

THE WHOLE THING CHANGES:
STUDENT ENGAGEMENT AND INQUIRY LEARNING

by

Adam Sanderson

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

Master of Arts in Education

Supervisor: Dr. Andrew Manning

Examining Board: Dr. Jerome Harste
Dr. Vivian Vasquez

MOUNT SAINT VINCENT UNIVERSITY

September 2013

Table of Contents

TABLE OF CONTENTS	I
ACKNOWLEDGMENTS	III
ABSTRACT	V
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: INQUIRY-BASED LEARNING	4
2.1 INTRODUCTION	4
2.2 INQUIRY LEARNING AND CHOICE	4
2.3 SOCIAL THEORIES OF LEARNING AND SHARING	9
2.4 TECHNOLOGY	12
2.5 ENGAGEMENT	14
2.6 DEFICIENCIES	17
2.7 RESEARCH QUESTION	18
CHAPTER 3 – METHODOLOGY	19
3.1 INTRODUCTION	19
3.2 TEACHER RESEARCH	19
3.2.1 <i>Insider Research</i>	20
3.2.2 <i>Action Research</i>	21
3.2.3 <i>Theory and Data</i>	22
3.2.4 <i>Qualitative Research</i>	23
3.2.5 <i>Arguments against Teacher Research</i>	24
3.3 METHOD	26
3.3.1 <i>The Setting</i>	26
3.3.2 <i>The Unit</i>	27
3.3.3 <i>The Data</i>	29
3.3.4 <i>Analysis</i>	31
3.4 CONCLUSION	32
CHAPTER 4 – THE WHOLE THING CHANGES (ANALYSIS)	34
4.1 INTRODUCTION	34
4.2 INQUIRY LEARNING	35
4.2.1 <i>Questions</i>	36
4.2.2 <i>Student Voice and Student Input</i>	38
4.2.3 <i>Critical Literacy</i>	40
4.2.4 <i>Collaboration and Respect</i>	42
4.3 CONCLUSION	45
CHAPTER 5 – THE IMPORTANCE OF PRACTICE (ANALYSIS)	47
5.1 INTRODUCTION	47
5.2 THE IMPORTANCE OF PRACTICE	47
5.3 VALUING STUDENT WORK	48
5.3.1 <i>Sharing in my Practice</i>	50
5.3.2 <i>The Desire to Share</i>	52

5.4 CHOICE	57
5.4.1 <i>The Freedom to Explore</i>	58
5.4.2 <i>Push and Pull</i>	59
5.5 TECHNOLOGY	60
5.5.1 <i>The Students Have Changed</i>	61
5.5.2 <i>Technology in My Classroom</i>	63
5.5.3 <i>Hands On</i>	64
5.6 CONCLUSION.....	65
CHAPTER 6 – CONCLUSION	67
6.1 INTRODUCTION	67
6.2 ENGAGEMENT	67
6.3 A REFLECTION ON TEACHER RESEARCH.....	70
6.4 A REFLECTION ON THE RESEARCH JOURNAL	72
6.5 QUESTIONS, PROBLEMS, ANOMALIES.....	73
6.6 CONCLUSION.....	82
REFERENCES.....	87

Acknowledgments

First and foremost, I would like to thank Dr. Andrew Manning. Andy not only answered all of my questions and assisted me through the process which led me to undertake this thesis, but also provided direction, read and edited countless drafts and pages, answered emails, set dates and handled the administrative paperwork. Without Andy's encouragement, guidance, knowledge and support I am certain that this thesis would not have been possible. I know that not only myself, but also countless other students and Master's candidates appreciate and deeply respect Andy's professionalism and dedication to the world of education. Thank you, Andy.

I would also like to thank Dr. Jerry Harste and Dr. Vivian Vasquez. Jerry not only got me thinking about inquiry, one of his fields of expertise, but also encouraged and supported me as only Jerry can. I would like to thank Vivian for her expert editing and direction with revision, great ideas and continual support throughout the writing process.

I would like to thank my mother and father for all of their support. Specifically to my mother, Rav Mckee, an accomplished educator in her own right, thank you for reading and re-reading numerous drafts as well as providing editing and guidance throughout this process.

Last and most importantly, I would like to thank my wife, Ainsley. Without your support and encouragement, as well as patience, my completion of this thesis would not have been possible. Also, thank you to my son Jack, who was born during the writing of this thesis, for sleeping so soundly upstairs while I worked hard below.

To all those mentioned, and all others that have offered support, thank you. I appreciate your help more than you know.

Abstract

This thesis is based on my experience with teacher research in my classroom. Teacher research aims to find individual and personal meaning within a very specific and local context. In this sense, my goal in engaging in teacher research was to participate in a self-reflective process of observation in my classroom, studying the effects of inquiry-based teaching on student engagement, in the hopes of improving my own practice.

The methodology employed was qualitative teacher research. Data was collected over approximately a six-week period throughout a language unit on social justice. The data was collected through a research journal. Thematic analysis of the data revealed several significant themes relating to the importance and impact of inquiry learning as a teaching pedagogy, the importance of valuing student work, student choice, and the use of technology in the classroom.

Chapter 1: Introduction

As a young student, I misbehaved in school, a lot. In fact, I received some form of suspension every single year from about grade seven until I reached grade thirteen (or O.A.C. as it was called in Ontario). I was bored, usually off task and, as you can imagine, did not achieve my potential academically. In short, I was not engaged. The lessons had no meaning for me and I had no passion or motivation for my work. I guess you could say this is where my thesis began.

Some may find my choice of profession ironic given my history with the schooling system. However, as an adult and a teacher I am passionate about the education of children and thoroughly enjoy everything about the field of teaching. Yet it would be naïve to think that there are not issues in my classroom. More generally, almost certainly, various aspects of schooling and learning in many of today's schools are problematic to a degree. Nonetheless, I believe it is within my power as a classroom teacher to impact the experiences that children have in school and the ways in which they learn. Indeed, I think it is my responsibility.

As a classroom teacher, I have become all too familiar with the disruptive student, the silent student, the student who is not paying attention to lessons, the student who does not submit work, or submits work late, or submits work far below his or her potential. Yet I believe that the majority of these students are not lazy or inept, or suffer from ADHD or any form of learning disability or social issue; they behave in

these ways because for them school work has lost its meaning, or never had any. Many students behave in these ways because, just as I was, they are disengaged.

Undoubtedly, one issue I have noticed with some of my students is a lack of engagement. Specifically, by engagement I am referring to students' connection to, and enthusiasm for, their school work, as well as their active participation in school and class discussions, and their ability to stay self-motivated and focused.

As a teacher, I cannot make a student learn and I cannot command him or her to be engaged. Ultimately, I have no real leverage to force students to work hard, to put in effort, or to self-motivate. At some point, the desire to put forth a genuine effort must come from the child. This issue is important because a student who is not engaged, interested, participating, or motivated is not learning the intended content. Students who are not engaged will often underachieve, will disrupt classes or routines for themselves and others, and will ultimately not learn as we want them to. Yet how do I get students engaged?

In addressing this problem, I am not looking for a magic formula, nor do I expect to find one. I do not believe that there is one right answer, or that every student can be genuinely motivated to learn. But what I am looking for is some practice that might help; a way to entice disengaged students to become sincerely engaged, and therefore to put forth a consistent and honest effort to give me a better idea of their abilities. In short, I am looking to help them learn in the best way possible. I have reason to think that the answer may be in concepts such as choice, personal interests, sharing,

collaboration, and technology. More specifically, the answer may be *inquiry-based teaching*.

In an inquiry framework, students are given choice relating to what they do and how they do it. They are also given access to new forms of technology and new literacies in order to create culturally relevant and meaningful work. Ultimately, in an inquiry curriculum, learning is seen as a social process built on relationships and respect. This process allows students to collectively engage in meaning-making through activities, such as creating media which is then shared. I believe that traditional outcomes can be reached through these alternative methods with little sacrifice made in terms of the curriculum, but great gains made in terms of student engagement and overall learning. Ultimately, my hope is for this research to help illuminate issues regarding disengaged youth - youth that are simply going through the motions and wishing to be anywhere but school; just as I was.

As a student, I was the definition of disengaged. As an educator, the issue of student engagement interests me. I believe that school can be a place where students actively and enthusiastically engage with materials, peers, teachers, and where genuine and authentic learning takes place. I have seen it done. However, for this to happen we must first address the problem of student engagement, quite possibly through rethinking our teaching pedagogy. In this thesis, I seek to explore possible solutions to this problem. In particular, I explore the role that inquiry-based learning can play in encouraging student engagement in the classroom.

Chapter 2: Inquiry-based Learning

2.1 Introduction

In chapter one, I discussed my background as a young student. I also introduced myself as a teacher and researcher, as well as highlighted a problem I have seen in my classroom with student engagement. Lastly, I offered what I think may be a solution to that problem; that solution involves inquiry learning and choice, social theories of learning and sharing, and technology.

In this chapter, I will discuss the theoretical background to those concepts, including related scholars and literature. I will also explain how I hope to uncover some of these concepts in my research.

2.2 Inquiry Learning and Choice

Inquiry-based learning requires students to be active participants in the process of learning, as opposed to teachers simply giving knowledge or answers to students. Inquiry learning invites students to experience concepts by inquiring and exploring (Dewey, 2004; Dewey, 2007; Postman and Weingartner, 1971; Short et al, 1996). Traditional models of learning have operated by compartmentalizing and sorting information into organized topics and levels of difficulty, and then simply telling or “teaching”, these to the students. Often within this model, regularly referred to as a transmission or banking model, teachers talk and students listen and learn (Freire, 1972).

Conversely, inquiry learning begins with the natural curiosity of the student. In inquiry learning the experiences of the students themselves are central to learning. This kind of learning tends to begin with questions. It is important for questions and topics to originate from the interests of the students. In this sense, learning is organized and propelled by students' interests, rather than the teacher's interests and ideas, which the students have little connection to. Questions are then explored through student-centred investigation. This process thrives on the active inquiry of the child, as opposed to the giving of information by the teacher.

Furthermore, within inquiry learning the teacher is generally seen as a guide. The teacher's role in inquiry is to assist and monitor students in their quest for answers, as well as to provide support and direction in the classroom. As a pedagogical approach to teaching, inquiry-based learning emphasizes a strong relationship between students and what they learn. It involves a high degree of student participation and is based on student experiences.

In North America, inquiry learning is often associated with a psychologist and educational theorist by the name of John Dewey. John Dewey offered many important ideas relating to education and learning, and was extremely influential in shaping original theories about inquiry learning. Dewey authored several significant works about education. His major educational works are generally considered "Democracy and Education", first published in 1916, and "Experience and Education", which was first published in 1938. Many of the following concepts about inquiry learning had their origins in these works.

Initially Dewey referred to what was known as “progressive education”, which was in direct opposition to “traditional education”. Dewey believed that progressive education should be rooted in the experiences of the learner. Dewey himself states that, “there is an intimate and necessary relation between the processes of actual experience and education” (Dewey, 2007, p. 6).

Progressive education was aimed at addressing the shortcomings of traditional education, mainly the compartmentalization of information and the organizational systems of schools. Dewey also took issue with the static nature of the information being presented to students, and the fact that in a changing world students were simply being rolled out in an assembly line fashion after being taught a list of dated, pre-conceived skills.

In contrast, Dewey believed strongly that education and learning should be inherently social and interactive processes, rooted in the curiosity of the learner. He proposed that students should play an active role in the creation of their learning, and viewed the teacher as an assistant in this process as opposed to the leader. These points are evident in the following quotation;

“When education is based upon experience and educative experience is seen to be a social process, the situation changes radically. The teacher loses the position of external boss or dictator but takes on that of leader of group activities.” (Dewey, 2007, p. 25)

Ultimately, Dewey believed in the important role of students in their learning, their need for relevant and current information which they themselves discover, as well as the need for choice in learning. The following quote encompasses many of these ideas;

“There is, I think, no point in the philosophy of progressive education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process, just as there is no defect in traditional education greater than its failure to secure the active cooperation of the pupil in construction of the purposes involved in his studying.” (Dewey, 2007, p. 28)

In short, whereas traditional education has failed to engage students, progressive education strives to provide students with choice and voice as they actively participate in their educational experiences.

Certainly Dewey has made significant contributions to educational theory, and to inquiry learning specifically. Dewey’s influence can be seen in the work of many educational theorists and scholars as others have embraced and advanced his ideas. While Dewey’s traditional model of inquiry has been adopted and implemented by many, some have changed or highlighted certain aspects. Over time other academics have incorporated and promoted ideas relating to student voice, choice, and experience-based learning within the inquiry framework (Postman and Weingartner, 1971; Short et al, 1996; Stripling, 2008; Kuhlthau, 2007).

Neil Postman and Charles Weingartner are among these, and have contributed to current notions of inquiry learning, in part through their book, “Teaching as a Subversive Activity” (Postman and Weingartner, 1971). It is from this book that I have borrowed my title, “The Whole Thing Changes”.

Postman and Weingartner (1971) stress the importance of rethinking learning and redesigning classrooms through inquiry. They assert that, “The inquiry method of teaching and learning is an attempt at redesigning the structure of the classroom. It is a

new medium and its messages are different from those usually communicated to students” (Postman and Weingartner, 1971, p. 24). Certainly one of their most powerful arguments is that there must be a change in the schooling system and that the inquiry method should play a large role in that change.

Postman and Weingartner (1971) also claim that learning does not necessarily occur in a linear fashion, as evidenced in this quote: “... the larger point is that the sequential curriculum is inadequate because students are not sequential: most significant learning processes do not occur in linear, compartmentalized sequences” (Postman and Weingartner, 1971, p. 28). Furthermore, like Dewey, Postman and Weingartner believe that teachers should guide student learning as opposed to controlling it.

Another advocate of inquiry learning is Dr. Jerome Harste. Dr. Harste has contributed a great deal to the field of inquiry learning generally, and to my ideas about learning specifically. One of Dr. Harste’s co-authored works, “Creating Classrooms for Authors and Inquirers” (Short et al, 1996) discusses the active role students play in beginning the inquiry cycle as they pose questions which are relevant to them. This book also stresses the importance of collaboration, and discusses what the inquiry process looks like in the classroom.

