Why did I mark that?

Understanding the Assessment of Student Learning Through Self-study

by

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Abstract

This study is a narrative self-study that reflects on the relationship between knowledge of assessment practice and theory and factors that lead to a change in practice.

There are a variety of ways to use assessment as a teacher in school settings, and this paper explores how the researcher-subject developed and changed assessment practices to inform her teaching, to assist her students in attaining mastery of curricular outcomes, and to report student achievement to parents and school administrators.

While tackling this complex topic, one discovers there is not one best way to assess student learning. Deciding to learn more about assessment demonstrating a willingness to try new assessment methods, to grow from successes and failures, and to look introspectively and critically current assessment practices, the result can be a more valid assessment of what a student knows and can do, and a more informed understanding of good teaching and assessment practices.

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I dedicate this work to my two daughters, Tressa and Isla. I hope that you find a love for learning, and go as far as your dreams will take you.

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Why Did I Mark That? Understanding the Assessment of Student Learning through Self-Study

Introduction

I remember the first time that a teacher's assessment of my work had an impact on my life. I was in my first year of university and received a "C" on the first paper I had ever written for a tertiary level course. I wasn't happy with this grade. I was someone who viewed herself as a "good" student and to this point I rarely received a grade of C on schoolwork, especially when I put an effort into what I was working on. When the paper was returned to me, free of any comments or notation, I felt my heart sink. I recall thinking, "What did the C represent? How was it determined? What had I done so poorly?"

At the time I was asking these questions, I didn't know that I would one day be a teacher myself, or that I would be a teacher with a specific interest in assessment. My interest in this particular aspect of education is a consequence of my experiences as a teacher when, through numerous events, experiences, situations, I began to see that what I did in terms of assessment had much more of an impact on my students then just receiving a grade. I came to realize that how I teach and the pedagogical decisions I make should be influenced by the way I intend to "measure" student learning. When I began to view assessment as more than a means to arriving at a mark for a report card or for an assignment, and understood that it is a process that can assist with all aspects of teaching, I became a better teacher. I would not say that I have the best assessment practices all the

time, but my awareness of the power of assessment and my willingness to reflect and learn from it and about it allows me to help my students. I know that assessment assists learning, is about learning, and it is a form of learning. Perhaps the day I received the "C" on my paper was the planting of a seed that would lay dormant, waiting until the time was right and I was ready to tend to it.

My Questions

When I began to research assessment of learning I thought that I would be seeking out the very best methods to assess the students I was teaching. What I soon recognized was that the process – the questioning and reflecting - was where my learning, understanding, and transformation would occur. It was not about finding the best way to assess learning. It was about becoming aware of my thinking concerning assessment, how my ideas about assessment and the assessment practices I experienced as a student and was using as a teacher had evolved, and the factors that had initiated and/or facilitated these changes over time. If I was to learn and continue to learn from my experiences as a teacher and as a student obtaining a Master's degree in education, I recognized that I was going to have to focus my research on both the existing literature and my personal experiences and beliefs. The questions driving my research became: What happens to my thinking with respect to assessment as I read the assessment literature and engage in conversations about assessment with professors, school administrators and teacher colleagues? How do I take what I have experienced and come to understand and use it to better my assessment practices and, thus, myself as a teacher? Why have I changed in the way I plan so the end result is a deeper understanding of what students know, understand,

and can do with the knowledge the lessons help them develop? What enabled me to make these changes?

When I realized that I would be reflecting on my own experiences and beliefs to answer these questions, it became clear that the method of self-study would help me to uncover what I do and why, and what I think and why.

Method

Self-Study

The purpose of self-study in education, particularly teacher professional development, has been to improve programs and to improve aspects of teaching. When teachers engage in self-study, they are using their own thoughts and teaching experiences to better understand teaching and student learning. Oftentimes, a new passion is ignited when teachers take on the task of looking into their practice and figuring out how to use past ups and downs in their own career to become a more competent and effectual teacher (Samaras & Freese, 2006). This is what happened to me. I had been reading so much about assessment and devoting time and attention to forms of assessment and evaluation in my graduate program, and self-study provided the means by which the ideas that I was acquiring could be discussed, reflected upon and learned from.

One of the assessment studies I read about was conducted by teachers at a high school in the United States. A professor, who had been teaching pre-service teachers about science teaching, returned to teaching in a high school classroom. He and several colleagues began a self-study to determine if the methods that he had been teaching his pre-service teachers would actually work in the classroom. His data, which came from journaling, discussions with students, and his own experiences, allowed him to see a that

the best way for teachers to understand and be able to implement teaching strategies and programs was through participation, not observation. That is, pre-service teachers must be involved in and experience the problems faced by teachers and attempt to resolve these problems if they are going to be productive in the classroom. He was speaking particularly of the experience of teachers implementing a new program and having to make decisions about curriculum and teaching methods (Diase, 2010).

This particular study set out to answer a question for the professor-teacher. He was able answer the question through reflection and conversations with others. With my research, I am utilizing this same reflective practice to determine if the methods I am using for assessment are productive and relevant in the sense that they are telling me and the students what we need to know to evaluate knowledge and skill development.

Hamilton (2004) states that it is important to appreciate the contribution that the self makes in a self-study, but stresses the importance of creating transferable knowledge that is beneficial to others while improving practice. There are teachers in my school who struggle, as I do, to meaningfully assess students' skill development and knowledge. I believe that my research fits the requirement laid out by Hamilton, as the knowledge I gain will be shared with my colleagues who are also dealing with questions and frustrations about their assessment practices.

When undertaking a self-study the goal is self-awareness and self-improvement. Through personal reflection and the reading I have done, I have noticed that I do not always put into practice my beliefs about assessment. Lablonsky (2001) states that self-study allows the researcher to answer the questions "How do I live my values more fully in my practice?" This kind of questioning is a central component of self-study.

Alderton (2010) has discussed how self-study can be beneficial when it comes to reevaluating practice and ensuring that beliefs are put into practice. Her research on how self-study can be beneficial to improving practice began with the recognition that she was not consistently acting on her beliefs about education. Upon reflection she came to the realization that self-study can help teachers understand more about what their students are learning and how they come to acquire this knowledge. She also found that reflective practice that is vital to self-study could allow teachers to grow and improve by allowing for examination of personal assumptions and beliefs about teaching and learning.

After reading Lablonsky's paper and about Alderton's experiences, I learned that my engagement in the self-study process would not only help me grow and learn as a teacher but would could also be a vehicle to encourage other teachers to reflect on their practice, ask questions, and challenge existing perspectives and assumptions. Self-study is not only a way to improve something specific about your teaching, there is also so much to be gained by engaging in a study of the self.

At times, during my research and through my attempts to meaningfully assess my current students, I have become overwhelmed with sorting through all the information I have and trying to apply aspects in my teaching. But it is from this frustration that I am encouraged to carry on with the method of self-study. Bullough and Pinnegar (2001) point out that this sense of struggle and feeling of discomfort is an important part of the process. When undertaking a self-study the goal is to provoke, challenge, and illuminate, not to confirm and settle. I am already finding this to be true and expect that I will be left with as many questions when I finish this study as I began with. I have come to realize that that is one of the purposes of self-study. Those undertaking the self-study process are

not likely to have all questions answered. It is through engaging in the processes we be come better educators. Since I have been teaching there have been, and continue to be, instances where I have felt uncomfortable with my assessment practices. These occurred at different stages, for different reasons, and I have handled them in different ways. Some of these incidents have been extremely significant and have made me the teacher I am today. Other moments have been little light bulbs going off that show me "this was effective", or, "don't do that again". Some have come in the form of research and university studies where I have looked at the pedagogical reasons or explanations of things.

Stories and Narrative Self-Study

Now that I was clear that self-study would assist me in re-evaluating my experiences, knowledge and beliefs, I needed to determine the path my self-study would take. I have always been a storyteller, and the years I have spent on my Master's degree have led me to become more of a reflective thinker. Both of these characteristics brought me to the research methodology of narrative self-study. Narrative self-study is frequently used in the field of education because it focuses on the human experience. It seeks to understand how people make sense of their lives, and it relies on humans and their stories to do so.

Clandinin and Connelly (1990) define the relationship between narratives and stories and how they can be powerful in educational research by stating:

...humans are storytelling organisms who, individually and socially, lead storied lives. The study of narrative, therefore, is the study of the ways humans experience the world. This general notion translates into the view that

education is the construction and reconstruction of personal and social stories; teachers and learners are storytellers and characters in their own and other's stories. (p. 2)

A significant part of my story is the changes that I have experienced and how I have reacted when I have had to let go of a belief because I learned and came to understand that there was a better way. These changes came through experiences in the classroom, conversations and interactions with colleagues, professional development opportunities, and throughout my Master's studies. In order to learn from our stories and the stories of others, one must acknowledge that stories are important for research, teaching, and learning. Genishi and Dyson (1994) address how stories address this idea of change when they answer the question; 'Why do we need stories?' They state,

Stories help us construct our selves who used to be one way and are now another; stories help to make sense of, evaluate, and integrate the tensions inherent in experience, the past with the present, the fictional with the 'real', the official with the unofficial, the personal with the professional, the canonical with the different or un expected. Stories help us transform the present and shape the future for our students and ourselves so that it will be richer or better than the past. (pp. 242-243)

As a teacher I know I can learn from my own stories that are born from my experiences. Upon reflection and the re-reading of my stories and experiences, I gain new perspectives and can begin to understand and examine why some of my ideas and values have changed, and why I believe what I do. I used to be one way and now I am another

and that is because I have deeply reflected on my experiences and been honest about what makes for good teaching and practices that are not beneficial to teaching and learning. This would have been impossible if I had not read, reflected upon, practiced, and changed what I think and do.

If I wanted to truly understand how to assess my students in meaningful ways, acquire significant information about their learning, and adhere to the expectations of my school, division and province, as well as the expectation of parents, the students and myself, I would have to understand the fundamentals of assessment. I would also have to have a clear understanding of my thinking about assessment. In order to make meaning of all the aspects of assessing, I needed to have a clear picture of what I thought, what I knew, and why certain things made sense to me. I came to understand the first step in answering my questions was not about finding the best way to assess students, but figuring out what happens to me when I meaningfully engage with others, professional readings, and my own personal data.

With this understood, I had further confirmation that narrative self-study was going to direct my research and my thinking. My experiences from high school through to the moment I am currently experiencing reflect a change in my thinking over time. My changing roles from a student, to a teacher, back to a student, as a researcher as well as personal and social interactions have all shaped my beliefs and ideas about assessment. My own experiences have been multifaceted and ever changing. This is a fundamental aspect of inquiry. Each interaction I have had, article I have read, and lesson I have taught has been constructed and reconstructed and resulted in new meaning for me. Using a model that reflects and welcomes this seemed to be the only way to tell my story.

Clandinin and Connelly (1990) state the importance of temporality – or locating things in time in narrative inquiry. Events or things have a past and a present. They also have a predictable future, all in terms of how they apply to the inquirer. I had a clear assessment past, one that I could tie to my high school days, and it became stronger as I continued my education and became a teacher. Without time, I would have no story because the student I was in high school shaped the student I was in university, and the teacher I became. The ideas and students that I encountered taught me the lessons I was ready to learn at that particular moment in time. One interaction occurring at a different time may have led to different results, but because each moment happened to me when it did, the results are unique to me and to my story and each plays a role in the learning that my students and I both had done and continue to do. This is why reflection is so important; for it is only when looking back that we are able to accurately locate that moment.

Going back to the beginning of the introduction and to the grade given to my first university assignment, I didn't know at the time that it was going to become one of my first stories. The reason the "C" made me uncomfortable is because I was accustomed to receiving good marks in high school – when I wanted them. But that changed when I was a first year university student. My first real assignment was a paper on the gross domestic product (GDP) of Canada over time. I spent hours on this paper and was happy with my final manuscript. As a result, I was filled with anticipation as this assignment was being returned. When the paper I had written was handed to me, I let out an audible gasp as the "C" stared back at me.

Making sense of the C.

Perhaps I should not have been as surprised as I was, as the early days of my first year in university had been a struggle. I had dropped two courses because they were difficult, and I recognized that I was out of my element. In high school I had been a good student, as I remember it. My marks were acceptable, and I didn't really work very hard in class. I grew up in a small town and was active in the school's extra-curricular activities. I was on good terms with my teachers, and I think that there were times when my personality may have bumped my grade from a B to a B+. I have no proof of this, but looking back on some of my high school work I think this is a fair assumption.

One thing I do recall with certainty is my resolve in specific situations. When I decided I was going to do something, I usually did it. In grade ten, for example, I did not want to write the final examination for science because I had heard it was next to impossible to pass with high marks. So I worked diligently on each assignment, studied for quizzes and, as a result of my determination, was one of a handful of students in that class who received exemption marks and was excused from writing the exam. The same thing happened in grade twelve biology and English. In English class, the teacher gave the writing of a short story as an assignment, and said he would read the best short story to the class. That was all I needed to hear. When my friends went to a party, I went home determined to write "the best short story", which I did.

