

What Are the Metacognitive Strategies That I Can Incorporate Into My Daily Teaching Practice and How Can I Have My Grade 4 Students Use These Strategies to Become More Aware of Themselves as Learners?

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Abstract

My exit project examines the generation of my living educational theory as it relates to my practice with my grade 4 students. The main purpose of this project is to examine my practice, my core values as an educator, and to use my way of knowing to improve my practice for the benefit of my students. My question required that I determine what metacognitive strategies I can use with my students to assist them to become more aware of themselves as learners. Current research strongly supports the use of metacognitive strategies in the planning and implementation of learning activities in all subject areas from the early years to post secondary education. I describe what strategies were used in specific language activities and report on how the students began to incorporate metacognition into their daily work by building self-evaluation and reflection into their academic tasks. The words of the students are presented to validate the claim that metacognition can assist students to begin to see themselves as learners. This project also attempts to demonstrate the power of reflective practice as it influenced my journey as a teacher-researcher. I share how my journals allowed me to revisit events, feelings, and thoughts to reconstruct new meanings to my experiences which enabled me to consider the programming directions that would be best for my students.

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Dedicated to the memory of my mother, Helen Nikiforuk.

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CHAPTER ONE: BACKGROUND TO THE PROBLEM

A new lesson is being presented: the layering of skills and concepts that is the process of student learning. The teacher digs, “Tell me what you remember from the last lesson” or “from last month” or “from last year.” A few hands go up. The same hands. The teacher calls on someone not eager to share, someone slouched down. “I don’t know” or “I can’t remember.” The teacher’s intent is not to embarrass but to take an inventory. How much review will be necessary to bring back to the forefront previously taught information before moving on? Running through the teacher’s mind at this point, perhaps, is the thought, “I know they have been taught this. Why aren’t they remembering?”.

Students today are growing up in a world that is fast paced, information laden, and technologically driven. They will have to demonstrate an ability to learn quickly and to apply information effectively, not just to be competitive but to survive economically and socially in the postmodern world. Allington and Cunningham (2000) state that skills in information management in a technological workplace dominate the job market. Without the ability to apply the skills they have been taught, many students will find it increasingly difficult to find their place in the adult world (p. 2).

There are many reasons why students experience difficulties as learners—intellectual and processing challenges, social and emotional challenges, language barriers, socioeconomic factors. But could it also be that many do not view themselves as learners? Could it be that many see themselves as students who come to school every day to complete the given task in a given subject without understanding the connections of their school- based learning activities to their overall growth as members of society at

large? If students are not taught that they are, in fact, learners who will integrate the lessons they are being presented with into their total self and on into the adult world, then teachers will continue to hear that common response, “I don’t know” or “I can’t remember.”

Metacognition is a vital tool for promoting student engagement, encouraging student analysis, and developing cognitive ability in the learning process. Learning is a fluid process that involves the continual layering of experiences. Teaching for thinking encourages students to go beyond the lesson itself and to consider the purpose of the lesson and how the skills being developed today will enable future learning to occur. In my research, I examine the metacognitive strategies that can and must be incorporated into the junior classroom in order for students to become aware of themselves as learners. It is not enough for the teacher to “teach” the skills and concepts at each grade level. Students must begin to see that all that they do in classroom in the present time is aligned with their previous learning and forms the foundation for future learning. Through metacognition, it may be possible that students might come to understand the interconnectedness of their learning activities. The research over the past decade has clearly shown that student comprehension and understanding is greatly enhanced through the application of metacognitive strategies. McGuiness (1999) suggests that it is important to give students the time and opportunity to talk about the thinking processes they are using, to make their own thought processes more explicit, to reflect on their strategies in order to gain more self-control over their learning. He states that using metacognitive strategies has emerged as a powerful idea for promoting a thinking skills curriculum (p. 2). It is my firm belief that students who believe that they are capable of

learning and view themselves as learners will use the skills they have been taught in their everyday lives beyond the classroom and that the level of learning will improve for all students regardless of their learning potential.

The Context: My Starting Point

I began my action research in April of 2008. I was working with a group of grade 6 students with the purpose of preparing them for the Education Quality and Accountability Office (EQAO) Ontario provincial grade 6 standardized assessment. I was to work with 12 targeted nonidentified students who achieved Level 2 results in the fall administered Comprehension, Attitudes, Strategies, Interest (CASI) test. The students were placed into two groups of 6. Our school goal was to improve our test results. My goal was to assist the students to improve their test taking skills to move them to Level 3 standings in the spring EQAO test. My plan was to review the reading and writing strategies that they had been working on all year. I decided my first lesson would be a review of the conventions of language such as parts of speech, punctuation, and word usage. My reason for this was that there are several questions on the EQAO test relating to the language conventions. Correctly identifying the parts of speech, word usage, or punctuation in the multiple choice section could push a high Level 2 language score into the Level 3 range.

During my first session with the first group, I realized from our conversation that the students were unclear as to why they were coming to what I termed the Literacy Clinics. I knew that they had been informed by the classroom teacher as to the purpose of the Literacy Clinics. Once we got started with the lesson, I discovered most of the students could not identify basic language conventions without being cued.

It was at this point that I began to reconsider my question, “How can I assist grade 6 students to improve their performance in EQAO testing?” I began to think about the qualitative data that I had gathered in this first session with the first group. The students could not clearly explain why they were coming to the clinics even though they had been informed by the teacher. They had trouble working with skills that should have been very familiar. And lastly when the teacher reported to me later that the group came back to class stating they had learned something in the session, I was concerned with their perception that they had learned something. My thinking was this was a review of basic language skills that they had been working with throughout their primary and junior years. Parts of speech is a language skill that should be firmly embedded in their repertoire of language skills by grade 6.

.It was at this point that I began to think that these students were not aware of themselves as learners. They did not seem to be attuned to the fact that information in the classroom is presented as building blocks for the next level of information. They are to remember and recall that they have been taught information previously that relates directly to the present learning situation. If students do not develop foundational memory skills, they are always starting over rather than building on what they already know. The data I had gathered in this first session did not provide me with answers but led me to investigate a new line of thought regarding student learning. As a result of my shift in my educational inquiry, I found myself asking, “How can I assist my students to become more aware of themselves as learners?” I set a new course for myself that would form the basis of my research for the next year.

My Living History: My Journey as a Learner

Greatness in teaching, (too), requires a serious encounter with autobiography: Who are you? How did you come to take on your views and outlooks? What forces helped to shape you? What was it like for you to be 10? What have you made of yourself? Where are you heading? An encounter with these kinds of questions is critical to outstanding teaching because teachers, whatever else they teach, teach themselves. Of all the knowledge teachers need to draw on, self-knowledge is most important and least attended to (Ayers, 2001, p. 124).

If I am asking my students to be aware of themselves as learners then it is critical that I understand myself as a learner. In order to do this, it requires that I step back and reflect on my experiences as a learner. How did I come to this stage of my educational life as a teacher and a learner? As Didion (1968) suggests, there is not one self but many past selves, the people we used to be; I think we are well advised to keep on nodding terms with the people we used to be, whether we find them attractive company or not (p. 142). I will take my readers back to the beginning, to the place where my professional life started. I graduated with a degree in Physical Education and Psychology from York University in 1974. My 4 years as an undergraduate were a disappointment to me. I was at university because it was expected of me. I was in the program because it had been suggested to me by my high school Physical Education teacher. Even though, I had always been able to learn what had been prescribed to me by my teachers and completed my assignments with good results, I did not have anything of myself in what I was doing at that time. I was in the wrong program, but I didn't know how to change. I never shared my concerns with my parents because I already knew they were not happy with my

program choice to begin with. I was unaware of the student services available that could have advised me and steered me in a direction more suited to me.

I understand now that I really didn't have an interest or passion in an academic discipline or a clear direction of the life path I wanted to pursue, so I simply existed in the state I found myself in. As I reflect on my undergraduate years, the experience of feeling helpless and discontented has had a lasting impact on my life. I learned from my undergraduate experience that I did not ever want be in that position again. It was at the end of that phase of my life that I became conscious of the fact that I am the one who is in control of my life, that I am responsible for the decisions I make, and that I don't have to let life happen to me. This was a big step, a concrete step. It was the end of letting others tell me what they thought would be best for me and the beginning of my taking charge of my life.

My first job after graduation was with the Children's Aid Society in a large, Ontario city as a case worker. After two years in that position, I came to the realization that I could not work in this field indefinitely. This was my first opportunity to put into practice what I had learned from my experiences as an undergraduate. I was not locked into this line of work. I could make a change. There were many other avenues to explore. I was not a failure because I did want to continue in this field. I knew from the feedback that I received from my supervisor that I did my job well. I was able to learn the policies and procedures of the agency. I knew that I established caring relationships with my clients and that I did my best to assist them with the challenges they were facing in their personal lives. I was coming to recognize my strengths as a professional and as a human being, but I knew that I did not have the emotional fortitude to continue on in social

services. It was my first opportunity to think critically about who I was and how I wanted to share “the who” I was becoming with others. Through self-reflection, I now understand that I was in the beginning stages of finding my identity and my integrity as described by Palmer (1998, p. 10). Palmer describes identity as all the forces that constitute one’s external (familiar, cultural, experiential, and socioeconomic) and internal (genetic, psychological) make-up. Integrity is the choices one makes based on the values and beliefs held. I was beginning to find myself. I was beginning to become a learner, one who was conscious about the world at large and who was thinking about finding my place in it.

During the 2 years I was employed by the Children’s Aid, there were several times that I found myself in school settings. It was during that period I began to consider teaching as a career. In the summer of 1976, quite on a whim, I applied for a Special Education position at a high school in Quebec which was advertised in the newspaper. To my surprise, I was contacted for an interview and even more surprising, as I was not a certified teacher, I was offered the job as a Short Vocation Special Education teacher because of my experience with the Children’s Aid.

I spent the next year teaching on a Letter of Permission. I discovered I loved everything about teaching, even though I didn’t know a thing about teaching when I first started. Reflecting on my first year as a teacher, I now understand that I possessed the qualities and characteristics that enabled me to learn on the job. I believe that I proved myself to be resourceful, curious, conscientious, flexible, adaptable, and caring. I was in survival mode, but I was not afraid to seek out advice from the department head, listen to

all the suggestions that were offered by colleagues, think back to my own experiences as a student in a classroom, and recall how my teachers taught. Schön (1983) states:

When a practitioner reflects in and on his practice, the possible objects of his reflection are as varied as the kinds of phenomena before him and the systems of knowing-in-practice which he brings to them. He may reflect on the tacit norms and appreciations which underlie a judgment, or on the theories implicit in a pattern of behaviour. He may reflect on the feeling for a situation which has led him to adopt a particular course of action, on the way in which he has framed the problem he is trying to solve, or on the role he has constructed for himself within the larger institutional context. (p. 62)

I didn't understand at the time, but I was engaging in a reflective practice that allowed for "learning on my feet." As Schön outlines in his presentation of reflection-in-action,

the practitioner allows himself to experience surprise, puzzlement or confusion in a situation which he feels is uncertain or unique. He reflects on the phenomenon before him and on the prior understandings which have been explicit in his behaviour. He carries out an experiment which serves to both generate a new understanding of the phenomenon and a change in the situation. (p. 68)

I was now becoming an active learner. I was aware that I was able to critically think about my working situation, to problem solve, to make decisions, to use my prior knowledge as a student and my growing understanding of what I was coming to learn about teaching to improve my practice as the year went on. As the school year came to an end, I had to make a decision about my future as a teacher. I could not stay on with the school board without a teaching certificate. I needed to become certified. After being

accepted at the Faculty of Education at Queen's University, I was given a leave of absence to pursue a Bachelor of Education. I graduated in 1978, but during that year I married and moved back to Brantford upon completion of teacher's college. I was then fortunate to be hired by my present school board and so began what has become a 30 year career.

Now having had formal training and a basic understanding of pedagogy, I began to further hone my skills. One of the aspects of teaching that I love is the option of being creative with curriculum. I have always strived to be a student-centered teacher. As a primary teacher, I used learning centers for hands-on learning for my students. It has always been my philosophy that students will grasp the purpose and relevancy of the lesson if they can manipulate and make connections to their real world through real-life, meaningful tasks. Another advantage of the profession is mobility if one wishes to explore the world through teaching. So, in 1981, armed with enthusiasm, a sense of desire to learn more about a culture so different from my own, and now with a degree of expertise, my husband and I made our way across the country to the Northwest Territories to the Native community that would be my home for the next 8 years (see Figure 1). It would be the place that I would truly develop my teaching skills and my love of teaching.

During the year that I taught Special Education in the high school, I worked with a group of students who had a profound effect on me and in fact were the inspiration for my odyssey north. They were young Mistasini Cree girls from northern Quebec who had come south to attend high school. They were teenagers who had spent their lives living a traditional life in an isolated community on the shores of James Bay. They had attended



Figure 1. The native community which was my home for eight years

school in their community and were now enrolled in the Special Education program at the high school because of their limited academic skills from their elementary program. I was now at a point in my life as a human being where I was a developing sense of social justice. I instinctively knew how brave these girls were to have even attempted to come to high school in such a foreign place, although it would be some years before I would truly understand the educational disadvantages that the girls faced and the failings of the educational system to provide for their learning opportunities.

Even though their English language skills were limited, the girls would share their stories of home with me during our classes. They were homesick and feeling lost as billets living in White homes in the south. They never disclosed being mistreated or abused, but they were certainly feeling displaced. I believe it was comforting for them to be able to talk about home. It was my first introduction to traditional Native ways and the beginning of my attempts to understand and appreciate a culture that is so rich in its history, that was so important to the development of this country, and yet has been so misunderstood and oppressed. Through our writings and discussions, they gave me so much, so much more than I was able to give them. Again, as I reflect, it was not by conscious design that I used their life experiences as the basis of our writing activities, but it was more of an intuitive act. I know I did think that by creating opportunities for my students to develop their writing skills by telling their stories, they were comforted. I also believed that these authentic writing exercises would have more meaning and relevance therefore, would hopefully improve their language skills. Certainly more than writing about a trip to the grocery store would be. Cooper (1991) advocates that by chronicling our own stories, we write to create ourselves, to give voice to our

experiences, to learn who we are and who we have been (p. 111). As my students told me their stories, they served to teach me and transform me. It was the beginning of my sense of social justice, a core value that has influenced my life to this day.

My recollections of my experiences with my Cree students guided my teaching in the north. Although my school was a modern, well-equipped school, it was filled with resources from the south. My community at the time was still a traditional community where the land dictated the way of life. Television had not yet arrived in this community. I remembered how the Cree girls had so little connection and understanding of the southern way of life, I knew that I would not want to teach solely using southern resources. Whole language was the teaching method of the time, so with enthusiasm, creativity, and ingenuity, I used community events, tribal legends, the elders' stories of the old days, our classroom experiences, and the land itself to develop my teaching program. It was my first attempt at integrated programming and developing my own curriculum based on the Territorial curriculum guidelines which were very general and non specific at that time. It was a successful strategy that produced results. My students were engaged and, though many had difficulty developing the reading and writing skills, they developed their English language skills enough to share their knowledge and experiences in English.