Of particular significance to Dr. Harste are notions about student voice and choice in inquiry learning, both of which are evident in the following quote: “Children need to be assured that what is on their mind is legitimate. Voice means that curricular invitations need to be open-ended and provide choice” (Short et al, 1996, p. 53).

Certainly choice is a key aspect of inquiry learning, and plays an important role in many conceptions of inquiry and student-centered learning.

Undoubtedly, a great deal of the work surrounding inquiry learning, participatory learning, experiential models of learning and social theories of learning focuses not only on the active role of the learner, but also on giving the learner choice. Many of those referenced throughout this chapter have advocated for choice in learning in one form or another, and it is in great part due to scholars such as Dr. Harste, that ideas like choice continue to gain legitimacy in education.

The list of contributors to the field of inquiry learning, as well as academics promoting student choice in learning, is extensive and includes among others, Carol Kuhlthau (2007), Richard Beach and Jamie Myers (2001), Gordon Wells (2004), Paulo Freire (1972), Harvey Daniels (2002; 2009), and Barbara Stripling (2008), all of whom have written about or studied inquiry-based learning, inquiry-based teaching, or the role of student choice and voice in learning.

2.3 *Social Theories of Learning and Sharing*

Recent research into learning has emphasized the importance of social interaction in the learning process. Generally, this is referred to as social theories of learning. Social theories of learning support the notion that student learning is inherently social, and therefore gains meaning and value in social settings and forums.

Social theories of learning also stress the social nature of learning as a collaborative and group process, emphasizing participatory learning and group sharing

of work and ideas. It is rooted in a belief that meaning is defined through a social process of negotiation within a specific context. Part of the process of engaging in collective meaning-making involves sharing work, a notion closely related to inquiry learning and highly relevant for this thesis.

Social theories of learning claim that meaning is constructed to fit particular contexts and specific social situations (Comber, 1997). For example, knowledge regarding how to properly behave or act in public is only useful if those practices are common in the community one is in. Similarly, knowledge is determined to have value differently in different contexts (Sealey, 1996).

Etienne Wenger (1998), James Gee (2004; 2007), Barbara Comber (1997), Adrian Blackledge (2000), and Alison Sealey (1996) have all contributed relevant ideas and information relating to the social processes of learning to this thesis. Wenger (1998) in particular claims that learning is a fundamentally social process and promotes the importance of collaborative, group, and community relationships in the learning process. Wenger states that; "Knowing is a matter of participating in the pursuit of such enterprises, that is, of active engagement in the world" (Wenger, 1998, p. 4). Wenger's emphasis here, much like Dewey, Postman and Weingartner, is on the involvement and participation of the learner in the learning process.

Similarly, Barbara Comber (1997) believes in the social construction of knowledge. She also proposes that this is important in order to keep learning current and relevant. Comber claims that, "literacy can be understood as socially and culturally constructed practices" (1997, p. 22). This relates closely to the notion that children

come to school with different experiences and thereby different sets of social skills, many of which are determined to be of differing value. This is a notion that is central to numerous social learning models, as well as many beliefs about critical literacy.

James Gee (2004; 2007) is considered one of the foremost scholars in the areas of literacy, technology and social learning. Gee offers several important ideas which support social theories of learning and fit with the inquiry process. Gee believes not only in the social nature of learning and language, but also in the importance of technology. As far as social learning is concerned, Gee promotes communication across a variety of mediums, as well as advocates for the role new literacies play in that process. When Gee refers to social learning involving language, he defines it as such; “the ways in which oral and written language are used when people do things together” (Gee, 2004, p. 21). Of course, social theories of learning take this notion further in proposing that language is not only used for social purposes, but also gains meaning and value in those social interactions, such as when shared.

John Seely Brown and Richard Adler (2008) offer a similar and particularly apt explanation in the following quote:

“What do we mean by “social learning”? Perhaps the simplest way to explain this concept is to note that social learning is based on the premise that our *understanding* of content is socially constructed through conversations about that content and through grounded interactions, especially with others.” (Seely Brown and Adler, 2008, p. 18)

While these two scholars are known primarily for their work surrounding technology and the internet in education, they exemplify the fact that social theories of learning can

indeed form a basis of understanding upon which specific teaching pedagogies or practices are then built.

While I have offered a look at some of the main ideas behind social theories of learning, this is but a fraction of the theory behind social learning models. Ultimately, this thesis will draw on only some ideas from social theories of learning, much like it draws from ideas about technology.

2.4 Technology

Within an inquiry framework built upon a social understanding of learning, technology is important as a medium and an aide. Many educational theorists (Gee, 2004; Jenkins, 2009; Lankshear and Knobel, 2010; Brown, 2000) promote the importance of technology for learning in the classroom. Numerous proposed solutions aimed at combating a lack of student engagement suggest the use of technology. Indeed, technology can engage students as it permits them access to incredible amounts of current and relevant information, as well as allows them to participate socially in larger on-line communities. Furthermore, many technology platforms have become mediums with which a great many students are extremely comfortable and familiar, and therefore willing to utilize.

Will Richardson is among those promoting greater use of technology in the classroom. Richardson (2006; 2011) has advocated for a new model of teaching and learning involving new literacies, technology, and the internet. Richardson believes that our teaching model is outdated and that we must use the technological resources we

have to help kids learn new content in new ways, in order to prepare them for a new world. He is not alone in this argument.

Colin Lankshear and Michele Knobel (2010) also emphasize the importance of new forms of media and technology for current teaching practices. They point to scholars such as John Seely Brown, Richard Adler, and Henry Jenkins who believe in a new model of learning; one involving the creation of, and participation with, new media online.

Of course, one of the most important aspects of technology is the internet. John Seely Brown summarizes its impact as “the World Wide Web will be a transformative medium, as important as electricity. Here again we have a story of gradual development followed by an exploding impact” (Brown, 2000, p. 12). Moreover, Henry Jenkins refers to the “digital revolution” and its challenge to “wire the classroom and prepare youth for the demands of the new technologies” (Jenkins, 2009, p. 59). Jenkins actually goes on to reference a connection between media literacy and inquiry learning: “One of the biggest contributions of the media literacy movement has been this focus on inquiry, identifying core questions that can be asked of a broad range of different media forms and experiences” (Jenkins, 2009, p. 59).

James Gee (2004) proposes that our teaching must be more relevant to the world our students live in, which naturally involves technology. Gee is known for promoting a rather unique style of teaching, in which students learn through the use of video games. His ideas relating to the link between technology and student learning

have had a great impact on current thinking about technology in the classroom, especially through his work, “Situated Language and Learning” (Gee, 2004).

Although his work will be discussed in more detail in the coming section, Marc Prensky (2001; 2005) is a firm believer in the importance of technology, especially as it relates to securing students’ engagement in learning. Clay Shirky (2010) and Kathleen Fitzgibbon (2010) have also contributed ideas relevant to this thesis regarding technology, learning, and literacy.

2.5 Engagement

The central issue this thesis aims to examine is student engagement. As such, it is important to explore and define engagement in light of the collective body of knowledge on student engagement in the classroom. Numerous educational scholars and theorists have contributed ideas about student engagement which are relevant to this thesis. Many of these discuss engagement as it relates to a specific teaching style, technique, or method of classroom organization. For example, problem-based learning, inquiry learning, or technology.

Marc Prensky has done extensive work relating to youth and engagement, specifically with regards to technology. Prensky (2001; 2001; 2005) believes that students are disengaged because they are bored. He suggests that they need access to technology in order to stimulate and engage them. Prensky also believes that we are employing yesterday’s teaching for tomorrow’s kids.

Another scholar concerned with student engagement is Sir Ken Robinson. Robinson (2007) asserts that kids need a more individualized model of education to foster new creativity for a new world. He claims that students need choice in their learning, and the opportunity to practice divergent thinking skills. Robinson also believes that students are not currently receiving this and are therefore disengaged.

Leah Taylor and Jim Parsons have offered a comprehensive review of literature relating to student engagement, entitled "Improving Student Engagement" (2011). One of the paper's findings supports the work done in this thesis. Discussing research being carried out on student engagement they claim that, "... current work is more willing to revision schools to fit the learning needs of students. This change seems crucial and promises to organize how the study of student engagement will be carried out in the future" (Taylor and Parsons, 2011, p. 2). This involves changing our teaching techniques in order to improve student engagement, and not attempting to change students to fit our teaching techniques.

Furthermore, many studies have been carried out purporting to measure various aspects of student engagement, and several of those have been useful in gathering information for this thesis. Referenced studies include Stephanie Ahlfeldt et al (with the help of the National Survey of Student Engagement) measuring levels of engagement in university classes (2005), and Jang, Reeve and Deci's, "Engaging Students in Learning Activities" (2010).

Jodene Dunleany and Penny Milton's article, "Student Engagement for Effective Teaching and Deep Learning" (2008) was also consulted, as well as Hmelo-Silver,

Duncan, and Chinn (2007) with their response to Kirschner, Sweller, and Clark (2006). Further useful work in the area of student engagement has been conducted by the NSSE (National Survey of Student Engagement), as well as the Ontario Literacy and Numeracy Secretariat.

It must be noted that I also made great use of a variety of resources about research, data collection, research methods, teacher research, action research, and educational research. Among these are books and papers by Andrew Manning and Jerome Harste (1994), Wilfred Carr (2005; 2006) and Stephen Kemmis (1980; 2006), Colin Lankshear and Michele Knobel (2004), John Creswell (1994; 2007), Lawrence Stenhouse (1981), and Kimberly Shakir-Costa and Laura Haddad (2009).

Obviously this is but a sample of the relevant research, literature, and scholars offering pertinent ideas and theories for my particular thesis topic. However, several of these scholars have been extremely influential in shaping and informing my thinking about my area of research. While the above sections highlight what has been done in areas surrounding my topic, it is also important to examine what has not been done with regards to inquiry learning and student engagement.

2.6 Deficiencies

In my opinion, a great deal of research and writing still needs to be done related to inquiry learning and student engagement. My perspective is unique in terms of bringing together inquiry learning, engagement, social theories of learning, and technology. I was not able to find a great deal of literature that focused on all of these together, in the way that I am currently conceptualizing them.

In addition, while many of the journal articles I found dealt with the theoretical concept of inquiry, or offered various definitions of engagement or markers for measuring engagement, I did not find much literature relating to the practical implications of these topics. Perhaps much of the theoretical foundation has been laid for inquiry learning in the classroom, but more practical experiences and observations, such as this thesis for example, are needed.

Moreover, I generally found the literature lacking in terms of its emphasis on the process for implementing a true inquiry classroom. While some works did discuss the layout and structure of an inquiry class (Short et al, 1996; Harvey and Daniels, 2009; Canada Literacy and Numeracy Secretariat, 2011), most seemed to refer to the concept more generally, as opposed to giving concrete explanations and descriptions of the inquiry classroom in full implementation.

Furthermore, while I found there to be a great deal of accessible literature on technology, and some literature on the role of choice, I found very little on the practice of sharing and valuing student work. In fact, I found this to be a distinct deficiency in classroom practice literature. For me, this reinforced the notion that we seem to pay

great attention to the production and assessment of student work, but very little to actually making sure the students feel that their work is valued.

Lastly, as mentioned above, teacher research is an individual and personal process by which we attempt to find answers to questions within our own local and specific contexts. Obviously, from a personal standpoint, this has never before been formally done by this researcher with regards to this question in this classroom.

2.7 Research Question

Clearly, a great deal of literature and a great many educational scholars and theorists have contributed to the various concepts which form the basis of this thesis. I have now reviewed some of the relevant theory and literature relating to inquiry learning, choice, social theories of learning, and technology.

This chapter has given some background to these concepts, concepts which I will look for as I implement my inquiry unit. Certainly, I expect student engagement to be positively impacted as students are given choice and access to technology within an inquiry framework. Therefore, I will look for these concepts to surface in my classroom as I change to an inquiry approach and observe the impact.

Ultimately, all of this has led me to a central question, one of sufficient significance to compel me to read, research, and write extensively in an attempt to answer. That question is: *does inquiry-based teaching lead to a change in student engagement?*

Chapter 3 – Methodology

3.1 *Introduction*

Methodology generally refers to the underlying assumptions on which a particular research project operates. This chapter outlines the methodology in which my research decisions have been grounded. My research is qualitative in nature and is located in the tradition of teacher research. There are two sections. The first section positions the research within the methodological tradition of teacher research. The second section outlines the specific methods used in the research.

3.2 *Teacher Research*

We teach in the ways we do because we believe some things to be true or untrue, good or bad. Teacher research aims to re-visit personal theory in order to address a need or simply to improve practice. It is carried out by teachers in their own classrooms. Susan Lytle offers that, when undertaking such a process, “Teacher researchers aim not primarily to ‘do research’, but, rather, to *teach better*” (Lytle, 2008, p. 373). This type of research is insider research assumed by a teacher in order to improve personal practice. The focus within my teacher research is on me, the teacher, and not my students, meaning that I am examining my own practices in light of how they affect my students. The goal, as Lytle states, is improving my own practice as a teacher in order to positively influence student learning.

Several key characteristics must be present and understood in order for teacher research to be effective (Manning and Harste, 1994). First, it is insider research; it is not

about changing practice for all, it is about improving one's own world in a personal context. In this sense, it is about individual learning and not about discovering generalizable truths. Furthermore, it is the teacher himself that is vulnerable in this process, meaning that it is his practice in which a weakness or weaknesses are exposed; in effect the subject is the teacher. Second, the term teacher research is often used interchangeably with action research. This is because good teacher research brings about action. This action is achieved through a reflexive response to the examination of the problem and the findings. Third, data within teacher research is examined for the purpose of redefining personal theory. Fourth, teacher research tends to be qualitative rather than quantitative in nature.

3.2.1 Insider Research

As Lawrence Stenhouse points out, teachers are in charge of classrooms, and for this reason he believes it is teachers that should be undertaking educational research (Stenhouse, 1981). In terms of exploring educational issues and topics, teachers are surrounded with endless opportunities for insight and research every single day. These opportunities need to be embraced and explored in an attempt to gain as much understanding as possible, and to therefore improve teaching practices in order to promote student learning.