This was why I was not ready to accept the C on the paper about Canada's GDP. I worked conscientiously on this paper and thought it was well researched and well written. A friend suggested that I speak to the faculty advisor assigned to me in this class to discuss the mark I had received. I made an appointment and went to meet him. I sat in his

office and prepared to state my case for a better grade. Then, all of a sudden, I began to feel nervous and foolish. I was nervous because I wondered if he was right. He had not told me why I received this grade; maybe it was a C paper. I didn't want to embarrass myself. If this paper was terrible, why was I here? Had I made a mistake? When he eventually came into his office, I politely introduced myself and said, "I am not sure why I got a C on this paper." He took the paper from me, quickly fanned the pages and said, "OK, I'll give you a C+."

I said thanks, took the paper and left. I was confused, completely befuddled. I wasn't sure if he even knew the mark I deserved. Did I know? I remember standing in the busy hallway, students and professors walking briskly by me, and thinking, "What just happened?" Today, I can speculate as to why this exchange occurred as it did. First, this particular faculty advisor may have perceived me to be another first year student who thinks she knows it all because she pulled off good marks for substandard work in her small town high school. Second, he may have taken the stance, why argue; I have to read one hundred papers every other week, I'm not re-reading a dreadful first year paper. Third, he may have thought, what did the grade for this particular paper really matter? If weighted 15%, the difference between a C+ and a C was 5% or 11.25-10.5, which is 0.75 points.

At the time, I accepted this as one of many new experiences. I did not realize until much later that this might have been the spark that led to this very moment, which is the result of eight years of teaching middle years students and six years in a Master's of Education program studying assessment.

While this particular event was the first time that I felt affected by assessment, it was not the first time I had a revelation associated with education. My application to the Faculty of Education forced me to reflect on why I would be a good teacher and why I should be thinking about going to school for a new career when many of my friends were established in theirs.

It's more than grades and report cards.

Why did I want to be a teacher? This question comes up dozens of times when one enters the faculty or tells others they are going to be a teacher. I was not one of those people who would say with shining eyes "I was born to teach!" or "I have never wanted to do anything else other than be a teacher!" But I did have an experience, in that same grade ten science class where I was excused from writing the final exam, which has stayed with me over the years. A teacher, whose best years were behind him, taught that class. It was clear that if he ever had a passion for the job it had long since been extinguished. His lectures were boring, his experiments were elementary, and I found him frightening. He would shout at students, his tall, lean frame leaning over our desks. Our hands would shake as we lit Bunsen burners and created mixtures. I am not sure that I learned much about science in that class, but I did learn a valuable lesson that became the cornerstone of my belief in education.

One day a brave student dared to say loud enough for the teacher to hear, "This is stupid. I don't need to know the temperature that salt will dissolve in water." We all braced ourselves for what was to come; a typhoon of yelling, flying spit, and waving arms as the teacher shouted at us to pay attention to our work without being insolent children. But it never came. In a calm, controlled voice, the teacher simply said this: "I

don't expect you to remember the temperature that salt dissolves in water, but I do expect you to be problem solvers. I have given you a problem, we have learned about solutions, now solve the problem."

I understood what he was saying. I didn't always want to be told what to do or to be given the answers to every question. I was a curious student, and I liked to figure things out. I also enjoyed working with others and loved debating and discussing. I wanted to learn things, use the skills I had developed, and be a problem solver.

As an adult, I realized that I wanted to be a part of this process for students. I did not want to stand at the front of a classroom and dictate notes composed of facts, dates, and other kinds of information they would need to know for tests. I wanted to use a problem-based approach and help students to solve problems. I believe that the ability to problem solve is a great life lesson that everyone can and should learn. This is the frame of mind I had when I entered the Faculty of Education. I wanted to work with young people, to engage them in discussions and debates, and help them to become well-informed and versatile problem solvers.

The incident in grade ten science was the first time I realized that school was not just about learning facts and completing assignments and tests for marks. It was a place where discovery and opportunity existed for anyone who wanted it. It was more than grades and report cards, it was about learning. Maybe that seems obvious, or it should be and it probably is to most educators, but it is an interesting lesson for a student to figure out. As a teacher today, I often tell this story to my students when I talk to them about being self-aware as learners, and seeing, and really understanding why we do what we do in class and in school. I believe it's very important, but I also think it is something that

students have to figure out on their own. My interest is in assessment as a tool to better my students and to improve myself, and it comes from a place in me that is a 15-year-old high school girl who realized that to learn we must accept and embrace that school is not just about assignments, it is about learning. When I talk about assessment, I often say that in a perfect world it would not exist. We would learn because we want to. Learning would be its own reward. At times it is, and when those moments come, I know I have chosen the right profession. But, while I wait for the world to become perfect, I want to assess as best as I can so that my students are learning and I know I have helped them to do so. That's pretty close to a perfect world.

Teacher Candidate in a Two-Year, After-Degree Bachelor of Education Program

When I entered the Faculty of Education I was like many others who walked into the building that day in September. I was full of illusions. I figured that the faculty was a stepping-stone to my future, something I had to pass through on my way to "getting on with it". I was not someone who referred to my education as "jumping through hoops" as I heard some of my classmates say, but after I kept hearing from my professors that the classes we were taking would not teach us how to be teachers I started to wonder what exactly we would be learning.

As I recall this period in my life, I didn't spend a lot of time thinking about how I would assess students. I don't think I would have even used that word "assess". I do remember taking a trip with a friend after I had been in the faculty for almost a month. She had been teaching elementary school for about four years. We were on a plane, and she pulled out some marking and asked me to help her. She gave me the math speed tests saying that I wouldn't know how to mark her science assignment. I remember thinking that I must have a lot to learn if I was not able to mark science assignments that were completed by students in grade two. But as I watched her read the assignments I started wondering, "How does she know? Will I be taught that? If my professors are not able to teach me how to teach are they going to be able to teach me how to mark?" At this early stage I didn't even know what questions I should be asking, or what there was to learn. I did not know what I didn't know and that made me nervous.

There were many times in my first year of the program when I was simply overwhelmed. I would spend a lot of time thinking about what I had to do and how I would figure out what I needed to do so I could learn what I needed to become a teacher.

Much of my anxiety came from the fact that I felt like I did not know what I was doing, and I was worried about what I would do when I had students I was expected to teach.

Gone was the notion that I would enter the lives of my students and be able to make them excited about the learning process. I was bombarded with assignments, deadlines, student teaching, and pleasing professors, faculty advisors, and collaborating teachers. I became focused on getting things done.

Learning about Assessment

I learned valuable lessons in the faculty, but I did not learn enough about assessment. I don't recall a single lesson or conversation in classes that focused on why and how to assess learning and how to communicate what an assessment really meant. I do remember learning about formative assessment and summative assessment, but I had no context for this knowledge. I'm not saying that these lessons did not occur, but they didn't make enough of an impact on me that I can recall them all these years later. I truly believe that this is the case for two reasons. The first is that I was not interested in assessment. I had an internal priority list, and assessment was an item way down at the bottom of this list. The life of an education student, especially one who lives away from their parents and is working to pay their way, is very busy. Such a student must prioritize to survive. Second, the faculty didn't do anything that would make me rethink my priority list and pay more attention to learning about assessment. There was no required course on assessment and, as I have previously stated, not a lot of time was devoted to it. The faculty also seemed to have its priority list. I was diligently working and receiving good grades, and my success told me to keep doing what I was doing.

My classmates and I had many conversations about our education and the content of the courses we were required to take in the faculty. There were a number of conversations about assessment. I recall quite clearly one in which a fellow student stated that she couldn't believe an assessment course wasn't mandatory. There was one offered as an elective that she wanted to take, but she couldn't register for it because it was offered at the same time as a mandated class. We discussed this with our classmates and found there were a variety of ideas about a mandatory assessment course. Some held that each professor briefly touched on assessment, particularly "how" to assess. For others, however, there was a sense that this led to a collection of details focused on the varied forms of assessment and little information on why assess or what to assess. Several thought that it was a major deficit in the two year, after-degree program, while others believed there was so much work to do and so much material being covered that the way things were was just fine. Their thoughts were that schools and divisions had different ways to assess, so we could deal with specific expectations when we began our first job. My thinking on the subject incorporated all three ideas. I wished that I had some specific instruction, but I was also beginning to realize that it was impossible to cover everything in the four, nine-week terms that preceded the school-based practica.

School-Based Practicum, Zeros, and Rubrics

During my practicum experiences, talk of assessment rarely came up. My cooperating teachers wanted to know the marks I was giving so they could calculate reports, but I never had to talk about my thinking with respect to assessment or how to determine the value of each piece of a student's work. I constructed rubrics for

everything, or so it seemed, and this was apparently enough for my cooperating teachers and advisors.

There were two instances where I did discuss assessment with my cooperating teachers. The first occurred during the second practicum of my first year in the faculty. My cooperating teacher was discussing the frustration she felt now that the school division no longer allowed the assigning of zeros for incomplete work or assignments not handed in. There were also no deductions allowed for late work. I thought this was idiotic. Why would they do this? How would students learn about deadlines, and responsibility? How on earth would teachers get them to hand in their assignments? Surely they would not do the work if there were no consequences for not doing it. She had begun asking her students to put their name on a paper and would give them a mark of 1. She knew this was not a solution, and she didn't like doing it, but she also felt that there had to be consequences for incomplete work. She had noticed that there were fewer late assignments coming in as students were choosing to do them.

The second conversation I had came the following year when my cooperating teacher and I were discussing an upcoming assignment on Canadian explorers. She wanted to ensure that I had all expectations on the assignment sheet and rubric. She suggested that I have a sample so the students knew what the final product should look like. Her theory was that the more the students knew about what was expected, the better the job they would do. I did like this idea and created a very detailed assignment complete with possible sources, optional discussion topics, and a diagram of how the poster should look. While I was happy with the assignment, I was worried that the students would copy my sample and that I had taken some of the creativity out of the

project. While both were true, there were benefits. The students asked me fewer questions as they felt less uncertainty about what was expected of them. I also had only a small number of instances where the expectations were not met.

On the whole, providing the students with my clear expectations was good for all of us. The class knew what to do, they did not need to ask numerous clarifying questions before they started, and they had a good idea of what I was looking for. It was helpful for me because in this rubric/explanation of the assignment I had a framework by which I could assess their work. I had asked the students to achieve particular goals and their ability to do so would help me assess what they had learned about Canadian explorers. It would also help me to focus on what I was really grading for; their knowledge of the topic, not whether they created and presented the poster correctly. With the help of the rubric, I also worked with the students on specific aspects of the project. We would tackle the assignment in stages, section-by section, head-on and together as teacher and learner. This allowed the students to make good use of the time set aside for working on the assignment and to ask me questions as they arose. Both strategies kept the students from falling behind.

It was at this time that I was coming to understand how assessment was more than giving a mark. It could be used as a tool to bring out the best in students. It was not just ticking off boxes on a prepared checklist or rubric or placing a check mark next to a correct answer. These things were part of the process that brought out of students what they knew. I saw for the first time how my assessing was also teaching. By providing a guide for what to do, I was also providing students with a way to ensure success.

Lack of Assessment Training and Knowledge

In the two years I spent obtaining my Education degree I worked diligently. I spent hours preparing lessons, developing assignments, and talking to people about my ideas. Even so, I knew that I was missing things. I quoted curricular outcomes and planned lessons and activities that met those outcomes, but I did not know what meeting those outcomes would look like. I planned lessons but did not know how to plan for assessing student learning. Perhaps most troubling was the fact that if I did have some information on what the student could do, I did not know how to interpret that information in a way that meant something to others. During these two years I didn't take a single course or professional development (PD) session on assessment. Once I graduated, it hit me that I wasn't comfortable with how I would assess students, and what I would do with assessment information once I had it. I saw plenty of rubrics used by other colleagues in the program and made many of my own. What I didn't know was how to synthesize what the rubrics were telling me in order to draw meaningful conclusions about a student's learning and development.

My discomfort with assessment practices faded as I began searching for my first teaching job. With my newly minted diploma waiting to be framed and hung in a classroom, I began applying for jobs. I submitted twenty-two applications and received one invitation to interview. This resulted in a job offer, which I accepted. During the interview process I spoke with the principal, vice-principal, and the assistant superintendent. I need not have worried about my lack of practical assessment knowledge as not one of these individuals asked me about my philosophy, opinions, ideas or experiences with assessment.

Nascent Teacher in a Middle Years School

In the first few years of full-time teaching, I recall little being offered in assessment professional development (PD), and I only went to sessions that were offered when the school's administration mandated it. When it came to optional PD such as the annual Manitoba Special Area Group conferences (SAGs), I didn't even consider assessment sessions. I may have even wondered who would choose to attend one. My focus was on surviving and teaching students the correct material. I wanted to ensure that I was preparing the students for upcoming grades. I feared their grade nine teacher saying "Didn't you learn this in grade eight?"

Late Policy

I began teaching with a very strict policy when it came to students handing in late work. I simply wouldn't accept it. I really believed that adolescents and teenagers attending school were given deadlines because there was a valuable, real world lesson in being given a timeline in which to complete a task and following through. Deadlines taught responsibility and organization. These were two values that I felt as a teacher I had to help encourage in my students. I wasn't allowed to be late issuing report cards; my students weren't allowed to be late submitting their work. I would permit one day's grace, and then would start deducting marks. If on the third day the assignment was not handed in, I would not take it and students received a zero. I even went so far as to write a letter to parents explaining the policy. Each student had to return this letter signed by his or her parents or guardians. This assured me that everyone knew and understood the policy. I even included a place in the letter where parents or guardians could comment if

they disagreed. Over a period of four years I never heard from a parent. I also didn't have much of a problem with the submission of late work.