My teaching practice also gave me personally enriching opportunities to connect to the community I was now living in. I became a part of the community because of the way I was teaching in my classroom. I was engaging in what Schön (1983) describes as interactive reflection-on-practice. I was considering the complexities of power, values,

and domination by minority stakeholder and how I as an individual could transform my practice to improve the quality of the educational experience for my students (p. 34).

I did have to consider how my actions would be perceived by the local structures and system that I was working in, not just with school officials but also with the community. However, as my students made presentations of their learning in a variety of situations-to the principal, to other classrooms, to the community, evidence of my effectiveness as a teacher was never a question.

Teacher performance reviews consisted of meeting with the local school board each May. It was at that time that the board, community elders, and local political figures would ask teachers to stay on or request that teachers leave. Each May, I was asked to stay on as a teacher at the community school. In May of 1988, I announced at my interview with the board that I had decided to return to the south. Leaving my community was one of the most difficult decisions I have ever had to make. By 1988, my marriage was over and I was now the mother of two young children. My older child is my adopted child. Leaving the community meant leaving his language, his culture and his birth family. I shared my decision with my adopted family and tried to explain why I needed to return to my family in the south. I promised that I would maintain contact with them and that I would bring Matthew back to his community for visits in the years to come. It was a promise I kept. Matthew, who is now a young adult, has maintained his relationship with his birth family all these years.

After a year off to relocate and settle back into life in the south, I returned to teaching in my present school board. My personal traits of flexibility, experimental, adaptability, caring have been applied consistently as the years have passed. I have

always persisted in remaining current with the new teaching initiatives, policies, and procedures. I am proud to say that that each year I have restructured my programs, have considered my teaching practice and have made changes to improve my practice. As a learner, it is logical that I take the next step in expanding my knowledge and understanding of my self as a teacher. Even though it has been 30 years since my days as an undergraduate and I am close to the end of my career, I started my first graduate course in July 2007. I have undergone a huge learning curve. Although I am an avid reader of history, social issues, and literature and had kept abreast of the educational field through professional magazines and teaching resources, I had not done any academic readings. I found I had to learn how to read academic articles with comprehension. My professional writing consisted of letters to physicians, social service agencies, and report cards. Even when I was in university as an undergraduate, my program did not require essay type of assignments. I had to learn to write papers that incorporated my own thinking supported by the research. I had to learn to think in a theoretical way where I could make the connections between research and practice. As each course was completed, I was able to see how I was changing and growing in my thinking and in my understanding of educational research and practice.

Rationale

I must now make the connection to my educational journey and my question: How did I come to be at this stage of my educational life as a teacher and a learner? My professional and life experiences have always proven to me that I learn. What I wasn't conscious of was that I knew how to learn. I wasn't conscious that I used metacognitive strategies to figure out how to be successful when I had no formal training or background

in the early years of my working life. I was able to take what knowledge I had as a starting point and build from there. As I look back on my experience as a case worker, using bits and pieces from my psychology course, by being able to ask questions, listening to the answers, observing, and being able to learn and assimilate the bureaucratic policies and procedures, I was able to become a case worker. Every step of my educational journey has happened because I knew how to learn, not because I had a master plan or knew how to do the job from the start. I have zigged and zagged over the last 30 years to where I am today. Through self-reflection, I have been able to peel back the layers of my life and come to an understanding of how I came to be at this point of my life. It is why I feel such passion about ensuring that my students are aware of themselves as learners and that they understand how they learn will impact on their lives

I do not want my students to find themselves not knowing how to take control of their lives as young adults. I don't want any of them to find themselves in the same situation that I found myself in as an undergraduate—not being able to think through how to make a change in their lives. It is my hope that my students will own the outcomes of their efforts if they are aware that they can assess and evaluate their efforts. They will realize as learners that they must remember what they have been taught and build on what they know. As learners, they will understand that to improve and grow, there will have to be changes in the way they perform, whether they are considering their academic efforts or their personal conduct. I want my students to feel the pride that is possible when they know that they have learned. I want them to understand that learning takes place in all aspects of their lives for as long as they live. I believe if we, as teachers,

consider the metacognitive component of learning as we teach, our students will be better equipped to find their place in our fast paced, ever changing world.

In this chapter, I have presented the point I am at today in my living educational theory. I have formulated a question:

What are the metacognitive strategies that I can incorporate into my daily teaching practice, and how can I have my grade 4 students use these strategies to become more aware of themselves as learners?

This is the question I have used to guide me in my practice over the past school year. To assist me to understand my own thinking regarding my students as learners, I needed to reflect on the experiences of my life that have led me to my question.

Whitehead (2008) describes my action as living theory, “an explanation by an individual of their educational influences in their own learning that begins with the experiences as lived and told by the researcher” (p. 3).

Outline of the Remainder of the Document

A review of the literature in Chapter Two outlines the theoretical framework of Vygotsky (1986) and Paul (1992) as it relates to my practice. I present the findings of authentic research in the area of cognitive engagement in junior level classrooms and a review of metacognitive strategies appropriate for junior students that can be incorporated into daily teaching practice to encourage the development of thinking, self-evaluation, and reflection skills. Chapter Three explains the methodological inventiveness and methods that I have used to conduct my action research and links the literature to the methodology and method. In Chapter Four, I outline the data analysis of my personal journal entries, personal conversations, student learning logs, student self-

evaluation and reflection activities, classroom anchor charts, and then present the findings as they relate to my research question. My final chapter, Chapter Five, concludes my action research as I attempt to conceptualize my own learning through my educational journey as a teacher- researcher and explain how I can share the knowledge I have gained through this experience with other practitioners.

CHAPTER TWO: LITERATURE REVIEW

This chapter begins by examining the theoretical frameworks of Paul (1992) and Vygotsky (1986) relating to student learning and the connection and value of self-reflective practice as it relates to action research and living educational theory. A review of the current literature in the field of cognitive engagement and student learning is presented to determine the validity of using metacognitive strategies in the classroom, specifically at the junior level. Current research strongly supports the use of metacognition in the planning and implementation of learning activities in all subject areas from the early years to post secondary education. As well, some of the metacognitive strategies being implemented in classrooms today that assist students in becoming aware of their thinking and learning are presented in this chapter.

It is not enough for teachers to “teach” the skills and concepts expected at each grade level. Education that is solely teacher centered and consists of nothing but rote learning fails to recognize that it is critical thinking that brings life into the curriculum thus transforming the classroom into a community of learners. The research over the past decade has clearly shown that student comprehension and understanding are greatly enhanced through the application of metacognitive strategies. McQuiness (1999) suggests that learners should be given the time and opportunity to talk about the thinking processes, to make their own thought processes more explicit, to reflect on their strategies and thus gain more control. Acquiring and using metacognitive skills has emerged as a powerful idea for promoting a thinking curriculum (p. 2).

Considering classroom practice as a means of introducing thinking opportunities to students is of paramount importance according to Paul (1992). He states that knowledge cannot be divorced from thinking (p. 299). He articulates a series of postulations for the educator who values critical thinking and endeavors to embed critical thinking into the educational process:

1. that students learn what to think only as they learn how to think
2. that one gains knowledge only through thinking
3. that the process of education is the process of each student gathering, analyzing, synthesizing, applying and assessing information for him or herself
4. that classes with much student talk, focused on life issues, is a better sign of learning than quiet classes focused on passive acceptance of what the teacher says
5. that students gain significant knowledge only when they value it
6. that information should be presented so as to be understandable from the point of view of the learner, hence continually related to the learner's experience and point of view
7. that superficial learning is often mis-learning and stands as an obstacle to deeper understanding
8. that depth is more important than coverage
9. that students can provide correct answers, repeat definitions, or apply formulas while not understanding those answers, definitions or formulas

10. that students learn best working together with other students, actively debating and exchanging ideas. (p. 297)

Tardif (1992) as cited in Literacy for Learning (2004) sums up Paul's (1992) postulations when he states that "knowledge is built up gradually, and during this process, learners relate what they already know to the new information being presented to them. As a result, the new knowledge is brought into the interaction with prior knowledge" (p. 32).

Paul's (1992) model regarding student learning relates directly to Vygotsky's (1986) theories of development and the zone of proximal development. Vygotsky believes in the social and functional context of learning, specifically language learning, and the importance of interaction and collaboration in the classroom. He states that "lower mental behaviour which involves elementary perception, memory and attention is gradually transformed into higher mental behaviour such as reason, logical memory, selective attention, decision-making skills and comprehension of language through the elements of collaboration, interaction and experience (p. 9). According to Vygotsky, the passage way of learning is from social interaction to internalized independent functioning. He states that it is an ongoing progression from mediated instruction to self-directed learning which the social context of the classroom facilitates (p. 30). Vygotsky believed that "an operation initially represents an external activity that is reconstructed and then begins to occur internally.... The transformation of an interpersonal process into an intrapersonal process is the result of a long series of developmental events" (p. 56-57).

The teacher's role within the zone of proximal development requires three key elements. First, the teacher augments the students' learning through social interaction. Second, the teacher's role is flexible in relation to the feedback from students relating to the degree of support that is required. Third, the amount of support the teacher provides is directly related to the amount of support the student needs to accomplish the learning activity. Vygotsky's (1986) zone of proximal development is the foundation of my school board's Literacy Profile, an instructional model that promotes a gradual release of responsibility. Using the model of gradual release of responsibility, literacy activities are modeled by the teacher with the whole group, shared as a class or small group led by the teacher, guided in small, homogeneous groups with the teacher, and then independently carried out by the students.

Reflective Practice: Connection to Classroom Practice

As a reflective practitioner who is conducting action research as a means to determine what are the metacognitive strategies I can use to assist my students to become more aware of themselves as learners, I must consider the process of how my grade 4 students think about their own thought processes and their ability to monitor their own learning. I have to ask myself, Do they know when they are being introduced to a learning situation in the classroom? Are they able to plan a course of action to engage with the learning situation? Do they think back on their previous experiences with similar situations to consider the effectiveness of their application of skills and knowledge with the present activity? How can I improve my practice to ensure that my students do have the opportunity to engage in critical thinking and metacognition as the next level of

thinking. The more conscious I am as an educator to ensure that I include critical thinking and metacognitive strategies as part of my curriculum planning, I hopefully will be able to provide my present grade 4 students and my future students with an awareness of themselves as learners that will carry on with them long after they leave my classroom. My goal for them is to be more effective in the thinking and learning activities they will encounter, not just as students but as adults as well.

The first step in accomplishing my goal for my students is by actively reflecting on my practice. Dewey (1933) states that “reflection is the active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support the belief and the further conclusions to which it tends” (p. 9). This forms the foundation upon which reflective practice in education lies. Dewey believes the foundational beginning for reflective thought is a question, doubt, or perplexity regarding some element of practice. Learning is derived through thinking and seeking an answer, movement to a condition of resolution, clarification of the issue, or merely by acknowledgment of the original question if no resolution can be ascertained (p. 16). He goes on to state that to be a genuinely thoughtful educator, the educator must be willing to sustain a “state of doubt” which provides the incentive to thorough inquiry (p. 16). In addition, Dewey believed that thinking is a natural state for human beings, but reflective thinking requires cultivation. Individuals wishing to engage in reflective thinking must practice their reflective analysis skills and must also embrace the following attitudinal qualities:

- open mindedness or “freedom from prejudice, partisanship and other such habits as close the mind” (p. 30)
- whole heartedness or “genuine enthusiasm” (p. 32)
- responsibility “to consider the consequences of a projected step” including the willingness to accept the consequences for a position which has been taken (p. 32).

Dewey (1933) wrote that the teachers’ role in education is to understand their students’ characteristics, behaviour, and the effects of their educational environment in order to create educational experiences that will cultivate and nourish reflective thought. He claimed that the benefit of teachers acting on this role or philosophical stance is that learners will be given control over their experience, which will increase the perceived value of the experience (p. 37).

Schön (1987) also endorses the act of self-reflective practice for teachers as they continue to strive to improve their efforts in the classroom. He states that reflective practice involves the components of reflection-in-action and reflection-on-practice, with the action referring to teaching practice (p. 22). This requires the teacher to engage in methodical thought about their natural manner of thinking and behaviour while engaged in a teaching activity and after the activity is complete. The purpose of this reflection is for teachers to examine their own teaching as a means to guide future teaching practice.

Self-reflection lends itself directly to the methodology of action research as outlined by McNiff, Lomax and Whitehead (1996) when they state that “action researchers are intent on describing, interpreting and explaining events (inquiry) while

they seek to change them (action) for the better (purpose)” (p. 13). By engaging in a systematic and critical inquiry of one's practice that can be made public through sharing of one's practice and findings, the teacher is conducting informed, committed and intentional action that will have a worthwhile purpose not only for the individual teacher but for the teaching community at large (p. 13).

Before I can expect my students to be critical thinkers, I myself must be a critical thinker about my own practice and continually engage myself in self-reflective practice to question whether my practice is indeed effective and, if not, where and what will I have to do become more effective. I also have to consider who I can share my classroom practice and experiences with as I seek suggestions and comments that will continue to build on the existing body of knowledge in the area of metacognition for junior level students. McNiff et al. (1996) suggest that authentic research begins with seeking answers to the educator's question and then, through authentic action research, practice is changed by the practitioner's growing understanding of the issue and that the change one is attempting to make is worthwhile and driven by the personal and professional values held.

Classroom Strategies: Connection to Research

During the last 5 years, there has been a massive undertaking by the Ontario Ministry of Education to improve student scores on the standard assessment from the Education Quality and Accountability Office (EQAO) grade 3 and grade 6 tests in the elementary panel. The Ministry has invested much time and public monies to ensure that students receive the strategic instruction and support they need to develop as fully literate

readers, writer, talkers, and thinkers (Ontario Ministry of Education, 2004, p. 1).

Teachers throughout the province have been introduced to new teaching strategies that have been designed to improve student literacy. However, the research shows that simply teaching the strategies is in itself not enough to guarantee a literate student. Taylor, Pearson, Peterson and Rodrigues (2003) cite several research findings that all stress the importance of instructional practices in which the teacher engages students' cognitive functioning rather than just covering key curricular components. In other words, they suggest that the "how" of instruction may be as important as the "what" (p. 5). Taylor et al. have summarized the findings of Campbell, Voelkl and Donahue, (1997); Cunningham & Stanovich, (1997), Guthrie, (1996) and Guthrie et al., (2000) as clearly indicating that engaged learners have better achievement than disengaged learners (p. 4). Taylor et al. go on to say that engaged learners are motivated, read to learn, use cognitive strategies, and interact in a classroom community (p. 4).