When an individual examines his or her own practice for the purpose of improvement, then issues relevant to that individual may easily be targeted. When outsiders attempt to entangle themselves in educational research in the classroom they

often create problems or focus on the wrong problems. Furthermore, outsiders may offer impractical solutions, or give little thought to the implementation of suggested programs.

Often, the problem with traditional forms of research in the classroom is that they over-simplify complex local issues in an attempt to generalize, and they try to make the issues too neat (Lankshear, 2004). Teacher research however, does not attempt to generalize. It is concerned with specifics, and can therefore sincerely deal with real classrooms and all their problems, messy as they may be.

What many teachers do not need is an outside source, removed from their everyday classroom environments, identifying problems and prescribing solutions, with no real connection to their particular classrooms, their specific students, or to them as individual teachers. What they do need is a self-critical examination of personal practice and beliefs in order to refine and redefine their own best practices. That, in short, is why teachers should be, and are, significant contributors to the field of educational research, often through teacher research.

3.2.2 Action Research

Both Wilfred Carr and Stephen Kemmis (2005) believe that teacher research plays a significant role in the development of teachers. Critical action research was introduced by them to replace older and, allegedly, inadequate theory-practice models of educational research. What they have effectively attempted to do is introduce a form of educational research that addresses the tension between educational values

and educational policy and practice. Furthermore, Carr and Kemmis believe that action research should be concerned with changing the way things are, not supporting the status quo or reinforcing a flawed and stagnant hierarchical social order.

Critical action research is concerned not only with examining practice, but also with challenging existing power structures, and questioning the role that education plays in supporting prevailing and discriminatory class systems. Simply, these ideas are the basis for two very important notions Kemmis referred to as critical education and emancipatory action research (Kemmis, 2005). Not surprisingly, Kemmis believes that action research must have an edge, and must be willing to tell unwelcome truths about schooling in the interest of education (Kemmis, 2006).

Carr and Kemmis have attempted to refocus both action research and teacher research with a more critical and subversive lens. In many ways, these two influential and often cited scholars are the founders of several key aspects of what we call action research and teacher research today, and have helped shape my personal views on teacher research.

3.2.3 Theory and Data

In undertaking teacher research, the researcher is looking to better understand his or her own theories of teaching and learning. Teacher research takes as a starting point, the theoretical assumptions on which the researcher bases practice. However, it must be noted that teacher research involves looking at the data produced by the research in order to better understand the theory, and not the other way around.

Ultimately, it is not *theory* that is being changed by the research, but rather the teacher researcher's *own* theory or practice, as practice is based on theory. Manning and Harste state this point nicely: "The research is [...] about the elaboration and revision of personal theory in light of one's own practice and the revision of one's practice in light of the elaboration of one's personal theory" (Manning and Harste, 1994, p. 3).

Lastly, it should again be stated that the data is work or observations or activities that would have been collected or experienced regardless of the researchers work; it is work that would have otherwise still taken place in the classroom.

3.2.4 *Qualitative Research*

My particular research is qualitative in nature, meaning that I am not proving something, but rather learning about something. Many scholars have conceded, whether they agree with the narrow scope or not, that teacher research tends to be non-quantitative in nature. This is generally seen as a means of countering the dominance of educational research by quantitative research methods. Although this is certainly not mandatory for teacher research, it is nonetheless the case here, as my research is qualitative.

Colin Lankshear (2004) situates qualitative ways of knowing in the tradition of "interpretive sociology", meaning that it makes relatively little use of statistical forms of analysis and does not restrict data collection to being highly structured, replicable or decontextualized. Lankshear goes on to assert that key features of qualitative research

include inquiry within real-life contexts, interpretation for meaning-making, and the key role of the researcher in the process.

Some lament the lack of generalizability seen in teacher research, and instead argue for more quantitative and replicable research methods. However, others believe that this is where the very strength of qualitative research lies; not in its ability to produce general truths but rather to get at the human nature of issues on a local level. Kimberley Shakir-Costa and Laura Haddad make this very point: “Qualitative observations can be particularly insightful in understanding the dynamics of a classroom because they reveal the nature of human interactions that numbers cannot reflect” (Shakir-Costa and Haddad, 2009, p. 26).

Qualitative research strives to focus on social phenomenon in a structured and focused manner, addressing problems with subtle complexities and within local and personal contexts. John Creswell claims that indeed, “qualitative research is legitimate in its own right and does not need to be compared to achieve respectability” (Creswell, 2007, p. 16). I certainly hope that this is the case as I endeavour not only to employ, but also to make meaningful connections and find reassuring answers by way of, qualitative research.

3.2.5 Arguments against Teacher Research

There will, undoubtedly, always be those willing and eager to state the case against teacher research and it is important to understand their arguments. There are those that claim that teacher research is too self-indulgent, or not objective or scientific

enough in its approach. Surprisingly, many of the most common sense criticisms of some particular forms of teacher research come from staunch supporters of the practice, such as Lawrence Stenhouse.

Stenhouse (1981) concedes that some teachers are not adept enough at examining their own practices to really understand what it is that they do. He also allows that some teachers may not be capable of making legitimate observations of themselves, or of being truly unbiased in the research process. Lastly, he reveals that many believe, perhaps correctly, teachers simply do not have the time in their busy days to conduct valid research.

Likewise, Stephen Kemmis (2006) offers his own criticisms of some forms of teacher research. Kemmis argues against action research that does not connect the actions of the teacher with the effect those actions have on the students, and thereby the effect those practices have on society in general. Kemmis also charges that action research conducted solely in order to introduce government policies or programs is not proper action research. Finally, Kemmis believes that action research undertaken alone, in isolation from a critical and sympathetic community of researchers and educators, and which does not take into account other voices, is not good quality research.

While many of these objections to teacher and action research are grounded in real experiences, collectively teacher researchers strive to avoid these pitfalls in an attempt to achieve experiences such as that shared by Kimberley Shakir-Costa and Laura Haddad in their article, *Practitioner Research Success*, “The experience was amazing—

the process helped us hone our craft as teachers and showed us the enormous impact our actions as teachers have on students” (Shakir-Costa and Haddad, 2009, p. 25).

Ideally, that is the hope for all involved in teacher research.

3.3 Method

This section presents in some detail the process I undertook to carry out my teacher research in the classroom, which includes the setting and unit, data collection, as well as a description of the data analysis. Ultimately, I believe that my method is fully justified and wholly appropriate considering the problem being examined, the individual researcher and the specific context of my research.

3.3.1 The Setting

My teacher research took place in my classroom throughout the course of a language unit on social justice. The focus of my research is on addressing issues with student engagement through inquiry-based learning. As such, I introduced an inquiry-based unit on social justice and set out to record, by way of my personal reflective journal, what was different throughout this unit from other units and past teaching approaches.

My research began in March 2013, in my grade eight homeroom class of 27 students in Markham, Ontario. The name of the school where this research took place is St. Julia Billiard Catholic Elementary School, within the York Catholic District School Board. St. Julia is a school of approximately 600 students, spanning junior kindergarten

to grade eight. I teach in the intermediate division and have done so at this school for the past four years. As a community, Markham is very ethnically diverse with many students coming from South Asia, specifically the Philippines, China and Sri Lanka among other countries. Our school population mirrors the diversity of the community. The students are generally very well-behaved and hard-working. However, as with any school population behavioural issues occur from time to time.

3.3.2 The Unit

The language (English) unit used to collect data was approximately 60 minutes a day, every day of the school week. The unit lasted for five weeks from March 4th to April 11th, 2013. In approaching this unit, I attempted to set it up in a way that allowed the students to define and redefine the content, based on their experiences and perceptions. This particular unit is one that I have used (in various different forms) for a number of years. However, presently it was to be introduced and carried out as an inquiry unit.

In the past, this unit was more prescriptive, allowing students less choice surrounding groups, topics, information gathering and presentation style. Also, the definition of social justice was generally given to the students as they were told exactly what social justice is. However, in its current form, I wanted to allow students room to navigate the material as they chose and to have choice in their work.

Therefore, in beginning my language unit, I allowed students to first explore topics and issues relating to social justice, in order to find out what social justice meant

to them. These topics ranged from what social justice is, to activists, to issues, to personal stories. Students did this by going home and looking up various definitions and forms of social justice. We then discussed and explored these as a class. From there, I asked students to choose one issue which they thought was an example of social justice. These were also discussed and debated in a whole class format. In this manner, we began to explore what exactly social justice meant to these students, and they began to form their own definitions of social justice.

Next, I allowed students to choose groups, or to work alone, if they chose to do so. The student-chosen groups picked one specific issue or area relating to social justice and began gathering information about their topic. Although the topics were not assigned to the students, I did ask them to clear their choices with me to make sure they were appropriate. I did not have to disallow any chosen topics.

Subsequently, each group collected information on their topic from a variety of sources and used a web-based program (wix.com) to create a website for their particular topic. These websites allowed students to consolidate and organize their information and present their topic as they thought fit. All stylistic and content choices regarding the websites were left up to the students. After the groups had created their websites, we then shared these in class during presentation style sharing periods.

Ultimately, the students explored the concept of social justice in order to create personal meaning and context. They then chose one area of social justice which was of particular interest to them and, possibly with a partner, began to gather information on that topic. When they had enough information, they created a website to help others

learn about their topic and, lastly, they shared these websites with the class as well as through live URL links posted on our class Twitter feed.

3.3.3 *The Data*

The data was collected through the use of a personal research journal. In their book, “A Handbook for Teacher Research”, Colin Lankshear and Michele Knobel discuss various data collection methods, among them the reflective journal. They define this tool as follows:

“Daily written log recording main events observed or heard that day, reflections on what was seen or heard, connections drawn between previous days’ data collection [...] Record of hunches, tentative interpretations and the like. Space for recording emotional responses to the research” (Lankshear, 2004, p. 190).

They go on to explain that this data collection is indeed a journal kept by the researcher.

This definition fits nicely with the research journal as I understand it.

Conceptions of the research journal such as this one, have guided my use of a journal as a data collection tool and its importance for my research process in the classroom.

As Dr. Jerry Harste stated to me in personal correspondence, “research is a reflection – in many ways *it is* the journal” (Harste, 2013). Indeed, the personal observations recorded in my research journal were immensely helpful for my teacher research. After each language period during the data collection unit, I would find time to sit at my classroom computer and write in my reflective journal. Mostly my writing was uninterrupted and I often for at least ten minutes at a time, and would regularly come back to the journal to add ideas and thoughts at other times of the day. When I began the unit and my journal, I told the students that I would be monopolizing the

classroom computer for a few weeks and asked them not to log me off, in case an idea struck me. My journal followed the format below:

Monday March 4, 2013 – Lesson 1

Review: Point form review of what the class did that day

Insights: Personal insights or ideas or reflections relating to the lesson or my research

I found that it was easy to review what I had done with the class that day. This was obviously just a procedural recount of the lesson or work period. I added things that I spoke to the kids about or issues we encountered, such as a broken laptop, as well as the formal outline of the lesson. This section was more for me to follow in a linear format, how the unit progressed, and to help me remember what we did on certain days.

The “insights” section however, is where the real reflection took place. It is here that I made connections about what I thought was important, what was working, what I was doing and how the kids were responding. I wrote down ideas I had about my teaching, or about what the kids liked, and obviously tried to tie much of this back to my original ideas.

For me, this is really where the self-critical examination of practice took place. I found that I would sit at the computer and really try to think about what was going on, consciously trying to be aware of the big picture, of how what I was doing was affecting the kids and their work, and their levels of engagement. I struggled with questions such as, is my method really working, is this approach realistic, and even, am I looking closely at the correct problems in this journal? My journal was written fast, messy and with one honest objective: to record what I did with the students and reflect deeply on it.

Also included in my reflective journal was information or dialogue I gathered from the students, both from personal conversations as well as their “exit slips”. Exit slips are a way to gauge student responses to classroom activities. By filling out exit slips at the end of the lessons, units or activities, I am able to better understand students’ attitudes, opinions and levels of engagement. Ultimately, exit slips, included through the reflective journal, proved very useful for my data collection during this unit as well.

3.3.4 Analysis

My data consists of the notes, observations and insights included in my reflective research journal. Analysis of this data was conducted through a thematic analysis. Once collected, all data in my research journal was completely scrutinized and sorted categorically. Only important or noteworthy data was selected and placed into categories based on themes. The themes allowed me to group observations based on similar ideas and the frequency with which they appeared in my journal. Once organized, these categories were then explored and related back to any pertinent literature, as well as to my overarching topic of inquiry and engagement.

As referenced in “A Handbook for Teacher Research”, LeCompte and Schensul state that, “the kinds of files maintained for a project depend on the research questions asked and the purposes of the research” (Lankshear, 2004, p. 302). They then go on to report that there are various types of files which researchers can use to organize their data, including “topical files”. Topical file is another term for thematic analysis, whereby

“the researcher arranges data by category – for example [...] theme, type of behaviour or any other topic of interest” (Lankshear, 2004, p. 302). Ultimately, my topical files, or thematic analysis, allowed me to effectively organize and conceptualize the data collected in order for appropriate analysis to take place.

3.4 Conclusion

Generally, my teacher research is about what I have learned from looking at my own practice. In my classroom, as well as in schools more generally, I have seen a growing problem with student engagement. My thesis attempts to address this problem through the introduction of inquiry-based teaching in my classroom. Specifically, I have employed as a methodology, qualitative teacher research. Data was collected through the use of a reflective journal exploring the relationship between inquiry learning and student engagement in my classroom.

Thematic analysis was used to identify three main themes. First, I found that inquiry as a method of teaching cannot simply be tried; it cannot just be a unit. Rather, if it is to be effective, that is, if it is to increase student engagement, inquiry learning must be an entirely new and different style of teaching altogether, and must be applied wholly to all aspects of a classroom. Second, I found that my own practice within inquiry learning has a great impact on student behaviour, and thereby student engagement. Specifically, I discovered that teaching practices related to valuing student work, as well as allowing students choice and access to technology all greatly affect student behaviour. Third, I found engagement to be an over-arching theme within my

research, and this is explored as it relates to all of my analysis as well as the literature.