The second reason for this policy was that I simply couldn't keep track of all the work sheets, projects, posters, reports, essays, and tests coming in at different times. There is a lot that goes into being a novice teacher; you have gone from two, six week teaching blocks in an academic year as a teacher candidate to being responsible for all the things that teachers have to know and do five days a week for approximately two hundred days a year. Aside from everything that goes along with teaching, there are hundreds of other important jobs like figuring out the technology and how to make the best use of it, participating in school and subject area meetings, organizing field trips and talking with parents. This policy had to exist for my personal survival. There was so much to keep track of, and this strategy helped me. I did not have to worry when I finally found time to mark students' work that assignments were missing, because those that hadn't been submitted got zeros.

Grade Machine

In these early years, I focused on teaching a lesson, assigning work to go along with the lesson, and testing. This is what I thought I should be doing. As mentioned above, I was very concerned with teaching students the correct material. Part of the reason I felt this way was because the culture in my school seemed to be focused on something called "Grade Machine" rather than assessment. Grade Machine is grade book software that is used by the school division in which I work. It is essentially a computation program where assignments are listed along with the point value for each assignment and the mark a student would have received. The program allows the user to

determine the course average along with many other calculations. My teaching colleagues used the program to calculate grades, and these grades were put on the students' report cards.

During my first four years of teaching, we would print Grade Machine results once every month to send home to parents or guardians. These printouts would include all the assignments given over a time period, the value of each assignment, and the score obtained by a student. The percentage for term work in a subject, like social studies, was also included. When I began teaching at the school, I was told to use Grade Machine. I was never told how to use it. The school administrators also never suggested the number of assignments that should be included on Grade Machine. However, I didn't need to worry, as the message would be made loud and clear.

There was a lot of talk in the staff room, and informally in other ways about how many assignments one should have, and the overwhelming idea was "the more the better". On more than one occasion I would have grade eight colleagues come to my room and ask how many items I had on Grade Machine. If the number I gave wasn't enough, I'd get a response of "Really?" with raised eyebrows. I have a clear memory of standing in the doorway of a fellow teacher when she asked me how many assignments I had on the latest Grade Machine printout. I knew the number but was actually afraid to tell her. I knew the message that was out there. When it came to the number of assignments: few were bad, many were good. As a result, I marked absolutely everything and entered everything into the Grade Machine software.

Once all the marks had been entered, I would send all one hundred plus pages to the main printer, one page per student per subject. I would breathe a sigh of relief, when I would see that I had approximately the same number of assignments as listed on the other printouts in the mountain of paper that had flooded the workroom. I felt that if I had a lot of assignments listed then the students and I must have been doing a lot of work. I started to believe this, and my personal grade book and Grade Machine began taking up a lot of my time. This is one area where my late policy helped. If I did not get an assignment, I could put a zero or would leave the cell in Grade Machine blank.

As a new teacher I was struggling with confidence. Was I a good teacher? How did I know I was doing a good job? No one had ever suggested to me that I was. Like many other new teachers, I was hired, given a classroom and a key, and sent on my way. No one told me what I was to do and no one checked up on me. I was pretty much on my own. The only guidance I ever received was from the teacher whose classroom was next door to my own, and I asked her for advice. She was a senior teacher. I liked her very much, and I admired her calm nature and the relationship she had with her students. We both taught English Language Arts and Social Studies. As a result, our lessons were similar. The person who was the principal when she began teaching at the school told her that seventy-five percent of our course content should be similar so the students in grade eight were getting the same information even though they had different teachers. That is what we did. Once a week we would meet to go over what we were planning to do. In reality, I had a lot of freedom, but I didn't really take advantage of it because I was too unsure of what I was doing.

Questioning My Use of Grade Machine

This was the environment in which I worked. I had freedom, so why was I so worried about the number of assignments on Grade Machine? Why was I letting Grade

Machine direct my teaching? I didn't really understand this at the time, and I couldn't articulate these thoughts, but I was beginning to question the validity and reliability of the numbers I was putting into Grade Machine. I was wondering what they meant. I was beginning to feel that I was teaching for the purpose of generating a number, giving a grade, and producing a report. It was not because there were valuable ideas and skills that could be learned that would enrich a student's life. Helping students improve their reading and writing so they could obtain a satisfying job or discover an interest that could last a lifetime was beginning to seem so much more important than Grade Machine printouts.

Why enter every assignment?

One day, early in my second year of teaching, this same teacher who had mentored me asked me why I put everything that students had submitted in Grade Machine. I was confused. She didn't? I honestly did not know what to say to her. The only reasons I came up with when I reflected upon her question were that I had been doing this for the last year and had felt pressure to keep it up, I was not sure what to omit, and it was a way for me to justify what I did every day. I was also reminded of the raised eyebrows over my latest printout and the doorway conversation where I was prepared to lie about the number of entries. Was my long list of assignments not the way to prove I was doing a good job? I had a lot of assignments, so my students must be very busy learning.

Her question did appeal to the part of me that had doubts about what I was doing. In addition to the fact that I was not comfortable with my understanding of what the scores really meant, I also had other concerns such as making every piece of work count

towards their final grade. Moreover, the weighting each assignment was given was the same. A quick role play from "The Outsiders" done in a group that was out of five marks was weighted the same as the final project done for the novel that was out of one hundred fifteen marks. I did not like what I was doing, but I kept doing it because I didn't know what else to do. I was still too overwhelmed as a new teacher to go searching for another way.

The impact of zeros.

Related to my use of the Grade Machine was how the program interpreted zeros. It had been a few years since my cooperating teacher and I had our conversation about not using zeros and the idea was beginning to make its way into my division. During one staff meeting my opinion of the value of zeros began to change. The vice principal was explaining what a zero did to a student's average mark. She showed the impact that a zero has when we would use the averaging of marks from a term's assignments to calculate a student's mark in a course. She wanted us to consider this when we used Grade Machine to generate our students' term marks and to really consider what the zero does to the average. She left us with this question. "When using zeros to calculate the student's average mark for the term is the resulting percentage an accurate representation of what the student has accomplished during the reporting period?"

This was a new idea for me, and there was something in her comments and question that spoke to me. I remember thinking "this makes sense". Afterward, when I put a zero into my Grade Machine program and saw what that did to the mark, it bothered me. I was well aware that the marks were those the student earned and by not doing the work they earned nothing, but I was uncomfortable with it. However, that was where it

ended for me. I thought about it for a long time, but I was not yet willing to give up the zero.

Sometime later in my career I came to believe that my job was to teach outcomes not the contents of teacher-given assignments, and with that philosophy one cannot give a zero. However, at the staff meeting with the vice principal, I was not convinced to change my ways. It did make me think more deeply about assessment, and this was one of the first times that I questioned my use of a mark of zero.

Losing my "security blanket".

A short time after this event, the school division began setting aside time for professional development focused on assessment. Zeros were on the brink of extinction, and it was decided that the Grade Machine printouts were not the most positive way to tell parents how their children were doing. In communications to school principals and teachers, division administrators used the language of Damian Cooper and Ken O'Connor to direct change in assessment practices. Both authors stressed the importance of formative assessment and using assessment to guide instruction. Up to this point I had been using my monthly printouts as a way to protect myself from the mystified looks of other teachers in the school and from the parents of students in my classes who inquired about the knowledge and skills their child was being taught. I was prepared if anyone questioned or asked what I was doing each day in my classroom. It looked like I would no longer have this security blanket. I was actually all right with the change being promoted by the division as I had become more and more uneasy about the message these Grade Machine printouts were sending.

It was also about this time that our administration decided that sending home report cards before having tri-conferences (parent or guardian, teacher, student) wasn't productive. The school initiated plans to schedule tri-conferences five weeks before reports were due. In this way parents or guardians would be made aware of their child's progress while there was still time to improve, if improvements were needed. I was very much in favour of this idea. I often found myself wondering why we would spend so much time taking with parents about things that had happened in the past.

A Graduate Student in a Master of Education Program

As my teaching career progressed, I continued to be aware of the ways in which my thinking about teaching and learning were changing. I had more confidence in my abilities, and I felt that I no longer had to justify my actions. I knew that I was a good teacher, I cared about the students, and I believed that I was teaching them skills and concepts we both considered valuable. My focus had shifted. It was less on survival and more on mastery. I decided that I was ready to begin a graduate program in education. When applying to the Master of Education (M. Ed.) program in Studies in Curriculum, Teaching and Learning, prospective students must indicate the area they would like to focus their research upon. I didn't immediately select assessment because I wasn't sure I was ready to dive into something so complicated. I felt I was just getting comfortable with walking, and wasn't yet ready for a marathon. I thought that a better direction for exploration would be teacher education.

Assessment as a Thesis Topic

I was thinking about ways I could use my experiences (past and future) to help nascent teachers starting out in their career. During the final assignment of my very first class, however, I completed a presentation that convinced me my area of study had to be focused on some aspect of assessment. Each class member had been required to do a presentation exploring one of a list of provided topics. I chose standards examinations, as my frustration over how we tested student learning was a concern of mine, and I wanted to learn more about the nature of this type of test.

At the time I was teaching a student who had been in classes with me for two consecutive years. He was a very personable boy and as a student was interested in

school, took pride in his work, and put great effort into all he did. He received average marks his entire time in school and was saddened by that. His problem was that he would get so nervous while taking tests that his mind would go blank. He would not sleep the night before tests and consistently performed poorly. In the school I was working, final examinations were worth twenty percent of a final grade in each subject-area. This policy had two consequences for this student. His poor performance on exams significantly lowered his marks and caused him great anxiety. He had pretty much come to terms with this and worked extremely hard on other assignments so his marks would not drop too low.

After many conversations with this student and his parents, I became frustrated and angry. His performance on tests and exams was not indicative of what he knew. He had proven this to me many times when we would talk the day after each test had been given. I would ask him questions, and he could answer those that he "blanked on" during the test. Knowing this, how could I use a test as an indicator of what he learned when it clearly wasn't a means for demonstrating what he actually knew? When I had the opportunity to read about testing for the first course in my M. Ed. program, I decided to take it. I wanted to find published studies that would support my position that tests were unfair. The more I read on the topic the more my perception of unfairness grew. These particular tests were not assessing what every student had learned. The tipping point was when I read an excerpt from a young boy in California who wrote a statewide standards examination that included a question about riding a toboggan. This student had never seen snow and had no idea what a toboggan was! This was the day that I realized I

wanted to focus my coursework and free time learning more about assessment, particularly the assessment of student learning.

Distinguishing between Assessment and Evaluation

As a new teacher my view on assessment was that assessment and marking and reporting were interchangeable terms. I now know that what I was doing was judging, not assessing. The following is one of the clearest illustrations I have found of what assessment is not. A figure skater skates her routine for her coach in practice. When she is finished she asks how she did. Her coach replies, "7.9". She tells him that she is asking for feedback, not to be judged. She wants to know what she performed well and what she should work on to improve. That is why she was spending so much time practicing, so she could learn through her mistakes knowing that the next time she would perform better (Cooper, 2007).

In retrospect, I had been doing what the skating coach did. I was not providing my students with the information that they needed to improve a particular skill or to develop a deeper understanding of a concept. I was not looking at the mistakes they were making and trying to improve my lessons based on the information students were handing in and sharing with me. I was strictly using projects, essays and tests as assessment of learning, not assessment for learning. The majority of my assessment was summative. I felt pressure to have a lot of assignments in my grade book and on Grade Machine. Students wanted to know what their mark was, and I wanted to be able to give it to them. So my methods of assessing were based on the following instructional design: the students and I would cover curricular material, the students would do assignments and projects, I would give a quiz and a test, and we would move on. In the back of my mind, I realized that this

was not the best way to assess. I wanted to inform my students about their learning, but I did not know how. I knew what I was aiming for and what I did and didn't believe and I understood that I had to change something.

Tests.

Over my first four years of teaching, my opinions had formed quite strongly against tests. I was even wondering what the point of grading was, and doubting the validity of report cards. I questioned the purpose of tests, why was I giving them and what were they telling me. The more teaching I did, the more I realized how unique individual students are. I saw how some students had a knack for writing tests and others did not. There were language and comprehension issues that prevented some students from being able to articulate on paper what they knew in their minds. I had students that had to take care of siblings, who had jobs, who suffered from test anxiety, or who lived in homes that were so disruptive studying couldn't be a priority. They may have known the material, but by using tests and assignments as the main way to determine what they knew, I didn't know.

Knowing factual information.

Something else that weighed on me was what I perceived as the absurdity of expecting students to remember factual information that they could look up. I frequently referred to textbooks, resource material, notes, other colleagues, and the Internet when I had questions. I saw this as evidence of being a good educator and a life-long learner. There were no instances that I had experienced in my career or that I could foresee where I would not be able to find an answer I needed from some source. I wasn't expected to have everything I needed to know to be a good teacher in my mind all the time. I was

never given a pen and paper and told to answer questions that would be marked right or wrong, then calculated as a percentage or letter grade to determine my effectiveness as a teacher. This score would never be sent out into the community so I could be measured against teachers around the city, province, or country. Why then did we do this to students? Was this kind of assessment acceptable? Was it accurate?

