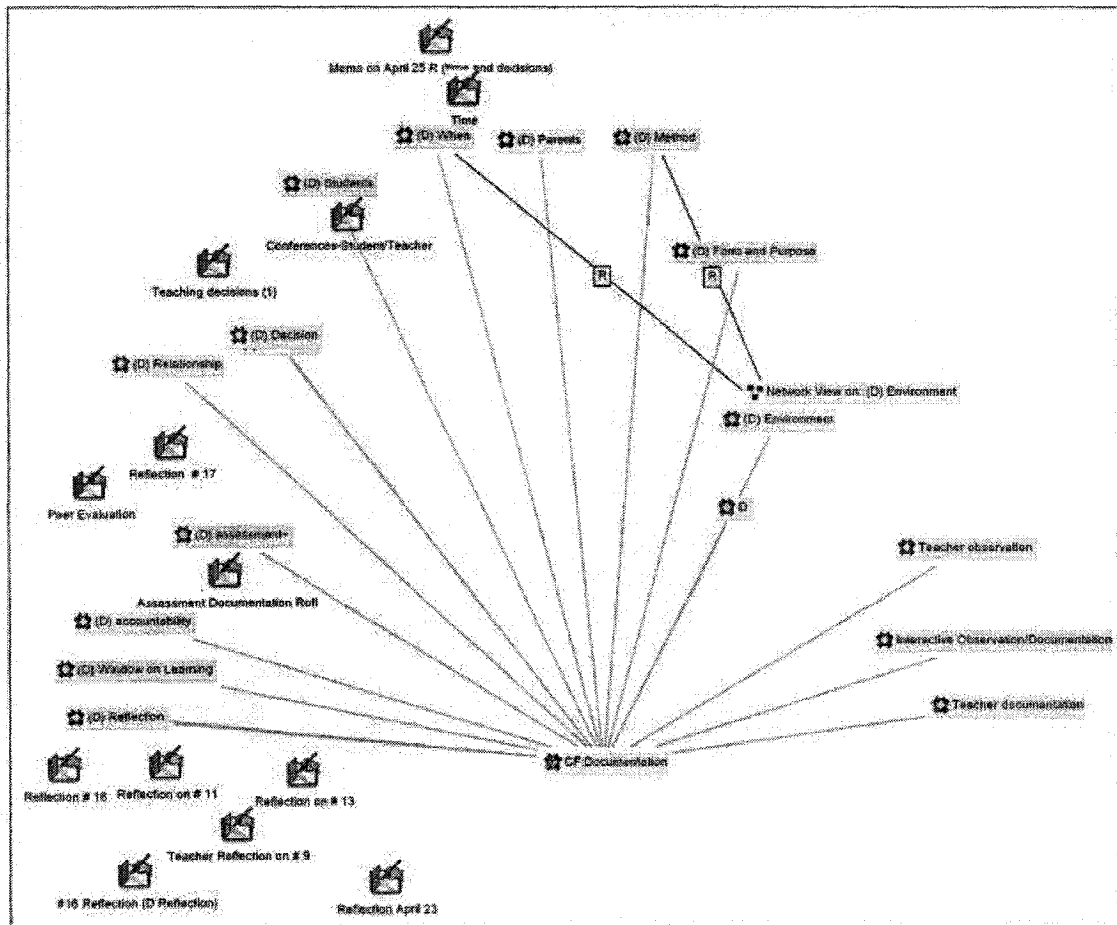
1. What do you think of reading?
2. When do you read at home?
3. When we have silent reading at school, what do you do?
4. Describe yourself as a reader.
5. What do you think would help you improve your reading?

WRITING QUESTION

1. What do you think of writing?
2. When do you write at home?
3. When is it time for silent writing at school, what do you do?
4. Describe yourself as a writer.
5. What do you think would help you improve your writing skills?

Appendix G – Graphic Representation of Network Editor

Classroom Documentation



Appendix H – Video Narratives

Appendix I – Sample Agenda Page

Lundi



4 Jun



There was a problem at recess
between John and another student. G.M.

reading

journal

R.R.

media Assignment

math problem 21 pg. 73

→ I have this Friday off work. Can I meet with you?

Mardi



5 Jun



Let me know.

Mary

reading

journal

R.R.

math test pg 102 # 1-8

I can meet you at lunch
time on Friday in my class

Mercredi



6 Jun



reading

journal

R.R.

math 3x tables

→ I will be there at 12:15. Thanks,

See you then

R.R.

