Teachers' Reflections on

Museums, Classrooms, and Technology

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Abstract

Teachers' Reflections on Museums, Classrooms, and Technology

Peter Vietgen, Ph.D. Concordia University, 2009

Utilizing an action research based methodology, this qualitative investigation explores the teaching opportunities offered through a project designed to integrate actual and on-line curriculum components into a visual arts program. The study involved 2 visual arts teachers, 1 from Montreal and 1 from Toronto, who guided their respective grade 11 visual arts classes through a project involving 2 main components. Phase 1, the "actual" component, involved conducting a field trip to the local museum/art gallery (the Montreal Museum of Fine Arts and the Art Gallery of Ontario), where the students were to view and select 1 art work from the museum's permanent collection towards which they felt a particular affinity. Back at school, the teachers assisted their students in the creation of their own art works, which were inspired by the pieces selected from the museum permanent collections. Once completed, phase 2, the introduction of technology, was introduced. This "on-line" component involved the creation of website links that contained an image of the student art work alongside an image of the museum piece which inspired it. These website links served as the vehicle through which an on-line exchange was conducted between the 2 grade 11 visual arts classes in Montreal and Toronto.

Through the writing of journals, recorded observations using field notes, and interviews conducted at 3 strategic points in the study, data were collected on behalf of the teacher participants to examine the teaching opportunities experienced through engagement in such a project. After a data analysis, themes emerged under 2

overarching categories: (a) museum/gallery field trips and (b) on-line communication/technology. In each of these 2 categories, subthemes emerged that revealed the complexities of the integration of such a project. These subthemes revolved around such issues as the role of the administration, the role of the school board, museum commitment, student commitment, teacher colleagues, technical support/availability, and the school timetable. This document highlights the reality of implementing such a curriculum project into 2 grade 11 visual arts programs.

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We did it!

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Dedication

To my parents,

Monika Vietgen

and

Heinz Vietgen (1932-2005)

I love you. This was for you.

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CHAPTER 1: INTRODUCTION

To be a teacher is my greatest work of art. Joseph Beuys, 1921-1986

In this opening chapter, I provide a personal background to the research conducted. This background is followed by an articulation of the development of the research question, and the purpose and significance of the study. Chapter 1 concludes with an outline of the 5 chapters which comprise this dissertation.

Background to the Research

The teaching of visual arts has been the central focus of my academic and professional life ever since my undergraduate days in the mid-1980s as a student at Brock University in St. Catharines, Ontario. It was during the summers of 1986 and 1987 that I had what, to me, was the best student summer job possible—Instructor of the Children's Summer Art Classes at Rodman Hall Arts Centre, St. Catharines, Niagara's regional art gallery. Through classes in drawing and painting, sculpture, and photography, I took students aged 7 through 16 on a journey that I hoped they would never forget. That journey was the discovery and exploration of the world of visual arts. It was during this job that I caught what some might call "the teaching bug". This bug made its way inside me and has, over the past almost 25 years, manifested itself into a variety of forms and expressions. Through the teaching of art to students, in as many different environments as their ages and levels, it has been the teaching process that has held me captive. As Elizabeth Delacruz (1997), Art Education Professor at University of Illinois, writes.

Teaching is the way human beings define and convey to one another the meaning and methods of living. To educate is both to preserve and to change the meaning of human experience (p.1).

Development of the Research Question

Today, after 15 years of working with the Toronto District School Board (10 years as a high school visual arts teacher and 5 years as a visual arts consultant), it is the classroom teacher that to me is the core of a strong and vibrant visual arts program.

According to Johnson (2008),

The most important variable in determining the quality of our children's educational experience is the teacher standing in front of a classroom (p.xi).

After 2 years of living in Montreal and working towards my doctorate in Art

Education, I still find the practice of high school art teaching an honourable, yet incredibly demanding profession. While in Montreal, I was fortunate to meet a new group of secondary visual arts teachers through supervising senior Art Education students out on their practice teaching placements (stages) in schools across the Greater Montreal Area. In this role, I found that my years of teaching and consulting were continuing in a new capacity and in a new province.

Reflecting on my years in Toronto, I had established strong ties with many art galleries and museums. As a classroom teacher, the integration of field trips was an integral part of my art program. As a consultant, the links with these galleries and museums grew even stronger. Now here in Montreal, I found myself becoming involved with the Montreal Museum of Fine Arts (MMFA). I could not help but make comparisons to the relationship I had established with the Art Gallery of Ontario, the gallery with which I had created many innovative partnerships with local

Toronto schools during my time as a consultant. What new possibilities could I envision here in Montreal and the MMFA? What types of connections to the education community could I possibly introduce that had not been done before?

When it came to selecting a topic for my doctoral dissertation, much consultation took place between me and my advisor. What the discussions always came back to was my love and respect for the teaching of art and the building of bridges between teachers and the museum/gallery community. How could I connect these interests and strengths that I brought to the table?

All of these discussions led to the articulation of a thesis question that presented a bridge to my past, Toronto, and to my current reality being lived here in Montreal. The question integrated my professional interests and introduced an area relatively foreign to me, yet one that has been at the forefront of my own desire for professional growth in the field of art education, technology. As Delacruz (2004) emphasizes, "little in the research tells us much about how practicing teachers view or learn to apply electronic media in their professional lives" (p. 7). With this background, the question posed for this dissertation reads as follows:

How does a visual arts exchange project, containing both actual and on-line components, between two schools and two museums in Montreal and Toronto, offer teaching opportunities within an art curriculum, as seen from the perspectives of the teachers and the exchange co-ordinator?

Thus, I developed a curriculum project involving two high school visual arts teachers, one from Montreal and one from Toronto, and the two museums/galleries with which I had a working relationship in each of these large metropolitan cities—

the Montreal Museum of Fine Arts and the Art Gallery of Ontario. The two secondary visual arts teachers invited to take part in the project each had a grade 11 art class that they engaged in two phases of a study. The first phase involved the students visiting the museum/gallery in their home city and selecting a piece from the respective permanent collection to which they felt a personal connection. These selected works then served as inspiration for their own art creations, which were made in response to their selected museum pieces. This phase of the study, the viewing of real art works in a museum/gallery setting and the creation of their own art in the classroom, reflects the "actual" component of the research question posed.

The second phase of the curriculum project began with digital photographs being taken of the student art work creations. These photographs were then placed alongside digital images of the museum pieces that inspired them. Together, the pairs of images were placed on the respective school websites in order that each class could access the opposite school's site and view the works created by students in a grade 11 art class in another province and see what pieces inspired them from their local museum or gallery. The students then engaged in an exchange of ideas based on the relationships that they could find between the art works created and the museum pieces that inspired them. It was this phase of the project that reflected the "on-line" component of the research question posed. Throughout the study, it was the teaching opportunities presented by each phase of the project that were explored.

Purpose and Significance of the Study

According to Delacruz (1997) there has been little inquiry about art teacher thinking, planning, or decision making. She elaborates on that concern, pointing out

that

there is a scarcity of any kind of research in typical art classrooms with the exception, during the last few years, of research promoting particular curriculum initiatives or teacher assessment and evaluation approaches and systems. (Delacruz, p. 20)

Just over 10 years later, it is still challenging to find research about the practice of teaching art in "typical" art classrooms. Most often, situations of gifted achievements are analyzed and shared in journals and periodicals. The question I put forward is:

What about the everyday art teacher? Where and how do they fit into the picture of teaching visual arts at the secondary level?

At the April 2009 NAEA conference in Minneapolis, I attended a session featuring Elliot Eisner and Arthur Efland. Celebrating the 50th Anniversary of *Studies in Art Education*, each speaker was asked to share his thoughts about the current state of research in the field of Art Education. When a graduate student in the audience put up his hand and asked Elliot Eisner what in the field of Art Education he should focus his research on, Eisner replied, "the process of teaching in classrooms today" (Eisner, response during 2009 NAEA session). It is this process of teaching in the everyday classroom which this dissertation will explore.