Reading for clarity.

With my focus of study now clear, I had to learn more about assessment. I had ideas and opinions, but I needed to ground my ideas in what experts in the field of assessment, specifically assessment of learning in formal K - 12 education, were suggesting. It was one thing to say I don't like standards tests and testing to determine the quality of learning at the end of a unit of study, but without the research literature to support my opinions I knew that I wasn't going to get very far.

As previously mentioned, the school division in which I worked had spent some time on professional development (PD) focused on assessment. I had a foundation of knowledge that was based around the PD that I was exposed to. I had read Black and William's (1998) book "Inside the Black Box: Raising Standards through Classroom Assessment" and had discussed the contents of this book with coworkers, but I still did not really understand what assessment was and should be. I began reading about the history of assessment. This led to uncovering what others defined assessment as being, and constructing my own definition from a synthesis of this work. I believed that if I wanted to better assess the learning of the students I was teaching, I needed to know how we arrived at our current understanding and practice.

History of Assessment

In their book "Fourth Generation Evaluation", Guba and Lincoln (1989) describe how the evaluation of students has changed over time. They divide student evaluation into four periods that are referred to as generations. These are measurement, description, judgment, and process. Each generation describes a time when beliefs about assessment and what and how to assess learning were very different. A summary of their work provides a glimpse into assessment, how it has increased in importance and changed due to time and circumstance.

The first generation, referred to as measurement, was about measuring the students' mastery of subjects. This period began in the late 1800's and extended to the end of World War I. During this time, formal schooling focused solely on "the basics". The content of lessons consisted of the facts that were known to be true at the time. Tests were a way to determine mastery, and students successfully completed such tests by reiterating facts.

Tests were first given individually and orally. Many answers were to be given in 'essay format'. It did not take long for testing and measuring to spread outside the school walls to the military and industry. Tests progressed and changed from the late 1800s but remained as an important means of measurement through future generations of evaluation.

The second generation of assessment began because the type of person that attended school everyday had changed. More students were staying in school beyond the elementary years, and they did so because they wanted to. They attended school to get an education in order to achieve more than their parents had. Getting an education was a

way to make this a reality. So, curricula as well as the methods of evaluating students' learning changed. Until this point in time, formal schooling beyond grade eight was seen as only for the college bound student. With this no longer the case, the curriculum had to change.

A group of researchers set out to transform school curricula and to demonstrate through research that students learning these new curricula in grades one through twelve could be successful in post secondary education. This came to be known as "The Eight Year Study". In order to ensure that the new curricula were working as intended, Ralph W. Tyler, who headed the evaluation component of "The Eight Year Study", created the idea of tying learning that was intended, the learning objectives, to the effectiveness of the learning experiences. Tyler's 1949 work published as "Basic Principles of Curriculum and Instruction" is where one finds the first official objectives ("a statement of changes to take place in students") (p. 44) and where the idea of program evaluation originated. Performance assessment progressed more toward description as teachers were expected to describe a student's strengths and weakness based on given criteria.

The third generation was about judgment and saw standards become more clearly established, as judgments were based on these set standards. The teacher took on the role of judge. Many evaluation models were created at this time. This generation came to be because the objectives, what the students should be learning, came into question. There was a paradigm shift away from "are the students meeting the objectives" to "are the objectives worthy of the students' and teachers' time and attention". It is this generation where we first see the role of the evaluator questioned as well as their abilities, motivations, and training. In addition, researchers and students began to wonder how

answers and results would be collected and interpreted, and who would see the results.

Two challenges arose during this period. One was the seemingly disproportionate reliance on quantitative methods to collect data. The other was the relationship between assessment and judgment and the reliance of judgments on values, but whose values.

The fourth and final generation at the time Lincoln and Guba were writing was about process. It was akin to action research; learning by doing. It was based on the constructivist view that knowledge is created internally, and also included the idea of constructivism which suggested that learning occurs when learners participate in activities that result in the creation of a meaningful product. This generation of evaluation took into account those who were being educated and attempted to use this information to meet their needs. Thus, all stakeholders and the issues these stakeholders may have were considered. This generation was concerned with the creation of a form of evaluation that would be fluid, ever changing, and built on consensus. It also required communication among stakeholders.

By the time I read Guba and Lincoln I was well into my M. Ed. program and had begun to change in the way I viewed assessment. It was interesting for me to see how the way teachers teach and assess had changed as students and their needs and the needs of society have changed. It gave me hope that teachers and the school system would continue adjusting to the population of students in their care even when some of the new ideas may initially be met with resistance and challenge. I have tried to take aspects from the fourth generation that Guba and Lincoln describe and incorporate them into my teaching, planning, and assessing. What they write about is replicated in many of the divisional ideas that have been presented over the years such as constructivist pedagogies

and planning with the end in mind. The way individual teachers assess, or how they intend for the students to demonstrate their achievement of the learning outcomes, can differ even though the outcomes at a grade level are the same. If students are going to be successful, I believe teachers need to know and understand who their students are as learners and talk with them about the assessment practices they will be using. I had, for several years, been discussing with the students in my classes about how I marked their work and what these marks signified, and we have had conversations about what they thought I should be focused on. I believe that this is what Guba and Lincoln were describing in this fourth generation.

I have, however, spent more of my career in the third generation, and I'm still there on occasion. I utilize outcome-based assessment. As a result I have to rely on the learning outcomes in curriculum documents, and those have changed very little, if at all, since I became a certified teacher. The majority of Manitoba curriculum documents, written in the first years of the twenty-first century, were based on an updated version of the "Tyler Rational" (Tyler, 1949) where outcomes for skill and knowledge development replaced behavioral objectives. While I have options in terms of how to present the outcomes, or which ones to focus on, my job as dictated by the province is to teach the outcomes that are listed these documents.

Defining Assessment

As Guba and Lincoln have presented, assessment has evolved in terms of what and how learning is measured and/or described, and it continues to evolve. What is not as clear, however, is precisely what is meant by the word assessment. Although the literature is replete with definitions of assessment, it is especially difficult to find a

definition that covers all of the important aspects with clarity. What follows are key points from definitions of assessment written by experts in the field, and my attempt to construct a definition from these key points that is meaningful for me.

The definitions of experts.

O' Connor (2002) describes assessment as information gathering, using a variety of tools and methods, and then using that information to describe student performance. This information is then used to enhance learning. Teachers provide students with this information by way of feedback so the students may use it to improve. Popham (2008) clarifies what some of the assessment tools are; techniques such as asking questions, conducting oral interviews, anonymous self-reports, writings, performance tests, and/or experiments. He suggests that the way assessment evidence is gathered must be broad so a clear picture can be painted as to what the student knows, can do, and understands. Popham also maintains that assessment is not synonymous with tests. Stiggins (1999) believes that assessment is used to increase learning by interpreting everyday classroom activities and talking with students about what was observed. The end result should be achievement of goals by knowing, through observation where the student should be, where you want them to go, and how to close the gap. In Black and William's (1998) groundbreaking work, assessment is defined as all of the activities teachers and students commence that provide information to modify both teaching and learning.

These ideas are as much approaches to assessment, as they are definitions of assessment. There are hundreds of ways of defining a concept like assessment. Those in the preceding paragraph provide teachers with guidance that, if followed, will ensure that assessment is not judgmental but informs teaching and directs learning in ways that

resemble generative and self-correcting feedback loops.

One thing the writings of O'Connor, Popham, Stiggens, and Black & William make clear is that assessment is a process, often with several phases, that results in a statement of learning. For clarity, assessment needs to be defined by the user. In the literature, the terms assessment, evaluation, marking, and grading are often used interchangeably. This is the result of assessment meaning different things to different authors based on what is being discussed. When reading about assessment, I have come to realize that it is important to understand the author's purpose. For example, an author who is trying to sell his or her test to a medical school may define the term assessment in terms of what insights can be gained regarding a potential student's knowledge or ability to learn, while a researcher who is trying to convince a school division to eliminate final examinations in core subjects may define assessment quite differently. The motivation of the first is to confirm their test will tell the suitability of a person for medical school. The latter may argue that a test cannot assess enough of what a child knows to determine end of course knowledge.

My synthesized definition.

For the purpose of this study, I have taken parts of several definitions and defined assessment of learning as follows: the gathering and interpreting of information from a variety of sources, both formal and informal, to describe a student's learning progress, including what the student has come to know and comprehend and what is not yet understood. This information can be used by the teacher to direct further teaching and to make statements about the student's learning. I have chosen this definition of assessment because it takes useful parts from definitions of scholars in the field who believe, as I do,

that assessment should guide students in their learning, be individualized, be based on set criteria, and inform a teacher's course of action for future student learning.

Utilizing information form a variety of sources requires that as much information as possible be considered when attempting to determine what a student knows, what a student is still processing, and what a student has come to understand. These sources include, but are certainly not limited to oral or written responses to questions, projects, essays, conversations, group work, quizzes, tests, and exit slips. Because something is being looked at by a teacher, or has been given a score, it doesn't mean that it's included in the final total of a student's mark, if such a score is necessary. The purpose is to know what a student can do; so more attention can be paid to areas where a student needs assistance. Once a number of sources of a student's work have been considered, steps can be taken to improve understanding where necessary. When newer pieces of the student's work have been considered, statements about the student's knowledge and understanding can be made. As such, assessment must be frequent and varied.

Teaching While Pursuing a Graduate Degree

While I was learning about assessment and completing the coursework in my Master's program, I continued in my teaching position. The skills of several of the English Language Arts students I was teaching while in the middle of my program were below grade level. I was struggling to find ways to teach them things I thought were important for them to learn. I was a believer in the importance of teaching the outcomes and was having a difficult time with the short story unit in English Language Arts. The lessons that had worked for me in the past were no longer working. I began questioning what I was doing. This time it was not because I was insecure in my abilities. I was questioning what I was teaching; was it what the students really needed to learn? I had always expected my students to challenge themselves and set their expectations high. This was one reason I chose challenging and interesting stories for the unit. But during this particular school year I had to face the fact that if a student can't read, learning elements of a short story is not what is important for that student.

This was a revelation for me, and one that I did not arrive upon willingly. I believed and still believe that there are certain things that students must learn even if they are difficult. But a conversation with a colleague made me finally accept that I have to teach the students I have, and I have to meet them where they are. This was not a new experience for me; it happened at some point in each of the years I had been teaching. As a result of the reading and researching I was doing on constructivist theories of learning and assessment as a tool to guide teaching, I finally was in a place where I could react to the feelings of discomfort associated with what I was doing and do something about it.

When the familiar internal tug of war between what I wanted to teach students went up

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against what they were capable of doing, it was a struggle to find the right place between

challenging them with high expectations, and asking the impossible. I could no longer

talk myself into teaching prescribed content that I knew was too difficult for students

because it required skills they had not yet developed. I could not use the excuse that I

didn't know what to do. I had to take on the challenge and learn what to do.

Learning What to Teach and What to Assess: "The Most Dangerous Game"

The conversation I had with a colleague came about when I was complaining that

I was not going to be able to use the book "The Most Dangerous Game" (Connell, 1924,

2006) with my students as virtually none of the students were at grade level in terms of

their reading and comprehension. I was disappointed because I love the story and the

students typically do too. It is always uplifting to see their reaction when they have

figured out what is really going on. It has led to some of the best conversations previous

students and I have had. This is how I recall the conversation with my colleague:

James: What is the reason you are doing the story?

Me: It is part of my short story unit.

James: So?

Me: Well, each story that we do teaches a different element of short stories and this one is

plot. The most important element! [The other elements that are part of the English

Language Arts (ELA) learning outcomes are character, setting, and theme.

James: So?

Me: They need to know the elements!

James: Why?

Me: Because it is in the curriculum.

As the words leave my mouth, I think, did I just say that?

James: So if they need to know the elements, it doesn't matter what story you read. Every kid could have a different one. But does every kid really have to know the elements? Is it not enough for some of your struggling kids to read a story and understand what they have read?

Me: No because if I am teaching the elements, I want all my kids to have the opportunity to learn the elements.

I am frustrated because he is pointing out something I had been struggling with. I am focusing my teaching on the elements of short stories rather than improving the reading abilities of my students. How can I do both? Am I lowering my expectations and perhaps what the students can achieve if I spend this small section of ELA time on things that they should already know, but do not? Am I bothered because I'm trying to make my existing lesson work on students that are not ready for it? I feel in my heart that I should be tossing everything out the window and focus on helping this particular group of students to read better, but what about the elements that the curriculum says students at this grade level are expected to learn? I am torn between meeting them where they are and responding to my colleague with the statement, "This is what they are supposed to be learning, it is important, and they will learn it!"

As a teacher I use backward design (Wiggins & McTighe, 1998, 2008) to identify what success would look like before I began planning learning experiences. This approach required that I go back to curriculum documents with their lists of outcomes for

student learning. Knowing that a goal of the ELA unit was to teach the elements of a short story, I was planning with the end in mind. I walked away from the conversation with my colleague asking myself questions similar to those that follow. "Is this an important outcome for ELA? How do I teach to these outcomes it if I know what my students can and cannot yet do? Can I go back and try to help the students fill in the gaps in their learning? What then will success look like given the exit outcomes for the grade level?"