Mary

Appendix J – Novel Assignment

Group: 3DATE 04-17-01Novel: Pearl and HerstrawGroup Member: 15, 13, 26, 21**NOVEL ASSIGNMENTS FOR GROUP DISCUSSION****Week 2****Describe the main problem in the story?**

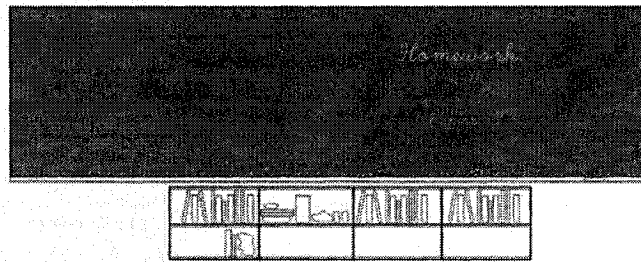
leigh Batts never found
out who the robber
of the lunch box was.

What are some of the minor problems in the story?

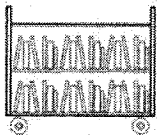
leigh Batts dad did not
call him. His dog got lost.
leigh Batts did not have
a lot of questions to ask
Mrs. Bager

Appendix K – Classroom Layout

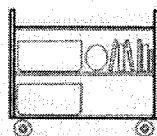
Front View



Front View

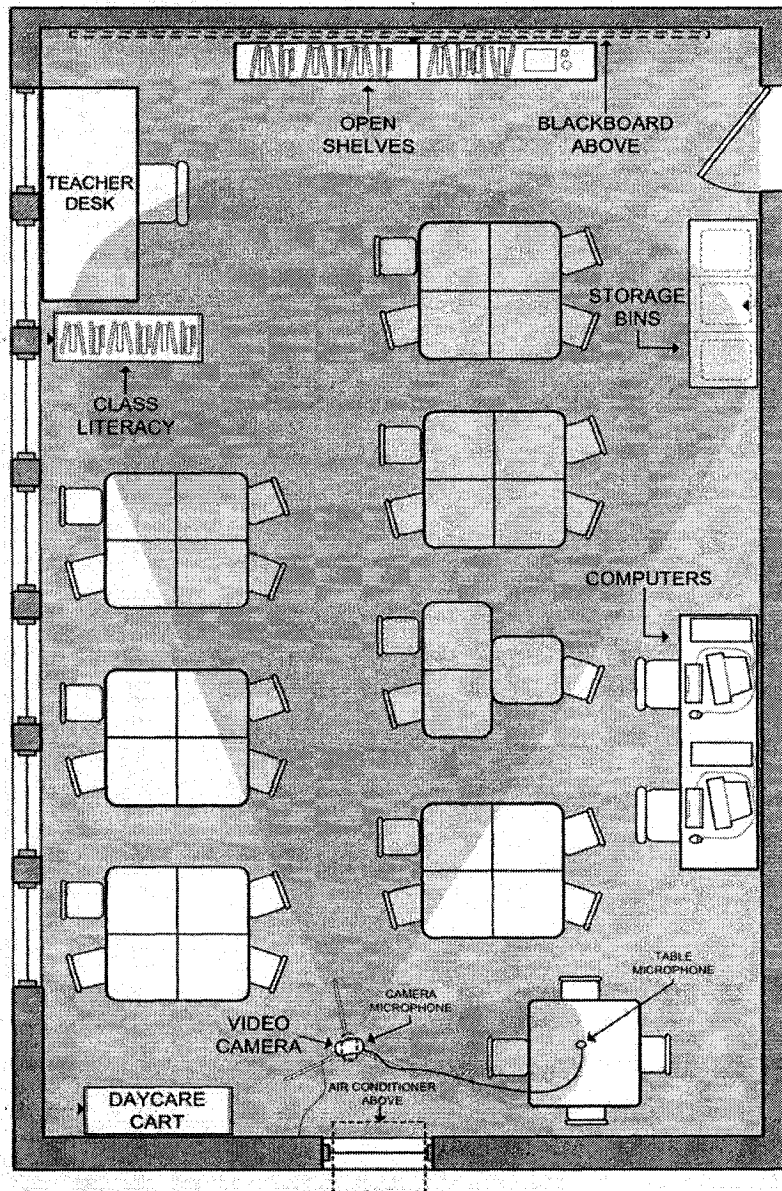


Front View



Front View

READING RESPONSE	JOURNAL	WRITING FOLDER
MATH	MEDIA STUDIES	PAPER



CLASSROOM PLAN

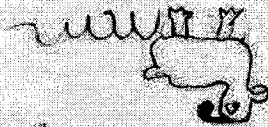
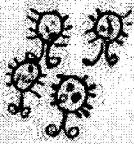
Appendix L – Katie’s Letter

Dear Alice Dalgliesh

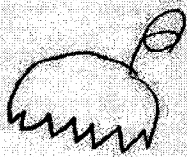
Your book is a wonderful
book. (The Courage of Noble
When I read it it makes
me think that it was
real.