When looking at the Arts curriculum guidelines for both Quebec and Ontario, one need not go far to find the role of museum/gallery visits and technology in the overall program planning for visual arts. In Quebec (2007), the secondary, Cycle Two Visual Arts document states:

Students have access to quality art materials and tools, particularly for digital creation, and to a variety of documentary resources. Technological tools and supports, reproductions and art books are some of the resources made available to students to stimulate their creativity, provide food for thought and to enrich their knowledge of the world of visual arts....In order to enable students to be exposed to their cultural environment and to become aware of the career possibilities, it is

important for them to have the opportunity to visit cultural venues.... (Quebec Education Program, Visual Arts, p. 5)

In The Ontario Curriculum, The Arts, Grades 11 and 12 (2000), it specifies that students will

analyze the impact of galleries and museums on the way in which we view and experience art works, focusing on social and political issues;...They develop their communication and collaborative skills, as well as skills in using different forms of technology. (p. 81)

When explaining the role of the art teacher, the Quebec Education Program expands on the role of the art teacher as "a guide, expert, facilitator and cultural mediator."

This cultural mediator, is one "who is able to convey their passion for art, project themselves into the future and establish connections between the past and the present or between different branches of art" (Quebec Education Program, Visual Arts, p. 6).

Over the years, much has been written about the importance of visiting museums and galleries with one's art students (Berry, 1998; Caston,1980a; Floyd, 2002; Jeffers, 2003; Ott,1980), yet it is the integration of these visits with technology in the form of an on-line exchange that takes this research one step further. Teachers have been encouraged through various Ministry guidelines to conduct integrative approaches to teaching, and this research will support that initiative.

Outline of the Chapters

This dissertation will take the form of five distinct chapters. This first chapter serves as an introduction to the research, with the background, purpose, and significance of the study laid out to the reader. Chapter 2 is the literature review. In this chapter, the research question will be deconstructed, and each of the various components relative to the study will be discussed in terms of existing research found

on that particular component. Chapter 3 is the design and methodology chapter.

This chapter will explain the overall structure of the research collected, expand on the research methodology used in the data collection, and discuss the parameters under which the research was conducted. Chapter 4 consists of the research findings. This chapter will articulate the results of the analysis of the data collected. As the most extensive chapter, chapter 4 holds the bulk of what actually happened, along with explanations/rationales of the data collected throughout the study. Chapter 5 serves as a summary and concluding chapter. It begins with an in-depth compendium of the findings, continues into a discussion, and positions the research in the greater field of Art Education. Chapter 5 closes with a reference to areas for further research and a formal conclusion.

CHAPTER 2: LITERATURE REVIEW

Introduction

Education is a term used to describe teaching and learning which occur both in and beyond the classroom. We often consider art education to be the practice of art teaching and learning that happen primarily, if not exclusively, in K-12 public schools. This is a very limited view of art education and one that I believe should be constantly challenged. The sources in this literature review discuss the fields of research in the teaching of visual arts, the importance of museum/gallery experiences and the focus of "object-centered" learning, and the field of educational exchanges and their integration of new technologies.

The Teaching of Art

Teaching is a complex form of public service that requires high levels of formal knowledge for successful performance. Teachers develop and utilize substantial knowledge about their content areas, about students' intellectual, psychological, social, and aesthetic development, and about schooling, including institutional goals, needs, influences, and limitations (Schulman, 1986). With a few notable exceptions, there has been little inquiry about art teacher thinking, planning, or decision making (Delacruz, 1997). There is a scarcity of any kind of research in typical art classrooms with the exception, during the last few years, of research promoting particular curriculum initiatives or teacher assessment and evaluation approaches and systems.

One major study, though, conducted in art classes by Anne Bullock and Lyn Gailbraith (1992) identified four themes that characterize K-12 art teachers' concerns.

They are:

- 1) a sense of "dissonance between what teachers want to do and what they can actually do in schools;
- 2) "frustration with scheduling, overwhelming numbers of students, widely varying ability levels in the same classes, lack of time to teach the sort of art experiences that students should have, and frustration with external perceptions of what they should be doing;
- 3) a sense of "urgency and mission", the realization, in the case of one art teacher that "a semester might be the only art a student gets their entire lifetime";
- 4) "compromise", as each art teacher was willing and able to modify instruction and accommodate the realities of school life. (p. 20)

When reflecting on my own personal teaching experiences, many of the above concerns ring loud and clear. The best teaching methods and strategies were those contributing to a climate that fostered self-confidence and encouraged critical selfinquiry and self-reliance on behalf of the students. As Delacruz (1997) confirms, the essential ingredients in such a climate are competence and trust. The real question is not whether students appear to be busy on tasks or free to discover and invent, but whether they feel safe to take risks, whether they are willing to engage unfamiliar conceptions and connect those ideas to what they already know, and whether they are provided necessary conditions to learn "how" to learn. Steward and Walker (2005) note that if students learn best when they are encouraged to generate their own questions, engage in relevant investigations, and reflect upon their learning progress, then teachers need to develop strategies to provide opportunities for such substantive engagement. The role of the teacher must shift from "that of one who dictates information to one who is a fellow inquirer as students construct knowledge" (Steward & Walker, p.15).

One teaching strategy common to many art teachers that follows this line of thinking is that of the "project method." Projects are planned undertakings that

students "carry out." The strength of the project method lies in the way it helps students organize and apply information, show responsibility, follow through, and make sense of what they have learned. The project method encourages free choice and fosters the development of both interpersonal and intrapersonal skills, as self-confidence rises with competence. As Delacruz (1997) emphasizes, "Attitudes, values, self-fulfillment–few kinds of instruction provide so many positive possibilities as the project method " (p. 39). Next to role playing and simulation, few methods of teaching bring about more intensive student involvement than the project method. It puts students in charge of their own learning through the planning and organizing of their own work. As Burden and Byrd (1999) further reinforce,

projects provide students with the opportunity to work somewhat independently from the teacher, have positive academic experiences with their peers, develop independent learning skills, become especially knowledgeable in one area of the subject matter, and develop skill in reporting this knowledge.(p. 99)

Co-operative Education/Collaborative Process

A teaching and learning style popular with many educators, not just art teachers, and often implemented using the project method of instruction is that of co-operative education. Co-operative education is the term used to describe instructional procedures whereby learners work together in small groups and are rewarded, most often, for their collective accomplishments (Cruikshank, Jenkins, & Metcalf, 2006). As Borich (2004) asks, "What good are critical thinking, reasoning, and problemsolving skills if your learners cannot apply them in interaction with others?" (p. 331) Co-operative learning activities instill in students important behaviours that prepare them to reason and perform in an adult world. They provide the context or meeting

ground where many different viewpoints can be orchestrated, from which one can form more articulate attitudes and values of one's own.

In the co-operative classroom, the idea of social interaction is at the root of the learning taking place. Borich (2004) reminds us that one of the most noticeable outcomes of social interaction is its effect on how we develop our personalities and learn who we are. Social interaction over long periods of time forces us to see ourselves-our attitudes, values, and abilities-in many different circumstances. This concept of "looking into ourselves" is often apparent in the visual arts classroom, especially when it comes as a result of a teacher applying the project method during the studio component of a visual arts program. With the co-operative learning model, interaction among students is intense and prolonged. In the visual arts classroom, students are constantly brainstorming, comparing, discussing, and adjusting their strategies of attack for their various studio assignments through interaction with their peers. Unlike self-directed inquiry, in co-operative learning groups, "students gradually take responsibility for each other's learning" (Borich, p. 335). This shared responsibility of learning may be the same as in the drive of self-directed learning and is commonly found in the studio-based visual arts classroom. Here, one can often see how co-operative and self-directed learning may be used as complementary learning strategies, with one reinforcing the skills acquired through the other.