I enjoy teaching the lessons that incorporate "The Most Dangerous Game". Given the opportunity to read the story, I know that students will like the story and that they will have questions and opinions they will want to talk about. They will remember the story, and it will be a great narrative for them to learn about plot. I want them to give it a chance, to trust me that it will teach them these things about reading and plot. Is the point of assessing not to show the students what they have learned, to let them know what they still can learn? I think that this story can achieve these two goals, but the students must first be able to read and understand "The Most Dangerous Game".

Assessment and Constructivist Theories of Learning

Here I was faced with another situation where what I wanted to do and what I thought was right were at a crossroads. I had done some reading on constructivism in my Bachelor of Education program and had revisited the topic in several of the courses in my M. Ed. program. It made a lot of sense to me. Years earlier, I had said that I wanted students to solve problems and that I did not want to stand at the front of the room and dispense facts that would be regurgitated to me. With knowledge of constructivist theories of learning, I could also have added to problem solving that I had to be aware of

what I wanted the students to know if I was going to figure out what to teach and how to teach. I needed to be able to scaffold learning by beginning with the current experiences, skill development, and depth of knowledge of the students I was teaching. If I believed that as a teacher candidate, how did I think students that were having a difficult time comprehending what they were reading would be able to understand conflict embedded in the plot of a story written at a more sophisticated reading level?

Mordichi Gordon (2009) synthesizes the ideas of other constructivist theorists when he states that knowledge about the world does not simply exist, waiting out there to be discovered, but that it is constructed by human beings through their interactions with the world. According to this belief, constructivism is a natural fit for formal education. We no longer believe that students learn by receiving clear, distinct, explanations provided by teachers and textbook authors. Although the teacher plays a vital role in the learning process, students will place in short term memory what the teacher says. They will make sense of this information in their own way, based on existing schema that are the result of personal, formal, informal, and non-formal experiences. Constructivist theories recognize that learning is a process where new information is added to existing information in longterm memory and personal meaning is made. As a result, learning is not linear, but is uneven, staggered, and constructed at different rates (Burke, 1993). The growth of constructivist theories of learning has contributed to the realization that formative (ongoing) assessment is a necessity if students are to maximize learning. Constructivists recognize that students learn differently and assessment should be able to meet the needs of students, helping them to progress. Thus, when viewed from a constructivist teacher's perspective, the purpose of learning is to assist students in constructing meaning that is

not the result of memorizing facts or using an algorithm to attain the right answer. It is an opportunity for students to explore constructs, to make meaning by taking into working memory new information and relating this to existing networks of items of information stored in long term memory.

Constructivism in the classroom.

While the above would seem to confirm that constructivism can support a very positive and open learning environment, some have argued that it cannot be transplanted into the field of education with out problems. Gordon (2009) discussed two related difficulties faced by teachers who use constructivist theories of learning and social constructivist pedagogies in their classrooms. These difficulties were (1) not fully understanding constructivism and, thus, being unable to apply ideas from neuroscience and cognitive psychology to education and pedagogy, and (2) constructivist teaching being a much more difficult task to undertake than initially believed. The former arises because of the large number of theorists writing about constructivism, and the fact that many teachers are using their interpretations of what has been described. The latter arises because constructivist theories of learning require a very different way of teaching than traditional teacher-directed instructional approaches.

I believe that at the heart of constructivism is the understanding that teachers can help students learn if they present developmentally appropriate material in such a way that students take in information using their senses and attempt to make meaning of these observations with guidance from the teacher and their peers. Using constructivist pedagogies in the classroom shows an understanding that all students are capable of learning. Some of these students come with many experiences and knowledge of many

things; others come with few experiences and limited knowledge, and many students fit somewhere between these two groups. When I know and acknowledge this, I am better able to teach.

Some constructivist pedagogues argue that the role of the teacher should be that of a facilitator, as teachers are not the 'givers of knowledge' they would have been in the past. However, the traditional role of the teacher can't totally change or disappear all together. It is important for the constructivist teacher to recognize students as individuals with distinctive needs. As such, no one pedagogical method or set of lessons will work seamlessly for an entire class. According to Gordon (2009, p. 47), "A good constructivist classroom is one in which there is a balance between teacher and student directed learning, and one that requires teachers to take an active role in the learning process, including formal teaching".

Constructivism in my classroom.

I had a real desire to teach in this manner before I even knew what to call it. When I made the decision to become a teacher, I knew that I wanted to help students solve problems and not become a teacher who dictates facts or tells students what they need know. Once I learned much more about constructivism, I recognized that it fit with what I was doing as a teacher and what I wanted to continue doing. It even became a topic that I introduced and talked about with the students in my classes. At the beginning of every poetry or short story unit I would listen to students complain that they "took this last year". I was able to tell them that last year they created a foundation of knowledge on the subject. This school year those who really 'got it' would be building on that foundation, making it stronger and, thus, learning more sophisticated content and styles of writing.

This would also give those who were struggling or who did not quite understand the poetry and short story learning outcomes for the previous school year to develop understanding so they could 'get it' this year. They were going to learn in more detail about these two genres because they were older and able to read, comprehend, analyze and write more advanced material.

As in a majority of Manitoba classrooms, the students I teach come to school with great variability in ability, knowledge, and understanding. With a constructivist framework, I consider the individual student as well as the class as a whole. When using assessment practices I recognize that while the whole class is to be taught, the needs of the individual students that make up that class have to be given consideration as well. By giving each student multiple opportunities to achieve specified outcomes, assessing students for what they have learned and adjusting teaching practices where necessary, the needs of all students can be met.

Dewey (1956), a pioneer of progressive child-centered education, believed that the authority of knowledge was the teacher, and that it was the contribution of "adult knowledge", not solely the insights of children that would enable the development of each child's learning. This is what Bruner (1978) means by instructional scaffolding and what Seatter (2003) describes as the intellectual acts of teaching. When students are learning in a constructivist environment, success can be demonstrated in a variety of ways. For this reason, students may be constructing knowledge that is not measurable using traditional number scores and letter grades. As a result, varied approaches must be used in order to make determinations of what a student has learned, what needs to be clarified, and what requires further study (O'Connor, 2002). Formative assessment is a

form of assessment that is often promoted for use in such classrooms.

Constructivist thinking and the conversation with a colleague who knew the students I was teaching in ELA made me realize that having high standards is great if they are attainable, but that they are only attainable if the students have the necessary prior knowledge. I realized that sometimes my role as a teacher would be to help students acquire that prior knowledge. In order to identify what they arrived in my classes knowing, I would have to be able to figure that out using diagnostic assessment or pre-instructional forms of assessment.

This was one of many instances where I had to change what I was thinking. One of the beliefs I held, which was a huge part of who I was as a teacher, was the need to set high standards for students to achieve. There were some difficult concepts, skills, and attitudes that I believed students had to learn for a number of reasons. It may have been a curriculum requirement or something that would lay the foundation for developing a concept or skill that I knew they were going to be learning. Perhaps it was a life lesson or general knowledge, not addressed in any curriculum document, that I thought middle years students should have. I had to let some of that go, now that I realized high expectations do not mean the same expectations for every student, or for every class, or for every school year.

Learning About Tests

The next thing to change was my belief that there was no value in giving tests, because they generally seemed to me to be unfair and uninformative. As it turned out, I may have been on to something when I thought that the tests I was giving were not telling me what I wanted to know. My education in graduate courses introduced me to the words

I was looking for; "reliable" and "valid". Tests that did not meet these two criteria were unfair and uninformative, but that did not mean that all tests were bad.

Conversations about testing in a research methods course.

This was a lesson that I first learned in a research methods course that was required for my Master's degree, and this lesson was given more support in an assessment course offered to Master's of Education students. A professor who was very much in favor of standards tests and standardized testing taught the research methods class. He tested us repeatedly in the course. This was a very new experience for me as a student in the Faculty of Graduate Studies with a specialization in Curriculum, Teaching and Learning. I thought that he was brilliant even though I initially disagreed with almost everything he said.

While he believed in testing, he did have an issue with how tests were being delivered to today's students. He felt that teachers were not properly educated in how to create, deliver and interpret tests. It was his conviction that tests could be worthwhile, beneficial, and provide meaningful information if they were created and administered correctly. He knew that teachers were creating tests with little regard for the science behind testing. They were making up questions, or taking them from textbooks without a solid foundation of what the wording, options, style of question should be, or how to divide the questions across the material being assessed. From his perspective, teachers were not trying to make bad tests, but they simply did not know how to create a test that would identify the things they were actually trying to identify.

His comments caused an instant flashback to my first year teaching when I had a number of old tests given to me by a retiring social studies teacher. I remember cutting

out questions and diagrams of volcanoes, taping them onto another sheet of paper and photocopying this as my unit test. It seems ridiculous to me now, but it shows where I was at the time. It made me think that if I had uninformed and poorly conceived test-making habits, I was probably not alone.

Conversations about testing with teacher colleagues.

I began talking to several teaching colleagues asking them how they made their tests. Common responses were taking questions from their notes for teaching, taking questions from assignments, and taking questions from textbooks. Most shared their tests with colleagues and chose questions from different sections of these shared tests. Many said they had been using the same tests for years. I was not at all surprised hearing this. At different times in my teaching career, these were answers I would have given. Creating a meaningful test is difficult. Like anything worth doing, or important, it takes time, knowledge, and research. I thought back to the professor and his mission to educate teachers in Manitoba school divisions on making reliable and valid tests and test delivery. It was his belief that if the test was not created correctly, then we as teachers would likely be misinformed as to what our students actually knew. This was something that I believed. I began asking myself questions like those that follow. Are my tests fair? Are my tests balanced in terms of time spent of content and the numbers of questions students are being asked to answer? Are my tests valid? Do they measure what I think they measure? Are my tests reliable? If I were to administer the same test to several classes would the results be nearly the same? I was not sure, and this bothered me a great deal.

Conversations about testing in an assessment course.

The professor responsible for teaching the course on assessment was also very much in favour of testing. He believed that standards tests and standardized testing had a place in schools from the primary grades through post-secondary and beyond. He thought that these tests were important, but they were not always utilized correctly. One of my issues with these tests, specifically, and testing, in general, had always been how they were used. When results were used to compare students, published without explanation or consideration, used for judging teachers and schools, or as a determiner for pay and/or funding, we both agreed that this was a misuse of information. He had a saying that assessment should be "frequent and varied." He was a believer in teaching future teachers about reliability and validity and how to achieve both in the assessments certified teachers would be developing and administering in their classrooms.

"Frequent and Varied" Assessments of Learning

Having my thinking challenged by these two professors and with knowledge from the reading on assessment that I had been doing, I found I could no longer make a blanket statement about testing. What I disliked about standards tests and end of unit tests was how they were created, administered and analyzed and how they were too frequently viewed as the indicator of knowledge. I knew there were some students in my class that preferred tests to projects. They liked studying and wrote very good responses to test questions. I knew that they should be given an opportunity to excel. I adopted the phrase "frequent and varied" as my own assessment philosophy.

On-air advice from a former teacher.

About the same time that I was registered in the research methods course, I heard a call-in radio program about grading and report cards. Normally, in such cases, I would change the station because I get so frustrated when I hear people talk about how things were so much better "in their day" when kids got zeros, could never hand in late assignments, and repeated failed grade levels. I didn't like hearing about everything that was considered wrong with kids today, and how it was the fault of the school system. I wanted to call in myself and ask "Did you ever pay a bill late, show up late for work, or hand in a late report?" I knew it was never worth the trouble; I would be wasting my time. All these callers went to school, so they feel like they are experts. There is no competing with that.

For some reason I kept listening to this particular program and heard a retired teacher call in. He said he was tired of listening to people call in and maintain that more testing and more marking would solve all the problems in schools. He asked listeners to think of everything that students knew and to imagine this knowledge written on a pole. Then, he asked them to imagine a ring of flashlights around that pole. Each flashlight represented a different form of assessing what the student knew. One would represent tests, one projects, another a conversation with the student, and another, an exit slip, and so on. When one flashlight shines on the pole, only a small amount of what is written there is revealed. When all the flashlights are turned on – what a different picture one would see presented. I realized I was driving with my mouth open. I almost had to pull onto the shoulder and stop the car. I felt like a ring of flashlights was shining on me! This person had summed up in one minute what I had spent years trying to put words to. This

is what assessment should be. I could not go on ignoring tests. I had to learn to see them as one way, in conjunction with others, of revealing what the students had learned.

I thought back to the test of volcanoes I had cobbled together and realized that I was a different teacher then. The teacher that created that test saw testing as the means to create a mark rather than information that could be used to identify what someone understands or does not understand and uses the information to close the knowledge gap. When I was that teacher I gave that test because I thought it was reasonable, and because I had never really learned to create a reliable and valid test. When I was that teacher I was relying too much on tests because I was not yet ready to use other forms of assessment.

When I heard the radio program I knew that the teacher I was in that moment was on the right track to becoming a better assessor and, as a consequence, a better teacher. Through my own education I had started to form opinions based on the research of experts, not just the personal views I had developed from classroom experiences. I was considering new ideas and trying to make sense of these ideas given what I already knew. I was constructing my own ideas of assessment. I was learning in the same way I believed my students were learning. I had changed my thinking and was in the process of putting these new ideas into practice.