All my compliments are for
you

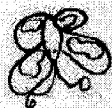
From:



Dalgliesh



Alice



To

Appendix M – Rubric Sample

Performance Assessment Criteria

<u>Reading Response Performance Criteria</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Content	In-depth expression of ideas and feelings	Many ideas and self expression	Some ideas and self expression	Few ideas or self expression	Very few ideas or self expression
Basic Information	Complete and more	Complete and neat	Complete but messy	Incomplete	Missing
Correction of previous response	Corrected and Improved	Completely corrected	Most corrections done	Some corrections done	No corrections
Language mechanics (spelling, grammar, punctuation, etc.)	No errors and well constructed sentences	No spelling or grammar errors or only minor ones	Few spelling or grammar errors, mostly minor	Frequent errors, major or minor	Content difficult to read and understand due to errors
ASSESSMENT					
Peer Name _____					
Peer Name _____					
Teacher					
COMMENTS					

Appendix N – Structuring the Narrative

Structuring the Narrative

Contextual Information:

Mary is a shy, timid girl from an Egyptian cultural background with English as her third language. This is her first year at EIS.

Reading Conference excerpt from April 17

Teacher- OK Good morning Mary. Did you have a good break? [This refers to the term end break.]

Mary- (Shakes her head yes)

Teacher- Great- terrific—ah! Are enjoying Sarah is it? The Courage of Sarah Noble (Dalglish, 1986). Do you like it?

Mary- (Shakes head yes.)

Teacher- Tell me what you like about the book? [Pause while Mary looks in the book. Shows me three pages but does not utter a word.]

Teacher- What is it? Tell me!

Mary- (Speaks very softly) I like this page, this page and this page. [Points to the pages.]

Teacher- What do you like about those pages?

Mary- (Looks at the pages and points to a paragraph).

Teacher- Tell me what this page is about.

Mary- (Looks at book, looks at me, looks at camera, then back at me without saying a word.)

Novel Study Group excerpt from April 24

.....

Katie- I like being in a group so we can talk about it and questioning..

Yola- (to K) Shush!

Katie- You just said a bad word in the back before.

Yola- (Shakes her head weakly indicating no)

Katie- So let's go work then.

Mary- (to K) She said shush! (puts her fingers to her lips)

Teacher reflection after viewing the video tape of the novel study group. April 24B

[The first thing I notice on the video is that 5 in a group is too many for input on an equal basis. This is particularly so for students like Mary who are very timid to speak English. Katie's comments in the group are often negative and condescending to the other students. Mary speaks clearly and holds her own with respect to Katie better than I would have expected. Her conversations with me are often limited to yes and no answers.]

Fieldnotes during USSR May 2

Mary goes to the book shelf several times. She changes books each time.

Fieldnotes in library period. May 4

Mary and Sharon are sharing an I Spy (Marzollo, 1995)book.

Appendix O – Crafting Annie’s Narrative

Creating Annie's Story

Annie's first conference Tuesday April 24

- Body language negative about coming to talk to me
- Admitted she was having trouble with English reading
- Discussed problem
- Suggest learning scaffold
- Left conference with more positive body language

Annie's second conference (April 25)

- Had worked on her reading- highlighted difficult words
- Went over the words with me
- Motivated to read

Annie comes during USSR for help with words (April 26- May 2)

Annie's third conference (off camera) (May 3)

- Wanted to go over words she was having difficulty with
- I introduced the subject of learning partner
- Discussed it and agreed on the student to approach
- Annie asked me to talk to the student