Co-operative learning procedures, though, demand a lot from teachers. All forms of co-operative learning call for teachers who have the organizational skills to plan, monitor, facilitate, and track the work of disparate individuals and groups (Cruikshank et

al, 2006). Since there are several forms of co-operative learning, each requires a somewhat different kind of teacher preparation, delivery, and closure. These types of procedures can be established not only through collaborative education practices with students in the classroom but also through the collaborative process between teachers themselves and researchers in the field of education. Gall, Gall, and Borg (2005) argue that one of the surest ways for academics such as university professors to add value to K-12 educators' practice is through participatory action research endeavours. This type of collaborative effort bridges what teacher practitioners may call the "Insider-Outsider" effect (Gall et al., 2005, p. 501). Here, teachers (K-12) see themselves as the insiders, serving daily in the classroom and in the trenches of teaching, while researchers, typically academics from a university, are the outsiders. Through a distinct collaborative effort in both education and research practices, this dissertation will explore an attempt at a research project that builds a bridge between the two areas of education that I believe should always be bridged—those of theory and practice.

Situated Learning

According to Brown, Collins, and Duguid (1989), many teaching practices have limited effectiveness because they assume that conceptual knowledge can be abstracted from the situation in which it is learned. Some educators believe that the activities and context in which learning takes place are regarded as merely supplementary to learning–pedagogically useful, but fundamentally distinct and even neutral with respect to what is learned (Pitris, 2004). A number of others challenge this separation of what is learned from how it is learned and used. When looking at research on cognition and how it is manifested in everyday activity, Brown,

et al, (1989) argue that knowledge is "situated" (p.34). By this, they mean that learning is in part a product of the activity, context and culture in which it is developed and used. They also present the idea that "approaches that embed learning in activity and make deliberate use of social and physical contexts are more in line with the understanding of learning and cognition in current research" (p.35).

Pitris (2004) adds to this definition of situated learning by noting that "to situate learning means to place thought and action in a specific place and time; to involve other learners, the environment, and activities to create meaning; and to locate in a particular setting the thinking and processes to accomplish knowledge" (p. 6). This concept of situated learning is embedded in constructivism, where in order for students to gain deeper understanding, they must actively come to know (construct) the knowledge for themselves. In a situated learning approach, knowledge and skills are learned in contexts that reflect how knowledge is obtained and applied in everyday situations.

The role of the teacher in situated learning is to facilitate social interactions, purposeful discussions, and constructive conflicts as well as to create environmental stimuli for provoking students' investigations. Knowledge is achieved or negotiated through interactions among the learner, other learners, and the environment. Situated learning often takes place when a classroom teacher brings her/his students into non-school environments. Popular non-school teaching and learning environments for the visual arts curriculum are the local museum or art gallery. The following section will elaborate on these diverse teaching and learning environments in greater detail.

Museums and Galleries as Places of Teaching and Learning

As mentioned earlier in Chapter 1 of this dissertation, museum and gallery experiences have always been an integral part of my delivery of curriculum as a visual arts classroom teacher. As Robert Ott (1980) wrote, "Today the art educator is asked to consider the museum as an art classroom and not just as a local resource" (p. 8). With my thesis research project design involving working with the Montreal Museum of Fine Arts and the Art Gallery of Ontario permanent collections, I believe that in museum teaching, objects form the basis of the less-structured process, which engages the learner's own interests, ideas and experiences. Museum education consultant Ellie Caston (1980) elaborates that

the museum, unlike other educational systems, can only rely on authentic programs that center upon the use of objects, not words, as the chief educational tool. When developing programs that center upon the use of objects, it is important to remember: to learn *about* objects (in the classroom) can be educationally valid and interesting, but to learn *from* objects (in the museum) can stimulate even higher levels of learning" (p. 22).

When teaching "from objects," students can experience learning in a more direct and comprehensive fashion. The teacher in the art classroom most often relies on textbook images or slide/computer image projections when discussing art works with her/his art students. These often discoloured or dated images (most notably in textbook reproductions) can distort the actual appearance of the object and lead to a false understanding of the artist's message or intent, let alone allow the student to appreciate the size of the object in real space.

In museum education practices, many references can be found as to how students can utilize art works in a gallery to help look at their own construct of perceptions, beliefs, and values (Berry, 1998; Caston, 1980; Dewey, 1900; Floyd, 2002; Jeffers,

2003; Ott, 1980). When looking at the history of museum education, it was John Dewey who in 1900 referred to the museum as both the physical and metaphorical heart of the ideal school. He saw it as "that place where the experiences of the child came into contact with the tools and practices all-important in interpreting and expanding experience" (Dewey, p. 64). Dewey was especially interested in the role that objects played not only in sparking the imagination but also in the construction of knowledge. This knowledge involved the idea that relationships between and among things can be discovered, cultures can be compared and contrasted, and most important, evaluative thinking can be encouraged.

In a study conducted in 2001, Minuette Floyd (2002), an assistant professor at the University of South Carolina in Columbia, writes about a gallery-stimulated project:

School and museum partnerships are a powerful invitation for students to become knowledgeable about their worlds and themselves. Opportunities for students to make personal connections are enhanced through learning that is used in conjuction with personally relevant themes. Utilizing the real world as a sense of inspiration for teaching is essential in making connections.(p. 45)

Often these connections are a highly personal experience, and words seem to be inadequate to express what is happening. Some call this an aesthetic experience, while others choose not to label it at all. As an educator, you can not "teach" this; you can only provide the conditions where meaningful encounters can occur. Because of their special environment, museums offer the kind of conditions that allow a student to experience the intrinsic qualities of the art object and integrate them within her or his being (Caston, 1980).

In the foreward of the text Perspectives on Object-Centered Learning in Museums

(Paris, 2002), John Falk elaborates on the fact that museums "more often than not do a wonderful job of situating objects within contexts that have personal meaning for visitors, and visitors, with or without interpretation by the museum, do a wonderful job of contextualizing objects for themselves (p.xii)." However, both museums and visitors contextualize objects in relation to events, experiences, and realities that exist beyond the museum. Building that bridge between visitors and objects–between past and future realities, between events that occurred prior to a visitor's in-museum experience and those that will occur subsequently—is the essence of good museum design.

When students as a group visit an art gallery, they share a very social experience. This social interaction can be incorporated as part of a larger teaching opportunity. Inez Wollins (1995) writes about the Russian psychologist Lev Vygotsky, who was principally interested in the social foundations of cognition and the importance of instruction in development. For him, instruction always resulted from a social relationship between individuals, and the nature of social interaction, such as in an art gallery or museum, is an important variable in the learning process. In a Vygotsky framework, social interaction focuses on intellectual content: When confronted with a concept to teach or a problem to solve, the knowledge or skill of the teacher, or another student in the group, influences the roles each will take towards others. This sharing of knowledge through social interaction amongst students became one of close observation during the visits to the Montreal Museum of Fine Arts and the Art Gallery of Ontario with the classes involved in the research project conducted as part of this dissertation.

Educational Exchanges

Educational exchanges have been taking place for many years. Their validity and sheer presence in the dialogue of education has been one that has over the past few decades been greatly debated.

Today, many people insist that education must be limited to essential components. For a great number of authorities in the education system, exchanges are important but not essential. Exchanges, they say, are costly. (Dobell, 1984, p. 3)

The above are the words of Jane Dobell, Chairwoman of the Society for Educational Visits and Exchanges in Canada (SEVEC), spoken at the opening of a conference held by SEVEC entitled "Exchanges...Assessing their Value" held in 1984. Today, 25 years later, the same rhetoric echoes the halls of school boards and Ministry of Education offices. In the same speech, however, Dobell defended her cause, stating "the conclusions are clear: a successful exchange is an enriching character-building experience which provides the most natural setting for *language* learning and results in a meaningful appreciation of cultural and human values" (p. 3).