These themes are explored in greater detail in the following chapters.

Chapter 4 – The Whole Thing Changes (Analysis)

“It is not a refinement or extension or modification of older school environments. It is a different message altogether.” (Postman and Weingartner, 1971, p. 26)

4.1 *Introduction*

I read this quote from Neil Postman and Charles Weingartner’s book months before I began my research in the classroom. However, as I sat at my computer one day with my research journal open in front of me, I realized how true it was. This is what inquiry learning is and must be, if it is to succeed. It cannot simply be the same old traditional models and methods of teaching dressed up in a new way. It must be an entirely new way of thinking about and practicing teaching altogether.

One of the greatest conclusions that I came to in light of analysing my research data, is that for an inquiry style classroom to be successful the entire premise upon which the class operates must change. Inquiry learning cannot be tried, it cannot be one unit; it is a way of teaching. From its origin, the inquiry classroom must be set up in a specific way, based on some very different principles. It involves re-socializing students to a new classroom model, likely very different from past classrooms. The entire teacher-student relationship must be redefined and renegotiated, as well as the relationship between students and their learning.

The realization I was confronted with was that inquiry learning is not something you do, but rather “it is the way the kids are listened to and talked to and involved, and valued.” (Journal Entry, 2/4/13). Undoubtedly, the unifying concept throughout all of my research is the enormity of what I have until now been referring to as “inquiry

learning". The impact of a true realization of this style of teaching is in fact so tremendous, that as far as one's classroom is concerned - *the whole thing changes*.

4.2 Inquiry Learning

Inquiry learning means that students actively engage with materials, ideas, teachers and peers to explore relevant and important questions and topics. The inquiry-based classroom must be created in a certain way, from the very beginning. What this means is that the classroom is built around a collaborative relationship between teacher and students, and that students understand their role as active and respected contributors. If this happens, and students are able to feel comfortable and can participate in an inquiry style, then more effective, relevant and engaging learning takes place.

Traditional inquiry learning involves students forming questions, generated by personal experience and interest, and then inquiring into those questions in a variety of ways. Various traditional inquiry models involve producing work which may or may not include answers to the original question, sharing work and possibly generating new questions for further exploration. However, the inquiry learning I refer to in this section of the thesis may emerge as something closely related to, but different from traditional inquiry learning.

Several key aspects of inquiry learning surfaced throughout my research. These principles include: 1) student questions, 2) student voice and student input, 3) critical literacy, 4) collaboration and respect.

4.2.1 Questions

Questions, and primarily those generated by the students, are at the heart of inquiry learning. I find that I am increasingly encouraging and promoting student questions. This was true during my language unit. It also became true in my class more generally as we embraced the inquiry style of learning. I noted on several occasions in my journal that student questions not only led to ideas for their websites, but also led to great class discussion outside of the language unit. At one point I noted in my journal that “students seemed more interested and involved when we could talk about questions they had.” (Journal Entry, 5/3/13). I found that the class began to gain comfort with the notion that their questions could impact our learning in a very real way.

One student remarked on her exit slip that, “This unit was ok but I was more engaged to it, if you compare it from writing all day and the work just given to me.” This student clearly appreciated the fact that in an inquiry unit, the work and the answers, are not simply “given” to students, but rather borne of their own design, their own questions. In this manner, inquiry learning and student questions specifically, become a way of functioning as a class and not an isolated teaching technique.

At one point in my research journal, I make note of an encounter with a younger student on the playground. She asked me, “Why do they call it 20-20 vision?” I replied that I did not know, but invited her to find out and tell me. I also suggested that she come to my class to post her question on a bulletin board we recently started, known as the “Inquiry Wall.” The Inquiry Wall was literally a wall in the class where we posted

student questions for further exploration later. Our Inquiry Wall was full of great questions, which were eventually explored by the students. In this manner, inquiry learning is cyclical; promoting a style of interaction with students that encourages them to operate in a particular way, a very different way. Which in turn, prompts more inquiry in new ways in the classroom, and in new areas of the curriculum. In this sense, inquiry learning is not only generative, but also ongoing. My research has shown that this inquiry can be, and often is, spurred by student questions.

An example of this occurred early in the language unit when we were looking at how to layout and organize a website. While I had planned to discuss various common aspects of websites, student questions took us in another direction. As stated in my journal, a student asked, “What should go on the homepage?” and I said “Well let’s look at a website and see what is on the home page.” (Journal Entry, 18/3/13). From there, we explored a couple of website examples as a class. In this case, student questions led the lesson in a specific direction and directly impacted student learning.

Barbara Stripling refers to this same point in her article on inquiry. She believes that,

“Inquiry is a process of learning that is driven by questioning, thoughtful investigating, making sense of information, and developing new understandings. It is cyclical in nature because the result of inquiry is not simple answers but deep understandings that often lead to new questions and further pursuit of knowledge. The goal of inquiry is not the accumulation of information; it is the exploration of significant questions and deep learning” (Stripling, 2008, p. 50).

Again, key notions here include valuing student questions, as well as the cyclical nature of inquiry, similar to what my research has shown.

4.2.2 *Student Voice and Student Input*

Also important for inquiry learning are student voice and student input. In my journal I noted several instances when I stopped halfway through a unit or set of lessons to discuss the timelines for the rest of that study, planning out test days or due dates together based on a negotiation between the students and myself. At one point in reference to a math unit we had done that week, I gave the students the option of having their test on the Friday or the Tuesday after the long weekend. Surprisingly, after we discussed the benefits of keeping their knowledge fresh, as opposed to waiting all weekend, they opted to have the test sooner. This scenario was not uncommon, especially for our math units, as the students gained comfort with negotiating timelines relating to our math program.

In order for students to have a real voice in the classroom, teachers must be open to student input and student ideas. Personally, I harbour no preconceptions that I am completely infallible, nor do I believe that it is impossible for a student to come up with a better idea than me. In fact, I welcome it. I am happy to be corrected, or to have a student offer an idea for an activity. It means they are engaged, interested and thinking.

In one instance, I told the class that we had one week of language time for follow up to our latest novel study. We then discussed ideas and options for what to do with that time. Our ideas eventually went from watching a movie of the book, to dramatizing our favourite scenes, to the activity we agreed on. The agreed upon activity involved students breaking up into groups, each group taking a chunk of the book, and then

dramatizing the whole book as a class (and in fact, appropriately, the subplot of the book was about a play). The students came up with all of those ideas. Lastly, because sharing is so important, we performed the play for our reading buddies. This is a great example of student voice impacting learning in a very real way.

Ultimately, we need to run the class with our students for them to have genuine voice. I believe that students must have a voice in their education, and that we as teachers should listen to that voice. However, this is not easy. It brings up questions about our roles as teachers, about the need for maturity from our students, and about control in the classroom. Yet, as stated above, this style of learning and this approach to the classroom is not something that can be implemented one day, and then withdrawn the next. It is a way of teaching, built up day after day through negotiation and a bond of trust forged between students and teacher. My journal notes that “it is the way the kids are listened to and talked to, and involved and valued. Even with this dance unit, I took one idea from one of the students, and one idea from another teacher.” (Journal Entry, 2/4/13).

In their paper, “Improving Student Engagement”, Parsons and Taylor describe one of the most important factors contributing to student engagement as “interactions”. They explain that, “such teaching contains more interaction, negotiation, and exploration among learners and teachers, who explore and discuss content together, often with teachers modeling learning as opposed to telling students what the answers, process, or outcomes should be” (Taylor and Parsons, 2011, p. 9).

This perfectly exemplifies one of the key aspects of an inquiry style classroom; that the teacher is not the “boss” of the classroom, but a knowledgeable and dependable guide. In this way, we as teachers model for students the collaborative learning that is so important for them to employ with each other. Students become major contributors to an inquiry classroom, informing the teacher, as the teacher informs them.

Similarly, in a study on student engagement as it relates to student autonomy and structure in the classroom, Jang, Reeve and Deci refer to this concept specifically. They describe autonomy supporting teaching techniques, similar to what I have been referring to, in the following way:

“When autonomy-supportive teachers acknowledge the students’ perspectives and feelings, they consider and communicate a valuing of the students’ perspectives during learning activities, inquire about and acknowledge students’ feelings, and accept students’ expressions of negative affect as a potentially valid reaction to classroom demands, imposed structures, and the presentation of uninteresting or devalued activities.” (Jang et al 2010, p. 589)

In other words, student input, as well as feedback, is important. Many teachers may dismiss student concerns over assignments, tasks or activities as laziness or apathy, however, this feedback should be valued and taken into account, and in turn will produce more valuable and useful student input in the future.

4.2.3 Critical Literacy

Critical literacy is key to inquiry learning, and to a way of functioning that allows students to openly and meaningfully question and interrogate the world around them. Critical literacy is about questioning the underlying principles and assumptions upon

which information is founded. In my language unit, I found that in order for students to contribute meaningful and original ideas and input, they had to be able to think critically about information being presented to them and about the work they were doing. I made this explicit to my students, as the following journal entry illustrates, “I talked about being critical of the information they are finding.” (Journal Entry, 21/3/2013). Not only did thinking critically about various text forms allow my students to pose questions and offer new ideas, it also allowed them to interrogate sources for their websites and, in one case, include a page about different points of view on a topic.

A specific example came from a group of two students creating a webpage on Marine Land, an aquatic theme park in Ontario. Recent allegations surrounding the centre’s treatment of animals meant that the group had a variety of sources and differing viewpoints to consider when creating their site. A critical literacy lens helped these students to understand and interpret various arguments and claims.

Critical literacy is central to inquiry learning. I encourage my students to be critical not only of information they are offered, but also of structures and processes both in the world around them and in my class. If we, as teachers, want students to be critically literate, then that must go for everything, classrooms and learning included.

In my language unit I found that at several points students were interested in diving deeper into topics, or in understanding the reasoning behind why things were the way they were. For example, during one lesson, it was not enough for us to simply mention capital punishment, but rather, we had to explore the concept, understand why capital punishment laws exist in Canada, and question and debate the validity of

various points of view about capital punishment. As critically literate thinkers, students are taught not to simply accept information at face value, but instead to question and investigate, even if, as happened in this instance, students share provocative viewpoints or ideas.

In their book, “Critical Literacies in the Primary Classroom”, Knobel and Healy explain that critical literacy involves being able to assume a critical perspective about many components of language, including language and literacy, texts, as well as wider social practices (Knobel and Healy, 1998). Indeed these skills, so important for being critically literate, are skills inherent to inquiry learning, especially in the context of a social justice unit such as the one used for this research.

To further state the point, in their article aimed at highlighting skills that are important for student success today, Dunleavy, Milton and Crawford refer to critical and creative thinking as well as collaboration.

“Numerous lists of 21st century skills have been published and all include competence in problem solving, critical and creative thinking, collaboration and communication. The difference between the ‘then’ and the ‘now’, however, is that these competencies are required by all students and not just the few students who achieved them in the past.” (Dunleavy, Milton and Crawford, 2010, p. 5)

Clearly, in the wider world, as in inquiry learning, critical literacy skills are important for all students, as is collaboration.

4.2.4 Collaboration and Respect

Collaboration in an inquiry classroom means not only students collaborating with each other, but also, and of equal importance, student and teacher collaboration. In

order for students to accomplish those things mentioned above, to ask questions and voice their opinions, they must feel comfortable. For that to happen, trust, freedom to speak and respect must be central to the entire classroom philosophy. If this is the case, then true collaboration can take place. This notion is expressed nicely in a recent Ministry of Education publication.

“In the shift from a transmission to a discourse model of education, researchers verify what classroom teachers know intuitively – that ensuring students are listened to and valued and respected for who they are leads to greater student engagement which, in turn, leads to greater student achievement.” (Canada Literacy and Numeracy Secretariat, May, 2011, p. 1)

To cite an example from my language unit, at one point near the very end of the unit, we discussed as a class how students felt about the unit; what they liked and what they would have changed, what they were happy about and what they felt they could have done better. I cite this because I believe that the responses I got from my students were very real and very open. There was no fear of consequences and no worry of censorship. My journal notes, “I think the feedback was genuine”, and “I got the responses that I expected. I think they were truthful.” (Journal Entries, 2/4/13). The students’ level of comfort with me and their understanding that we had undertaken the unit as a class, meant that we were all free to discuss the successes and failures of our unit together.

However, maturity on the part of the students is very important in this process. Students need to be trusted to make mature and appropriate decisions and contributions. They need to understand the very real boundaries and rules within the classroom. Inquiry learning is not a free for all, but a redefining of traditional roles and

restrictions. This is why inquiry learning may look very different between the various grade levels. Indeed, the amount of freedom students are awarded and the amount of choice they are offered may very well be the biggest and most challenging questions this style of learning has to address.

Relatedly, let us not forget that much of what is being discussed here involves not only rethinking our teaching techniques, but also re-socialising our students; perhaps not an easy task. A great deal of what I am proposing requires students to act very differently. For many of them, this means stepping out of roles they have learned and played for years. The issue of how to get students out of their traditional student roles, that of the passive empty vessel ready to be filled with knowledge, is indeed a challenge. However, as stated so many times before, I believe that students can re-learn how to learn, but only if inquiry learning is wholly and truly implemented and embraced, both by students and teacher.

Another important point is that I feel my data unit was successful only because I had already been incorporating many aspects of inquiry teaching into my class prior to this language unit. Because this was the case, my students were able to fully embrace the inquiry style, and we were able to achieve the level of success that we did in our social justice unit. If that had not been the case, then I am not sure the unit would have been successful. In fact, I think it would not have been successful. I relate this very sentiment in my journal, "I think inquiry has to be a mindset in the class. I don't think this would have worked with my class had I not already had an open environment.

Likewise, it might not work early in the year with new students.” (Journal Entry, 18/3/13).

The concept of collaboration and respect is not one for which it is easy to cite examples, but rather one that is felt. As a grade eight teacher, I make a point to seek out younger students in my school, in the halls or on the playground, and try to cultivate relationships with them early on. My belief is that by knowing the students in my school, as many as possible, I have a better chance of securing those vitally important relationships, and building the collaborative and respectful classroom I have discussed here.