New ideas informing my teaching practice.

I knew that I would continue to create and administer tests because it was one of the many ways of varying my assessment. I believed there were two things I had to do.

The first was to do my best to ensure that the questions I was asking were reliable and valid. The second was to make my expectations clear, to engage students in reviews of what I was helping them to know and do and look for gaps in their understanding and

skill development. While I try to do right by students each day I am with them, I am not an expert in research methods or test creation. I relied on Bloom's Taxonomy and my teaching experience to create tests. As a result, my tests consisted of questions from each level of Bloom's Taxonomy. Example questions from a short story test would be:

Remembering. Define protagonist, antagonist, and theme

Why did he stop when he did?

Understanding. What is the main idea in the story "The Most Dangerous Game"?

Applying. What would happen in "The Most Dangerous Game" if the other hunter fell off the boat instead of Rainsford"

Analyzing and Applying What is the theme or message in "The Most Dangerous Game"? Apply it to your own life.

Evaluating. Compare the protagonist in "The Scream" and "My name is Angie" how are they similar and different in their physical and personality traits?

Creating. How else could the author have ended "The Most Dangerous Game?

These questions address the levels of abstraction identified by Bloom as well as the outcomes that the school's English Language Arts team has chosen for short stories. They will let me know if a student has understood the assigned story and the elements of short stories. Moreover, I would be able to see aspects of their higher order thinking. In the past I may have asked some or all of these questions. However, I was not making a conscious effort incorporate all levels each time I created a test.

The key to my assessment is to always keep a basic question in my head. It will vary based on the subject matter, but I am always thinking as I am reading a student's work or listening to him explain something to me, "Does this person understand?" In

order to evaluate what a student has learned and turn that into a mark, I must be open to different ways of gathering information (e.g., essays, projects, tests, and conversations), know what I am looking for in the students work given the outcomes I am assessing at that particular time, trust my professional judgment and use it.

I also have to accept the fact that assessment is not a science, and that when I need an answer to the question "How is she doing in school?" there are a numerous ways to arrive at a valid answer.

Formative and Summative Assessments

One aspect of my assessing that I knew that I had to change was the marking and recording of every piece of student work. I was in a committee meeting when one teacher who was a relatively new member of the staff began talking about how several teachers at her former school were using Grade Machine in a new way. They were marking a lot of work and keeping track of all of it on the software program, but they were distinguishing assignments as either formative or summative assessments. Summative assignments went towards the final grade but formative assignments did not. Keeping track of each piece of a student's work was used to show students how all of their practice helped them learn. The focus was on improvement, and the goal was higher summative marks.

This was very interesting to me because it could potentially solve the problem I had of not wanting to count everything towards the final mark. Yet it would allow me to show all the work that students were asked to complete. The added benefit would be that students would see their improvement. It would also show them that there was a purpose to the work they were doing; it was helping them to successfully achieve the outcomes. I was on board.

Not long after this committee meeting, I found a clear and interesting metaphor from the National Middle School Association (2007) that I would use in discussions with students about formative assessment and summative assessment. The metaphor compared assessment to obtaining a driver's license; you get your learner's permit, practice for a while, and then you take the test. Students were to imagine that every time they got behind the driver's wheel, before taking the road test, they were graded. I then said something like the following: "You start out struggling with this new task but gradually improve. However, each time you practice, you are given a score, and that score is recorded in your driving report card. After sufficient practice, you take your road test. You receive no deductions during this test, but when your practice is added to your final score, you have a result of sixty percent. What does this number represent? What story do we want this number to tell? Is it right to get sixty percent when you received one hundred percent on your road test? Which number is really reflective of your current driving ability?"

If the practice is viewed as just that, the repeated act with the desire of acquiring proficiency of a skill, then should the attempts at practice be included when attempting to demonstrate how good one has become at performing that skill? The way the practice and testing actually occurs in a driver's test is similar to formative assessment. The practice is part of the instructional process. An important function of formative assessment is the information it can provide teachers. It can be used by teachers to adjust their methods and materials while learning is taking place. The results of this type of assessment do not go into the grade book, but are to guide practice, and allow teachers to determine their next instructional steps. The idea of formative assessment is that it is designed to inform

teaching, not just measure student learning. By using types of assessment that tell teachers and students what is known and what is not known, teachers can adjust their instruction to ensure students are helped to meet curricular outcomes.

Defining formative assessment.

There has been some dispute in the literature regarding how to define formative assessment. Bennett (2011) points out that the disagreement can be boiled down to who is defining it. Those who have stakes in the area of test making look to describe it as a tool. However, educational researchers and teachers tend to view it more as a process (Popham, 2008). The result of formative assessment in a classroom is "not so much a number or a grade, but is a qualitative insight into students understanding" (Bennett, 2011 p.) Individuals associated with The State Collaborative on Assessment and Student Standards (SCASS) in the United States came up with the following definition of formative assessment, as stated in McManus (2008): "Formative assessment is a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended outcomes" (p. 3). In using formative assessment teachers must know what they are looking for and must use the assessment tool that will tell them. If students are to improve, they have to know what the teacher's vision of quality is, and the students must work toward this vision. Without these similar goals, students will not be able to judge their own work and improve it (Saddler, 1989).

To drive useful instruction and inform the learner of strengths and weaknesses, Saddler (1989) maintains that three situations have to be present. First, the learner has to know what the standard or goal is. Second, the learner has to be able to compare what

they have done with the standard. Third, when there is understanding that a gap exists between the standard and performance, the student has to know what to do to close the gap. This is why feedback is important. Feedback is information about the gap between the actual level and the reference level of a system parameter, which is used to alter the gap (Ramaprasad, 1983). It can be defined in terms of its effect rather than its informational content.

If the goal of assessment, education, and the school system is to see students improve, Saddler's conditions must exist. Students must be aware of the goal and have a way to compare that with what they know and can do to achieve this goal. This will help students monitor their performance, which is the aim of providing feedback, and assessment is necessary for this to occur (Brookhart, 2001; Sadler, 1989; Gipps, 1994). Ultimately it is the teacher who can provide this information and, as Wiggins (1998) states, quality information is essential if students are to know how to improve their performance. According to Bookhart (2001), "[t]he provision of [this] feedback is called formative assessment."

For me, feedback was provided in the form of comments. I tried to stay away from giving students a number score, a percentage or a numerator/denominator as I had been doing in the past when I used rubrics with marks associated with descriptors. I started writing at least two comments where the student needed to improve and one positive comment on something that she had done well. I also would give an assignment for practice, which I returned with feedback, and then required the completion of a similar assignment that I would take in for marks. I would record marks for both the

practice (formative assignment) and final assignment (summative assessment) in Grade Machine.

Defining summative assessment.

Summative assessment has a role to play in identifying what students know and understand. This type of assessment is what I used exclusively when I began teaching. It is essentially a summary of learning that comes at the end of a unit, cluster, or other significant periods of instruction (Boston, 2002; Cooper, 2007; Biggs, 1998). The results of summative assessments are generally used for grading, reporting, and as a means of accountability.

Proponents of formative assessment consider summative assessment a negative form of assessment when it is used too frequently or the results are used improperly as it can have a negative effect on students and teachers. However, there is research that contests the tension between formative and summative assessment. If summative assessment is in step with instruction and outcomes, it can have positive effects for the learner (Harlen, 2009).

Scrivin (1967) was one of the first to make a distinction between formative and summative assessment. He defined summative assessment as a judgment based on standards and set criteria. Summative assessment has come to be viewed unfavorably by many teachers, especially since the revelation of the findings of Black and William, (1988). Their exhaustive study of the literature was a search for evidence that could answer the question, "Would improving formative assessment improve students attainment of curriculum standards?" Their review of relevant articles and books over a nine-year period told them, in a word, yes. Their research found that formative

assessment not only produced significant learning gains, in general, but improved methods of formative assessment also helped low attainders more than other students.

They found that learning through assessment is possible if students are given feedback, are actively involved in their learning, and know what to do with the information the assessing provides and how to self assess. The authors also claimed that assessment by teachers was focused more on the quantity of assignments and marking and grading rather than the quality of the learning that was taking place. These factors tended to lower the self-esteem and self-confidence of learners, which was seen as a hindrance to learning. Black and William (1988) also found that where formative assessment was used by teachers to adjust their teaching, and by students to monitor their learning, the motivation and self-esteem of the students increased.

Summative assessment is largely seen as a comment or judgment on what students have learned (Boston, 2002). It typically does not come with feedback and has finality to it. Black (1998) discusses the tension between formative assessment and summative assessment and states that formative assessment focuses on the needs of the student while summative assessment exists in response to the system's need for accountability. Ecclestone (2004) points out that summative assessment is widely used in school systems, from Kindergarten to post-secondary education. It is also a major component of the assessment for admission to many private schools, tertiary and vocational programs. Due to its prevalence and purpose, it is likely to remain even with the increasing popularity of formative assessment.

Formative summative assessment: Necessary pieces of the same puzzle.

In order to assess accurately, summative assessment is important, but again it is

part of an ensemble, not a solo act. Nowhere in the literature I read did it say that it is the only form of assessment that should be used. When it is used as a sole indicator of achievement, an accurate picture is not presented. While the term judgment is synonymous with summative assessment, nowhere is it stated that this type of assessment is a firm, final, reported and, therefore, never to be discussed again judgment. When used correctly, with explanations, and with other forms of assessment, summative assessment can be another light shining on the pole I referred to earlier. Summative assessment is one additional tool in the assessment toolbox of teachers that can show teachers what their students have learned. When used in conjunction with formative assessment, teachers will have a clearer picture of each student's learning, knowledge, and understanding. In order to achieve this, it is important for those involved in education to see beyond the struggle between these two forms of assessment. If the goal of assessment is to promote learning, then these two should be used together.

Despite the tension that may exist, there are many researchers who maintain that a blend of the two forms can be in the best interest of the student. Both forms exist and are being used. Why then, is there tension when there could be cohesion? Instead of looking at formative assessment and summative assessment as two separate entities, these two types of assessment can be seen as necessary pieces of the same puzzle, as the excerpt below suggests. Both forms of assessment have valuable components, and it is possible to use them in order to provide the best assessment possible.

Instead of seeing FA [formative assessment] and SA [summative assessment] up close as two different trees, I would zoom to a wider angle conceptually. Then, in the broad picture of the whole teaching context – incorporating curriculum,

teaching itself and summative assessment – instead of two tree trunks, the backside of an elephant appears. (Biggs, 1998, p. 108)

Biggs is making a reference to the fable of the blind men (or mice) and the elephant. The story has been adapted and changed many times, but the core is that seven blind men are all touching a different part of an elephant. The man touching the trunk believes that an elephant is a snake. The one touching the tail believes the elephant is a rope. The one who touched the leg believes that an elephant is a tree trunk, and so on. Each man develops a different idea of what an elephant is, based upon what he felt. They are each partly right, but all are also wrong. The lesson is the importance of seeing the whole picture of something before understanding or judgment can be complete or accurate. This is the point Biggs was making: Step back; remember why you are assessing, and see the whole rather than the parts. One can also look at formative and summative assessment in this way. The goal of good assessing is good teaching. The sum and the whole have to be considered. Instead of focusing on one, the strengths of each should be used to drive instruction and benefit students. The following research confirmed for me that students can benefit from summative assessment and formative assessments working together.

Brookhart (2001) found that students were able to work well when they were given a combination of summative assessment and formative assessment. Her study focused on successful students and how they interpreted formative and summative assessments of their work. She found that students did not make distinctions between formative and summative evaluations, they tended to integrate both, taking the positive parts of each in order to further their learning.

Brookhart was able to draw these conclusions based on student reviews of their assignments, and asking them questions about their work on the particular assignment or project. If their answers focused on how the assessment helped their learning, she concluded students were discussing formative assessment. If their comments focused on a final judgment, she assumed they were discussing summative assessment. Again, she found that students talked about using both the formative and summative assessment they received. Her questions sought answers to their understanding of how to do the assignments, their understanding of what needed to be done in order to achieve the desired grade, their ability to do the assignment, and how they thought they did (i.e., self-assessment). She used a student's answers to determine if the student thought the formative or summative feedback was more valuable. Her findings were that students integrated both summative and formative assessments when determining what they learned and how well they performed on an assigned task (Brookhart, 2001).

Final tests, which are usually considered summative forms of assessment, can be effectively used as a formative tool. The use of constructive feedback with a test can result in benefits normally associated with formative assessment. Based on research at the post-secondary level, Wininger (2005) found assessment is best when formative and summative are used in combination. In the discussion of his research results, he promotes a marriage of both forms of assessment. He has called this "formative summative assessment". This means "going over exams in class with students and gaining both qualitative and quantitative feedback from the students about their comprehension" (Wininger, 2005, p. 164).

Wininger's study consisted of detailed coverage of completed exams with the morning section of his psychology class. This group of students received formative summative assessment. Students were encouraged to ask questions, seek clarification, and state misconceptions. Examples were given, grade determinations were explained, and time was provided for calculations and follow up questions. One week later students were given the opportunity to write the same exam again for extra credit. Those who received the formative summative assessment improved their scores on average by 10% with only 2% improvement seen in the control group, an afternoon psychology class.