Educational language exchanges, especially in Canada with its two official languages of English and French, have dominated the "types" of exchanges that have taken place across the country. According to Choldin (1989), a researcher in the field of multiculturalism, cross-cultural student exchanges are a valuable tool in promoting multicultural education. They are effective in breaking down stereotypes and developing appreciation and understanding of another culture. Choldin also shares the fact that the two most important parts of a successful exchange experience are in its orientation and its programming.

In a study carried out by Cumming, Mackay, and Sakyi (1994), data were

collected on a high school exchange program focusing on multicultural, antiracist education. In this study, students and their teachers from 12 school boards in different regions of Canada took part in 2-week cross-Canada exchanges aiming to develop multicultural awareness, antiracist attitudes and school policies, understanding of other regions of Canada, and student leadership in these areas. This study was carried out over a 3-year period, 1990-1993, and involved both qualitative and quantitative analysis. Cumming et al. developed a methodology and data collection based on information gathered from their own research as well as suggestions from the participating teachers in the exchanges. In the first year, participant-observation data were used along with interviews with all the participating teachers as well as some students and their parents. Narrative case studies were also undertaken. During the second and third year, of the study, Cumming et al. focused on learning processes that took place during the exchange. The researchers also relied heavily on journals and diaries written by the participants, which documented the content and processes of their learning during the exchanges. Through their ongoing research in the area of student exchanges, Cumming et al. developed a structure that they found helped to successfully implement their required curricula during their exchanges. This structure could be broken down into six "fundamental activity-types." These were (a) co-operative tasks such as peer interviews, group simulations, interaction games, or role plays, (b) guest speakers or media presentations, (c) guided tours of sites with local cultural significance, (d) planning sessions (to prepare students for the context of the exchange), (e) formal ceremonies, and f) student performances (p. 403). This structure would prove to serve as a valuable reference when developing an exchange structure to be carried out for this dissertation.

Educational Exchanges and the Introduction of Technology

The Cumming et al. (1994) study was based on an exchange that took place in the early 1990's. Since that time, society, and with it education systems, have embarked on huge overhauls of reform and restructuring. Funding is no longer available in many instances to conduct large group exchanges, and many students (and teachers) feel that with a newer, more compressed curriculum, time away from school is a luxury of the past. To accompany these changes, however, a great turn has taken place in the direction of education in today's world. With tremendous strides made in technology, students no longer have to physically leave their home school to engage in an educational student exchange experience. In a study conducted in 1995 at the Universidad Nacional Autonoma de Mexico in Mexico City, Mary Meagher, an English teacher, discovered how learning exchanges via the internet radically transformed the foreign language classroom. Meagher found that a group of Mexican students learned English by participating in an international cultural exchange over the internet. These students made significantly more progress than did students in a control group who studied English traditionally in a classroom with a textbook. It was also noted that when the language students were writing to real people on-line, they cared about what they said. They explored their own reality much more closely, and in the need to discover what had really happened in their own country, it fostered research, which in the end developed higher order thinking skills. Meagher noticed also that the more relevant to the real world the projects were, the more motivated were the students to research, collaborate, and learn.

Through the above study in Mexico City, Mary Meagher (1995) witnessed how the teaching technique of co-operative learning occurred when working with the

internet and new technologies in the classroom. Meagher (1995) writes:

In cooperative learning, students learn to collaborate and to assume responsibility not only for their own learning, but for that of others as well. They contribute their own special abilities, teaching others what they know or can do well. We have found that often, high school students are more proficient than are teachers at using computer and telecommunication networks. Students can train other students, and even help their teachers when necessary. Further, a teacher new to technology often finds that it is much easier to think of him or herself as just one member of a large team who is sending and receiving information via the internet than as the sole expert responsible for the exchange. (p. 89)

Hardly ever has there been a more appropriate time when this concept of all members in a classroom functioning as a co-operative team meant the recipe for successful, progressive teaching. Both students and teachers need to embrace new technologies, and with that embrace, the role of the teacher becomes that of a facilitator in the learning process.

In another study carried out at the University of Utah, researchers Oliva and Pollastini (1995) conducted a 2-year study on the integration of internet resources as a primary instructional tool in the teaching of Italian language classes. In the study, students were required to use their language skills on a daily basis for "exchange" communication with native Italian speakers through email. The data for this study were collected by questionnaires in which students were asked to assess their progress in language learning as well as to evaluate the course and give suggestions for possible improvements. The results showed that many of the students believed that the use of the internet, and specifically email, was the most useful learning tool employed in class. They believed that the internet resources enhanced the user's freedom of communication. The challenges expressed were difficulty in learning how to use the internet resources, and oftentimes students experienced

frustrations with computers or networks that were not functioning properly. An interesting point to note was that, as the class progressed, students gradually expressed a desire for more oral speaking of Italian in class and for less discussion focused on computers and the process of the learning taking place.

Another study that involved educational exchanges and new technologies was put forward in a paper presented in 2000 at The Education Secretary's Conference on Educational Technology in Alexandria, Virginia. In this paper, Edwin Gragert (2000) focused on expanding international education through the internet. He began by introducing the importance of these technologies as follows:

In the 1980s, there was a government interest in enhancing international awareness and education through the expansion of citizen exchanges. What sets the new international education initiative apart, is that in 2000, for the first time in human history, the potential exists for exponential growth in direct international interchange. Through the Internet, significant opportunity exists for human-to-human interactions, experiential learning and direct learning applications. Our students have the opportunity to both learn and teach through direct interaction. Therefore, the challenge for education is to develop curriculum-based strategies that are relevant to this context. (p. 1)

Art Education and Technology

The proposal of a visual arts exchange over the internet is a clear example of what Gragert was referring to. We are in the era where the use of the World Wide Web is a daily occurance in the lives of our young people. Schools need not only be hooked up to the internet but must be looking at providing comprehensive curricular programming that encompasses this new technology in an integrated and progressive-thinking fashion. When relating this study of visual arts education and new technologies, it has most often been approached with a postmodern point of view (Clark, 1998; Efland, Freeman, & Stuhr, 1996; Julian, 1997). This postmodern perspective includes

characteristics that are shared with the internet: nonlinearity, linking, interactivity, interconnectedness, openness, nonhierarchy, decentering, and a web-based model of learning. The internet journey itself is full of unexpected twists and turns. Because of their interaction, new categories of thinking may open up that were not in the original plan. As June Julian, an Ed.D.candidate at New York University, stated,

With art teaching becoming digital now, and with the possibility of art students and art teachers connecting to each other in a gigantic, growing network, the old hierarchy of one teacher teaching one group of students is outdated. (p. 41)

These new categories of thinking are also reflected in the minds of our students. Student expectations regarding the classroom and student interaction are changing. Students today value more the conversational learning style. They are interested in student-initiated and student-centered classroom discussions. Students are seeking out new learning environments that better facilitate open and honest discussion, including disagreements, without the fear of being judged by one's physical appearance and attributes. The "disembodied nature" of virtual classes and on-line communications, with their lack of physical social cues, has meant for some students the chance to maintain a more professional relationship toward the class and one's classmates (Lai, 2002). Internet and cyberspace technologies have changed not only our students' expectations and skills but also their lifestyles. Increasingly, students would rather go on-line to chat with their friends than talk on the phone or hang around with each other face-to-face at a certain time or place. As teachers, we cannot dismiss the kind of "techno-social life" our students are engaging in daily. This puts the challenge, not only for art educators but for all educators, to understand the new technologies in an educational context which involves the dynamics of virtual student interaction and the

learning processes that take place in this interaction.