4.3 Conclusion

Ultimately, one of greatest surprises I encountered in my research, if not *the* greatest surprise, was the enormity of the impact of inquiry. Inquiry learning for me over the last few months has become not a technique used in a unit, but the way that my classroom operates, and the way I operate as a teacher. Inquiry learning involves redefining the classroom in an entirely new way. It means embracing students’ input and voices and requires critical literacy skills, as well as collaboration and respect. In order for inquiry learning to succeed, it must be embraced wholly. According to Postman and Weingartner, borrowing from Marshall McLuhan:

“We are seeing clearly enough, but we are looking at the rear view mirror. Thus, the locomotive was first perceived as an 'iron horse'; the electric light as a powerful candle, and the radio as a thundering megaphone. A mistake, says McLuhan. These media were totally new experiences and did to us totally new things. So it is with the inquiry method. It is not a refinement, or extension or modification of older

school environments. It is a different message altogether, and like the locomotive, light bulb and radio, its impact will be unique and revolutionary." (Postman and Weingartner, 1971, p. 25)

Let us not wait any longer to make these words a new reality for today's students.

Chapter 5 – The Importance of Practice (Analysis)

5.1 *Introduction*

The last chapter focused on inquiry teaching as a pedagogical approach to teaching. In this chapter, I will discuss the importance of certain aspects of my teaching practice within an inquiry framework. Specifically, I will examine the importance of valuing and sharing student work, allowing choice in both selection of topics, how to explore those topics, and the central role technology should play in today's classrooms.

5.2 *The Importance of Practice*

The second theme to emerge from my analysis involves how my teaching practice affects student behaviour. I was surprised and interested to come to the realization that the choices I make about my personal teaching practice as an educator impact students' learning experiences so greatly. While some may find this obvious, I was struck by the many observations made during my research, highlighting the ways in which my personal practice so directly influenced student behaviour and often student engagement. Necessarily, I have also come to the understanding that negating certain practices, or not doing things, may decrease student engagement. To be clear, what I am referring to are aspects of my teaching practice within an inquiry framework.

5.3 Valuing Student Work

The first aspect of my personal practice which I found significantly impacted student behaviour was valuing student work. The more time I spent focusing on my classroom and my students' responses to my teaching, the more I thought about the importance of making sure that the students felt that their work was being valued. An idea began to form; that in order for students to engage with their work, to take pride in it and ownership of it, they have to find it meaningful and feel that it is valued. One way of accomplishing this is by having it viewed, publicly if possible. Specifically, student work should be shared, displayed, published, or in some way exhibited for others to appreciate. Ultimately, students are more engaged when they feel that they are creating something that will be valued by others, as opposed to simply marked and thrown out.

The notion of valuing student work originated for me before my data unit, with observations that I made about an assignment called "Talking Walls." This was a multicultural language unit during which students chose a specific country and explored famous or historic walls from that country, relating the stories that those walls had to tell in various creative ways. As we discussed the details of the assignment as a class, I realized how anti-climatic it was. As soon as all the work was completed and handed in, the assignment was simply over. I recognized that the work would sit around my class until marked, after which time I would tell the students to simply "take it home or throw it out".

Therefore, I decided to create a gallery of my students' work. I told the class that the day the assignment was due we would rearrange the desks into a large rectangle, display their work in the middle, and view each other's work; browsing, discussing and appreciating. The students loved the idea, and so did I. I found that by allowing the student's work to be displayed for their peers, their pride in their work grew and their motivation to achieve the best product possible increased. We did not stop there. Beyond that day, we decided to set up a display outside of our class and combine all of their best pieces to create an exhibit that the whole school could enjoy.

As I started to think more about this, I noticed that so often we, as teachers, were demanding such high quality work from the students, requiring such incredible effort, but then simply grading the work and discarding it. I, like many other teachers, have an already over-crowded classroom with little space for daily supplies such as books, bags, photocopies, computers, overheads, desks, chairs and water bottles, let alone large and cumbersome projects and assignments. As a result, I find that more often than not, after working so hard and for so many hours on projects, assignments and tests, students are simply told to get rid of them.

As I began to see my classroom and my teaching from the perspective of my students, I realised what kind of message this was sending; the wrong message. Students were indirectly being told that their work was for assessment purposes only, and was not truly valued. This is exactly the type of practice that is counter-productive to enticing students to put in the time, effort, and more importantly engagement, that

we want from them. In the words of Dr. Vivian Vasquez, we need to be valuing student work, not just evaluating student work.

5.3.1 Sharing in my Practice

My research journal highlights the theme of valuing student work quite significantly. Original journal notes on this topic pose the question, “how important is it for students to feel that their work is valued?” (Journal Entry, 5/2/2013). Observations made during my language unit which relate to this topic appeared at three notable points; when the students “published” their websites; when they shared their websites and topics with the class; and when students tweeted the links to their pages on our class Twitter feed.

The web-based program that we used to create our social justice themed websites was called, Wix. Wix allowed the students to sign in, work on their websites, save work and then log out. The sites remained private to the students and me, until they were finished, at which time the students hit the “publish” button and their sites were awarded a URL, and were thereby live on the internet. Although the publishing of the websites was more symbolic than practical, it nonetheless gave the students the feeling that their sites were live to the world. My journal notes that for many students this appeared to increase their pride in their work, as well as the feeling that their work was important. At one point I noted that “the students seemed excited when I told them the sites could be published.” (Journal Entry, 20/3/13). I believe that having their work published to a live URL increased student’s sense of pride in their work. I also

believe that knowing in advance that this was going to take place increased student's engagement in their work, as they wanted to produce the best work possible.

My research journal also repeatedly makes note of the fact that the students enjoyed sharing their topics and websites with each other, in what was realistically an oral presentation of their work. After the websites were finished, each group gave a presentation of their work. In my journal I note that, "many liked the presentation because they learned from each other and got to share." (Journal Entry, 8/4/13). I believe that this again allowed students to feel that their work was valued by others. Numerous students remarked on their exit slips that they enjoyed sharing their efforts with other students, and liked learning from other groups' presentations. One student wrote, "I think I was more engaged in this because I was able to share my topic with the class, which I was excited about, so I wanted to make my website interesting." This comment clearly typifies the theme of valuing student work that has emerged from my research, and supports the notion that sharing increases engagement.

The final component of my data unit that related to valuing student work was tweeting the links to students' sites on our class Twitter feed. I recently started a Twitter account for our class. The account allows me to communicate with my students about school-related topics through a platform on which they are comfortable, which is completely public, and which is current and relevant. At the end of my data unit, I had all of the students tweet me the links to their websites (those students without accounts had a friend tweet it to me) and I then re-tweeted the links on the class Twitter feed, making them public. I make note in my observations that, "I am encouraged by how

much the students want their links tweeted.” (Journal Entry, 2/4/13). This entry highlights the fact that students seemed proud to have their work shared on our class page. Much like the publishing of the websites themselves, this small act seemed to increase students’ pride in their work as it was being shared with a larger public audience.

Collectively these observations constitute a theme; the theme of valuing student work. Ultimately, analysis of my data shows students are more engaged when they feel that their work is valued, meaning that it is shared.

5.3.2 *The Desire to Share*

A variety of research and literature (Wenger, 1998; Gee, 2004; Jenkins, 2006) promotes similar ideas that offer new insight into the concept of sharing. An example of such, is the notion of “participatory culture.” Quite simply, participatory culture is the idea that people enjoy creating and sharing content based on common interests and activities; that these shared and common interests create informal groups which support members, and that these groups of people tend to feel at least some social connection to each other on the grounds that they believe that what they create matters (Jenkins, 2006).

The idea of participatory culture was first introduced by Henry Jenkins in reference to the increasing prevalence of clusters of the population becoming involved in group creation and sharing of media online. I believe that one of the most gratifying aspects of a participatory culture for its members, and one of the defining

characteristics of participatory culture generally, is sharing. Much like the notion that students want to feel that their work is worthy of being shared and is thereby valued, members of a particular participatory culture want to feel that they too are creating something that will be shared and valued. In fact I would go further and argue that it is often the knowledge that their work will be shared which motivates members to create it in the first place.

Henry Jenkins alludes to this idea when he proposes that, “teachers are finding that students are often more motivated if they can share what they create with a larger community” (Jenkins, 2006, p. 51). My observations certainly support Jenkins’ comments and link his ideas about participatory culture and sharing to my classroom, and the notion of valuing student work.

Not only do my students participate in legitimate online participatory cultures through platforms such as Tumblr, YouTube and group gaming sites, but they also appear more eager to perform and engage when they understand their efforts will be made public. Take for example, their singing for a school assembly or even simply walking into the hall in orderly lines for graduation. These tasks are given importance mainly by the fact that the students know they will be public endeavours, viewed and appreciated by others.

Another example of a similar idea in related literature is James Gee’s notion of “affinity spaces.” Gee describes affinity spaces as virtual spaces built around shared and common interests which connect people and resources (Gee, 2004). Much like participatory cultures, one of the defining characteristics of affinity spaces is that they

rely heavily on sharing. Affinity spaces succeed partially due to passion for common interests, which unites people, but also because of the desire to share.

Furthermore, Etienne Wenger's idea of "communities of practice" functions quite similarly. Wenger's notion is based on the belief that groups of people come together to appreciate a topic or participate in an activity, primarily through sharing knowledge and resources (Wenger, 1998). Once again, we find sharing at the core of this theory.

All of these ideas indicate participation by sharing. Moreover, they point to the fact that the desire to share is often the impetus for engagement in creation in the first place. The link to the classroom results from the fact that students are increasingly called upon to be participants and collaborators within a larger community of learners by sharing ideas and knowledge. Furthermore, it appears that our students are embracing this, and in fact, demanding it in return for their attention and their effort; in return for their engagement.

Today's students understand that meaning and value are created through collaboration and sharing, and as such, behave quite differently when they know their work will be shared as opposed to when they think it will be discarded. If our students are to live in a world which relies upon the sharing of ideas, and in which success is measured by YouTube views and website hits, then our classrooms should reflect those trends.

Knowledge today appears not to have meaning in isolation, but as a part of a larger social landscape. The sharing is what gives meaning, importance, and value to the

work our students produce. Examples of individuals receiving gratification through sharing are all around us in the world of social media. To name but a few; wikis, YouTube, MySpace, Twitter, Instagram, Facebook and a variety of blogs like Tumblr. In a collaborative, on-line, connected world, sharing is the gateway to participation and the route to gratification. As such, it has become the motivator. Clay Shirky (2010) argues that in the 20th Century we consumed media, and that now in the 21st Century, we create it. I would continue this train of thought and propose that after we create, we share, and in sharing, we find meaning and motivation to continue creating.

Every day, millions of people all around the world create video footage. They do so, not in order to keep their experiences private, but in order to share them with the world on YouTube. Furthermore, there is the increasing tendency of many people to share so much of their everyday lives with others, in writing and pictures through online mediums such as Facebook, Tumblr or Instagram. Indeed, these platforms have taken the notion of sharing to an all new and extremely personal level.

Henry Jenkins provides us with a somewhat shocking statistic, stating that recent studies have found that “one-half of all teens have created media content, and roughly one-third of teens who use the internet have shared content they produced” (Jenkins, 2009, p. 3). Why do so many of these teens share the content they create? I would argue that perhaps it is because the act of sharing allows the content they create to gain value, and thereby be perceived as meaningful. With these examples, the idea of sharing takes on a new meaning, not just that we want others to see and appreciate the work that we do, but that we want others to see and hear and read everything about us.

There is no definitive answer as to why this is the case, however, one possibility is that we want to feel that what we are doing has value; that it is important, and that the best way to accomplish this is by sharing.

Examples supporting the notion of valuing work also appear in many other settings, both inside and outside of schools. Visit the home of any family with young children, and look on their refrigerator. My guess is that you would find a picture or a story created by one of the young children in the family. Certainly this is for the parents' enjoyment, but it is also to make the young child feel that their work is appreciated, subtly indicating that they should continue with this type of effort. Likewise, the hallways outside of so many primary classrooms are covered with student art work, sending similar messages, both explicit and implicit. With adults, it is much the same story. For example, researchers, scholars and academics engage in research and writing every day, often with one common goal among many: to get published. It can be argued that at the core of many of our ambitions to create important and meaningful work, is the desire for that work to be shared and appreciated, to feel that it is a part of a larger body of collective work.

The focus here, however, must be on the consequences of this finding for the classroom. As it relates to my teaching, this idea is important insofar as I understand that the practice of valuing student work through sharing increases student engagement, and conversely not doing so, often has the opposite effect.

Summarily, my analysis of the theme of valuing student work has taken into account my personal observations, research journal entries, student responses, and a

variety of relevant literature and scholarly theory. Consequently, I believe that by establishing practices in the classroom that show students their work is valued, by sharing that work, there is a greater likelihood that students will become more engaged and motivated by the fact that others, possibly outsiders or the public, will view and appreciate their work when it is complete.

5.4 Choice

One of the original concepts that I focused on as important for combating the problem of student engagement was choice. Before beginning my research, I hypothesised that a more individual and personalized model of learning was needed, one in which students were afforded choice. Indeed the theme of choice has emerged in my research as an important aspect of personal practice affecting student behaviour.

Data from my research journal about student exit slips illustrates that students have no problem openly and enthusiastically vocalizing their support for choice. Many times over the past several months, my students have told me that they like, appreciate and want choice in their work. With regards to my data unit, students noted on their exit slips that they liked being able, not only to choose any social justice topic they wanted, but also how they explored that topic, how they set up their website and then how they shared it.

One student remarked on her exit slip that, “I was more engaged in this unit compared to others because all our choices were basically in our hands.” That sentiment is exactly the type of engagement that I was hoping to illicit when the unit

was originally conceived. The idea is that when students are able to focus on ideas and topics of their choosing, then they will naturally be more interested in their work and therefore more engaged. Another student remarked, “I liked how we got to pick our own topic,” and still another, “it was enjoyable because I got to create a website on a topic that I am interested in, which is cool.” These student opinions speak for themselves. In my research, through consistent observation and my reflective journal, the message was overwhelmingly communicated that students appreciate choice in their learning.