There is a starting point for engaging learners: the teacher, the most critical element in the classroom. An effective teacher will be able to accomplish more with less than an ineffective teacher with the most complete inventory of resources and supplies. Wiseman and Hunt (2008) state that the "effective teacher is able to motivate students and establish motivating learning environments - a learning-focused environment" (p. 14). They describe the learning-focused environment as one that promotes effort, continuous improvement, and understanding (p. 14). In this environment, students set "goals for themselves, take responsibility for themselves for monitoring their own progress, are aware of the way they learn and study, monitor the effectiveness of their

efforts and adapt when necessary, learn and use learning strategies that are effective”

(p. 15). This is active learning.

The learning environment has been established. So, what happens in a learning-focused environment? First, the teacher understands the taxonomies that have been developed to describe the stages of higher order thinking skills. Bloom’s Revised Taxonomy as presented in Ontario Ministry of Education, (2004, p. 33) provides one approach to the hierarchy of thinking skills, with knowledge and memory as foundational skills followed progressively by comprehension, application, analysis, synthesis, and evaluation. It has been my experience that many of my students come into my fourth grade not achieving beyond the foundational skills of knowledge and memory. This claim can be substantiated by the frequency of “I don’t know” or “I can’t remember” when we are working through knowledge-based skills such as points of grammar, punctuation, word usage, number facts, math vocabulary, and general information. These are the basic skills students have been working with since grade 1. For these students, knowledge and memory is their starting point as learners. They are not yet proficient learners. They have to remember that they have been taught specific skills and the learning expectation is to remember the information for future application.

To assist my students with “remembering,” I keep a running record of all the language skills and strategies that I have presented through explicit instruction over the course of the year. When students respond with “I can’t remember” or “I don’t know”, I refer to the chart and remind them they have learned the skill and that they have to remember. I also keep a master log by our class, ‘*What I have Learned So Far This Year*’

chart. The log contains definitions, examples, explanations of all the skills and concepts we have learned and that appear on the chart. During work periods, I will call the students who are working to develop their memory and knowledge thinking skills over to the learning chart and ask them to look for the skill in the master log that they couldn't remember earlier. I will then restate my knowledge-based question from the earlier lesson. By getting the students to seek answers to the questions I have of them, they are being encouraged to be active learners. They have also been given a tool that enables them to take ownership of their own learning rather than taking the easy way out with an "I don't know." If they cannot recall, they know where to find the information they need. I am no longer giving them the same information that they have been given many times previously just to hear "I can't remember" again. My practice is supported by the findings of Taylor et al. (2003), who state that what teachers do to maximize students' cognitive engagement in literacy activities will matter as much as what they cover in their instructional interaction with students (p. 5). As stated earlier in Chapter One, there are many reasons why students experience learning difficulties; however, by creating a learning-focused classroom environment, all students, regardless of the depth of their learning potential, can be active learners. Keene and Zimmerman (1997) state that "proficient learners are metacognitive learners. They think about their own thinking during learning activities. In examining the thinking of proficient learners, researchers have identified approximately seven thinking strategies consistently used by effective learners" (p.22).

These include:

- Activating prior knowledge before, during and after the learning activity
- Determining the most important ideas
- Asking questions of themselves, others and the texts
- Visualizing and creating other sensory images
- Inferring meaning
- Synthesizing
- Using “fix up” strategies to repair comprehension. (p. 22)

In a learning-focused classroom where the teacher is key to student success, it is paramount that the teacher believes he/she can have an important, positive effect on student learning (Wiseman & Hunt, 2008, p. 15). Wiseman and Hunt describe effective teachers as those who are organized, flexible, have a deep understanding of the subjects they teach, are clear in their communication, task oriented, enthusiastic and energetic and dynamic in their work (p. 13). Teachers who bring these characteristics to the classroom are more likely to provide opportunities for their students to engage in the metacognitive strategies as outlined by Keene and Zimmerman (1997).

Teaching metacognitive strategies requires explicit instruction. The first step for the teacher is to model the strategies by showing the students how the teacher thinks during a learning activity. Using a Gradual Release of Responsibility Model such as has been developed by my school board as part of its literacy program, the teacher will move the students through various stages of instruction- modeled, shared, guided, and independent. As students become familiar with the different metacognitive strategies, they will be able to incorporate the strategies in their learning activities at each stage of

instruction. It is vital that teachers give students time to reflect regularly so they become adept at monitoring, assessing, and improving their own performance. Burke (1999) states that students and teachers need to take the time to process what they have done and to reflect on their own learning. She suggests that students keep a learning log and journal in which they can:

- record key ideas
- make predictions about stories, about school events, national or world events
- record questions
- reflect on information that has been presented
- reflect on their achievement in an assignment
- respond to questions that the teacher has
- make connections to other subject areas, to their personal experiences, to texts and other media (p. 117).

Burke (1999) cites Fogarty and Bellanca (1987) who suggest that teachers use prompts to promote thinking at a higher level at the beginning, middle and end of lessons such as :

- What questions do you have from yesterday?
- Write two important points from yesterday's lesson.
- What do you want to know more about during this lesson?
- How is this like something else you know about?
- Something that I learned today that surprised me?
- How will you use this information outside of the class? (p. 117)

Burke (1999) states that responding to new ideas in log or journal entries helps students process information and reflect on their learnings (p. 117). She continues with Fogarty, Perkins, and Barell's (1992) concept of "transfer of knowledge." They define transfer, a key role in metacognition, as the ability to learn something in one context and apply it in another situation. They state that journals, formulating questions, goal setting, and self-assessment can help students become more aware of their thought processes and, therefore, more able to transfer those strategies to real-life situations. "Ordinary learning contrasts with transfer. In ordinary learning, we do more of the same thing in the same situations...Real transfer happens when people carry over something they have learned in one context to a significantly different context" (p. 129). Fogarty et al. developed a Transfer Journal metacognitive activity that asks students to first consider an idea being presented in the lesson, then asks students to consider what the idea means to them (interpretation), and last, asks the student how the ideas can be applied to another subject or to the student's life (application) p. 134). Fogarty et al. present the stages of transfer in a hierarchal form that can be closely related to Bloom's Revised Taxonomy (2001): overlooks, duplicates, replicates, integrates, maps, innovates (p. 130).

Burke (1999) presents several other metacognitive exercises that "help teachers gain a psychological insight into student learning that the multiple choice tests cannot. Metacognitive and transfer strategies help provide insights into the child's mind" (p. 132).

They include:

- What do we know? What do we want to learn? What have we learned? The KWL chart devised by Donna Ogle, monitors prior knowledge, student interest in the topic and application and evaluation
- Mrs. Potter's Questions designed by Fogarty and Bellanca (1987) asks, What were you to do? What did you do well? What would you do differently? What help do you need from me? These questions assist students to process and reflect on their work
- The Pluses, The Minuses, What was Interesting or Intriguing about the topic is the PMI chart designed by Edward de Bono (1992). This chart encourages students to become independent thinkers and critical self-evaluators of their learning at the end of an assignment or unit (p. 131).

Harvey and Goudvis (2000) present several metacognitive strategies that are widely used in literacy activities. They include think-alouds, the way readers make meaning of the text as they read by asking questions, making connections, inferring, and making predictions (p. 33). Visualizing and inferring are strategies that interweave as the proficient learner reads. As Harvey and Gouvis state, "When we visualize, we are in fact, inferring with mental images and thoughts (p. 96). They continue to explain that inferring is the "bedrock of comprehension." Inferring is about reading faces, body language, reading expressions, reading tone as well as reading text" (p. 105). When one considers this statement, it becomes all the more important to ensure our students develop the thinking skills that take them beyond the text, beyond the classroom, to transfer their understanding from academic lessons to

real-life situations. Harvey and Gouvis continue to present further strategies such as determining importance (p. 121), synthesizing information (p. 143), making connections (p. 68) and formulating questions (p. 81). Each of the literary strategies presented by Harvey and Gouvis correlate directly to the strategies that proficient learners exhibit as outlined by Keene and Zimmerman (1997), thus linking literacy and thinking.

The final piece of the metacognitive puzzle is feedback: the process in which external feedback (the teacher's feedback) is coupled with internal feedback (student self-evaluation) that affects student knowledge and beliefs. Brookhart (2008) reviews the work of three major studies on feedback. Kluger and De Nisi (1996) found that the effects of feedback depend on the nature of the feedback while Hattie and Timperley (2007) determined that feedback about the quality of work and feedback about the strategies used to do the work are most helpful. Feedback that comments on the person (good girl!) does not draw students' attention to their learning (p. 4). Brookhart goes on to state that:

“good feedback gives students information they need so they can understand where they are in their learning and what to do next- the cognitive factor. Once the students feel they understand what to do, most students develop a feeling that they have control over their own learning – the motivational factor” (p. 2).

Where does the feedback piece of the metacognitive puzzle happen? It is in the individual conference. This is the time that the effective teacher builds into the learning blocks of the classroom day for meeting with students on an individual basis to review the outcome

of a learning activity. It is at this time when the teacher is able discuss the learning task itself and elicit student feedback and self-evaluation on their performance of the task. Conferences must be regularly scheduled so that both students and teacher know they are accountable to one another. As each student shows where their understanding is, the teacher uses this information as formative assessment to continue to plan the next phase of the learning cycle. Some students may be ready to apply strategies independently with self-selected activities; others may need another guided lesson to use a specific skill more effectively; others may need reteaching of a skill or concept (Brookhart, Moss, & Long, 2008, p. 56). Through conferencing and feedback sessions, flexible groupings can be created in order to move students through different learning activities based on needs. Formative assessment, in fact, becomes an instructional strategy based on the information the student provides about his/her own learning. Again relating back to Schön's (1983) theoretical construct, I am engaged in a continuous cycle of plan, act, observe, and reflect.

Summary of Literature Review

The action research that I am engaged in requires three components that I have drawn from the literature: first, a theoretical understanding of the learning theories as presented by Vygotsky and Paul. In order to change my practice from simply attempting to replicate teaching strategies that have been introduced through a series of professional in-service forums, I have endeavoured to understand the theory behind the strategies through my readings. Through my review of the literature, I have broadened my knowledge of the reconstructionist approach to curriculum planning in that I am able to

build learning activities that are scaffolded to accommodate the different stages of learning and learning development for each student and to encourage the development of critical thinking through the use of metacognition as each student engages in the activity at their stage of development.

The second consideration for my action research is my own ability to reflect on my practice and the outcomes of the learning activities I have designed for my students. Dewey and Schön have presented the philosophical rationales behind the power and effectiveness of self-reflection for me as a practitioner engaged in action research. Without self-reflection, I would not be analyzing my practice to determine if I have been effective in achieving my goals for changing my practice to assist my students to become aware of themselves as learners.

The third component of my literature review revolves around the findings of those educational researchers who are actively investigating the use of cognitive strategies and student learning outcomes in authentic classrooms. Their findings clearly support the use of critical thinking activities and metacognition in the classroom as a means of engaging students to become active, motivated learners. The authors of the various teacher reference books available to classroom teachers today provide concrete activities which can be adapted by classroom teachers for use in the classroom. In my own practice, I attempt with every activity I do with my students to encourage the growth and development of their thinking skills as well as their academic skills. One of the many anchor charts we have developed as a class has three points that can be related to

Bloom's Revised Taxonomy and to the stages of transfer (Fogarty et al., 1992). Our classroom chart, which will be elaborated on in a future chapter, states that:

- Learning is remembering what we know from before
- Learning is building on what we know from before
- Learning is changing how we used to do something

As we work through our various daily activities- modeled, shared, guided, or independent, in small groups, partnered, whole group, or in conference settings, my grade 4 students are becoming aware that they are learners. They are beginning to use the language of learners as they extend their ability to read, write, and communicate their learning in the conferencing setting. I now hear in conferencing: "I need to add evidence from the story to support my opinion", "I will make sure I use capitals for proper nouns" or "This is my best story yet because..." I recall the self-evaluation one student completed after viewing his video taped oral presentation. "I didn't know my back was to the audience when I showed how to put on my goalie pads. Next time I will have to turn around so the audience can see me." It was a much more powerful learning experience for him to see himself and make his own assessment than if I had simply told him his back was to the audience. Some of the students are farther along than others on the continuum of learning, but they all know that our class is a community of learners and that they all are valued members of our community where our common goal is to always think about the way we complete our tasks rather than just completing them.

The above three elements that I have reviewed in the literature are interconnected and interrelated components that allow me understand and improve my own practice. Through the literature I have reviewed, I have been able to develop teaching strategies and activities for my class that are based on sound research and theoretical principles which will enable me to help my students as they embark on their journeys as learners. Chapter Three describes how I incorporated the metacognitive strategies into my daily academic curriculum tasks.

CHAPTER THREE: RESEARCH METHODS

Creswell (2008) states that research suggests improvements for practice, offers new ideas to consider for practice, and allows practitioners to evaluate the approaches they hope will work with the individuals in the educational setting (p. 4-5). To select the form of research one will undertake requires the researcher to determine the purpose of the research by identifying the objective of the study and developing the specific research question. Creswell defines the two major approaches to research. The first and older form of research is quantitative research, where the emphasis is on collecting and analyzing number information that measures distinct attributes of individuals and compares groups or relating factors about the individuals or groups in experiments, correlational studies, and surveys. The second research form is qualitative research, which is a recognition that researchers gather the views of participants, ask general open questions and collect data in the place where people work and live to advocate for change and the betterment of the lives of individuals (p. 48-51).

In order to conduct my research, I first had to determine the nature of my study and determine which research approach was appropriate for my study. I understood that I was formulating a question that would hopefully lead to improving my teaching practice in the classroom which would benefit my students. As Dadds and Hart (2001) state, “enquiry approaches enable new understandings to develop; understandings that empower practitioners to improve their work for the beneficiaries in their care” (p. 169). I knew that I would not be using statistical procedures to examine causal relations among variables or making comparisons about a population, outlined by Creswell (2008) as

characteristics of quantitative research (p. 52). I would, instead, be seeking answers to a question that relates specifically to my practice and that would allow me the opportunity to explore my practice in depth. My study, therefore, will be using a qualitative research approach as described by Creswell in which I rely on the views of myself and my student participants; where I ask broad general questions; collect data that consists of words and images; where I will describe and analyze these words and images for themes and conduct my inquiry in a subjective and biased manner (p. 46).

Whitehead (2008) refers to methodology as the theoretical analysis of the methods used appropriate to my educational inquiry (p. 11). In this chapter, I will explain how I use reflective practice and living educational theory as methodological inventiveness. Because I am incorporating more than one form of methodology into my study, I am adopting what Dadds and Hart (2001) describe as methodological inventiveness. They state that

practitioner research methodologies are with us to serve professional practices. So what genuinely matters are the purposes of practice which the research seeks to serve and the integrity with which the practitioner researcher makes methodological choices about ways of achieving the purposes. No methodology is, or should be cast in stone, if we accept that the professional intention should be informing research processes, not pre-set ideas about methods of techniques.”
(p. 169)

Through my research, it is my hope that I will contribute to the existing body of knowledge relating to my question: What are the metacognitive strategies that I can

incorporate into my daily teaching practice, and how can I have my grade 4 students use these strategies to become more aware of themselves as learners?