Museums/Galleries and New Technologies

When focusing on specific visual arts content and the internet, today artifacts abound in cyberspace, and discovering them via technology can be an exciting experience for today's students. As art educators struggle to stay afloat amidst shrinking funding for their programs, technology can also offer an infusion of interest in the importance of art instruction. Art classrooms increasingly take on the role of training our young people to utilize technology and to use it creatively. Bonnie Halsey-Dutton (2002), a high school art teacher and author of the article "Artifacts in Cyberspace," exclaims,

When students in my class study ancient Egypt, they can go via the Internet to the Cairo Museum to compile information and view a virtual museum collection. This does not replace traditional methods of art history instruction, but vastly expands access to information and collections of instructional visuals.(p. 20)

This accessing of museum collections and other art images was previously unavailable in the art classroom. Today, images that may not have appeared in print, slide, or poster format may be available on the Web. Newly discovered or created artworks can be posted almost instantaneously on the Web and then viewed by everyone around the world who has Web access. An example of this are images from the prehistoric caves at Vallon Pont-d'Arc, discovered in January 1995, which were posted on the Web before they appeared in any journals, books, or newspaper articles (Koos & Smith-Shank, 1996). Christo and Jeanne-Claude's *Wrapping of the Reichstag* (1995) in Germany had images posted on the internet every day by project photographers. These photographers recorded the entire progress of the installation.

Some collections of art exist only on the World Wide Web. These websites are "virtual museums" and are created most times by the artists of the work and an accompanying webmaster.

In the article "Museums Go High Tech," Thomas DeLoughry (1994) describes how the internet has been used in museums to complement traditional services. Computer networks make vast resources of museums accessible outside their walls to many people who may not have known that they existed. Some advocates argue that the exposure could attract new visitors--and new donors--to the facilities. Many museum officials see technology helping them transform their institutions from merely comfortable places to walk through on a Saturday afternoon to learning centers where visitors can study topics in depth. For many adults, the museum visit can be very intimidating, and many teenagers find these "lofty icons of culture" too frightening or boring to approach (Valenza, 1998). Realizing this problem, museum educators and curators are using technology to bring museums and young people together. Museums are posting images, background information, and educational activities on-line relating to artists and their works. The Web allows teachers to collect images from museums and to view them together in one place in a way that a slide projector could never do. Valenza, a media specialist, reminds us though that

the Internet is a useful tool for browsing and study, which serves to augment the museum experience. It cannot replace the contemplative experience and the aesthetic of viewing real art on real walls. On-line images, while good, will never reach the quality and can never be viewed in the true size, scale, and vitality of the original. (p. 11)

Issues in the Integration of Technology into the Visual Arts Classroom

Not to be excluded from the line of discussion in this literature review, the integration of technology into the visual arts classroom has documented its share of difficulties. These difficulties most often seem to revolve around the technology itself and can be grouped under the three categories of (a) access, (b) time, and (c) training (Mengel, 1998-1999). The first category incorporates the reality of having access to the technology. In many schools, computer labs are often overbooked, and those art classrooms that have computers, and if they are fortunate internet access, most often lack the upkeep needed to maintain fully operating networking systems. The second category, time, involves the fact that teachers have very little time to learn about new technologies. With the current emphasis on curricular reform, priority is not on learning what they can do on-line but how will they cover all the curriculum content that is expected from them. The third category is that of training. Before teachers can make use of the computers in their art classrooms, if they have them, they must have at least some introductory training on how to use them effectively and particularly how the computer can be used more specific to the discipline of visual arts.

Literature Review Summary

This literature review has attempted to discuss the contributions made to the academic literature in the fields of research in the teaching of visual arts, the importance of museum/gallery experiences and the emphasis of "object-centered" learning, educational exchanges, and the integration of technology across each of the listed foci. Even with the aforementioned "bumps on the information superhighway" (Mengel, 1998-1999) being noted, the introduction and utilization of

progressive and innovative teaching strategies must prevail. Through the integration of the educational fields of museum/gallery experiences, educational exchanges, and new technologies, I hope to explore in this dissertation new avenues in the teaching of visual arts education. I would like to bring this literature review to a close with words from June Julian's (1997) article "In a Postmodern Backpack: Basics for the Art Teacher On-line":

Art education is beginning to rise to the challenge of the new technologies. The hardware might have changed in a huge way, but the accumulated wisdom from past art education inquiry can inform the new thinking for the new hardware. The Internet gives us a perfect model for our attitude, the open integration of numerous possibilities. (p. 42)

CHAPTER 3: DESIGN AND METHODOLOGY

In this chapter, I address the design and methods used to conduct the inquiry. As a former visual arts teacher and consultant, as stated in Chapter 1, the realities of the daily classroom grind ring close to the heart. Working directly with classroom visual arts teachers was a goal from the start. Having visited and utilized museums and galleries extensively in both my own teaching practice and professional development initiatives organized as a consultant, this connection to the "gallery as resource" was one from personal experience. The integration of technology into the art classroom is a direction encouraged by Ministry-initiated curriculum documents as well as the moving direction of society itself. With my professional experience taking place in Toronto and my doctoral work in Montreal, I had hoped, through my doctoral studies, to create a bridge related to the practice of teaching art across the Ontario/Quebec border. Hence this study came to fruition.

Qualitative Inquiry

The study carried out falls under the umbrella of qualitative inquiry. According to Hittleman and Simon (2002), the basic qualitative research purposes are to describe, interpret, verify, and evaluate (p. 38). Creswell (1997) defines qualitative research as the "processes of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting" (p. 15).

This "natural setting" where the research is being conducted is expressed by Bogdan and Biklen (1998) as qualitative research being carried out in a

"naturalistic" environment (p. 4). Researchers enter and spend considerable time in schools learning about educational concerns. Data are collected on the premises and supplemented by the understanding that is gained by being on location.

Qualitative researchers go to the particular setting under study because they are concerned with context. They feel that action can best be understood when it is observed in the setting in which it occurs. Eisner (1991) elaborates this discussion, stating that qualitative studies tend to be "field focused." "In education, those conducting qualitative research go out to schools, visit classrooms, and observe teachers" (p. 32).

Why Action Research?

For this study, action research served as the model of qualitative methodology. My role was as a participant action researcher who was informed by action research. According to Johnson (2008), action research can be defined as the process of studying a real school or classroom situation to understand and improve the quality of actions or instruction. It involves systematic investigation of new actions by practitioners in order to improve their effectiveness. Gall et al.(2005) describe how researchers have developed different approaches to action research, depending on their goals and values. Kenneth Zeichner and Susan Noffke (2001) cited in Gall et al., describe most action research studies as having one or more of the following three purposes: (a) professional purposes, (b) personal purposes or (c) political purposes.

Under professional purposes, action researchers emphasize the value of action research in the professional development of educators in school settings or higher education. It provides educators with opportunities to better understand,

and therefore improve, their educational practices. Under personal purposes, some approaches to action research focus on encouraging individual practitioners to undertake investigations to help build a knowledge base for their own practice and for other practitioners or in the service of school reform. Under political purposes, some action researchers emphasize the use of action research to promote democratic forms of education and collaboration among teachers, students, and others in the educational community (Gall et al. 2005).

When discussing the various forms of educational research taking place today, Mertler (2006) notes that "frequently, there exists a gap between what is learned by researchers, who conduct and report their research on educational topics, and practicing classroom teachers" (p. 13). He continues, "Research occurs in the ivory towers, whereas practice take place in the trenches" (p. 13). He concludes with sharing the idea that what goes on in public school classrooms often does not reflect research findings related to instructional practices and student learning. Action research provides one possible solution to bridging this gap by creating a two-way flow of information. Research findings offered from researchers can still be used to inform best practices and to better understand what is happening in classrooms.