Annie comes for help with her reading regularly during USSR

Learning Buddies

- Annie reading during daycare with learning partner

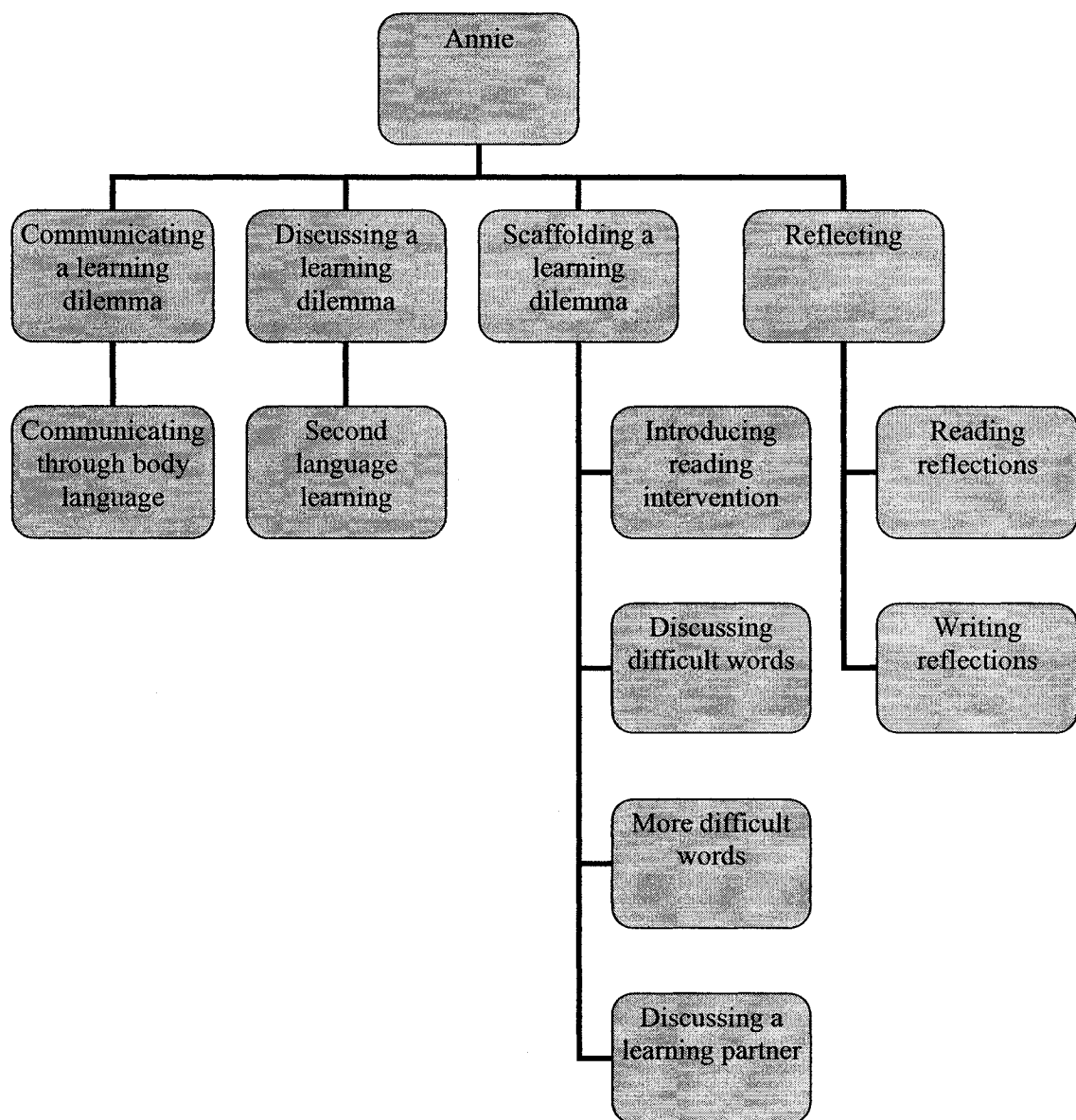
Annie's reading and writing interview with me.

- Reflecting on reading and writing from her perspective

Denouement

- Annie's comfort level in talking to me increased. She came more often to ask for help with reading and confided in me how scared she was about the upcoming exhibition in the gym for the unit of inquiry on occupations . She did not feel confident to speak to others about it.

Appendix P – Sample Storyboard



Appendix Q – Lawrence’s Poem

AMBER BROWN
PAULA DANZIGER

Amber Brown
Room is messy
Getting taller
Mom always
At the telephone
Mom has another boyfriend
Dad lives in
France!

Appendix R - Correction Key

CORRECTION KEY

Sp Spelling

Gr Grammar

C Capitals

P Punctuation

? I do not understand

Paragraph