Research Design

Under the umbrella of the qualitative research approach are several different methods. I determined that since I was conducting a study of my practice by formulating my research question and setting on a course of action to discover answers to my question, my primary method is action research. As McNiff et al. (1996) state, “action research is about my action; that I am at the center of my research; I own my claims and judgments and that I am the author of my research accounts” (p. 17). They continue to say that “as an action researcher, I am seeing my own practice as the central focus of my research through critical reflection and self-study” (p. 17). Thus, in this chapter, I discuss the role that reflective practice plays as a part of my action research method.

As I attempt to explore the experiences of my life and the impact my experiences have had on who I was, who I am today, and how I want to continue to grow as a human being, I am developing my own living educational theory . My living educational theory forms the foundation of the method of my action research study. McNiff and Whitehead (2000) explain through their work with teacher practitioners how living educational theory

encourages individuals to clarify the values base of their work, and to try to live their values in their practice, recognizing that this inevitably gives rise to contradictions. The focus of the action research is to try to at least understand and

aim to resolve the contradictions, so the researcher may work more productively and enable others to do the same. (p. 201)

I began my project presentation in Chapter One with a scenario that I believe is familiar to most teachers. I make this claim because it is a scenario that has taken place in my own classroom many times during the many years I have been teaching, and it is a scenario that I have listened to fellow colleagues describe over the years. What is important to me as I consider this scenario is the values that I hold as a teacher. If I believed that this is just the way students are - some will get it and others won't, I would not have taken action to explore why this is the situation. However, I do believe that as a practitioner I can help my students to become better learners. It is a quest that I have been on for many years. McNiff et al. (1996) present this dilemma as the "I" as a living contradiction. I hold the achievement of my students as a key value for me as a teacher yet this value was not being fully lived in my practice (p. 48). As I attempted to address this situation, I was in what McNiff et al. call the "reconnaissance period," the time when I looked for solutions to this situation (p. 29).

For many years, I focused on improving my teaching pedagogy by attending in-service training sessions that dealt primarily with teaching strategies, read professional articles that offered teaching suggestions and planned lessons that I believed were meaningful and relevant. I overlooked an important component of the teaching puzzle: the student's role as a learner. I have always been able to provide what the student needs to know, and my quest has now led me to consider incorporating an additional teaching strategy into my program- the teaching of metacognitive strategies to my students in

conjunction with content in order that they begin to think about how they are learning as well as what they are learning.

Self-Reflective Practice as a Component of My Living Educational Theory

As I have considered my stated problem over the years, that is, students in the junior grades do not yet view themselves as learners but more as students who complete tasks, I have engaged in a series of action reflection cycles. Whitehead (2008) describes this process as one in which we determine that our values are not being fully lived and we let our imaginations begin to offer possibilities for improving our practice (p. 11). For me, I acted on seeking answers to how I could improve my practice by learning as much as I could about new teaching strategies through workshops and professional readings, personal discussions with fellow teachers, and over the years, implementing the new strategies in my classroom and then reflecting on my practice. I was engaged in what Ghaye and Ghaye (1998) state is a reflective, public conversation, a conversation that “above all else is one that involves a discussion of values. A focus on values is at the heart of the personal and collective improvement process” (p. 19). The outcomes of my actions did not create the level of observable learning in my students that I believed was possible for them, so I have continued to pursue my living questions, “How can I assist my students to become learners?” “What is missing in my practice to improve student learning?” “Where can I go to seek the answers to my questions?” Ghaye and Ghaye cite Whitehead (1993) as they state that:

reflective practice sits at the interface of practice and theory. Through systematic and rigorous kinds of reflection-on-practice, teachers are able to construct

meaningful theories-of-action which are in a 'living form'. They are living in the sense that they are made up of reflective conversations and actual teaching episodes, created through retrospective thinking about practice and public validations of accounts of it. (p. 18)

Another facet of my living educational theory involves my "life-affirming energy with values as principles of educational influence" (Whitehead, 2008, p. 10). After 30 years of teaching, I am still filled with joy and passion for what I do. I love being creative in the classroom as I always strive to seek new and innovative ways to improve my practice. I am energized by the enthusiasm of the students as they work through tasks. I seek to be an educational influence on my students by asking myself how I can improve my practice for their benefit. I seek the educational influence of others to assist me to improve my practice. This is one of the reasons why, at this stage of my career, I am engaged in graduate studies. As I have always pursued knowledge through system in-service training and being familiar with the Ministry initiatives, it is logical that I am now pursuing knowledge through the research and theories of those who are involved in scholarly work. I am seeking the educational influence of those scholars who were not readily available to me in a general school setting. In so doing, I will be able to add a new lens through which to consider my practice as I act to modify my practice, to live my practice to meet the educational and personal values I hold dear as a teacher. In this way, I become my own educational influence as I am living my educational theory in my quest to improve the learning of my students through my best practice.

As part of my reflective practice, I wanted to be sure that I have clearly articulated my values to myself and to others during the course of my graduate studies. I reviewed the papers I had written over the past 2 years and found a common values theme that I believe validates the question I am seeking to answer in my research. I do value and believe that as teachers we are responsible for preparing our students for the future with more than subject-based knowledge and that we are obligated to help them to become thinkers and learners.

Teaching the basic skills and expectations at a grade level are not enough to provide students with the life skills they need to become responsible, productive citizens of today's complex world. Because of our changing world, education is now faced with a dilemma. Do we, as educators, stick to our mandate of teaching academic skills and subject content, or do we accept the challenges that curriculum improvement can lead to more thoughtful and productive citizens? (Nikiforuk, January 2008, course paper).

For teachers who are willing to take risks to examine their curriculum practices with a different lens, there needs to be an opportunity to share and evaluate their own learning experiences as a shift from traditional practice. (Nikiforuk, November 2007, course paper)

My other question is given our societal and environmental crises that exist today, would it not make sense to introduce curriculum that would encourage students to question their own self-knowledge, formulate a value system based on a sense of democracy and social awareness that would in turn hopefully produce a next generation of thoughtful, civil citizens. (Nikiforuk, July 2007, course paper).

I determined after the first meeting with the first group of students and following my discussion with the teacher that if I continued with simply reviewing strategies and skills previously taught it was unlikely the student scores would improve significantly. My new goal for the next 6 weeks was to have the students take ownership of their learning. I believe this is the key to improved performance. My first step was to rename the clinic from the EQAO Literacy Clinic to the EQAO Learning Clinic as I wanted the emphasis on students becoming aware of themselves as learners (Nikiforuk, June 2008, course paper).

I believe my previous work demonstrates my values are being lived in a public forum and that I am open to reflect on and act on the questions I have posed to myself and others throughout my career. It is that part of me that brings me to the present. Whitehead (2007) emphasizes the importance of each individual's responsibility for making a contribution to the generation of a world of educational quality (p. 220). I present my vision for sharing the findings of my action research with others in a way that hopefully will contribute to the growing body of knowledge regarding students as learners in my final chapter.

Methods

Whitehead (2008) defines method as a "single procedure such as an interview, or a questionnaire to strengthen the validity of an account (p. 10). In this section of the chapter, I outline the different methods that I have used as part of my practice to answer my research question.

The Learning Environment

My first consideration for the year was to consider how to establish a learning-focused environment. Let me clarify that I have always worked to have a classroom set-up that would lend itself to student learning; however, my classroom was teacher centered in that I directed the activities, marked the work and determined the resources in the classroom. A learning-focused classroom as described by Wiseman and Hunt (2008) is one that promotes effort, continuous improvement, and understanding for both the teacher and the students. In this environment, students set goals for themselves, take responsibility for monitoring their own progress, are aware of the ways in which they learn, monitor the effectiveness of their efforts and adapt when necessary, learn and use learning strategies that are effective (p. 14)

My first obstacle for establishing the learning-focused classroom was the physical environment itself. I had been assigned to a portable for this school year. This would be my first time teaching in a portable, and the portable I was moving into was depressing. It was old, dingy, and to me, smelly. I knew this was not the classroom environment I would want my own children to have to spend a school year in. I decided to paint the two wall panels a cranberry red to give the portable some warmth and to simulate bulletin boards which were non-existent. The old, wooden floor-to-ceiling closet in the back corner became a photo gallery of our class in action. Colourful posters and character attribute charts encouraging positive social interaction with each other covered the dull wall coverings to create a more inspiring environment. I took action to improve our physical space, as I believed the drabness of the environment would eventually wear

down our spirits and productivity. My actions were intentional and for a purpose that I could defend (Novak, 2002, p. 73).

Metacognitive Activities

I had already decided from my previous research that Bloom's Revised Taxonomies (2001) as presented in the Ontario Ministry of Education, *Literacy for Learning* (2004) document would be the basis of my metacognitive approach for the coming year (p.33). It has been my experience that many of my students coming into grade four are not achieving beyond the foundational skills of memory and knowledge. This claim can be substantiated by the frequency of "I don't know" or "I forget" or "I don't remember". For these students, knowledge and memory is their starting point as learners. They have to remember that they have been taught specific skills and that the learning expectation is to remember the information for future application. My teaching goal is to assist students to move up the hierarchy to more complex thinking during the course of the year.

Our first metacognitive activity involved developing a class anchor chart using the shared instructional teaching strategy (see figure 2). It has three points that can be related to Bloom's Revised Taxonomies' (2001) first level of hierarchal thinking skills- knowledge and memory (p.31). Our chart, now prominently posted and frequently referred to, states:

We Are a Community of Learners

- Learning is remembering what we know from before
- Learning is building on what we know from before

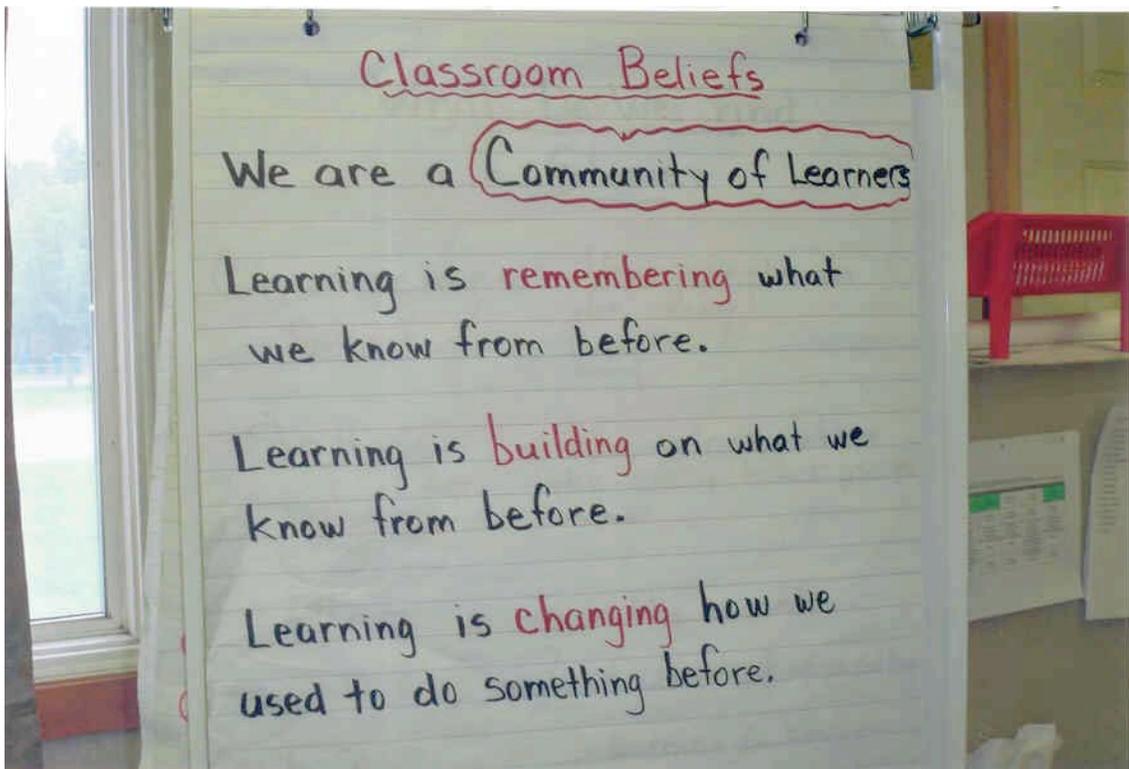


Figure 2. Community of Learners. This chart was our mission statement for the year. I referred to this chart for everything we did in the classroom as learners.

- Learning is changing the way we used to do something.

The chart was developed on the first day of school in September, 2008. I asked the students questions such as “What are some of the things that you have learned to do in school?” There were responses such as “reading,” “printing,” “adding,” “writing a story.” I set the scene for them. I asked, “When did you learn to read, add, or print?” They responded with in grade 1, 2, or a long time ago. When I probed as to how they know how to do the things that they learned way back in grade 1, they came up with the concept of remembering. This became our first statement.

The next type of questioning centered around building on what we already know. “Do you do the same kind of adding today as you did in grade 1?”. Through discussion, the students determined that they use the same facts they learned in grade 1, but now they have learned how to add “bigger numbers” and then last year, they learned to regroup using those same facts; hence our second statement. They build on what they have learned from before to learn new skills.

The change statement was a little more difficult to determine in our discussion. They did come to grasp and then state, through some concrete examples of using sentence writing. I presented a grade 1 level sentence - The dog is barking. I presented the same sentence as it should develop through the next grade levels. They were able to see and conclude that the idea of the dog barking remained the same, however, the writing changed in complexity through the addition of adjectives and adverbs, phrases and a stronger verb (growling) to give more context. They now have a clear

understanding of the way their work will have to show change in grade 4 from the way they worked in grades 1, 2, and 3.

Our last statement has become my focus statement for the students as they work to improve. Each time I meet with the students in a conferencing session, their work must show some evidence of growth. Our learning chart has become the focal point for all that we do in the classroom.

During the course of the year, all students were engaged in various metacognitive activities that were explicitly taught as an extension of the curriculum expectations outlined in the Ministry curriculum guides for grade 4. These thinking activities were based on and developed from the work of Burke (1999) and Harvey and Goudvis (2000) and included prepared and teacher-designed student self-evaluation forms that were completed following assigned tasks in the subject areas of Language and the Arts. These self-evaluation forms are discussed at length in Chapter Four and are included as appendixes in my research project. Student learning logs were also employed as a metacognitive strategy where students reflected on their own learning and made text-to-text, text-to-world and text-to-self connections. Again, the data from the student logs are analyzed and presented in Chapter Four.

Invitation to My Student Participants and Their Parents

My next step in my research was to complete the review process that was required by Brock University and my school board. Upon completion of the process, I was granted permission by both bodies to conduct my research using student participants. (Appendix A). In February of 2009, I sent an Informed Consent Form to the parents of each of my

students. I sent out 23 forms which explained the nature of my research and outlined the methods that I would be using to conduct my research. I had 16 consent forms returned. As I explained to parents in the Informed Consent Form, all students would participate in the learning activities as part of the regular school program and no student's grade would be affected if they did not participate in the project. Those students who did not return the form did not have their personal data included in the data analysis section of Chapter Four although there may be quotes, observations of and anecdotal comments relating to non participants as part of my personal journal entries. No student was identified by name.