After reading about numerous research methodologies in preparation for doctoral research, I found that action research was a methodology that was grounded in classroom practice. It is this classroom practice, in particular that of the day-to-day goings-on of the secondary visual arts teacher, that I wished to explore in my dissertation research. Gay, Mills, and Airasian (2006) summarize

that through action research, classroom teachers are empowered to do the following:

- 1. Make informed decisions about what to change and what not to change
- 2. Link prior knowledge to new information
- 3. Learn from experience (even failures)
- 4. Ask questions and systematically find answers. (p. 499)

Selecting Participants

My quest for finding participant visual arts teachers began with a closer look at the potential benefits of my chosen research methodology itself. Why would teachers want to take part in my research project? Seeing that "action research supports the professional development of practitioners by helping them become more competent in understanding and applying research findings" (Gall et al. 2005, p. 490), I began the process of finding secondary visual arts teacher research participants. I was eager to share with them what I had been reading about in the field of action research and how it could directly benefit them as individuals, their teaching practice, and ultimately their students.

As stated earlier in this dissertation, it was my goal in my doctoral studies to create some sense of a bridge between Ontario and Quebec and the two large urban centres of which I had become greatly fond and familiar. After teaching and working in Toronto for 15 years and now having spent 2 years in Montreal, I knew I wanted to find a teacher participant from each of these two cities. What I was looking for was a teacher in each city who was teaching art in a "regular" secondary school. By "regular," I was looking for schools that not only delivered a visual arts program but a balanced curriculum of all subjects, with no particular focus in one

specific area. I was not looking for an isolated "School for the Arts" or a pilot school for new technologies (Cyber Arts School) but a midsized school where the art teacher may have been the sole member of her/his department or one of possibly two or three art specialist teachers hired to teach art at that school. As a former consultant with the Toronto District School Board, a board with 112 high schools, I was able to see the "big picture" of specialty schools versus what I would call "regular" schools in a large school board. Possibly 5 to 10 % were "specialist" or "focus" schools, while 90 % were what I am calling "regular" schools. It was the voice of the visual arts teacher from the "regular" school (the majority of the art teachers) that I was seeking. It was this voice that I wanted to be heard as, when board-wide or Ministry of Education initiatives were being created or implemented, these were the majority that would be affected. Speciality or focus schools often had additional funding or protection of some sort to enable their programs to continue when changes or initiatives came from above.

I was also looking for teachers that I was not familiar with in either a professional or personal capacity. The reason for this was for me to attempt to remain as free from bias as possible when it came to carrying out the study or during the analysis and reporting of the data collected. As a researcher, I wanted to be as objective as possible at all points of the research, especially when it came to the participating visual arts teachers involved in the study.

My search in Montreal began with discussions with my doctoral advisor, who was familiar with a number of secondary school visual arts teachers in the city. After a few possible names of potential participants were discussed, I decided upon one individual, Sonja, who was teaching visual arts at a high school in Montreal, not far

from Concordia University. After my meeting with my advisor, I phoned Sonja, explained my research project, and we set up a meeting to discuss whether she would be interested in taking part in my study. A week later, after our meeting, Sonja was excited and on board to be a part of my research study.

In Toronto, I knew many secondary visual arts teachers from my years with the Toronto District School Board. Many of these teachers were not only professional peers but were also personal friends. I was scared that trying to be objective would at times be challenging if I were to work with any of these individuals. With that in mind and to start my study with a blank slate, I wanted to look outside the Toronto District School Board. Just beside my apartment building, where I had lived for the last 8 years while in Toronto, was a secondary school. I had walked by the school many times but never ventured inside. This school was not part of the Toronto District School Board and therefore not part of my working world as a teacher or consultant. I approached the principal of the school and explained who I was and why I was visiting his school. After inquiring if there was a visual arts teacher on the staff he introduced me to Birgitta, the one visual arts teacher at his school. After I had introduced myself and explained my research study, Birgitta asked if she could have some time to think about her involvement with such a study. A few days later, she called back and was eager to take part! I was fortunate to have found my 2 secondary visual arts teacher participants, one from Montreal and the other from Toronto.

To bring an additional voice to the research participant table, I included myself as a third member of the secondary visual arts teacher participants. After having been educated and certified as a secondary visual arts teacher in 1987, I taught high school

visual arts for ten years in Toronto, and then proceeded to help other teachers to develop their own visual arts programming for an additional five years in the role as an art consultant, immediately thereafter. With this background, I engaged to involve myself in two roles in this action research study. Not only was I a doctoral candidate serving in the capacity as a researcher, but with my experience in the art education field, I could serve as a third secondary visual arts teacher participant as well. I believed that through this involvement, I could bring in an additional voice, one that straddled the overarching perspective of the research being conducted.

Carrying Out the Project

Once the ethical review forms were completed and accepted by the Concordia University Human Research Ethics Committee, I proceeded to conduct the research project. The action research study developed involved a number of components with a high level of complexity due to the sheer physical distance between the two study centres, a high school in each of Toronto and Montreal. The study took place over a 3-month time period—early April through to early July, 2004. The goal of this time frame was that the project was to coincide with the final term of study for both schools taking part. Two grade 11 art classes, which were being taught by each of the 2 teacher participants, took part in the project. As explained earlier, I took the role of both researcher and participant. This involved much driving back and forth between Montreal and Toronto during the 3-month period. This travel was necessary in order for a smooth transition to occur from one part of the project to the next and also in an equal attempt at a rapport to be established with each of the teachers at the two study sites while the project was being carried out.

The research project involved three major components. The first was a visit by each class to their local major art gallery. Inspired by what they saw, this visit led to the second component of the project back in the classroom. Here, students created art works inspired by what they saw in the art gallery. The third component involved the introduction of technology in the form of an on-line "sharing" or "exchange of ideas" between the two classes. As an added component for the sake of the students in the two classes, a celebratory exhibition of the completed art works was planned.

Before these major project components took place, I had made a personal, introductory visit to each grade 11 art class. During this visit, I introduced myself to the students, explained my art education background and my current status as a doctoral candidate in Art Education at Concordia University. I presented, along with their visual arts teacher as a partner, the overall research project to them, and answered any preliminary questions that they may have had dealing with the study. As first impressions are always very important when working in collaboration with either teachers or students, I tried to establish a safe and honest rapport from the start. I knew that with such a structured and planned approach to my study, the co-operation from all parties, every step of the way, could only assist in the smooth execution of the various components of what was to be a rather complex research study.

An important note, which was always to be reinforced, was that the research being conducted was to be aware of the teaching opportunities offered throughout the carrying out of each of the particular project components. Each of these components will now be discussed in greater detail.

Museum/Gallery Visits

The first component of the research study involved each of the two classes making two visits to their local major art gallery. In Montreal the students visited the Montreal Museum of Fine Arts, while in Toronto the students visited the Art Gallery of Ontario. As the co-ordinator of the study, I had contacted the Heads of Education at each of the two institutions and made them aware of my proposed dissertation research. Each Head was very enthusiastic and supportive of the research.

The first visit to the gallery served as an orientation to a limited number of preselected rooms of each gallery's permanent collection (for practical, time constraint reasons). Each grade 11 art class, along with their teacher and me, was guided/escorted by a gallery docent or security guard. The students were asked by me and their teacher to select three works of art which they felt "spoke to them" in the form of an aesthetic message or statement. This "connection" could be thematic, a chosen colour scheme, or as simple as a common symbol or subject matter that they could relate to. Exploration of connections to the students' self-identity were also discussed when the students made selections from the permanent collection. This theme was introduced as it was one commonly utilized by secondary students at that grade level in the creation of studio art pieces.

Once the students had selected their three works, they were asked to create sketches, write notes, and record observations that related to their three chosen art works. Due to limited time, decisions were made quickly, based solely on the visual impact the art work had on the student. A second visit to the art gallery followed shortly thereafter, and students at this point selected one art work from the three

chosen initially, to which they felt the strongest affinity. This affinity, as mentioned earlier, could have been for reasons such as the message read, the materials used, the reaction evoked, or for whatever reason the student made that selection. During this second visit, more in-depth sketching and note-taking of the single artwork selected was carried out.