In their book, “Creating Classrooms for Authors and Inquirers”, Short, Harste and Burke claim that, “Choice makes it possible for students to negotiate and renegotiate a curricular invitation in light of what makes personal sense to them. Cognitively, choice acts as a propeller in learning” (Short et al, 1996, p. 319).

This is the exact notion illustrated in my reflective journal. My data unit not only allowed students to form their own conception of social justice through exploration, but it allowed them to negotiate the assignment according to their ideas and interests. Ultimately, it occurred to me that the learning was more interesting for the students because they were looking at topics that they actually wanted to look at; they liked their topics because they chose them.

5.4.1 The Freedom to Explore

Choice in inquiry learning means not only allowing students to choose topics or presentation styles, but also allowing them to choose how they investigate a particular

topic. In my research journal I remarked several times that students seemed to thoroughly enjoy “investigating, discovering and exploring.” (Journal Entry, 19/3/13). Students liked that I did not tell them what to do, but rather let them figure out what they wanted to do. One student noted, “There didn’t seem like there was a guideline.” Part of inquiry is allowing the students to explore and discover answers and information for themselves based on paths and processes of their own choosing.

In a short publication promoting inquiry learning in the classroom, the Ontario Literacy and Numeracy Secretariat suggests that,

“Teachers create learning contexts that allow students to make decisions about their learning processes and about how they will demonstrate their learning [...] They make sure that students have the necessary knowledge, skills and strategies to operate independently, make appropriate choices, and expand their abilities by attempting challenging tasks” (Canada Literacy and Numeracy Secretariat, May, 2011)

This is what choice should look like in the classroom. Of course, choice should not be a completely open invitation to follow any whim or radical idea, but a guided and thought-out path of the students’ own choosing.

5.4.2 Push and Pull

The idea of choice relates closely to a specific notion put forth by John Hagel and John Seely Brown regarding “push and pull” models of learning (Hagel and Seely Brown, 2005). Hagel and Seely Brown believe that in today’s fast paced and continually changing global marketplaces it is important to stay ahead of the curve. One way of achieving this is to anticipate a particular need for resources, and push them ahead of

demand. However, this theory has potential application for our educational systems as well.

Specifically, today's students do not want information "pushed" to them, they want to "pull" in what they deem important, relevant and interesting. As opposed to having one form of lesson prepared on one topic, many options can be made available, allowing students to pull, or choose, the one most engaging and relevant to them.

Hagel and Seely Brown refer to the notion that, "some of the most interesting innovations in education are going on outside these traditional institutions. Many of these innovations involve a transition to pull models of learning" (Hagel and Seely Brown, 2005, p. 96). I certainly agree with the potential for this type of learning model, and in fact, believe that examples of its potential use can be seen in this thesis.

Choice is a central tenant of inquiry learning. It was also very important for me, in the conception of my original research question and theoretical approach to my problem. Not surprisingly, the theme of choice has emerged as central to both my research journal and observations, as well as in my reviews of relevant literature on engagement and inquiry learning. Certainly, it is my belief that choice should play a significant role in teachers' personal practice and in students' daily experiences.

5.5 Technology

Another theme that emerged from my research as an important aspect of practice was the theme of technology. Leading in to the thesis, I believed fundamentally in the importance of technology for today's learners. My research has confirmed for me

that as part of my personal teaching practice, I must allow students access to technology in order for them to participate in relevant and engaging learning.

5.5.1 *The Students Have Changed*

Marc Prensky, one of the foremost thinkers on, and proponents of technology in education, summarizes the importance of this topic well when he states that:

“Today’s students have not just changed *incrementally* from those of the past, nor simply changed their slang, clothes, body adornments, or styles, as has happened between generations previously. A really big *discontinuity* has taken place. One might even call it a “singularity” – an event which changes things so fundamentally that there is absolutely no going back. This so-called, “singularity” is the arrival and rapid dissemination of digital technology in the last decades of the 20th century.” (Prensky, 2001, p. 1)

Today’s students are not the students of the past. They are not simply different from us, as we were from our parents. Much like inquiry learning in its dissimilarity to older teaching methods, the whole thing has changed. Students have changed, and technology is a big part of the reason.

Indeed, Marc Prensky goes so far as to assert that students’ brains are physiologically different today than those of students from the past, insisting that this is because of the different lived experiences they have gone through, namely, all of their interaction with technology. Prensky claims that, “based on the latest research in neurobiology, there is no longer any question that stimulation of various kinds actually changes brain structures and affects the way people think, and that these transformations go on throughout life” (Prensky, 2001, p. 2).

It would appear that the students have changed, perhaps physically even, and that the change is due at least in part to technology. Certainly Prensky believes that the answer to dealing with a lack of student engagement is technology. I would have to agree insofar as my research has shown that, at least in part, technology can be a part of the solution.

Students today do differ greatly from those of the past, and I believe that technology has played a large part in that change. The answer, however, is not to ban technology, to pine for the good old days and attempt to move backwards, but rather to embrace students' levels of comfort with, and passion for, technology and move forward in that manner.

In addressing what he believes to be a crisis with student learning in today's classrooms Prensky states that:

"Teachers assume that learners are the same as they have always been, and that the same methods that worked for the teachers when they were students will work for their students now. *But that assumption is no longer valid. Today's learners are different.*" (Prensky, 2001, p. 3)

Certainly I believe much of what Prensky claims, to be true. Specifically, he believes that the difference being referred to in this quote, lies in students' extremely close and connected relationship with technology which, in his view, is the key to student engagement and success. I cannot speak to the neuroscience behind student brain development, nor can I claim that technology is the one key to student learning, but my research has clearly shown that students want, and perhaps even need, access to technology in order to fully engage in today's classrooms.

5.5.2 *Technology in My Classroom*

Much like their support for choice in learning, students were very vocal in their appreciation of technology in my data unit. In my discussions with the students, my observations, as well as analysis of student exit slips, I found that many of the students' favourite parts of this unit included making websites (on the laptops), watching social justice videos online, and electronically presenting their websites, all of which involved technology. One way of measuring the success of this unit and its use of technology is to imagine it without technology. In my opinion, this unit could have existed only as a much more bland, irrelevant and less engaging version of itself without the technology components.

I also found that the students enjoyed looking at current events and connecting to the wider world. In my journal I note that, "One of their favourite parts seems to be learning about world topics." (Journal Entry, 11/4/13). In part, I believe this observation came from the fact that our unit focused on more global and universal topics, those being social justice issues, and I also believe that this is generally true for students with technology. Again, students want to connect, to share and to explore with a broader and larger audience. Often technology is the best, if not the only truly capable platform with which students have to do so.

In reference to the technology in this unit and what students' favourite part was, one student remarked that "Other than Wix not working properly and having all those glitches, I didn't really have a least favorite part." This is positive, but leads me to one drawback of technology, the dreaded "technical difficulties." Although technology was

certainly seen as a major contributor to student engagement in this unit, it was not without its drawbacks, namely that some students had difficulty with the usability and functionality of the Wix website at certain points.

Technical difficulties with technology can be a major setback for a lesson or classroom activity. Being prepared and familiar with the technology in use certainly helps, but is by no means a guarantee that problems will not arise. This is another reason that the practice of using technology in the classroom should be embraced, to ensure that new and better technologies are continually being introduced and maintained in classrooms, allowing students greater access to the most up-to-date technologies. Despite some technical setbacks at certain points, overall the student sentiment towards technology in this unit was extremely positive, as seen in this journal entry, “the students did not want to put the laptops away when it was time to work on something else.” (Journal Entry, 20/3/13).

5.5.3 Hands On

Another point that I made note of in my research journal, is the fact that when it comes to technology, and perhaps this is partially due to their level of comfort with it, students simply want to use it, to figure it out themselves. I made note on several occasions in my journal of students’ willingness to work “hands on” with the technology, even new technology, and to discover the technology for themselves. My journal reads that, “when they were allowed to work on their own and take the work on, they just started to do it [...] they also went immediately for the technology and started using and

manipulating the websites.” (Journal Entry, 19/3/13). Similarly, on this point, John Seely Brown writes that, “They want to turn the thing on, get in there, muck around, and see what works. Today’s kids get on the Web and link, lurk, and watch how other people are doing things, then try it themselves.” (Brown, 2000, p. 14)

Obviously today’s students have had more opportunities to experience, explore and connect with technology. It is also clear that they are embracing this, engaging in the relationship. In order to best prepare students for a digital, global, high-speed and interconnected world, we as teachers must incorporate technology into our teaching practices. My data unit and research in the classroom have shown this to be true, as well as my research into relevant literature. Let us not continue to offer students a watered down version of what learning could be, sticking to paper and pencil and chalkboard, but let us rather offer them something new and relevant and engaging. Perhaps we should call it, Education 2.0?

5.6 Conclusion

One of the greatest discoveries I made in my analysis of the research conducted in my classroom, is the importance of teaching decisions including valuing student work, choice, and technology. Indeed, I believe that all of these factors contribute to student engagement, and that conversely, not incorporating them leads to a decrease in student engagement. Ultimately, teaching practices can increase or decrease student engagement, even within a teaching philosophy such as inquiry teaching, and if indeed

the goal is to increase student engagement, then I believe specific practices regarding sharing student work, choice, and technology should be embraced.

Chapter 6 – Conclusion

6.1 *Introduction*

This thesis is about student engagement. Initially, I planned to use inquiry learning as a response to the problem of student engagement. My hope was that this teaching approach would increase student engagement. I found this to be true, and more importantly, I found that specific teaching practices within an inquiry learning framework affected student behaviour and engagement.

This chapter will tie the theme of engagement to my analysis, and allow me to reflect on my personal experiences with teacher research, as well as explore some of the questions, problems and anomalies that have arisen throughout my research.

6.2 *Engagement*

At the beginning of my research journal, I made a point form list, as a reminder to myself, of what exactly I was looking for in my classroom for inclusion in my research journal. The first point on that list was “whether I notice more engaged versus disengaged behaviours.” (Journal Entry, 4/3/2013). Engaged behaviours included participation in class discussion, enthusiasm for the project as indicated by my observations and students’ written and spoken expressions and students’ ability to stay self-motivated and focused. I also included behaviours such as, students vocally expressing their engagement to me or to each other, such as when they said things similar to “I like this assignment.” I can now report with great certainty that my

research journal repeatedly made note of more engaged student behaviour in relation to past units and non-inquiry-based units.

Along with my personal observations noting engaged behaviour, the students repeatedly expressed on their exit slips that they did indeed find the social justice unit engaging. Moreover, many students appeared to me at various times to be genuinely excited about what they were exploring and the work they were producing. At one point, I make note in my research journal of a student exclaiming, “I am so excited for our webpage.” Still another entry in my journal notes, one student bragging, “ours is awesome,” referring to the webpage they were working on. These sentiments relay the kinds of attachment that comes with taking ownership of, having pride in, and wanting to engage with school work.

Highlights from my data include the students’ engagement in our learning endeavours, such as an entry referring to an informal engagement survey I conducted with the students which showed, “most were engaged, some were very engaged, and none said they weren’t engaged.” (Journal Entry, 2/4/13). Moreover, entries such as when I noted that, “certain activities that involved them, made them more engaged and interested” alerted me to some of the types of activities and learning experiences that are more likely to engage students. (Journal Entry, 5/3/2013)

At another point, I note under the “insights” section in my journal, “to be engaged, they have to be interested, to get interested they have to be comfortable, this is what they are showing me.” (Journal Entry, 2/4/2013). Certainly my research journal observations demonstrate the type of engagement I was hoping an inquiry unit would

illicit from the students. This is consistent with what a great deal of other research is now finding regarding student engagement and inquiry learning.

According to a Ministry of Education publication, “Research suggests that students are more likely to develop as engaged, self-directed learners in inquiry-based classrooms” (Canada Literacy and Numeracy Secretariat, October, 2011, p. 1). Indeed, my personal experiences and journal entries are consistent with this view. I found my students not only exhibiting engaged behaviours during my language unit on social justice, but also taking ownership of their work. My students also exhibited many characteristics of the self-directed learner referred to in this quote.

Another quote from an earlier referenced study offers the same sentiment; “Classroom practices reported to engage learners are predominantly inquiry-based, problem-based, and exploratory” (Taylor and Parsons, 2011, p. 11). I think it is important for teachers to understand that student learning is not something that just happens, that we simply pass the knowledge from ourselves to the students, but rather that it is a process which must be negotiated, and of which students must want to be a part.

Certainly there exist many similarities between this teacher research and the inquiry learning environment I was striving to create in my classroom. This thesis has been written on a topic of my choosing, in a manner and style of my choosing, with the use of technology, and with the intention of sharing the finished product with others. Furthermore, my research has been an inquiry in itself, as I began with a question which I explored in an attempt to find answers, and which led to proposing new questions for

further investigation. Moreover, it can be said that like my students, I too have chosen to explore a social justice topic; my own teaching practice.

Perhaps I should take comfort in the fact that my engagement has been very high in this process. Indeed, I would think it rather impossible to finish a work of such considerable size, were one not wholly engaged. The similarities appear to have genuine merit in showing that the process which I am writing about certainly does work, for learners of all ages. Ultimately, if nothing more, it strikes me as interesting that my research thesis appears to be on a topic which generally mirrors the process I myself am engaged in, while writing on that very topic.

6.3 *A Reflection on Teacher Research*

I have been fully engaged in the process of teacher research for a considerable length of time now. Have I found this practice useful and worthwhile? In a word; absolutely. Much of the literature I read about teacher research in preparing myself to participate in this process, claimed that all teachers should at some point become involved in teacher research. That it is a process which can work to strengthen and improve generally accepted best practices, and which can legitimize the professionalism of the teaching field (Carr, 2005; 2006; Kemmis, 2006; Lankshear and Knobel, 2004; Creswell, 2007; Shakir-Costa and Haddad, 2009). After having been involved in teacher research, I can say that I wholeheartedly agree.