My Critical Friend

In January of 2009, I asked Barb (pseudonym) to come into my class as a critical friend. Barb is a Masters' cohort colleague with whom I have been working to initiate an assistive technology program for a few of my students who struggle with the mechanics of reading. By asking my colleague to be my critical friend, I am moving my practice into the open. I am willing to have my practice reviewed and willing to listen to the advice and suggestions of others. As Earl and Katz (2006) cite Costa and Kallick (1995), "a critical friend is a trusted person who asks provocative questions, provides data to be examined through another lens and offers critique of a person's work, as a friend (p. 21). It is very important to me that I have feedback in order that am able to make the necessary adjustments to my practice to ensure I am being as effective as I can be. Theresa video-taped several lessons, student conferences and student presentations between January 2009 and June 2009. She provided invaluable feedback in the form of

conversation and email exchanges. Barb's participation as a critical friend is discussed in Chapter Four.

Sharing My Work in the School Professional Learning Community

I am exploring a new way of working with my students to hopefully give them the tools that can assist them to become more aware of themselves as learners at an earlier age. My work has value and meaning to me. If I believe this to be true, I must find ways of sharing my findings with others in a way that they, too, may wish to build some of the strategies I have found to be effective in assisting junior age students to see themselves as learners into their own classroom practices. Novak (2002) describes a process of leadership as one where a hopeful vision is constructed that is then articulated to a variety of audiences and finally enrolling others to participate in the vision (p. 4). My opportunity to begin to share my vision with others begins in our school Professional Learning Community. I describe the outcomes of this professional opportunity to share my findings with my school-based colleagues in my final chapter.

My Personal Journal

My personal journal entries have been written as I have moved through the various stages of my journey as a teacher researcher. My reflections on this process and about this process are included in my data analysis and findings. Through my journal entries, I hope I will demonstrate what Ayers (2001) declares to be true of teachers and teaching:

Teaching is a highly personal and intensely intimate encounter. The rhythm of teaching involves a complex journey, a journey of discovery and wonder,

disappointment and fulfillment...Teaching depends on growth and development and is practiced in dynamic situations that are never the same twice...Teachers, above all, must stay alive and engaged (Ayers, 2001, p. 1).

I present the outcomes of my quest to improve my practice by incorporating metacognition into my curriculum tasks in Chapter Four. My journal entries will hopefully demonstrate the process of thinking that I have undertaken to be more aware of how I am influenced by what happens in our class on a daily basis.

CHAPTER FOUR: DATA COLLECTION AND DATA FINDINGS

I began to collect data for my exit project at the beginning of the 2008-09 school year. The first set of data is in the form of my personal journal entries, metacognitive anchor charts that were developed in class by the students and me as shared metacognitive activities, and a video tape of myself teaching a lesson. This collection of data took place during the first term of the school year as I taught my Language and Arts programs. Because I have a half time classroom teaching assignment, I do not teach Mathematics, Science, Social Studies or Physical Education. Many of my language activities were planned to be integrated with the Social Studies and Science units occurring at the time in collaboration with my teaching partner. By integrating literacy learning into other subjects, I would be introducing my students to a wide range of texts and topics that would provide reading and writing opportunities to help them develop not only their literacy skills but allow them to connect what they are reading about in more meaningful contexts. As Tardiff (1999) is quoted in the Ontario Ministry of Education: *Literacy for Learning* document (2004):

Teachers must take every opportunity to find links among different contexts, concepts and themes being presented. The cross-curricular integration that is made possible by openness among disciplines offers many advantages. It allows the transfer of learning and gives students the opportunity to work simultaneously with any number of ideas.(p. 30)

This, actually, has been my practice for the last several years that I have been teaching in a half-time classroom teaching assignment. Now, the research I have found

validates my practice. My teaching practice has allowed me, for the purpose of my action research, to collect a broader base of data from the students regarding their thinking and their learning because of my integrated teaching approach. I was not able to use student data during this time frame as I had not yet received approval from the Brock University's Research Ethics Board or my board's research advisory committee to conduct research with my student participants. My journal entries; however, included my observations of my students at work and my recollections and my reflections of my work with my students.

During this period of time, my practice consisted of two components. The first component of my practice involved my regular teaching duties in which the grade 4 curriculum expectations as outlined in the Ontario Ministry of Education curriculum documents were taught. As I planned my teaching units and my lesson plans for the first term, it was with a critical eye to my living educational theory. I knew that I would be using some of the same resources that I had in the past, but I was very aware, as I planned, it was with "I" as a living contradiction. My values regarding my practice were not being fully lived in that I wanted to see more evidence from my students that they were aware that they were learners. I was now engaged in new cycle of action reflection that I hoped would bring me closer to finding a way to enable my grade 4 students to have a greater awareness of themselves as learners. This was the second component and the difference in my practice this year. It was the conscious introduction of metacognition into my teaching practice. I had "imagined a way forward" and was now in the beginning stages of "acting on a chosen way forward" (Whitehead, 2008, p. 4). My journal entries

are my record of my journey as a teacher-researcher acting forward to find answers to my question. My journal entries will be presented using the italic font to represent my voice and my thoughts as being distinct and different from the analysis of my entries, although my journal entries are the subject of my analysis.

The portable has been set up, walls painted, everything is unpacked. Now to start thinking about my program - how to introduce the metacognition on Day 1. (Nikiforuk, personal journal, September 3, 2008)

My research question, in part, involved determining “What are the metacognitive strategies I can use in my daily practice?” During the first term, I spent a great deal of time researching this question. I reviewed a number of teacher resources and collected several different models and samples of commercially produced metacognitive activities. I then set about to revise some of these activities for my purposes (Appendix B, Appendix C). I collected and designed metacognitive activities that would allow my students to self-evaluate their work, given a clear set of criteria and to reflect on their understandings of a topic by making connections, formulating new questions, and seeing different points of view.

Literacy lessons, during the course of the year, followed the Gradual Release of Responsibility model which was explained in Chapter Three. In September, as the first step in my literacy program, I modeled the literacy strategies the students would be eventually required to apply independently. Using a teacher read-aloud, *Owl in the Shower*, by Jean Craighead George, I focused on four reading strategies that are outlined by Harvey and Goudvis (2000):

- visualizing- a strategy that allows the students to combine the author's words with their background knowledge to create mental images that enhance their understanding of the text and bring life to reading (p. 101)
- making connections- a strategy to activate the students background knowledge and prior experience to deepen their understanding of the text (p. 80)
- questioning- a strategy that allows the student to interact with the text to monitor their understanding and to construct meaning (p. 82) (see Figure 3)
- inferring- a strategy where the students think beyond what is presented in the text to construct a more complex understanding of the text (p. 108)

As I modeled the reading strategies, I also introduced and modeled the metacognitive strategies that the students would be using for the rest of the year to monitor their learning and their thinking about their learning. I was living my educational theory from this point on. As Cole and Knowles (2000) state, "when practice and practical action are recognized as an embodiment and expression of theory, teachers are, by extension, recognized as theory builders. Theory, then, becomes redefined to reflect the multidimensional, personal, and complex nature of teaching and teaching knowledge" (p. 10).

The book is holding their attention. I am finding it really easy to model the strategies as everybody is staying with me. They get visualizing - I can stop at any point and ask what do they see in their heads and most of them want to share. Need to keep working on questioning. For example, Why is the owl named Enrique?- Why does Borden live near a forest? Actually now that I think of these questions in retrospect, we can use them to

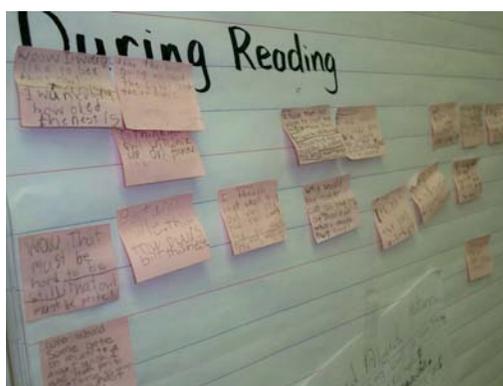
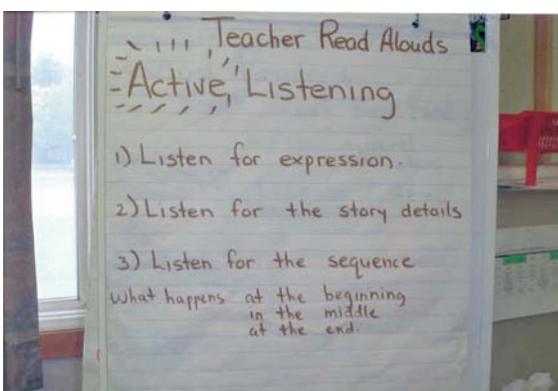
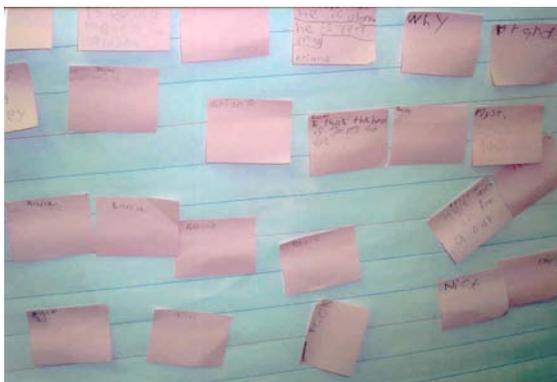


Figure 3. Active listening lesson. Top: student questions before lesson on active listening. Middle: lesson gave specific strategies for listening during teacher read-alouds. Bottom: student questions following the lesson on active listening.

show how an author develops a novel by naming a character and using a setting to be part of the plot. Now I feel bad. I brushed these off this morning as meaningless questions. Lesson for me. Everything - well almost everything said will have value in this class. Metacognitive part - kids to explain what they want to learn from their question. Will their question help extend their understanding or is it a Can't think of anything to ask question. Discussion opportunity. (Nikiforuk, personal journal, September 16, 2008).

On October 7-8, 2009, my students wrote the board-mandated Comprehension, Attitudes, Strategies and Interest (CASI) standardized reading assessment. I spread the testing out over 2 days in order not to fatigue the students, as this was their first major reading and writing assessment of the year. I was able to collect diagnostic data from this assessment which I used to help me to plan the next stages of my literacy program. The Ontario Ministry of Education: *Literacy for Learning* (2004) document states that:

literacy assessment in the junior grades is an ongoing cycle of assessment before new learning; assessment during learning; assessment of independent achievement and evaluation, reporting, and next steps. Assessment that is embedded in authentic learning where the students see what they are learning, where they need to improve and how they can use their growing knowledge and skills in other ways has the greatest impact on student achievement (p. 46).

Using the information gathered through the CASI assessment and my month-long student records, I now had enough data to organize my guided reading groups. I determined the sequence of language skills to be reviewed and introduced. I was referring daily to our

Community Of Learners Chart, which has been described in detail in Chapter Three.

An integral part of our daily program was now metacognition.

Next step. Will work on summarizing, finding the main idea and open responses with evidence. Will model and share this with the rest of the novel. Will use Impressions for the guided reading. The Group of Four will use the Ginn books. Will focus on thinking on how to improve work using the posted models as guides. (Nikiforuk, personal journal, October 12, 2008)

In March of 2009, my exit project was approved by the Research Ethics Board and by my school board's research committee. I was now able to use the data the students were generating as part of my project. I had 16 consent forms returned by the end of March. All 16 parents gave consent for me to use their children's data as part of my study. The 7 forms that were not returned were from families that had difficulty returning forms in general so I decided that I would not pursue this any further.

Can't believe it. Have 16 forms back. All of them are checked yes. Really surprised that Mrs. X said yes. Not going to worry about the others. They're in my observations anyway. (Nikiforuk, personal journal, April 3, 2009)

By this time, the students had practiced using several different metacognitive strategies as part of their various academic tasks and post task reflections. The metacognitive strategies had been modeled by me throughout the first term, and the students were now familiar with the language that was needed to explain how they were thinking about their learning.

To help their students develop as thinkers, teachers model a wide range of open-ended responses that will elicit a range of responses. They talk to their students about their thinking and understanding and reflect back to them successful strategies, skills and approaches the students are using. They demonstrate how thinking aloud can help readers and writers to gather information, develop insights, make connections, solve problems, clear up confusion and plan next steps. (Ontario Ministry of Education, 2004, p. 58)

The student data collected comes from information gathered during conferences, their student logs, self-evaluation forms, and reflection activities. Student data are in written form and in video taped format.

In January of 2009, Barb became my critical friend. I asked her to become involved with my project for two reasons. First, as members of the Master's cohort, I admired and respected the scholarly manner in which Barb has journeyed through this program. She committed to the program with dedication and continually endeavoured to share her insights with the group. As well, she willingly extended herself to be supportive of others who were in need. I knew that I could trust her to come into my classroom and provide honest and constructive suggestions and feedback regarding my practice. I was working through a process in which I was central to my study. As I questioned myself regarding the strategies I had selected to assist my students to become more aware of how they think as they work through tasks and how they see themselves as learners, I needed to have that other person to validate my claims (McNiff and Whitehead, 2000, p. 209).

During the course of the Master's program, Barb and I had engaged in many discussions about our projects and I believed her to be truly interested in my action research.

Hi Lee,

Thanks for the great lunch conversation. I so enjoy working with you! (Email from Barb, January 7, 2009)

The second reason to have Barb as my critical friend was that I was a participant in her project. As part of her study, Barb worked with a target group of students in my classroom to develop their reading skills using an assistive technology program. She became a familiar face to all of the students over the course of terms two and three so they were very comfortable with her in our classroom.

Data Analysis

The first step in my data analysis revolved around my own personal journals. I read through my journals three times. During my initial reading, I was amazed that I had written so much, as I am not a journal writer by nature. This year, in fact, was my first sustained journal writing endeavour. I found myself reflecting on this notion. Some of my thoughts included, "I've been relying on my memory of classroom events and practices," "I always believed I was improving my practice every year but now maybe I wasn't as I don't have any tangible proof that I was. It was only in my mind," "Now I'm depressing myself by my self-doubts." I asked some new questions about myself, "Why am I not a journal-writer?" "Have I been afraid to record my thoughts and dig down deep into who I am?" "How common a practice is journal-writing?" "Do I know anyone outside of this

cohort who journals as a matter of practice but they don't talk about keeping a journal?" I found all of these thoughts and questions rolled around in my mind over the course of the next 2 days before I returned to my journals a second time.

I also noticed that I did not record in my journal from December 10, 2008 until January 14, 2009. My entry on January 14, 2009 was a reminder to myself, after hearing from Barb following her first classroom visit, to send my observations to her regarding the three students who were working with the assistive technology. I believe that with Christmas activities, Christmas holidays, and the fact that I was starting a novel study unit with three different sets of materials, I overlooked journal writing for that period of time. I also wonder, as I reflect now, if because journal writing was still not truly embedded into my practice as a professional writing habit, it wasn't the first thing I was thinking about as we got back into routine in the New Year.