In order to have the selection and interpretation process of both classes be consistent, a distinct approach to looking at the art works was used. The theoretical framework behind this process was that developed by John Dewey and Albert Barnes for the Barnes Foundation in Merion, Pennsylvania, in 1924 and from writings by Terry Barrett (1997) and his approaches to interpreting works of art. In the art appreciation classes held at the Barnes Foundation, students observed works of art hanging on the walls with no labels present to give a date, title, or location to their execution or no wall text to create a context for the art work being viewed. This was to force the viewer to interact directly with the painting or object, allowing nothing to come between them and that which was being presented for appreciation. The Barnes students must find answers themselves. As Suplee (1994) states,

They learn by doing – by looking at and perceiving that which is in front of them, by bringing to that task their diverse backgrounds, by reflecting on their funds of knowledge with the intent of solving the puzzle or problem that confronts them, and finally they arrive at meaning – meaning that is totally grounded in firsthand experience.(p. 36)

To further assist in their selection of art works, the students were made aware of an approach utilized by the art educator Terry Barrett. When interpreting artwork, Barrett recommended that students ask three basic questions: (a) What do I see? (b) What is the artwork about? and (c) How do I know? (p. 48). These questions

rely on the novice viewer to look inside themselves for answers in order to understand a work of art.

Back in the Classroom – Art Production

After the two visits to their respective art galleries, the students resumed the project back in their art classrooms at school. After having had the opportunity to reflect upon the one art piece they chose at the gallery, the students then began to think about their own art piece that they would be creating. The art work selected in the gallery was to serve as inspiration for the creation of their own work of art, which would be "in dialogue" with their selected gallery piece. Their art piece would also take the form of a sense of a "visual autobiography" based loosely on their perception of self-identity as a teenager living in either Montreal or Toronto. The students were given the instructions that they could explore the use of mixed media in order to give them the greatest opportunity to create this "visual dialogue" with their selected work from the respective museum. Throughout this creative process, students would be able to refer to the images of their chosen gallery art works on the internet, as these works were told by the gallery staff to be all available on each gallery's website.

Throughout this process of art making, both the art teacher and I, if available, would be circulating and assisting students who needed help. This assistance took many forms such as idea/concept development, suggested uses of original materials available for the project, as well as practical art making assistance ranging from the application of paint and materials to a canvas to the construction of three-dimensional forms and sculptures.

The idea of using museum/gallery works as inspiration for art production is one

that is quite common and has most often been found to be very effective in the practice of teaching art. As Bolin (1998) points out,

Works of art are excellent sources of ideas for making other works of art. For example, having students look at and draw from objects in the museum helps establish a foundation for understanding how some artists have worked in the past, and for students to enlarge their own understanding of the art making process. (p. 2)

Introduction of Technology/On-line Exchange

Once the students completed their art works in their classrooms, it was at this point in the project that the introduction of the use of technology took effect. Each visual arts teacher took digital photographs of each student's individual art piece.

These photographs were then put on the internet in order for the students in the opposite class to access the images for the on-line "exchange" to take place. If the high school had an official school website, the art images were put on a site that was available through a link from the school's main site. If not, a website needed to be created to serve as a "home base" for that school's art images. It was important for the students' art works to be part of a class set of art images in order to maintain a sense of cohesion among each participating grade 11 art class. This class set of images approach would also enable a greater sense of structure to be maintained while the action research was being carried out.

Once the two sites composed of each class set of art works were complete, the next step was for the digital images of the museum/gallery art pieces which inspired the students to be accessed from the respective museum/gallery websites. Once accessed, these images were placed next to the corresponding image of the art piece created by each individual student on the school web sites. This would enable each

class to go to one location on the internet and have access to the other class's art pieces, as well as the museum/gallery works that inspired them, side-by-side.

After the web sites were complete, the classes were now ready to engage in the on-line exchange. This exchange involved an art period where the students from each grade 11 art class visited the website of the other school. Once there, the students were assigned a "twin" in the opposite class. In some instances, due to class size, a student had more than one piece that they were twinned with. After viewing their twin's art work and the museum piece that inspired it, the students were asked to make notes of connections and inspirations they saw between their twin's selected gallery art work and the work created by their twin her/himself. Each student was then responsible to write a short description of her/his observations which was to be submitted to their respective art teacher. These written observations were then to be shared with the students in the opposite school at a later date to complete the on-line exchange portion of the project.

Celebration and Sharing: Student Art Exhibitions

To bring the project to a close, each of the two grade 11 art classes was to celebrate their achievements through an exhibition held at the museum/art gallery in their home town. Through the generous enthusiasm and support of both Heads of Education at the galleries, the Montreal exhibition would be held in the Education Corridor of the Montreal Museum of Fine Arts, and the Toronto exhibition would be held in a space adjacent to the Education Wing of the Art Gallery of Ontario. What a coup for these students (and their teachers) to be able to exhibit their art work in such

high profile spaces at such an early stage of their artistic careers! This generosity of exhibition space for the display of student art in the art museum is genuinely supported by Stephen (2001), who writes,

We live in an age in which art museum professionals are broadening their ideas about what objects are appropriate for museum display. Such changes within museums have opened the way for the involvement of students and their art in the art museum. (p. 34)

When planning the student art exhibitions themselves, the overall philosophy of the exhibitions was discussed with the visual arts teachers at both secondary schools. With this process of communication manifesting itself through the display of student art, the "exhibition becomes a vehicle for a teacher to make a public declaration of his or her vision about art and teaching" (Richard & Lemerise, 2001, p. 12). A critical perspective was taken into the conceptualization of the research project as a whole and how the exhibitions of the results would best share the overall project experience with the viewer. As Richard & Lemerise stress, the first criteria for a successful student art exhibition is a clear definition of the objectives, be they didactic, cultural, promotional, decorative, or for entertaining purposes, and how these relate to the exhibition space and the targeted audience (p. 12).

After numerous discussions and time for reflection, an exhibition plan was decided upon. Alongside each student's actual art piece, a colour photograph of the museum/gallery art work that inspired it would be posted in order for the viewers to make their own visual connections between the two works. In close proximity, and in most cases right below or above the photograph of the museum piece, would be a text card that shared the thoughts and comments from the student in the opposite grade 11 art class. These words were the results of the on-line exchange, which were passed

on by the art teachers at the end of the project. The three components would act as a triptych of sorts, all relating to be part of the whole of that particular dialogue. In order that there be clarity in the objectives of the overall art project, that is, who was involved and how the project came into being, an introductory didactic panel would be posted in a central location at each student exhibition site.

With this exhibition plan in place, the visual arts teacher participants were excited and eager to be part of such a project. With the development of "an alternative approach to student art exhibits that included clearer definitions of purpose and better consultation," the teachers believed that they were taking part in a project "where the pedagogical objectives of the teacher and the learning process of the students became the primary objective of the exhibition" (Richard & Lemerise, 2001, p. 13).

Data Collection

The process of data collection in action research is largely determined by the nature of the inquiry. Falling under the umbrella of qualitative research, certain data collection methods may be more appropriate than others. In this particular study, data collection took the form of semi-structured interviews, journals, and participant observations/fieldnotes. These particular data collection methods were then used in combination as a form of triangulation. According to Stokrocki (1997b), triangulation increases validity in research by incorporating at least three different data collection methods (p.106). The qualitative researcher's most effective defense against the charge of being subjective is to support what she/he has observed with material that reinforces these observations from other sources. Researchers have claimed that the rationalization for triangulation is that the flaws of one method are often the strengths

of another, thereby strengthening both the validity and reliability of the entire study.