Teacher research involves the self-critical examination of practice. It involves the examination and consolidation of other academics' work and research. Ultimately, I

believe that both of these practices make one a more reflective and reflexive teacher. It is hard to understand until such a process is experienced, yet the act of reflection, the act of observation, the constant struggling to analyze and make sense of classroom practices and experiences, become a way of functioning as a teacher. Truly, one of my greatest discoveries doing teacher research is about the effectiveness of undertaking it, assuming the goal is to become a more thoughtful, insightful and deliberate teacher.

Furthermore, I think that teacher research itself is good for the classroom atmosphere. Not only does the process literally mirror that which you are asking your students to undertake in learning, but it also fosters reflection, an entire sub-heading of the Ontario curriculum, and stimulates the classroom to evolve through action.

The research process has also made me more open to receiving student ideas and input. In teacher research, students are seen as key informants as well as sources of data and information. They are informative and important. I believe this mindset towards students leads to teaching practices and behaviours which can be healthy for all classrooms. When you as a teacher, are constantly looking for ideas and ways in which to improve your practice, the students become vital informants, and in the process gain a level of importance and receive a form of respect which is healthy and revitalizing. Not only for the students themselves, but also for the greater classroom environment.

However, my experience with teacher research was not without a steep learning curve and a few setbacks. Initially, I found myself over-focused on the actual research process and not on what the research was telling me. I was focusing on things which were not a result of my teaching, when I should have been focusing on what the

examination of my classroom experiences was telling me. I found that once I simply embraced the ideas that popped out from my observation, that I was able to find meaning in what I was observing, to find answers to questions about my teaching and my classroom. Once this happened, I was able to embrace teacher research for what it truly is: a worthwhile, informative, helpful process for understanding the classroom, the students, and becoming a better teacher.

6.4 *A Reflection on the Research Journal*

My primary data collection tool was a personal research journal. I found this essential for the collection and organization of data, and vital as a source of information and analysis after my data unit was complete. Much like the process of teacher research itself, I believe that initially I was unsure of how exactly to use this tool. However, as my comfort level with the reflective journal grew I found it absolutely invaluable.

In terms of larger learning experiences beyond this thesis, I think this research project has taught me the value of the consolidation of thoughts and ideas through the written word. For me, a level of understanding and synergy takes place when ideas are consolidated and written down. The research journal allowed me to take observations of personal experiences, record them, organize them and then finally analyse them for meaning.

Through the use of a research journal, I was able to explore different relationships between pieces of data and organize my ideas thematically in a way that

may not have been possible with other data collection tools. I believe that for this particular research project, in these conditions with myself as the researcher, the data collection tool of the personal research journal was wholly appropriate and ultimately proved completely indispensable.

6.5 Questions, Problems, Anomalies

Up to this point, readers may have been acutely aware, as I, the author am, of the absence of a crucial component of research: problems. My research has ultimately provided me with insight, ideas and a great many answers, yet that does not mean it has not left me with questions, as I believe all good research should. Let me address and discuss these.

1) How do you get students to “inquire?”

Inquiry learning assumes that students genuinely want to inquire into questions and explore topics they find interesting, but what if they do not? One question that arose for me in my research relates to getting students to inquire, specifically students that are not inclined or motivated to do so. In my research, I encountered problems with students finding appropriate topics, manageable topics, or no topic at all in some cases. Even within this new style of teaching, old issues arise such as, are students really looking for a topic, really inquiring, or simply wasting time?

I found myself asking a similar question with regards to the use of technology as well, as it appeared many students wanted to skip the step of gathering information and simply begin designing and manipulating their websites. Were these students inquiring

or just participating in the less onerous parts of the unit, taking the easy way out? This issue was further problematized when I began to wonder if this could be considered a problem in an inquiry unit. In an open learning format where teacher interference should be at a minimum was I going to hold students back from working on their websites, until they showed me concrete information with which they planned to fill them? After all, that is what inquiry learning is; students engaging with work stemming from curiosity. Yet students are not machines. Some days they will struggle to find true inquiry questions, just as some days they will not feel like putting in their best effort or truly engaging.

Ultimately, I have faith in the notion that given time and space, and when coached and assisted to do so, most students will gravitate to a topic or area of interest to them. When they do so, I believe that they will then engage in a process of discovery. However, we must be willing to embrace the various ways in which students choose to do this. Furthermore, I believe that students must learn to learn in this manner. Inquiry learning cannot simply start for all students immediately. Many will need to learn how to learn in this way, and some will need to begin with an area or topic which is different than the starting point the teacher had in mind.

2) Does inquiry need to start with a question?

Many traditional conceptions of inquiry have students beginning with a specific question. However, as I formed my own ideas about inquiry, I began to wonder if this in itself was a constrictive guideline. I think that certainly questions make the best starting point from which to springboard the inquiry process. However, I believe that this is by no means the only option.

For example, with my data unit, students began with a topic within a framework, such as poverty within the topic of social justice. Yet the inquiry process came from them forming a personal context for social justice and creating a foundation of knowledge about poverty. Other possibilities, as opposed to beginning with one question, include inquiring into why an answer or theory is true in a subject or topic area, or why things physically work or not.

3) How much choice should we give students?

The question of how much choice to give students is an important and difficult one. Let me first define some types of choice. There can be choice of content (such as, which social justice issue to research) or choice of medium (such as, whether to create a website, blog or essay). There may also be guided choice (such as, when students pick a topic from a list) or free choice (such as, when students pick any topic on any subject to research). Ultimately, I believe much of this comes down to the judgment of the teacher, given the age and maturity of students, the resources available, the timeframe, the curriculum and the subject.

Choice can be a frightening prospect for many teachers, as it is the beginning of relinquishing some aspect of control, but the students understand that as well.

Students should be made to see choice as a responsibility, one they are entrusted with and made to feel comfortable negotiating. Indeed these are the skills they will need for the rest of their lives, albeit not in the same way at the age of six or eight as at the age of forty-five.

Ultimately, we must give students room to make important choices, yet not allow the classroom to be seen as a free-for-all. At one point during my data unit one student declared, "I don't understand how we are supposed to present it." There will always be those students who need more guidance and they should not be denied that, but they should be made to feel more comfortable with a level of choice over time. In the end, the goal is not to confuse or overwhelm students with choice, but to allow them to contribute to and control, to a degree, their learning.

So much of these students' lives allow them control and choice (hundreds of channels on television, many brands of breakfast cereal, personalized music buying and smartphone apps, hundreds of video games and more clothing options than they can comprehend) not to mention various hot lunch options in school and selection of elective courses in high school, as well as websites online and social media mediums. I believe that in order to prepare them for a world limitless with options, we need to begin to allow them some choice in the classroom.

4) How much authority do we have to let go of, and how will we provide an appropriate level of behaviour management within this style of teaching?

Again, how much control, input and voice a teacher allows students is up to him or her. Many teachers fear that allowing students to slip out of traditional roles (the straight-backed quiet student facing the board with hand quietly raised) may lead to anarchy in the class. But I fear that not doing so has forced us to compromise engagement. Indeed, students can learn to play the role of the “perfect” student, but they can also learn to appear engaged, when really their minds are somewhere else, somewhere interesting.

Inquiry learning need not be a free-for-all in which teachers’ wishes and classroom rules are dismissed. There is no need to forego respect, quite the opposite in fact. I believe that a classroom run with mutual respect and agreement, is a classroom in which true collaboration and engagement can take place. Classroom rules are very important, as they exist for the safety of the students and teachers. But that does not have to mean that noise is bad, that divergent thinking is banned, and that students should not have opinions and voices as well.

However, much of this will depend on the age and maturity of the students, as well as the classroom teacher’s level of comfort with the group and with behaviour management. Not all classes can run on mutual agreement all of the time, and it must ultimately be clear that the certified and trained adult in the classroom has the final say, for the good of the class and the safety of all students.

5) Is the considerable amount of time that inquiry learning takes a problem?

Many classroom teachers feel the crush of time as they rush to reach all of the outcomes for all of the subject areas each term. There is never enough time. Yet ironically, that is exactly what inquiry learning demands. Time to explore and discover. Even within my own data unit, I found myself questioning the great amounts of time given to simply exploring, discovering and inquiring.

I believe, however, that we must ask ourselves what is really important. Do we give up sleep simply because it takes up such a large chunk of each twenty-four hour period? We cannot sacrifice real learning just because it happens to take up more minutes than allowed by the subject planning guide. Inquiry learning does take time, but it is time well spent, and time that the students need. In the end, if it is accepted that this is the best possible style of learning, then consideration for time must be disregarded.

6) Can current curriculum outcomes be reached through inquiry learning?

In order to understand if inquiry learning can reach all of the pre-determined outcomes, we must simply be willing to step outside of the box. Much like conceptualising inquiry learning itself, in understanding that the whole thing must change, learning tasks designed to meet curriculum outcomes must be rethought in this way as well.

Curriculum outcomes tend to dictate *what* students should know and not *how* they should come to know it. If we are willing to rethink the way in which our classrooms are set up, and rebuild the foundation upon which they stand, then we must

also be willing to rethink our teaching programs and methods by which we plan to reach the curriculum outcomes.

My belief is that all curriculum outcomes can be reached through inquiry, and often through large cross-curricular activities. If we are willing to rethink the narrow subject areas and content-specific assessments and assignments that have become the basis of our scheduling, then real inquiry learning can take place and can meet curriculum outcomes.

I have seen young students capable of great things. For example, planning grade eight graduations (which included math, geography, language, media and the arts) or organizing fundraising events or art shows, or physical education lessons (again encompassing many subject areas). When given the freedom to explore and to plan and to inquire, students are capable of great things. But we must start asking them in different ways. Inquiry learning is capable of meeting curriculum outcomes, just as traditional models of teaching are. However, what this looks like within inquiry learning is quite different. It is more project-based, more cross-curricular, and less paper and pencil test driven.

Ultimately, I believe that inquiry learning can allow us to reach current curriculum outcomes through a more engaging and relevant path.

7) What about assessment?

Relatedly, how do we assess in an inquiry classroom? The big question is always about assessment. How do we prove the students are learning? How do we legitimize our teaching? In an assessment climate, teachers have been trained to seek out

standardization, comparability and uniformity in marking, assessment and evaluation. Whether it is called diagnostic, formative, summative, or labelled assessment for learning, assessment as learning, or assessment of learning, we must not forget about assessment. However, assessment comes in many forms, or can come in many forms, if I may again suggest that we step outside of our comfort zone and rethink assessment.

As stated above with regards to curriculum and lesson planning, we must be willing to rethink assessment, conceptualizing the accounting of student learning not simply through multiple choice and true and false, cultivating a climate of student fear and anxiety with regards to assessment, but rather measure learning through accomplishments and achievements. More performance-based, participatory and oral marking can be made use of, through tools such as observation and student-teacher conferencing. We must as teachers, exercise our use of professional judgment with regards to student success and learning, and be willing to stand by those opinions and conclusions when it comes to reporting.

It is time for assessment tasks to be rethought. What is the use of asking a student to write an essay on spelling by hand, when he will never have to spell without autocorrect, will write mainly on a keyboard, and may very well never need to write another essay in his life? Moreover, why ask a student to write a math test about unit conversions without a calculator, when all smartphones and personal computers have both calculators and unit converters? Not all learning in schools is outdated, but certainly some methods of assessment have become obsolete.

Inquiry learning can be assessed and teachers can remain accountable for their students' learning, yet we have to be willing to lose some of the rigidity with which we often approach student assessment, and this is a task easier said than done.

8) Does this mean that our role as teachers has changed?

Ultimately, what does this mean for us as teachers? Will our role completely change? In reality I think it already has, whether we like it or not. The world is changing, and with it, the youth of tomorrow. Whether we as teachers like it or not, our students are not the same students we were 20, 30 or 40 years ago. As stated earlier, students have changed, and our schools have not. Picture an old schoolhouse from its first conception, the physical layout and structure, and then compare it today's classrooms. Amazingly, very little has changed. Perhaps the time to make that change to our schools is now, and for us, as educators, to change along with them.

9) Did I really solve my initial problem of student engagement?

One of the biggest questions I began to struggle with as my research came to a conclusion, is whether or not I succeeded in answering my initial question about student engagement. In the end, I certainly did not discover a guaranteed method for engaging all students in all circumstances. However, I did answer the question about what happens to the classroom when inquiry teaching is introduced, and with very positive results.

I discovered that regardless of my research, my analysis and my conclusions, students are not machines. They may behave one way one day, and another way the next. Qualitative local research is useful in the classroom for precisely this reason, for

the human nature, the immeasurable quality, of student behaviour, child behaviour.

Did I solve the problem of student engagement? No. But did I discover a method and style of teaching with specific practices which may help all students, even the disengaged? Yes I did.

6.6 Conclusion

As Dr. Andrew Manning would say, so what? This teacher research thesis has led me to question my own personal perspectives and biases, as well as to question the experiences on which my opinions were formed. I have taken my lived experiences and focused on important recurring questions surrounding my own daily classroom activities. I then formed ideas and theory about my teaching practice. What is more, and infinitely more difficult, I have revised and edited these ideas in light of a variety of literature and research from those with far more experience than myself.

I then conducted teacher research in my classroom, an experience I will never forget. Through continuous, methodical and rigorous observation of my classroom environment and its daily routines, I recorded data. I then analysed that data thematically and again found that many unique and original ideas had once again formed, all of which are found in my analysis and linked to my research journal and cited references.

As a researcher, I learned that engagement cannot be turned on, students are not machines and as I suspected all along, there is no one answer to the complex

problem of student engagement. I did however, find that there are approaches and practices which may, and I believe often will, help to increase student engagement.

In my classroom, throughout the course of my research, student engagement was positively impacted by inquiry learning. I discovered that in order to be effective, this style of teaching cannot simply be sampled; it cannot be offered one day and retracted the next. It must be accepted fully by students and teachers, and when this happens, a new style of teaching and learning can take place.

Within inquiry learning, teaching practices relating to the use of technology, offering students choice, as well as giving them opportunities to share the work that they put so much time and effort into, can have a positive effect on student behaviour and student engagement.