My second reading of my journals took a different tack. This time I found myself being really impressed. My journals revealed that I had accomplished a lot over the year. I used my journals to explain what my purposes were for my activities. The result was twofold. Not only did I have a detailed account of the purpose of my activities (my day book simply identified the activity, i.e., reading - Chapter 2 and the sequence of the morning lessons) but I discovered I now have a comprehensive record of the activities.

Found a great article on the internet for the Remembrance Day mini unit. It is readable for the kids and gives all the background information re WW1 to give them that historical perspective. Have decided to do the water colour poppy art project first as they can make connections to the poppies everyone is wearing. They are going to do a self-

evaluation of their painting using the elements of design as their criteria. Will read the text on Wed. after the service and visit from the reservist - he is bringing a truck and some gear that they use and will talk about the Canadian military operation in Afghanistan. That way, I think the kids will be more into the reading and hopefully get the significance of the day and the symbols. I'm going to have them do a response writing piece on do we still need to have Remembrance Day - metacognition - making a judgment. (Nikiforuk, personal journal, November 4, 2009)

It became clear to me that I used my journals to analyze my work and situations in the class. I recorded my observations, noted the success or not so successful outcomes of specific lessons.

- first lesson for determining the important facts - rough start today - although I was prepared (I thought), kids weren't in the groove - very chatty, Student X was on a roll- wouldn't sit, wandered, unsettled, argumentative - finally sent him out. Was using the lesson overhead from National Geographic resource kit. The kids didn't seem to get the point of the exercise - I had to do way too much cuing - very little interaction with them - they all sort of sat - could be that the teaching transparency was pretty bland, simple - seasons change - well, yes, seasons change - they could tell me that from their "prior knowledge" so I guess they didn't see why we had to bother with the text. Dah! - don't use it just cause it's there. I will find a more interesting short text and try again tomorrow. (Nikiforuk, personal journal, April 1, 2009).

I know that I have had lessons in the past that didn't go well. I know that I repeated the lesson using a different resource or approach. The experience was not relived. I just went on. The difference my journals afford me is that the experience is not forgotten in the blur of passing days, passing lessons. They bring me back to the day and allow me to feel what I was feeling and what my thought processes were at the time of the experience. As I read the above journal entry, I recalled that lesson. I remember so clearly standing by the overhead and saying to my students, "c'mon guys" and saying to myself "this is bombing. This is supposed to be the modeled lesson for the report writing unit, and if they don't know how to find the facts, they aren't going to write Level 3 reports...." My thoughts went on and on as doom. As I recall, we were saved, literally, by the bell. My journal account was written after the distance of the rest of the day. My entry told me that by the end of the day, I had a different perspective. The kit sample was not engaging for the students, find something else and the unit will move on as planned. I would not have remembered my thoughts at the time of teaching and been aware of my tendency to become frustrated or agitated when things do not go well without my journal.

My journals have allowed me to reflect-on-action (Schön, 1983). They have provided me the opportunity to explore what was happening in my class at the given moment, to ask why I acted the way I did in the given moment, which then opens up a whole new set of questions and ideas about my practice. As Schön states, "As inquirers frame the problem of the situation, they determine the features to which they will attend, the order, they will attempt to improve the situation, the direction in which they try to change it" (p. 165).

During my third reading of my journals, four distinct themes regarding my practice emerged. It is interesting to note that although I have read about emerging themes in the course readings and we, as a cohort, did complete an assignment in which we analyzed data and looked for themes, my previous experiences did not prepare me for the flutter of excitement as I saw emerging themes in my own work. I was quite enthralled with the phenomena that was unfolding before my eyes.

I determined that my journals contained four distinct themes.

Theme One: My Planning -Activities and Strategies

These entries described my plans prior to the activities and usually included the metacognitive component that I was going to build into the activity. They were straight forward entries that explained my purpose and my thinking for the activity.

Will use the shared fall fair narrative story we wrote as the posted model for their independent Hallowe'en adventure story. Go over the characteristics of a narrative as a whole group lesson. Create a new story frame outlining plot development beginning, middle, and end. Brainstorm for story ideas as a group. Review stages of writing. Show them the Hallowe'en writing paper for good copy. Hope this is a motivator to keep them going. Metacognitive part - compare their story to the mode l- lots of details, interesting words, story flows from one event to the next - is it long enough! No five liners!

Conferencing focus- show how story matches the sample (Nikiforuk, personal journal, October 15)

Theme Two: My High Points

These entries were filled with a charged emotion. I was excited, happy, pleased and validated by the successes recorded in these entries. They reflected the growth and development that we had experienced over the course of the year. It was my living educational theory of imagining forward. Not only were the students in my class becoming more aware of themselves as learners, I also was a learner as my practice changed to let my students have so many more opportunities to think and reflect about themselves as learners. Our successes were the life-affirming energy that kept all of us moving forward all year. This year was a teaching highlight because of all the high points for me and my students. The reality of teaching is that this isn't always the case.

Ron (the principal) came into the portable with the kids at bell. He said a group of kids came up to him at recess and wanted him to see our Inclusiveness Chart, and so here he was. The kids scrambled all around him, saying this is mine, look at mine. I was so pleased that they were proud of the work we had done on this character attribute and that they wanted to share with the principal. This is big. Totally unprompted. He commented that he was glad that everyone could explain what inclusiveness was but then he went on and told them what really made him happy was how they were able to give examples of how they knew they were being inclusive at school (the metacognitive part of the task) He must have stayed for 10 minutes listening to the kids tell their stories. What a pleasant surprise. (Nikiforuk, personal journal, May 14, 2009)

Theme Three: My Low Points

There were relatively few low points in comparison to the high points; however, there were journal entries that recorded my disappointments with student efforts, student productivity, and connections. I believe that some of the lack of student effort with some of the tasks that we had been working on both academically and metacognitively can be attributed to the fact that grade 4 students are only 10 years old. They do not have the work habits and focus and attention of adults. I know that some of them, at different times, ran out of steam and were not “on” 100 % of the time. Some of the disappointments were recorded from the authentic, real life situations such as our field trips when I expected connections to be so obvious. However, I have concluded that because in real life, developmentally, grade 4 students are still at a play stage, overall, we accomplished a great deal during the course of the year.

I didn't hear one kid make a connection all morning to either the Rocks and Minerals or to the environmental issues readings we have been doing. They were really well behaved at the activities but nobody had an aha. This is what we have been reading about, or I learned this in science. I know they were having a blast, but still - all that learning stuff at school and no connections until lunch when I asked. Then it all came out - at least it was there, it just wasn't conscious. Must say the high school kids did a good job as instructors (Nikiforuk, personal journal, May 12, 2009 following WaterFest field trip)

Theme Four: Self-Doubts

These entries revealed to me that even though I should have every reason to feel secure with my efforts and that my ongoing desire to improve is because I am and have been an inquiring professional, I have moments when I feel as if I am not doing enough or that I am not on the right track. These are my moments of self-doubt. These are the times I need to seek out my critical friend or a collaborative colleague. But there is the fear of being viewed as stupid. My fear is that others will think “you’ve been in this profession long enough that you should know all there is to know or have a solution to any situation that arises.” I know rationally that this is not the case but there are those times when my first response in a situation is an emotional response. This is a vicious circle, and it is a psychological head space that I recognize. Perhaps this is one of the reasons I have felt uncomfortable with journaling. It was more comfortable to keep these feelings hidden. This is the first time I have made a public statement about a part of me I wish wasn’t there. Frightening or liberating? Another question has arisen as I pursue my living educational theory.

The data from the following journal entry showed me how I tend to respond emotionally and personally to situations I perceive as problematic. If someone is unhappy, I assume their burden as my failure. Experience has shown me time and time again, my feelings of self-doubt are generally unfounded, but that feeling still tends to creep up.

Ask Student 2 his thinking re “I wish I was home schooled” (a statement I came across on his worksheet duotang cover when I was going over his work). Is he bored?

What is he looking for? Am I doing enough? What can I do to make his day- to- day schooling different or more meaningful so that he wants to be here? What does he think home schooling is? Ask Sue (the French teacher) if I can have 10 minutes with him next class. (Nikiforuk, personal journal, January 22, 2009)

In this case, when I talked to him, the student revealed that school was “fine” and “lots of things were fun,” but he was just wishing he was home schooled so he wouldn’t have to work all day long. He was just wishing for something he knew would never happen much like you or I might wish to win the lottery.

The data from my journals has been a revelation. They have provided me with great insight in how I perceive what I am doing as a practitioner, how I perceive myself as a practitioner and what directions I want to move in. It showed me how as a person, I function on a very practical and objective level sometimes and other times, my thoughts are subjective and value laden. My journal is a concrete representation of the “I” in my living history, as I was able to see and hear myself in my entries.

The second set of data I collected came from my students. The students were introduced to the concept of metacognition in all areas of the program. Using our Community of Learners Chart, students were able to self-evaluate their work. They became fluent in asking themselves if they had to remember a fact, detail or process to work through a task. They began to recognize if they were using previous knowledge or skills to build a new skill. The most significant step as learners was their ability to determine if they had changed or improved on their previous efforts. (see Figure 4)

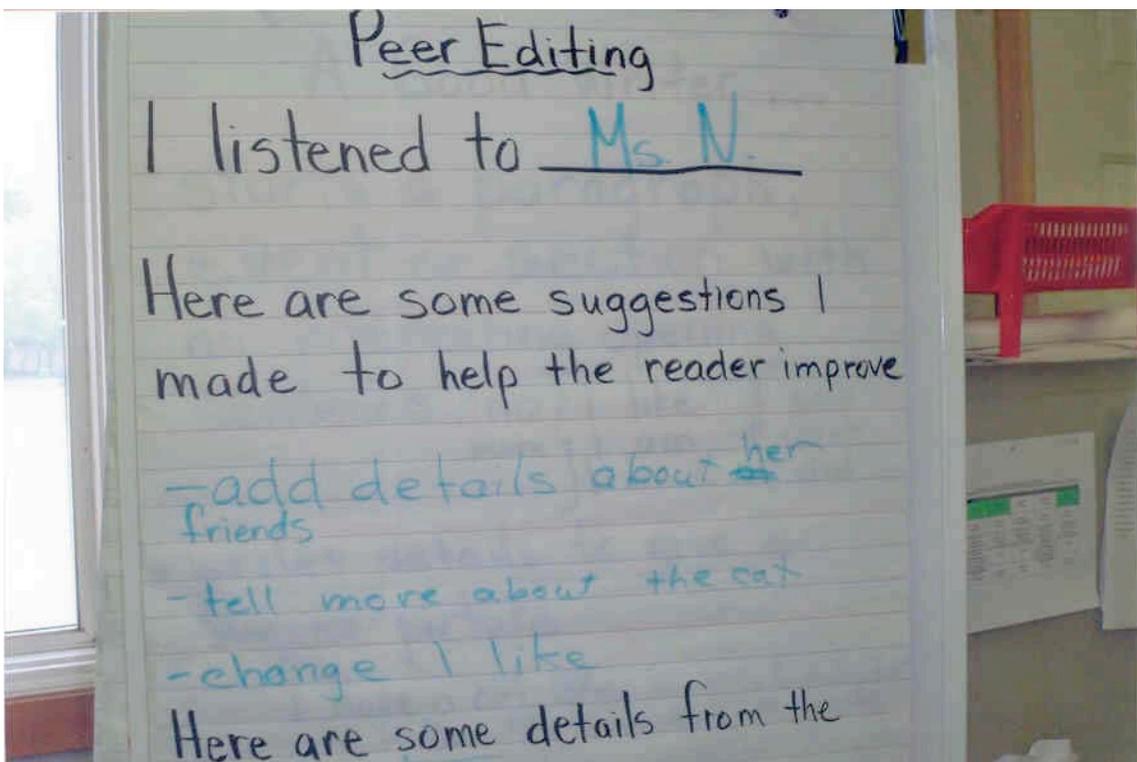


Figure 4. Students as editors. Students learning to evaluate the work of others and to make suggestions for improvement through pair-and-share activities.

As readers, they were able to explain their thinking about their reading in the individual conferences. The reading strategies were modeled, shared, and guided in whole and small group lessons and then bridged into the independent reading block. (Appendix D). “Through strategy lessons, students learn to become more strategic readers. Teachers explain and demonstrate the use of strategies and then students apply the strategies with guidance and support from the teacher” (Collins, 1991 cited in Ontario Ministry of Education: *Literacy for Learning*, 2004, p. 68). During conferencing, students identified the various strategies that they used when reading to deepen their understanding of the text and explained how they actually engaged with the text. The following is a transcript of a reading conference with Student 4.

T. Hi Student 4. Thanks for joining me at the conference table. I want to have a conversation about one of the texts we have been reading this past week. I’m interested in how you went about reading the text. What kind of thinking you used while you were reading.

S. OK.

T. So. Which text would you like to talk about?

S. I want to do the Land Changing one.

T. Can you tell me why you picked that text?

S. I read both of them, and this one is easier for me. I understood it better.

T. Oh. OK. Can you tell me why you think the Land Changing was easier for you?

S. Well, I could read all the words, so that meant I could get a picture in my head better. I could see that the wind and rain was wearing down the rocks from a long time ago and

that's how we get the hills today from when they used to be mountains. And the canyons. I know the rivers cut a path through the rock just like it said in the story 'cause I seen pictures of the Grand Canyon.

T. Anything else go through your mind when you read the text?

S. I had a think aloud. Like this is just like the Grand Canyon even though it didn't say so in the story. I said "I bet this is the Grand Canyon."

T. Well, I can tell that you have a pretty good understanding of this text from what you've told me. And you told me the ways you were thinking about your reading as you read. That's really good because your thinking is going to make any text you read have meaning for you. I hope you find that makes you want to keep on reading.

S. Yeah.

T. So. Can you tell me why all the thinking that happened in this text didn't happen with the Trash article?

S. I ...ummmm. I think it was because the words were too hard for me. I tried to get a picture in my head, but I couldn't see anything. I didn't know what was happening 'cept it was about a lot of garbage in the world but that's all I know.

T. Well, what are some of the strategies we've practiced for those harder reading passages?

S. Ummm. Find an easier book! (both of us laughed at this).

T. Ok. I guess that's one way of solving the problem. But let's say you do decide to try to read the harder book? What's a strategy that you can use to help you?

S. I can try to sound out the big words.

T. What if that doesn't help because they are big words, you know and sometimes we just can't figure out the word?

S. I can try to go back and read it again and see what the rest of the words say and then try to figure out what the word is. Just keep on reading it again until it makes sense.

T. I think you have a good strategy there, Student 4. When we're finished here, I want you to go back and try to read the Trash article again. Not the whole thing. Pick a paragraph or two and try to practice reading around the hard words and see if you can understand the text a little better this time. OK? How does that sound?