Students also completed a questionnaire following their completion of the second test. For the statement "Going over the exam helps me to clarify and understand items that I missed or didn't understand", students were asked to rate the truth of that statement on a scale of 1-5, 5 being strongly agree. The average response from the 26 students was 4.66. As a result of his study, Wininger concluded that students subjected to the formative summative assessment method learned and retained information better than those who did not have the opportunity to receive formative feedback on a summative evaluation (2005).

These results must be treated with caution due to the fact that the same test was given to the students. One is left to wonder what actually led to the improved performance. Did the students understand the concepts better due to the formative summative evaluation they received? If Wininger had given the students different test questions and the same improvements were revealed, it might be easier to draw the conclusion that concepts were better understood, which resulted in a better test performance. It is also possible that the improved performance occurred because the

students participated in a discussion of the test questions and answers, which led to memorization of the correct responses. Moreover, Wininger did not know the amount of time the students spent preparing for the second test outside of class. Nevertheless, responses to the questionnaire and the results of the control group enabled him to conclude that students believed they had a better understanding of the test questions after to going over them in class.

My own experiences with formative summative assessment.

I have recognized that Wininger's findings are reflected in my own experiences with Middle Years students. In the social studies classes I am responsible for teaching, unit tests are given. There are approximately six per year. After a unit test is marked, it is handed back with a few comments, and each answer that has required a description is given a mark. The students in each class are given the instruction that we are going to go over the test – the summative evaluation – and discuss the answers as a class. Students are required to write down correct answers in a way that they understand. They can then use this test to help them prepare for the social studies examination at the end of the school year. I have been doing this for years and have found it helpful as I can clear up lingering misconceptions and think ahead to the final exam as well as how to improve my teaching and test questions for the next school year.

Once the review is over, students hand back their tests and those who make improvements to their responses to test questions receive a quarter of a mark for each correction. This is done as a motivator for students to improve their understanding after they have seen their grade. I have also retested students, and noticed an improvement. I've done this by asking students up to 3 days after returning their test corrections to

orally answer questions about concepts and events that were not well answered on the test. I have found that students are able to answer correctly. While this is not a formal test and there are many confounding variables such as test anxiety, answering orally versus pen and paper, and having more time to think about the material, it remains that students seem to benefit from a summative formative method of assessing even if the summative is acting as a motivator. As a teacher, it is the results that I am concerned with, and in this situation the results are the retention and understanding of information for future use.

Committee Work

It was not only my reading, coursework and thinking about assessment, or my experiences in the classroom that contributed to what I thought and did about assessment. In the two years leading up to my second maternity leave, I was a participant in two groups discussing assessment. The first was a study by teachers of Damian Cooper's book *Talk about Assessment*. The second was a divisional committee tasked with developing a new report card for the schools of the division in which I was teaching.

Discussing Cooper's "Big Ideas"

I was eager to become a member of this group because I wanted the changes I had been experiencing around assessment to be reflected in how I talked to students about assessment, how my students and I experienced assessment each school day, and how I reported students' learning on report cards. I thought this reading group would provide a platform for teachers interested in assessment to talk about how Cooper's suggestions might work in our classrooms. I envisioned that we would discuss his "Big Ideas" and how to use these ideas to bring about change in our assessment practices. This was not what happened. The sessions were disorganized and more focused on assessing examples of student work than Cooper's thinking. I left with very few ideas on how to best incorporate strategies informed by his study of assessment. What I did learn I obtained from reading the book myself. Cooper has eight big ideas and within them I not only found validation for what I was thinking but I was also obtained mental images as to what my assessment policies and procedures could look like. It was in these readings that I encountered anecdotal stories that resonated with me, and that I knew I could use to clearly explain some of my assessment decisions. Moreover, I was reminded that I had to

explain to students what I was doing and why. The students' marks, and how they were derived was not a secret to be saved for report card day; even though that is how they were treated. I needed to figure out a way to help students to be more aware of how they were doing. I recognized that this was a process, but the key to success is to make certain that the students know what is expected of them and that they practice getting there. And, while they are practicing, they learn what to hang on to and what to improve. The story Cooper relates about the figure skater that I described earlier explains this very well. She looked to her coach for feedback; details on how she can improve and what she did well, not a numerical score. This was further evidence that I need to talk to my students about what their mark means, and how I arrived at it. Such an approach would require more than handing the rubrics for assignments to students. It meant having conversations about what was expected and how their work showed me what they did know and could do.

At the time, I was using terms such as "emerging", "meeting expectations", and "proficient" when reporting a student's knowledge of the outcomes. I realized that I had to clearly define these words. I would explain how each term could tell the student where they were when it came to their understanding of the concept. Reading Cooper's book gave me confidence that I was on the right track with my plans to redefine the way I assessed. I wish that when I was in the book study group I could have spent time sharing my ideas about assessment and the reasons for these views and how I was thinking about implementing some of the ideas I had. I now wonder if there were any other teachers like me in that book study. Perhaps if we could have talked about Cooper's ideas, and our own, and efforts we were making to improve our assessment practices, I would have learned through talking to peers. I was reminded that as teachers we do not have enough

time to discuss pedagogy and "best practices". So often we sit alone and reinvent the wheel even if we are someone who wants collaborative professional development. Many times I have reflected upon the fact that if I were not working on this Master's degree I would have no vehicle with which to explore, reflect, process, and develop my thoughts, beliefs, and ideas about assessment.

Discussing a New Report Card for Schools in the Division

Around the time I began the book study sessions, an announcement came from the school division that all report cards currently being used in the division's schools would be changing. I had mixed feelings about this information because this would be the fourth new report card I would be asked to use since I started teaching in the division. However, I did think that the report card I was currently using needed improvement. For example, as a teacher I would like to have the opportunity to comment on the student's achievement of the outcomes, and I also would have liked to be able to comment on a student's classroom behaviours. In the report cards we were using, there was no place for comments on behaviours, organizational skills, or study habits. All comments were strictly based on Manitoba Education's mandated outcomes.

Our report cards had indicators that we were to use that would indicate the student's level of mastery of the outcomes. The scale began with NY – Not Yet, followed by E - Emerging, ME - Meeting Expectations, P – Proficient, and the top indicator was O – Outstanding. I did not like the numerical scale that was attached to this qualitative scale. I found that it was difficult to put a number to "Meeting Expectations" because the expectations students were trying to meet were subjective.

Something positive that arose from the Cooper book study was that we did spend time looking at work samples of students in grade eight. We discussed how we would assess these samples and what sort of feedback and marks they would receive. Essentially what we were doing was defining what "Meeting Expectations" actually looked like in this particular context. However, as many in the profession know, this is difficult to do. I had mixed feelings about this at the time, and I still do. I am not certain that it is possible to arrive at an exact description of "Meeting Expectations" because it differs depending on several factors. My experience in a high needs school and classroom has convinced me that the expectations are different for each student. That doesn't have to be a bad thing. I think it is more realistic and practical. We can still set high goals for our students and help them achieve them, but in today's classroom – especially mine – these vary widely and much more than I ever anticipated.

Following the announcement of the school division's plan to develop a new report card, I was approached by my principal to join the divisional committee. I was enthusiastic when I received this invitation. I wanted to be a part of something that I hoped would result in a report card more reflective of a student's capability. I was even more enthusiastic when I attended the first meeting and saw who was on the committee: one of the assistant superintendents, principals, vice-principals, consultants and a few teachers. I knew all of the people in the room, and I knew they were people that were there to get things done. The first two meetings were productive. We had great conversations and were working towards agreement to adjust the NY to O scale (Table 1) as well as the accompanying marks. I was optimistic, although I had reservations about report cards in general, I saw this committee as a chance to develop a better way of

reporting a student's learning. I had the opportunity to talk about what I believed, and I felt heard by the group. They felt as I did; we were going to do what we could to improve the divisional report card.

Table 1

My School Division's Academic Performance Key

Provincial Evaluation Standards	Early & Middle Years Performance Key	Middle Years Mark	Achievement on Outcomes
Demonstrates mastery of Provincial outcomes	О	90-100%	Outstanding
Consistently meets the Provincial outcomes	Р	80-89%	Proficient
Adequately meets the Provincial outcomes	ME	60-79%	Meeting Expectations
Approaches some of the Provincial outcomes	E	50-59%	Emerging
Does not meet the Provincial outcomes	NY	0-49%	Not Yet Achieved

As a result of the potential for success, I requested to remain on the committee despite my approaching maternity leave. I figured that I would have to miss one meeting but would be able to stay with the group while I took eighteen months away from classroom teaching. The assistant superintendent told me that I could continue as a

committee member as long as I could handle the responsibility along with being a new mother. I need not have worried about being dismissed as this committee was disbanded in less than three months. Nancy Allen, the Minister of Education, announced the elimination of divisional report cards and the creation of a report card that would be used province wide.

This news was very upsetting to me. In addition, I was told by the assistant superintendent that a committee was going to be formed that would include divisional representatives. My heart sank. I knew that my chances of being a representative on that committee were virtually nil. I also was disappointed that the divisional committee that had such promise was disbanded so easily. All I could do was wait to see what Manitoba Education developed and hope that it resulted in some of the changes I was eager to see.

Using Manitoba Education's Report Card for Public Schools

About two years after I learned that the province was taking over in the creation of a report card for Manitoba Schools, I utilized the provincial report cards for the first time. There were improvements made from earlier drafts. These changes proved the department was listening to teachers when they pointed out particular problems, such as the fact in middle years all creative arts teachers had to share a comment box, which meant that if a student took art, band, and drama, all three teachers would have to find a way to comment in one box.

When the new report cards were first utilized, I had to find a way to adjust the way I had been marking to the new system. I had become comfortable with my division's use of the NY to O scale, described above. My challenge was transforming it from a five point scale to a 4 point scale and ensuring that the expectations at each level were clearly defined and meaningful for me and for the students.

A New Way to Evaluate and Report

There were a lot of trials and tribulations that I would have to work through before I would even have the chance to use the new provincial report card. Changing how I report my assessment required a lot of thought and examination. My current marking process has been adapted a few times and is still a work in progress. The first step that I had taken in my efforts to make my assessments an accurate reflection of each student's knowledge really began to take shape when I returned to teaching after my maternity leave and was assignment a new grade level. This was the perfect opportunity to start my assessment practices anew and fully put my ideas into practice.

As must now be obvious, I had wanted to change the way I evaluated student work and how I reported for a long time. This was necessary because of the things I had learned about assessment and how I had begun to implement changes before my months away from teaching. I had been using feedback in terms of my comments on students work, and I had spent a lot of time talking with students about what marks really mean, how I felt about late work, deductions, and the importance of assessing what they know versus a numerator and a denominator mark on an assignment, quiz, or test. I wanted the students to know that what I was looking for was what they knew, and that I was using this information to plan instruction and activities. This was a good start, although I had not yet been able to translate this integrated way of teaching and assessing into my grade book.

What I was searching for was a way to look at and comment on the development of the student. I wanted to use this both as feedback on individual assignments and on report cards. I believe that one of my responsibilities, as a teacher, is to assess students against the outcome I was measuring. I wanted to know where they were with regards to that outcome at a specific time. I would not average, as I did not believe that averaging assignments would give me an accurate picture of what the students knew, understood, and could do. This follows what a constructivist teacher would do. It is about making instructional changes based on what one knows and what one has learned about and from formative assessments. I believe in constructivism, and I am a constructivist learner.

When I read about and talk about something that resonates with me, or that I think I could use in the classroom, I incorporate it. I have used experiences to change and grow, and I

continue do this today. So, when I began teaching grade seven after years in grade eight, I was ready to fully commit to change.

I was excited about being paired with my new teaching partner in grade seven. For a number of years she had been working on assessing her students based on the outcomes, and she had a system that told her what outcomes the students understood and to what degree. She still gave assignments, quizzes, and tests. But she would not give a final percentage score. Her approach was to group questions based on outcomes and mark the students on their demonstrated understanding of the outcomes.

She showed me the 5-point scale that she used, and I wanted to try to replicate it but I had some doubts. I was not sure that I liked how a 5-point scale would translate to a percentage score that I was still obligated to put on a report card. We also did not agree on what "Meeting Expectations" looked like, and the number on the 5-point scale "Meeting Expectations" would represent. I believed that "Meeting Expectations" was where my students should be. I believed it to be a 3 on the scale. She felt that it was better than where an average student should be and ranked it about 3.5 on the 5-point scale. We worked out a slightly different scale that we were both comfortable with, and we were satisfied that this scale would work for the students in the subjects and the courses we taught. We also created a scale that would enable us to turn this 1 to 5 number into a percentage score.

Although our grading schemes were slightly different, we had the same philosophy and frequently discussed what we thought the student should know based on the provincial learning outcomes and the students we had in our classes. We were very clear in our discussions with students, and they understood that the scale was not a

fraction but a place on continuum, one through five. We focused on the big ideas represented in the learning outcomes of a unit or cluster, and the students always knew what we were assessing and why. We did not average the marks of the assignments a student would submit, but looked for evidence of her or his understanding of the material being taught. Consequently, we marked the student knowing that there would always be opportunities for the student to improve.