Certainly there are issues with the conception of inquiry learning and the style of teaching I have offered here, but I believe they are manageable, not to mention preferable, to the myriad issues that already exist in many of today's classrooms (not the least of which is engagement). Moreover, examples from the wider world of the significant use of technology, the desire to share and have one's work viewed publicly, and the abundance of collaborative projects directed by choice and creative thinking, all link the ideas within this paper to the world around us.

As an undergraduate student, I spent my summers working as a carpenter. During those short months when I would trade in my pencil for a hammer, I found that my awareness of construction, building and carpentry was heightened. I would see lines and nuances in construction which would go unnoticed to many not involved in

carpentry day in and day out. This is similar to my experience with this research thesis. As I have become immersed in my subject matter, my material, my ideas and my research, I have begun to see examples of the things I have written about, not only in my classroom and my school, but also in the wider world.

Examples of how the ideas in this paper are present and evolving in the world have certainly caught my attention. For example, a radio commercial for the “Boys and Girls Clubs of Canada” about *inquiring* minds staying inspired and *engaged*, or the parallel between personalized music buying on iTunes and choice in the classroom, suddenly strike me as significant. I seem to be more acutely aware now that the most recent newsletter from the Ontario College of Teachers cites a book on inquiry as one of the top 10 most requested books in the College’s library. And a year-end card from a student reads, “The art of teaching is the art of assisting discovery.” Mark Van Doren.

When you open your mind to new ideas, as I have in undertaking this thesis, those ideas seem to pop out at you from the world, and declare their legitimacy and their willingness to push through to the consciousness of the general public. I believe that my immersion in teacher research and in inquiry learning, has certainly made me more aware of the parallels between student behaviour in my classroom and how the world is changing and evolving around us, often quite similarly.

For me, the whole thing has changed. My classroom has become a different place. A variety of collaborative and student driven projects have seemed to simply spring up, and I have been revitalized by my new approach to student learning. As my comfort levels with inquiry, with student voice and input, with sharing and with

collaboration, have grown. New ideas have emerged, and new lesson formats and teaching practices have been conceived.

In my classroom, my inquiry wall, my class Twitter account, the word wall, as well as a variety of language, visual arts, dance projects and sharing exercises, have taken place, which before this thesis would not have even entered into my mind. Technology and student choice have moved to the forefront of my teaching consciousness, and I find myself open to students' ideas more so than ever. Certainly there have been and will continue to be, growing pains and learning experiences, but if I have learned anything from this research, it is that we must keep, not only teaching our students, but also learning from them.

Ultimately, inquiry is not simply an isolated teaching technique. It is a style of learning, a mindset, a disposition to discover and uncover, to ask questions and to find answers. Inquiry is not just something students do in a classroom, but rather a relationship we hold with the world. At its deepest, it is about relationships, critical thinking and collaboration. Skills that are essential in many aspects of life.

Summarily, I believe teaching is about relationships. The foundation upon which a healthy, respectful, collaborative, critical and engaging classroom is built begins with relationships. Students want to be viewed as important and contributing members of the classroom environment, not as silent vessels to be filled with content chosen and presented by others. Relationships are at the heart of great teaching. Although this may seem like commonsense to some, I believe that as human beings we cannot function at our true potential unless we feel comfortable and safe. These feelings must

be earned by teachers, built upon a foundation of respect. Therefore, it is our job to build relationships with students, all students, in order to create an atmosphere in which they can realize their true potential. An atmosphere in which we recreate the school environment to meet both teachers' and students' needs. Unfortunately, so much of this is more easily said than done.

In closing, I encourage all teachers to consider the ideas about teaching and learning proposed in this thesis, and to attempt to employ an inquiry style of teaching in the classroom. I truly believe that those educators who succeed in adopting this method of teaching will come to understand, as I have, that *the whole thing changes*.

References

- Ahlfeldt, Stephanie, et al (2005) "Measurement and analysis of student engagement in university classes where varying levels of PBL methods of instruction are in use." *Higher Education Research & Development* 24(1), pp. 5-20.
- Anderson, Ronald D. (2002) "Reforming science teaching: What research says about inquiry." *Journal of Science Teacher Education* 13(1), pp. 1-12.
- Beach, Richard, and Jamie Myers (2001) *Inquiry-based English Instruction: Engaging Students in Life and Literature*. New York: Teachers' College.
- Blackledge, Adrian (2000) "The Social Process of Literacy," *Literacy, Power and Social Justice*, Trentham Books, pp. 1-22.
- Canada Literacy and Numeracy Secretariat (May, 2011) *Engagement Student Identity and in Elementary Schools*. N.p., n.d.
- Canada Literacy and Numeracy Secretariat (October, 2011) *Getting Started with Student Inquiry*. N.p., n.d.
- Carr, Wilfred (2006) "Philosophy, methodology and action research." *Journal of Philosophy of Education* 40(4), pp. 421-435.
- Carr, Wilfred, and Stephen Kemmis (2005) "Staying critical." *Educational Action Research* 13(3), pp. 347-358.
- Comber, Barbara and Philip Cormack (1997) "Looking Beyond 'Skills' and 'Processes': Literacy as Social and Cultural Practices in Classrooms." *Reading Today*, UKRA, pp. 22-33.
- Creswell, John W. (1994) *Research Design*. Thousand Oaks, CA: Sage publications.
- Creswell, John W., and Vicki L. Plano Clark (2007) *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage Publications.
- Daniels, Harvey (2002) *Literature Circles: Voice and Choice in Book Clubs and Reading Groups*. Portland, ME: Stenhouse.
- Dewey, John (2004) *Democracy and Education*. Courier Dover Publications.
- Dewey, John (2007) *Experience and Education*. Simon and Schuster.

- Digital Youth Research: Kids Informing Learning with Digital Media, "Final Report." N.p., n.d. Web access: 25 Jan. 2013.
- Dunleavy, Jodene, Penny Milton, and Cailey Crawford (2010) "Search for Competence in the 21st Century." *Quest Journal*
<http://www.leadingedgelearning.ca/q2011/Docs/QuestJournal2010/Article12.pdf>
- Dunleavy, Jodene, and Penny Milton (2008) "Student Engagement for Effective Teaching and Deep Learning." *Education Canada* 48(5), pp. 4-8.
- Ferris, S. Pixy, and Hilary Wilder (2006) "Uses and Potentials of Wikis in the Classroom." *Innovate: Journal of Online Education* 2(5)
<http://www.qub.ac.uk/directorates/AcademicStudentAffairs/CentreforEducationalDevelopment/e-Learning/E-LearningFileStore/Fileupload,134940,en.pdf>
- Fitzgibbon, Kathleen (2010) *Teaching with Wikis, Blogs, Podcasts & More*. New York: Scholastic Teaching Resources.
- Freire, Paulo. (2005) *Pedagogy of the Oppressed*. The Continuum International Publishing Group Inc.
- Gee, James Paul (2004) *Situated Language and Learning: A Critique of Traditional Schooling*. New York: Routledge, p. 21.
- Gee, James Paul (2007) *Social Linguistics and Literacies: Ideology in Discourses*. Routledge, pp. 123-128.
- Grant, Lyndsay (2006). "Using wikis in schools: A case study." *Future Lab*
<http://archive.futurelab.org.uk/resources/publications-reports-articles/discussion-papers/Discussion-Paper258>
- Hagel, John & John Seely Brown (2005) From push to pull: Emerging models for mobilizing resources. Unpublished working paper, October. Retrieved Jan. 4, 2011, from: <http://www.edgeperspectives.com>
- Hargreaves, David H. *Learning for Life: The Foundations of Lifelong Learning*. The Policy Press, 2004.
- Harvey, Stephanie, and Harvey Daniels (2009) *Comprehension & Collaboration: Inquiry Circles in Action*. Portsmouth, NH: Heinemann.
- Hmelo-Silver, Cindy E., Ravit Golan Duncan, and Clark A. Chinn (2006) "Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark" *Educational Psychologist* 42(2), pp. 99-107.

- James, Heather (2004) "My Brilliant Failure: Wikis in Classrooms." *Kairos News*. N.p., n.d. Web access: 02 Jan. 2013. Retried from <http://kairosnews.org/node/3794?PHPSESSID=c50a97d36570b527fc8c8a9de9d4255e>
- Jang, Hyungshim, Johnmarshall Reeve, and Edward L. Deci (2010) "Engaging students in learning activities: It is not autonomy support or structure, but autonomy support and structure." *Journal of Educational Psychology* 102(3), p. 588.
- Jenkins, Henry (2009) *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. MIT Press.
- Jenkins, Henry (2009) *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century (Part two)*. MIT Press.
- Jenkins, Henry (2006). *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.
- Kemmis, Stephen (1980) "Action Research in Retrospect and Prospect" mimeo presented at the Annual General Meeting of the Australian Association of for Research in Education, Sydney, November.
- Kemmis, Stephen (2006) "Participatory action research and the public sphere." *Educational Action Research* 14(4), pp. 459-476.
- Knobel, Michele and Anna Healy (1998) "Critical literacies: An introduction." *Critical Literacies in the Primary Classroom*, Open University Press, pp. 1–12.
- Knobel, Michele, and Colin Lankshear (2010) *DIY Media: Creating, Sharing and Learning with New Technologies*. New York: Peter Lang.
- Kuhlthau, Carol Collier, Ann K. Caspari, and Leslie K. Maniotes (2007) *Guided Inquiry: Learning in the 21st Century*. Westport, CT: Libraries Unlimited.
- Lankshear, Colin (2004) *A Handbook for Teacher Research*. Open University Press.
- Luke, Allan (2013) "Leaders in Educational Thought | Allan Luke." *Leaders in Educational Thought, Allan Luke*. N.p., n.d. Web access: 02 Jan. 2013.
- Luke, Allan (1986) "Linguistic stereotypes, the divergent speaker and the teaching of literacy." *Journal of Curriculum Studies* 18(4), pp. 397-408.
- Luke, Allan (1991) "Literacies as Social Practice." *English Education*, p. 131-147.

- Lynch, Sharon, Joel Kuipers, Curtis Pyke and Michael Szesze (2005) "Examining the Effects of a Highly Rated Science Curriculum Unit on Diverse Students: Results from a Planning Grant." *Journal of Research in Science Teaching* 42(8), pp. 912-946.
- Lytle, Susan L. (2008) "At Last: Practitioner Inquiry and the Practice of Teaching: Some Thoughts on *Better*"." *Research in the Teaching of English* 42(3), pp. 373-379.
- Manning, Andrew and Jerome Harste (1994) "Teacher research: Demonstrations of possibilities." *Reading* 28(1), pp. 2-4.
- Newlits (2013) "Welcome to NewLits.org." *Newlits*. N.p., n.d. Web access: 25 Jan. 2013.
- NSSE Home "NSSE - National Survey of Student Engagement." *NSSE Home*. N.p., n.d. Web access: 04 Jan. 2013.
- Parker, Kevin R., and Joseph T. Chao (2007) "Wiki as a teaching tool." *Interdisciplinary Journal of Knowledge and Learning Objects* 3(1), pp. 57-72.
- Postman, Neil. *Teaching as a subversive activity*. Delta, 1971.
- Prensky, Marc (2001) "Digital Natives, Digital Immigrants" *On The Horizon*, n.p.
- Prensky, Marc (2001). "Digital Natives, Digital Immigrants Part 2: Do They Really Think Differently?" *On The Horizon* 9(6), n.p.
- Prensky, Marc (2005) "Engage Me or Enrage Me: What Today's Learners Demand." *Educause Review* 40 (5), n.p.
- Richardson, Will (2006) *Blogs, Wikis, Podcasts, and Other Powerful Web Tools for Classrooms*. Thousand Oaks, CA: Corwin.
- Sealey, A. (1996) Language as Social Practice, in *Learning About Language: Issues for Primary Teachers*, Open University Press, pp. 17-32.
- Seely Brown, John & R. Adler (2008) "Minds on fire: Open education, the long tail, and Learning 2.0." *Educause* (January/February).
- Seely Brown, John (2000) "Growing up digital: How the Web changes work, education, and the ways people learn." *Change*, March/April, pp. 10–20. Also accessible at *USDLA Journal*, 6(2) February 2002.
http://www.usdla.org/html/journal/FEB02_Issue/article01.html

- Shakir-Costa, Kimberly, and Laura Haddad (2009) "Practitioner Research Success!" *Science and Children* 46(5), pp. 25-27.
- Short, Kathy Gnagey, Jerome C. Harste and Carolyn L. Burke (1996). *Creating Classrooms for Authors and Inquirers*. Second Ed. Portsmouth, NH: Heinemann.
- Stenhouse, Lawrence (1981) "What counts as research?." *British Journal of Educational Studies* 29(2), pp. 103-114.
- Stripling, Barbara (2008) "Inquiry: Inquiring minds want to know." *School Library Media Activities Monthly* 25(1), pp. 50-52.
- Taylor, Leah. & Jim Parsons (2011) Improving Student Engagement. *Current Issues in Education*, 14(1). Retrieved from <http://cie.asu.edu/>
- Wearmouth, Janice, Janet Solar & Gavin Reid (2003) *Socio-cultural Models and Approaches, Meeting Difficulties in Literacy Development: Research, Policy and Practice*, Routledge Falmer, pp. 1-2.
- Wells, Gordon (2004) *Dialogic Inquiry: Towards a Sociocultural Practice and Theory of Education*. Cambridge University Press.
- Wenger, Etienne (1998) "Introduction: A Social Theory of Learning," *Communities of Practice: Learning, Meaning, and Identity*, Cambridge, pp. 3–11.
- Wikibooks "Learning Theorists." N.p., n.d. Web access: 02 Jan. 2013.
- Wikimedia Foundation (2013) "John Dewey." *Wikipedia*. Web access: 02 Jan. 2013.
- YouTube (2010) "Clay Shirky: How Cognitive Surplus Will Change the World." *YouTube*. Web access: 15 Jan. 2013.
- YouTube (2007) "Sir Ken Robinson: Do Schools Kill Creativity?" *YouTube*. Web access: 05 Nov. 2012.
- YouTube (2011) "TEDxNYED - Will Richardson - 03/05/2011." *YouTube*. Web access: 25 Mar. 2011 and 20 Dec. 2012.