S. OK.

T. Now, let's find an interesting passage from Land Changing. I'd like you to read a bit for me.

S. OK. Oh I just thought of a question about the story.

T. Oh and what is your question?

S. I wonder if that means the Rocky Mountains are going to be hills some day?

T. That's a good question. I wonder if we can use the information we have here in the text and see if we can come up with an answer to your question.

S. Ummm. (needed a cue)

T. Lets go back to the beginning and see what facts the text gives you.

S. Well it says there's wind and rain and ice wearing down hard, jagged rock —over millions of years!

T. Does that give you a clue?

S. That means it will take millions of years and then maybe the Rocky Mountains will be hills. That will take forever.

T. So, do you have an answer now?

S. Yup! They won't be hills for a really long time.

T. I think you're right about that! Alright now. How about you show me what a great reader you are becoming.

S. Student reads- haltingly, phrases, misses punctuation, several miscues, but able to self-correct most errors.

T. Student 4, your reading is getting a lot better. What do you think you need to do keep on getting better?

S. Well, I need to read more.

T. Where can you do this?

S. At school and at home.

T. I agree. When you have your independent reading time, what would be a good thing for you to do to help your reading?

S. I need to keep on reading.

T. Instead of

S. Doodling

T. That's a plan. So the next time it's your independent reading time, what won't I have to say?

S. Put my drawing away and I'll keep on reading.

T. You know, you could ask someone to be a listening buddy for you. The more you practice reading out loud, the easier it will be for you to read by yourself.

S. OK. I'll try.

T. Thanks for talking with me, Student 4. We covered a lot today. (reading conference, April 16, 2009)

This conference gave both the student and me a great deal of information. First of all, he is able to carry on an interesting conversation about reading even though he is not a strong reader. He knows that he is a struggling reader, but when he reads a just right text, he understands the text. This is a confidence builder for him. I know that even though he is a struggling reader, he is able to apply some of the strategies for reading. It is my job to let him know that he does do what good readers do. This is another way to help motivate him to read and want to improve his reading skills. I asked him to challenge himself by returning to the more difficult text but provided him with a way to tackle it. I know from our conversation that he does think when he is reading in that he can make connections such as the connections to the Grand Canyon and Rocky Mountains. I know that as an independent reader he will choose books that he feels comfortable reading. It is my job to provide him with more challenging texts during guided reading lessons so that we can work together to further develop his decoding skills, build his sight word vocabulary, and use context clues more effectively when he does run into unfamiliar vocabulary. This is the scaffolding strategy that Vygotsky (1986) refers to as the zone of proximal development. He is also aware of his tendency to lose

his focus. By giving him a strategy such as having someone listen to him read, he will be developing his attention and focus, which he can then transfer to his independent reading.

Conferences, such as the above, allow students to engage in a meaningful dialogue about their reading and encourages them to become conscious of how they read and how they can improve. Reading, then, is not just an exercise of reading words for the content of the text but becomes a process of understanding as the student interacts with the text. By conferencing with students, reading also becomes a social exercise allowing the student and teacher to interact on a less formal, more personal level than is possible in whole group and small group lessons.

The data gathered from reading conferences showed that most of the students were able to have a conversation about their thinking by identifying the strategies by name and how they used the strategies. The biggest change for me as a practitioner was shifting the focus of the conference from content to a discussion on how we read. When I asked Student 13, one of the students who was now using Premier Assistive Technology to assist her with the reading of texts, if she found the technology useful, she responded, “It’s great. Now I don’t have to worry about the words. I get to do my thinking” (reading conference, April 17, 2009).

Another metacognitive strategy that I introduced to the students was self-evaluation. With this strategy, students are encouraged to review their assignments, looking for ways to improve their work. Students were usually asked to consider what they thought they did well and how they could improve. The students required explicit

instruction on how to go through their work and self-evaluate. I modeled self-evaluation using the shared samples that we created as a class for the specific skill that we were working on at that time. The students had opportunities to self-evaluate their work in each of the curriculum areas that I taught. The students generally found the tasks that involved a visual element such as video taped activities (Drama, Oral Communications) or Art easier to self-evaluate independently (Appendix E).

Examples of self-evaluation are the expository oral presentations video taped on December 9, 2008 and viewed on December 10, 2008. Students were given a self-evaluation form and instructed to watch carefully and think about how they presented their “How To Do Something.” They were instructed that “I like it” was not a thinking response. As a result of explicit instruction, there were no general responses such as “I did great,” “It was fun” on the self-evaluation sheets. Each student was able to identify a specific element about their performance they liked and what they could improve on.

What did you like about your presentation?

Student 1: That I did all the steps right. I didn't forget any.

Student 6: I liked the trick I did. I did it right.

Student 8: My craft went together like I practiced.

Student 9: I didn't look scared but I was.

Student 11: My fruit salad looked delicious when I put it together.

What do you need to improve on for your next presentation?

Student 1: looking at the class when I'm talking

Student 6: I just did my trick. I didn't talk much. Next time I will tell them what I was doing.

Student 8: I have to talk louder.

Student 9: I didn't talk very loud

Student 11: I did not look at the audience.

The above responses demonstrate that the students were engaged in thoughtful deliberation about their performances. They had considered two components of their performance and communicated their self-evaluations in writing. Because the students were aware that they were viewing their work for a specific purpose, it was absolutely silent in the classroom at the time of the viewing. Without the thinking component attached to the viewing, I believe that there would have been lots of chatter and laughter about seeing themselves on tape.

Although we did self-evaluate many pieces of writing and reading responses, I found that it was difficult to gather concrete data for these types of activities. Self-evaluation for academic activities usually took place in a small group setting as part of a follow-up to an independent reading or writing activity. Students would compare their work to the posted sample, and as part of a discussion, determine what they had done well and what they needed to add or change. Often, I would direct them to consider their previous work and make a comparison. Was there a change in the way they completed the task from the last time? Was there more detail, interesting vocabulary, evidence from the story? As we worked through the self-evaluation process, I would always remind the

students that a learner makes changes in their work by making it better than before.

The self-evaluation was centered around this point. Had their work improved and how?

Closely related to self-evaluation is the ability to reflect on their work following a project (Appendix E). Students used their student logs and conferences to reflect not only on what they were learning but how they were learning. Through modeling and explicit instruction, the students were taught the difference between retelling events and thinking about events.

Earth Day (see Appendix B) provided many opportunities for academic activities as well as metacognitive reflections. School-wide and community events provided a backdrop to an environmental studies unit, with Earth Day as the culminating event. Students were provided with different reflection activities that tied into the overall unit. One activity required that they think of an environmental change that they could make in their daily lives. The criterion was that it had to be a realistic change that they could make without adult support or involvement. A realistic change eliminated general responses such as “stop polluting the world.”

The following are some examples of the students’ reflective thinking with the activity entitled, *One Way I Can Help Our Earth*. Students worked with a sentence frame that first asked them to think of something they can do to make an environmental difference. Then, they had to explain why the practice is helpful. The third part of the activity was to explain how they knew they could make the change.

Student 7- I can *reduce the garbage I use*. This will be helpful because *the landfills are overflowing*. I know I can make this change because *I make my own lunch and I will use containers instead of bags*.

Student 10- I can *play outside more*. This will be helpful because *I won't use the electricity for my video game*. I know I can make this change because *I can go on my trampoline without my dad*.

Student 3- I can *use a reusable water bottle*. This will be helpful *because I won't put any more plastic bottles in the garbage*. I know I can make this change *because I already have my own water bottle*.

The above data shows that when given a real life problem, grade 4 students are able to think about the problem, make a personal connection to the problem, reflect, and think of solutions to solve the problem. This critical thinking activity demonstrates that these students can be guided to consider the world around them and to think about their place in the world today as 10 year-olds. Using their critical thinking skills, they have determined that they can make a difference in the world.

Our final reflection piece for the school year involved "Final Thoughts." In this reflection, students were asked to think back over the year and decide what were the stand outs in various areas such as trips, books, interests (Appendix G).

This was an independent, quiet reflection time without any cuing or sharing before the task. I explained that the activity was a reflection survey of the year and asked that they work quietly and fill it in. The first question asked them to consider what they have they learned about learning.

We have spent the year thinking about ourselves as learners. What have you come to understand about learning?

Student 14- Learning is like building a house. You have to put your thoughts on top of each other the way you build a house.

Student 15- I know I have to remember and I have to change and then I can challenge myself.

Student 10- Learning is always thinking so you can remember and not forget and then you can build on what you know.

Student 1- You need to remember and change the way you do things and you need to improve and learn. Take all the things you have learned into grade 5.

Student 5- You have to build. We have to change and remember.

The data shows that the students have come to associate key vocabulary such as remembering, changing, thinking, and have similar ideas about what learning is as a result of the various activities and discussions that have taken place over the year.

Nobody asked for assistance or any additional explanations regarding the questions. No one said they didn't understand. All worked quietly for about twenty minutes and gradually, students began to lose their focus and engage in conversations. The Educational Assistant took the four identified students back into the school to complete the survey as a shared activity. They stayed with her for the regular 50 minute block discussing each question as they worked through the task.

I have claimed to know in this study that my living educational theory about metacognitive strategies can assist junior level students to become aware of themselves as

learners. By being aware that they are learners, it is my claim that they will become more conscious that they have been taught skills and strategies to use in learning activities. They will be able to apply the skills and strategies more effectively because they are aware that there is a purpose for the skills and strategies. My own personal data has validated my educational pursuit in living my theory that grade 4 students can be taught to be learners, not just task completers. The student data have shown me that indeed, my students use language that shows they understand how learning takes place. They are able to talk to me about themselves as learners in a whole group, small group and individual setting. I needed to have my claim validated by someone other than myself that indeed this is what is happening in my classroom.

My critical friend, Barb, spent several hours in our class from January, 2009 to June, 2009. Her statements to me regarding my practice have been the professional validation I needed to substantiate my claim. She has shared her observations of my students' learning with others in our cohort study group (Study Group meeting, May 21, 2009). Her suggestions and insights into my practice have given me a new perspective to consider as I reflect on my practice and the impact of my educational influence on my students. On May 8, 2009, my critical friend video taped the student conferences that focused on our report writing activities of the past 4 weeks. The focus of the conference was to have the students explain what they had learned about report writing, and what they would be thinking about report writing as they began the Medieval Times research project. The following email from my critical friend following the taping session provided the validation for me that my students are indeed beginning to think about themselves as learners while they are developing their academic skills.

Observations and Reflections on the Report Writing Conferences in Mrs. Nikiforuk's Grade 4 class by Barb, May 17, 2009.

Observations:

- *The students appeared quite excited about being video-taped and talking about what they have learned about themselves and about report writing.*
- *Students appeared quite comfortable and relaxed with Mrs. Nikiforuk.*
- *Some students were able to use specific language which indicated they understood the process and concepts of report writing at a deep level but that they also understood the meta-cognitive/reflective process as well. Other students appeared to understand the concepts inherent in report writing but couldn't always use specific language to describe their understanding.*
- *Most students (all but one) were able to describe themselves as a report writer before the report writing lessons and practice and also able to describe their growth and improvement in their report writing skills. Many were able to articulate what they needed to do in the next report writing assignment to improve.*

Reflections:

- *I reflected upon myself as a Grade 4 learner and I don't think I would have had the sophisticated language and concept understanding to talk about one form of writing is such detail and I certainly wouldn't have been able to speak so critically about my own learning and growth and next steps.*
- *I reflected upon the relationship between language and high order cognition and meta-cognition. If you have a weakness in expressive language or concept*

formation it would be difficult to explain what report writing is and also difficult to evaluate yourself as a learner. I don't believe however that the individual isn't capable of meta-cognition but maybe we need to think of alternative methods of showing the process. Would that student be able to decide between two reports which was the better written???? Would that student be able to put in order cards which had the steps of report writing written on them??? Would that student be able to look at two pieces of his/her own writing and point out how things have improved or not????

- *I reflected also on the relationship between relationships and meta-cognition. I think it is important to feel that you are in a safe and accepting environment before you begin to expose yourself as a learner with both stories of success and failure. I noticed that the students seemed to have a very comfortable and trusting rapport with Mrs. Nikiforuk. Many of them were not afraid to express how they used to have some poor writing habits but now they have improved. They were not hesitant to describe what they needed to watch out for in the next report so as not to make the same mistakes again. Does a positive, trusting relationship between teacher and learner promote an openness to sharing and exploring oneself as a learner??? Would the students' responses have been as rich if a stranger had done the interview with them??? (email from Barb, May 17, 2009)*

I have presented the data and my analysis of the data as it relates to my question, What are the metacognitive strategies that I can incorporate into my daily practice, and how can I use these strategies to help my students be more aware of themselves as learners. I believe the data shows I have found ways to build metacognition into my daily

practice and, by using the strategies, most of my students are able to think about the way they are learning. In Chapter Five, I attempt to conceptualize my learning as it relates to my living educational theory and describe how I can share the findings from my action research with other interested practitioners.

Limitations of My Study

This study is limited to the use of metacognitive strategies in one grade 4 classroom during the 2008-2009 school year. As such, the findings are limited to this classroom. The specific lessons and their sequence were not reported in this study so it would not be possible to replicate my teaching activities in the way that I conducted the lessons. In fact, I will not be able to replicate the lessons again in just the same way. Variables such as class size, student temperament, student interest, teacher's purpose, teaching style for a given lesson on a set day in this school year will not be the exact same in a different class and therefore cannot be controlled. As a result, the findings would be different in another setting.

This study involved determining what are the metacognitive strategies that could be used in a classroom with junior students and whether they are useful in helping these students become more aware of themselves as learners. The metacognitive exercises that I used are self-designed and relate directly to the academic tasks that the students were doing at the time. In this respect, the specific worksheets, conferencing questions, and discussion opportunities I used cannot be directly replicated by another teacher in a different setting. In fact, I will have to redesign the thinking questions to align them with the lessons that I will be teaching with my next class, as I will not be able to reproduce the lessons in the exact form as I did this year. The variables that made it possible to

work with the students from this year will not be the variables for the next class, and as such, adjustments will have to be made to meet the specific learning needs and styles of next year's students. The examples of the metacognitive exercises provided in the appendixes are to be used as samples of self-designed thinking exercises.

The findings in my study are related to the performance of the nonidentified students in my class. I had five identified students in my class. The identifications included autism, mild intellectual disability, severe behaviour conduct disorder, and learning disabilities with poor executive functioning. Although the identified students participated in the classroom activities along with the other students during the course of the year, their program was differentiated. The findings from the differentiated program were not reported on in this study. A research study that examines the question "How can I improve my practice to assist students with learning and behavioural difficulties to develop metacognitive skills" could be considered by practitioners who are concerned with that area of their practice.