I was very happy with the way my assessment of students was developing. I had many ideas I wanted to further develop and to continue to work on, but I had a system that I could verbalize to students, parents, teachers, and my administration. My assignments, activities and classroom units would include opportunities for students to demonstrate understanding of multiple outcomes. When I was assessing their work I would use the Mastery of Outcomes scale that was used in my division (NY, E, ME, P, O). These were indicators that teachers used to describe to what level a student had mastered the outcomes.

As I was marking my students' work I would consider the outcome that I was assessing and consider where the student was in his or her mastery of that outcome. I would have the outcome listed in my grade book and would assign the student a letter grade based on the understanding he or she had demonstrated. This demonstration would come from a variety of sources, both written work and spoken. Based on what students were showing me that they understood, I would either go back and re-teach particular content, or I would attempt to clear up obvious misunderstandings. Once I had addressed what I had set out to teach and was satisfied with the understanding of the students, we would progress through the remaining big ideas addressed in the unit.

When a particular unit of study was over, I would open my grade book and look for consistency in marks and improvement. The indicator (NY, E, ME, P, O) for the listed outcomes in the unit that occurred most frequently would become a student's mark for the unit. I would then look to my scale to see what the mark (NY-O) was on my 1-5 scale. That number would indicate the student's score for that unit. I would do this for all the units we covered in our term and average these scores. I was comfortable using an average in this instance because I believed the way that I arrived at this mark was through a careful, deliberate process.

While I was comfortable with this process, I knew that is was only the beginning. It needed time to evolve, and I knew that I would fine-tune it each time I worked with it. So when the report cards changed to a provincially common report I was hoping that I could continue to work with the system I had so carefully developed.

When I saw what the new reports required, I knew that I would have to change. My system relied heavily on the scale I described above which used a five-point number system. The new reports did not have letter indicators (NY, E, ME, P, O) and utilized a four-point number system. I debated the logistics of keeping my NY-O system, but decided that the reason I used it in the first place was because it used the language required in the divisional reports. I believed that consistency was important, so I chose to use the language of the provincial report card. Even so, I had to find a way to adapt my system to the new reporting system.

This focus on development toward mastery is something that I stress with students, and whenever I get the chance, I talk with parents and guardians about it. My goal is to let students know that it is my job to accurately comment on what they have

learned, and to scaffold their learning by providing feedback that will help them to achieve the grade-specific exit outcomes for Social Studies and ELA. I knew I could still do this with the new system, but I had to figure out how to alter the 5-point system to the 4-point system. The indicators that were set out by the province are provided in Table 2:

Table 2

Provincial Indicators of Academic Achievement

Academic Achievements of Provincial Expectations Grade Scale			
4	Thorough understanding and in-depth application of		
80% to 100%	concepts and skills		
3	Very good understanding and application of concepts		
70% to 79%	and skills		
2	Basic understanding and some application of concepts		
60% to 69%	and skills		
1	Limited understanding and minimal application of		
50% to 59%	concepts and skills; see teacher comments		
ND	Does Not yet Demonstrate the required understanding		
Less than 50%	and application of concepts and skills; see teacher		
	comments		

When reading students' work I would consider the same learning outcomes as I had previously. I would assess different outcomes multiple times and instead of using the old letter system I would give the students a number, one through 4, considering what those numbers represented. Then I would follow the same steps as I described earlier. When I looked back to calculate the students' marks for the outcome and unit, I realized that something was not right. The marks seemed higher than where I thought the students were with regards to their understanding of the outcomes. I was frustrated because I had

spent so much time and thought trying to fairly assess and it seemed like I was taking one step forward and two steps back. I was not happy with what I was seeing because I did not feel the marks I had reached when assessing the work of my students was a fair representation of what they knew. This had always been my benchmark, something I could rely on. My purpose was always to do my best to have my assessment reflect the student's ability. If I was unsure or having a difficult time explaining something, I could work through it because I knew that I was doing the best I could to accurately reflect what I knew the students had learned.

I went back to my partner who had helped me to develop the way of reporting that I had used the previous year. We discussed my concern that some students were not getting the mark they should. I had spent so much time trying to change my existing system on paper when trying to arrive at the mark that I had not realized that I had not changed what the number meant in my mind. By looking at my grade book and asking me to what degree I felt the student understood the outcomes, she helped me realize that when I read a student's work, in my mind I was thinking of the scale that I had developed the previous year when tying to determine their understanding of the outcomes. If I looked at the work and thought it was Meeting Expectations (ME), I would give it a 3. That worked when my scale was a 1 to 5 scale but it did not work when the scale was a 4point scale. In order to solve this problem I continued to assess as I had trained myself to think in the previous year. I would give my students the same number that reflected their demonstrated understanding of the outcomes and would use the 5-point scale in my grade book then would translate that number to the number that represented the same level of understanding on the 4-point scale.

Conclusion

This is what I am currently doing today and will continue to do this school year. My short-term goal is to refine the process I use and to learn from it over the next two report cards. I don't feel as good about it as I felt about what I was doing last year. I am not sure if it is because I am not as familiar with it or because I am not happy feeling forced to change something that was working well.

Something that contributes to my frustration is that my view on the importance of the report cards is out of step when compared to the amount of time I spend writing them. I feel the most important part of assessment is what I do with the students every day. This is the assessing that I use is to figure out what they know and don't know that informs my subsequent instructional steps. Currently, I am happy with the way that I assess, but I know there are things I could do better. I also know that I will continue to learn and practice, to experiment and evaluate, and in doing so will keep improving as a teacher.

I recognize that formal K - 12 education is constantly changing, and that if I am going to improve I too must also change. I view myself as a teacher who is continually learning. As a result, I have to reflect, re-evaluate, and change as the research literature suggests without losing myself in the process. This is another lesson that I have learned over the last several years. It is not enough to get mad and frustrated or to complain about how things are, I have to figure out a way to adapt and adjust when new ideas are proposed.

Countless times, new ideas were presented that conflicted with what I was thinking at the time. When I was presented with something new that was contradictory, I had to figure out what to do. I had to critically evaluate what I believed and weigh it

against the new information. Then I had to make a decision. Sometimes I would think, "Yes, what I have been doing is wrong, this is what is best for my students and for me, and I must change to make it work with my new way of thinking." An example was when I realized that I had to use a frequent and varied form of assessment. Tests were going to have to be a part of my assessment package, but I had to use them along with numerous other ways of assessing to paint a clearer picture of what the student knew and what I needed to do to help the student move further along the path toward mastery.

Sometimes I recognized that the new information was right, but I was not yet ready to deal with it. I had to put the information away, but ensure that I did not forget about it so I could examine it more thoroughly in the future. This is what happened when I heard the information in the staff meeting about the use of zeros in averages. Working on a self-study was a way for me to change my assessment practices and reflect on what was working and what was not. I was organizing and keeping track of my thoughts. I had questions about my current assessment practices, and I needed to study both the literature and my own practices and then find a way to better assess the learning of the students I was teaching.

Questioning Grade Machine and how I was using it and the conversation I had about "The Most Dangerous Game" were also pivotal moments for me. Although I was being challenged, I recognized that I had to critically analyze the disequilibrium I was feeling if I was going to become a better teacher. These and numerous other events during my teacher education program and teaching career are the data for this self-study. Given that the goal of self-study is the desire to improve practice, my goal is the

improvement of my assessment practice by reflecting on the assessment practices I have used in the past and the events that initiated changes to these practices.

This process has been an investigation into what I think of assessment, why I think of it as I do and how I use it as a professional. My data has been my experiences and my interpretation of them. I have used time, experiences, and education to construct my own beliefs to change my teaching practices. I have also become so much more willing to adapt and change and to try things that I do not always immediately agree with. My experiences over time have caused me to reflect on all I have learned and I now look back at my experiences in a new way.

Writing this thesis has changed me as a teacher. Writing about my experiences, reflecting on what I have done, conversations I have had, and things I have learned in the Faculty of Education have all shaped what I now do. The interactions and experiences I have written about have led to how I currently assess the students I teach.

Returning to my school and teaching a new grade presented the perfect opportunity for me to make a new start, and really practice what I believed in terms of assessment. When the new report card was introduced I had to work with it. It disrupted the path that I was on, but I had to learn to adapt when such changes occur. I thought back to Bullough and Pinnegar's idea that struggle and discomfort are part of the learning process. That is what I am trying to work through; to learn more so I can do better.

I also have to be flexible because the students that come through my school's doors have significantly changed in the last few years and this is projected to continue. We have a high immigrant population that comes to us from all regions of the planet. These students arrive with a wide range of experiences, including educational

experiences, and beliefs. If I am to teach these students, I have to continuously reassess how I teach and how I assess because many of these students need more from me than students in the past. Many have reading levels that are well below the level Manitoba Education expects students to be for Grade 7.

The way I currently assess involves a number of steps, and allows me to use the outcomes in combination with provincial expectations and my professional judgment to figure out what my students did not understand, where my teaching should go, as well as generating a mark to put on the student's report card. My students are also very involved in this process and when I explain how I assess, what understanding looks like on their part, what scale I use, how I have taken their work and interpreted it into a mark that they understand and can agree with, then they know they are a part of the process.

My research has taught me that I cannot meet the needs of my students if I do not plan with them and with the end in mind. Each year I must reevaluate my lessons and the exit outcomes that I focus on. This has to be done with the students that I have in my classes that year. I have to spend time getting to know them, what they know and what they can do. If I don't know the skills and concepts they already possess, how can I help to develop them further? It is vital that I figure this out, and I do so through assessing. This assessment can take a number of forms, from first-hand activities, paper assignments, conversations, and the like. The goal is to figure out where began and the direction we need to go in a unit or subject. Once this is known, assessment takes on a different role. I use it to see what they have learned through the activities and units we study, and I use this information to determine when we can move on. Sometimes students take a longer time to understand ideas and to develop particular skills. Sometimes a

majority of my students will have misunderstood a particular concept, and I have to critically analyze my planning and delivery to begin to figure out why. Why has there been a disconnect between what the student are expected to know and what they have learned?

This recently happened in my Short Stories Unit. I knew from prior observations and work with these students that we would have to break the unit down to focus on the basics. We studied setting, protagonist, antagonist, and conflict. We read lots of stories, did a lot of activities that focused on developing an understanding of each one of these concepts. I felt confident that the students "got it". When they wrote the test, almost every student struggled with the notion of conflict. This showed me that they did not have a sufficient grasp of the concept to independently answer the questions. I spoke to the class and asked about what they wrote and why. Many students did not realize that when discussing conflict it was the struggle that they were to describe, not the protagonist view of what happened. I was able to re-teach this in a different way. When I retested them, they demonstrated a much better understanding of the concept. The old me would have entered their initial test mark in Grade Machine. Now I try to determine what caused the gap and teach so as to close it.

There are also some concepts that I will work on until every student can understand what is to be learned. The best that some students will be able to do is to meet the outcome with assistance, but they will meet it. This year when I taught longitude and latitude, I told the class that no one would get less than 65% on the final test. We would study, practice, and keep practicing until they were all able to locate places on a map using longitude and latitude. When I told them that if they could not achieve this it would

be my failure not theirs, their eyes were as big as saucers. After several weeks spent on the concept, they could do it. I know this was a good moment for many of them who found it difficult and confusing at the start, but who ended up with 100% on the test because they persisted and found success at something that they once found difficult.

Because of my assessment beliefs, things I have read and discussed, and what I have written, I have changed my teaching philosophy. I spend more time on fewer outcomes and my goal is to help students understand those few. If they do not understand something, then we try again, often in different ways, until they do. Sometimes I have to realize that a student has come as far as she can. I also do not get as worried about missed assignments, because I know that I can address each outcome numerous times, and that I will see a level of achievement more than once.

The biggest thing that has changed is my thinking. I am questioning things much more than I would have in the past, and I credit my experience in the M. Ed. program with this. When I plan lessons or am determining how I am going to assess, I am always asking myself "What is the goal?" I make sure that I know the answer and stick to it. When I'm reading over student's work, I'm asking "Given the goals, what do they understand?"

I know that I would not be asking these questions or spending so much time refining my practices had I not decided to complete my Master of Education degree. Through reading, writing, and talking with people about assessments, I have learned many things about teaching and assessing. The underlying lessons is to accept that this is how I currently assess as it is the best way I know, and to recognize that this way is not static. It will continue to evolve and change as I do. And as I change so will the ideas and

philosophies around assessment. I welcome that and am prepared to deal with it. I understand that I must keep learning, reflecting, changing, and adapting if I am to achieve my goal of assessing my students in a meaningful way. Throughout this process I have come to realize that, more than ever before, I am open to change. If new ideas come along, I will be willing to try them if they benefit my teaching and the students' learning. Everything I now do in the context of assessment is underpinned by constructivist theories of learning and my lived experiences as a teacher. I build on what I know by finding a way for new ideas and pedagogies to have meaning for me.

When I began this study, my question was about my thinking and what happened to me when I read the literature or conversed with my colleagues about assessment. This is a question that does not have one answer. The question is an ever present reminder to be aware of what I am thinking when I engage in assessment in any way, then letting my thoughts grow into things I can do and ideas I can discuss with my students. Learning is about questioning and thinking and this is something to be practiced and continued and believed in. Dewey once stated that: "Education is not preparation for life, education is life itself" (1897). This has been my education, to question, think, and do, all with the goal of improving my students' ability and desire to learn and myself as a teacher.

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