CHAPTER FIVE: CONCEPTUALIZING MY LEARNING

The purpose of this chapter is to present how my understanding of myself as a teacher-researcher and the embodied values that I bring to my teaching practice influenced me over the course of the 2008-2009 school year as I sought a new way to improve my practice. Why do I seek to improve my practice? I am a late career teacher. My teaching practice has been validated in a social context by many. The administrators I have worked for have completed performance reviews that summarize my work as exemplary. Most of the parents that I worked with have appreciated my efforts with their children, and many have verbalized their positive feelings about my work. Most of my students over the years have demonstrated their trust in me by sharing not only their work but also their life stories. Because of my collaborative efforts, my colleagues have validated my work and my impact on our working environment by thanking me personally for my collegiality and acknowledging my contributions in a public forum such as staff meetings. I could be content and say that I have accomplished all that I need to accomplish in my career. But a core value I hold dear is to continually be inquiring. It is what I try to instill in my students. Always look for more, whether it is evidence in a story or a solution to a problem on the playground. For me, the teacher, my ongoing inquiry is “How can I improve?”.

I seek to improve my practice because I am my living educational theory. “I” as a contradiction believes there is always a different way to look at how I can improve my students’ learning and their understanding of their place in the world at large. This is how I have lived my career.

I have studied myself and my practice from a different perspective through my action research this year. In the past, I relied on knowledge coming from outside sources. I attended in-service training sessions where the Ministry initiatives were introduced, new teaching strategies were explained, and I followed the directives that were given by my administrators. I am an effective teacher because I was able to learn from the outside sources and implement the practices that were expected. Still, I had questions. Why, if I was doing all that was expected of me, was I still not satisfied with student outcomes? This became the focus of my quest. How can I assist my students to understand that they are learners and not just task completers?

To answer my question, I began formal studies as a graduate student. I wanted to know more about how I, as a teacher practitioner, came to be. I needed to have a greater understanding of my practice from a theoretical and research-based perspective. Through my studies, I have come to understand that theory by itself does not have meaning unless it can be connected to practice and practice can be improved when the theoretical underpinnings are understood. As Carr and Kemmis (1986) state:

Theories are not bodies of knowledge that can be generated out of a practical vacuum and teaching is not some kind of robot-like mechanical performance that is devoid of any theoretical reflection. Both are practical undertakings whose guiding theory consists of the reflective consciousness of their respective practitioners. (p. 11)

As a graduate student, I have been embarked on a journey of change. I have self-initiated my journey so it has been an experience I have embraced even when there have been times when I asked myself, “Do I really want to do this?” or “I don’t I understand.”

My desire to hold steady and continue with the changes I wanted to make in my understanding of my practice, despite moments of self-doubt and uncertainty, is validated by the findings of Hargreaves (2004). He states that “self-initiated change evokes enthusiastic and effusive emotional responses from teachers who become energized and motivated by the benefit and fulfilment and accomplishments they see in their students and themselves” (p. 304).

I have come to understand that I bring to my practice years of embodied knowledge. Delong (2009) describes how teachers hold myriad ways of knowing about teaching and relating and responding to students that are not usually found in academic texts. My embodied knowledge is the sum of my experience and my way of knowing. It is the driving force of my practice today. As I have gathered knowledge, skills, insights, and experience over the years, I have come to know how I teach and that I evolve and change my practice as an improvement strategy.

In one of my papers, I explained how I was using a class developed anchor chart that outlined what learners do. They remember, they build on previous knowledge and they change how they do something. My instructor commented, “Nice, but where did you get that idea from?” I remember thinking to myself, I didn’t find that in a text, I just know that is what we do as learners. I shared this incident with my academic advisor, Dr. Delong, who discussed the concept of embodied knowledge with me. She validated that the chart we developed came from the knowledge I have gained through my interactions, my observations, and my experiences with students over the years. (J. Delong, personal communication, May 21, 2009). I took my embodied knowledge one step further and researched my belief about learning. My very simplified hierarchy of learning that I

presented in a way that was meaningful to my students is based on empirical research about the cognitive process. Using Bloom's Revised Taxonomy (2001, p.31) remembering from our chart correlates to Levels 1 and 2 of the taxonomy (recognizing, recalling, classifying, explaining). Building on what we know correlates to Levels 3 and 4 of the taxonomy (executing, implementing, differentiating, organizing, attributing). Changing how we do something correlates to Levels 5 and 6 of the taxonomy (evaluating, making judgments, designing, creating). Through dialogue with my advisor, my critical friend, and my own research, I have validated my claim to know.

Another change in my practice has been the use of self- reflection as a means of understanding what I am doing and why and what are my next steps. I believe I can claim I have always engaged in a process of thinking about my work. If I didn't think about my practice, it would look much like it did when I first started teaching. My resources would be the same, my methods would be the same. As Ghaye and Ghaye (1998) cite Brookfield, "Being a critical thinker is part of what it means to be a developing person. Without critical thinking our workplaces remain organized as they were twenty years ago" (p. 18).

The practice of reflection-in-action and reflection-on-action as described by theorists such as Ghaye and Ghaye (1998), Cole and Knowles (2000) and Schön (1983) has enabled me to think on a deeper level about my practice than if I just remembered what had taken place in my classroom. By recording my actions and the thoughts that accompanied my actions, I have been able to revisit my practice. Ghaye and Ghaye state that "reflective practice is a research process in which the fruits of reflection are used to challenge and reconstruct individual and collective action" (p. 5). My journals have given

me the opportunity to reflect, ask new questions, be conscious of the values that I bring to the classroom, and restructure my thinking about my practice. My journals allowed me see and understand what were the factors at a given time that resulted in the events of the day. Was it a disruptive child who interfered with our lessons, was it my choice of teaching materials, was there a social conflict taking place, was there an outside event that called for a change in plans, was there a technical glitch with equipment that meant a lesson could not proceed? By reading through my journal entries, I was able to evaluate my responses and reactions to the kinds of situations that happen daily in a classroom. Ghaye and Ghaye refer to this process of reflection as “making sense of teaching and learning in that we become more aware of the interaction between ourselves and the context in which we teach” (p. 6). Reflection as a practice will help me consider the ways I can strive to improve my practice while Palmer’s (1998) voice will be the guiding beacon, as he asks, “Who is the self that teaches?” (p. 4).

Central to my understanding of my living educational theory is the concept of life-affirming energy with values as explanatory principles of educational influence. This to me is the essence of teaching. There has to be more than a paycheck to keep teachers coming to the classroom day after day, year after year. I understand what Whitehead (2008) means when he says “a living educational theory includes a relationally dynamic and receptive response to the flows of energy and values in the living space. Life affirming energy is the love for what we do in education” (p. 14). I have come to understand this is why I have stayed in teaching for all these years. I love what I do. The act of teaching is rewarding in and of itself because it is in constant motion. A given lesson cannot be reproduced. It will transpire only the way it did at that given time. The

ever changing variables from one day to the next give teaching an air of adventure. You can never be certain of how the day will unfold. Nothing is fixed in teaching except than the bells. How I am each day will have a tremendous impact on the children in my care.

I am always cognizant that I show my students how much they mean to me and what we do in the classroom is meaningful and relevant to all of us. The values I want to impart to my students are transmitted only if I live them. I can not say be respectful to each other if I am not respectful of my students as human beings. I can not ask my students to persevere if I, myself, give up on them when they don't understand. I strive to be the educational influence that will carry on with them long after they leave my class. I want my students to believe that they can learn, that they can contribute, and that they can make a difference in their world. Some of my students will live in a small world because of their circumstances, but it is important for me that all my students, regardless of their circumstances, know how to live in their world productively and as good citizens. This is the life-affirming energy that keeps me going.

As a teacher-researcher, I am generating knowledge from the study of my practice. The purpose of my study was to determine the metacognitive strategies that I could use in my daily practice and use these strategies to assist my students to become more aware of themselves as learners. My practice has shown that I was able to use metacognitive strategies effectively in the classroom. The data that I collected from students demonstrated to me that my students were able to talk about themselves as learners in different settings within the classroom. I have shared my findings with my critical friend and in this document. As a teacher-researcher, I can look for other opportunities to share the knowledge that I have generated from my study. McNiff et al.

(1996) suggest that the teacher-researcher establish validity of the claims made by sharing the resulting knowledge with co-practitioners, people who understand the context in which the teacher-researcher operated and who can struggle through the evidence provided to understand the claims that are being made (p. 24).

The Professional Learning Community (PLC) is the milieu today in which teachers are encouraged to share their teaching stories. This is the place where I can present the story of my action research; the strategies I used and the way in which the students interacted with the strategies. The School Effectiveness Framework: A Collegial Process for Continued Growth in the Effectiveness Of Ontario Elementary Schools (2007) has recognized the role of the PLC and is now mandating that teachers gather evidence from their classrooms for public viewing (the staff) in order to analyze the areas of instructional strengths, student performance, assessment, and evaluation to determine areas for improvement. In this respect, I have a built in arena and audience with which to share my findings. Because my classroom practice has been video taped and photographed, I will be able to bring evidence of the students using the metacognitive strategies in an authentic way. The PLC then becomes what Snow (2001) cited in Delong (2009) describes as a procedure for systematizing teacher knowledge.

The knowledge resources of excellent teachers constitute a rich resource, but one that is largely untapped because we have no procedures for systematizing it. Systematizing would require procedures for accumulating such knowledge and making it public, for connecting it to bodies of knowledge established through other methods, and vetting it for correctness and consistency. (p. 9)

I will always remember this class and hold them dear to my heart for many reasons. They were the participants in my action research. This is the class that has been video taped, photographed, and digitally recorded. They actively worked with me as I sought a new approach to my teaching practice. We had so many learning adventures during the course of the year. The images of their smiling faces and the words they wrote and spoke are the evidence of my living educational theory. I will always remember my students flocking about me as I came out to the portable in the morning. There were always good morning hugs, stories to tell, treasured possessions to show, and offers to help. This is the only thing I will miss about the portable. The morning always started with personal connections. It was a good way to start the day.

I will not be at this school next year. I will not be seeing my students again on a daily basis. This a concern to me. Their awareness of themselves as learners is in its infancy. They have just begun to think about how they are learning. They are just learning to talk and write about how they applied their thinking during an academic task. Metacognition is a skill that needs to be practiced and developed like any other skill. If it is not used, then it will disappear from the repertoire of learning skills the students are building. My concern is one that was experienced by Mounter (2009). Mounter conducted a similar research study with her students and writes:

The children progress on to other teachers but I yearn to still work with them and share their thinking. Talking to the children I had two years ago, they said they don't talk and think about learning so much now. They described it as dripping away and were keen to talk about what we used to do together. I thought that was really sad. This demonstrated their ability to reflect critically on the educational

value of their previous experiences and their beliefs of the conditions that benefit learning (p. 4).

This is a big regret because these kids are so special to me. My living educational theory is my imaginative act of hope (Novak, 2002, p. 4). I imagined forward that I could assist my students to understand that they are learners (see Figure 5) and now my hope is that what they learned about themselves during their grade 4 school year will carry on with them into the future.

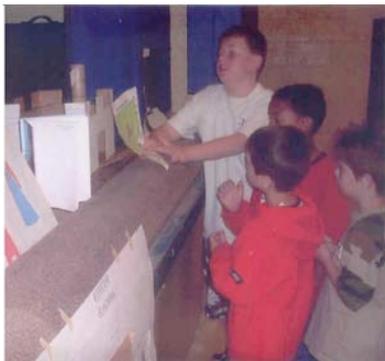


Figure 5. Students at work. It was a busy year learning, thinking about our learning, and sharing our learning.

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Appendix A

Ethics Clearance Letter

To be inserted here

Appendix C

Independent Writing Checklist

Independent Writing Checklist

You have four different writing tasks to complete for **Wednesday, November 5**. Use this checklist to keep you on track. You will be responsible for managing your own time during the independent writing time. Check off each task as it is completed.

Task # 1. Hallowe'en Narrative Story using the writing process.

Stage # 1 Think and Plan ____ Stage # 2 First Draft Writing ____

Stage # 3 Revise (finding mistakes, improving my story) ____

Stage # 4 Teacher Editing ____ Stage # 5 Publish ____

Task # 2. Create a Hallowe'en Free Verse Poem

Use the First Draft worksheet to create your poem. Make sure you have words and phrases organized to create a feeling and picture of Hallowe'en.

Draft ____ Published and Illustrated ____

Task # 3 Hallowe'en Descriptive Sentence (Parts of Speech)

Write a very descriptive Hallowe'en sentence that tells:

Who Where When How What

Use the First Draft worksheet to write your sentence. Revise it using different words until it is the scariest, creepiest sentence you can write. Publish you sentence on the Ghost Page for our classroom book.

Draft ____ Published ____

Task # 4 Ending Paragraph Published (Fall Fair)

Published and printed _____

Daily Work Log

Evaluate your daily writing period. Record what you completed each day and what writing skills you practiced.

Tuesday, Oct. 28 _____

Wednesday, Oct. 29 _____

Friday, October 31 _____

Monday, November 3 _____

Tuesday, November 4 _____

Wednesday, November 5 _____

Appendix D

Independent Reading Tasks

Round #1 Independent Reading

Picture Book Summary

Title _____

Write a summary of the picture book you chose to read in this round of independent reading.

You will use an opening sentence to introduce your summary. You will use story mover words to move you through the story events.

Remember a summary informs the reader as to what the important events are in the story. It does not tell about the interesting details.

Round # 1 Independent Reading**Narrative: Reading Strategies**

Title of Novel

Select an interesting scene that was written into the novel. Use visualization to recreate the scene as an illustration. Include a caption to give your reader a context for your illustration.

Would you recommend this novel to someone else to read. Why or why not? Give specific examples from the text to support your thinking.

Appendix E

Hand Design Self-Evaluation

Name _____

Explain what techniques you used to create your hand design.

What was a challenge for you with this art activity? _____

Compare the 2 designs that you created. Describe the difference between the 2 pieces of art.

What improvements did you make on your 2nd design? How were you able to make these improvements?

Appendix F

Medieval Times Project Reflection

Medieval Times Project Reflection

Projects can take a lot of time and effort to put together. But when they are all finished, people usually feel good about their finished project.

Think about the following and jot down your thoughts:

When you started working on your project, what previous knowledge could you draw on to help you work through this project?

What skills did you have to use to put your project together?

What was the best part of the whole process of doing the project?

What was the hardest part of doing the project?

You will have to do another research project or report next year. What have you learned from doing this project that will help you next year.

Appendix G

Final Thoughts

Final Thoughts

By _____

We have spent this year thinking about ourselves as learners. What did we come to understand about learning?

What do you do with your subject tasks that shows you are thinking about yourself as a learner?

What was something you know that you have gotten better at doing this year? How do you know you have gotten better?

What is something that still is hard for you? How do you know that this is difficult for you?

My favourite reading book this year _____

Why? _____

My favourite project was _____

Why? _____

The most interesting thing that I learned this year was _____

Why? _____

My favourite word that I learned this year is _____

Why? _____

My favourite school trip was _____

Why? _____

I think I am ready for grade 5 because _____

The most important thing that I know about myself as a learner that will help me in grade 5 is _____