Using multiple data sources also allows a researcher to fill in gaps that would occur if she/he relied on only one source of data collection. The following sections will now discuss each of the three data collection methods used in greater detail and will provide justification for their use in this particular action research study.

Semi-structured Interviews

The key data collection method of this study was semi-structured interviews. As opposed to focused and structured interviews, semi-structured interviews allow the interviewer to be freer to probe beyond the answers given by the project participants. May (2001) notes that "the interviewer, who can seek both clarification and elaboration on the answers given, can then record qualitative information about the topic" (p. 123). This enables the interviewer to have more latitude to probe beyond the answers and thus enter into a dialogue with the interviewee. These types of interviews also allow people to answer more on their own terms than the standardized interview permits but still provide a greater structure for comparability over that of the focused interview.

In this study, the semi-structured interviews were conducted with the 2 participant visual arts teachers as well as with me in the role of a secondary visual arts teacher as well as researcher. The interview with me was conducted by an outside, objective third party. These interviews were held at three key points in the research study—at the very beginning before the project began, at a midpoint halfway through the project, and then at the end, once the on-line exchange was complete. The choice of this interview method

was selected when noting the purpose of the research and the question being asked. The teachers involved were to determine whether the proposed project offered teaching opportunities for the delivery of their visual arts curriculum as well as to share insights on the practicality of such a project, reflecting on their own personal experience. As Seidman (1998) concurs, "if the researcher's goal is to understand the meaning people involved in education make of their experience, then interviewing provides a necessary, if not always a completely sufficient avenue of inquiry" (p. 64).

When observing the logistics of administering the semi-structured interviews during this study, the following steps and details were carried out. Each of the three interviews conducted consisted of a set of carefully constructed and focused questions. These questions were geared specifically towards the inquiry concepts and study content that were relevant at that particular stage in the execution of the given project procedures. For example, in the preproject interview, participants were asked questions geared towards their general teaching background, their experiences with field trips and art gallery visits, and the overall concept of educational exchanges. In the midpoint interview, the questions were geared towards feedback on their gallery/museum visit, the teaching back in the art room, the art making process by the students, and their anticipation of the integration of technology into the project. The third and final interview asked questions that encouraged the participants to reflect back on the overall project, the various teaching opportunities presented, and the relevance of such a project in their own delivery of curriculum and everyday teaching philosophy. For the complete set of questions asked in Interviews 1, 2, and 3, please refer to Appendix A.

The majority of the interviews were conducted live and recorded through the use of a tape recorder which was brought along to each of the interview sessions. The sessions varied from approximately 30 minutes to 45 minutes in length. The individual length of each interview depended on how much the participant elaborated on each of the questions asked. A few times, due to not being able to be on site in either Montreal or Toronto, the interview was conducted over the telephone. This was done to maintain the timeline of the project. When this was the case, the phone was put on speaker phone, and the interview conversation was once again taped using a tape recorder. After each of the three interviews was conducted with the 3 art teacher participants, the taped interviews were transcribed as a complete set of three interviews, where each of the participants were asked the same questions. This was done in order to keep the interview transcripts organized and to maintain a sense of structure during the data collection phase of the research. After all the interviews were transcribed, each participant had the opportunity to take part in a review/member check of the transcription of their interviews in order to confirm what was said during their particular interviews.

Journals

The role of the journal or diary in the research process is as a central record of project ideas, classroom occurrences, and personal thoughts whose purpose it is to serve as a stimulus for reflective teaching. Mertler (2006) notes that teacher journals can similarly provide teacher-researchers with the opportunity to maintain narrative accounts of their professional reflections on practice (p. 99). As Allport stated (cited in Bogdan & Biklen, 1998), "The spontaneous, intimate diary is the personal document par excellence" (p. 95). This was in reference to the product of a person

keeping a regular, running description and reflective commentary of the events in her or his life.

Throughout the duration of the research, the 2 art teachers and I kept reflective journals on the daily progress and happenings of the two art classes involved in the project as well as personal insights as to what was taking place and the overall teaching and learning being experienced. Writing in the journals took place regularly. A reminder by Connelly and Clandinin (1998) was that to be useful as a reflective tool, the journal needs to be an ongoing record of thought (p. 84). This ongoing reflection upon their teaching experiences was a means to collect data, analyze actions, and, most important, develop solutions to real teaching problems and limitations. In this action research study, the keeping of journals assisted in the gathering of information to greater understand the personal context and mindset of the visual arts teacher participants while the research was taking place. As Unrath and Nordlund (2006) reinforce, "a reflective teacher always remains on the verge of discovery" (p. 3).

At the end of this action research, the journals were collected from the 3 visual arts teacher participants. Their purpose would serve as a valuable form of data collection in the quest to explore the research question presented at the outset of this dissertation.

Observations/Field Notes

Observation is the most basic method for collecting data in qualitative research.

Through observation, qualitative researchers obtain data by watching the participants.

The emphasis during observation is on understanding the natural environment as lived by the participants, without altering or manipulating it (Gay et al., 2006). For

certain research questions, observation is the most appropriate and effective data collection approach.

There are two common types of observation: participant and nonparticipant. In participant observation, the observer becomes a part of, a participant in, the situation being observed. The researcher participates in the situation while observing and collecting data on the activities, people, and physical aspects of the study site. Gay et al. (2006) stress that a benefit of participant observation is that it allows the researcher to gain insights and develop relationships with participants that would not be possible if the researcher observed but did not participate. The participant observer is fully immersed in the research setting in order to get close to those studied as a way of understanding what their experiences and activities mean to them. This immersion "provides a window through which the researcher can see how participants in the study lead their lives as they carry out their daily activities" (Gay, Mills et al. 2006, p. 447).

In spite of the valuable insights gained by participant observation, there can be drawbacks. A few drawbacks from this form of observation are that the researcher may lose objectivity and become emotionally involved with participants or may simply have difficulty in participating and collecting data at the same time. In this particular study, with the two study sites being located in Montreal and Toronto, the sheer distance between the sites as well as the dynamic of the projects occurring simultaneously caused difficulties to arise. These will be discussed in Chapter 4, the Research Findings section of this dissertation.

In nonparticipant observation, the observer is not directly involved in the situation being observed. The researcher observes and records but does not interact or

participate in the life of the setting being studied. As they do not get directly involved with the study, nonparticipant observers are less intrusive and less likely to become emotionally involved with participants than participant observers. With this potential "lack of connection" with the participants, nonparticipant observers may have more difficulty obtaining information on participants' opinions, attitudes, and emotional states (Gay et al., 2006). A reason a researcher may choose to be a nonparticipant observer is that she/he may not have the background or needed expertise to meaningfully act as a true participant.

With my personal background in the field of art education, both as a past secondary visual arts teacher and then as a visual arts consultant with a school board, the data collection method of participant observation seemed most appropriate for the action research study to be carried out. This seems most logical when one notes that I was taking part in the study as one of the participating visual arts secondary teachers as well as the researcher responsible for the project co-ordination.

In action research, as in other methods of qualitative inquiry, observations are recorded in the form of field notes. While directly in the field or just after returning from each observation, the researcher writes out what happened. Along with a description of the people, objects, places, events, activities, and conversations, the researcher records ideas, strategies, reflections, and hunches about the study site and what was observed (Bogdan & Biklen, 1998). This written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the data in a qualitative study is referred to as field notes. When collecting these field notes, the material consists of two kinds of material: descriptive and reflective.

Descriptive field notes represent the researcher's best effort to objectively record the details of what has occurred in the field. These notes focus on the researcher providing a clear "word-picture" of the setting, people, actions, and conversations as observed. As Bogdan and Biklen (1998) explain,

Aware that all descriptions represent choices and judgements to some degree – decisions about what to put down, the exact use of words – the qualitative researcher strives for accuracy under these limitations. Knowing that the setting can never be completely captured, he or she is dedicated to transmitting as much as possible on paper, within the parameters of the project's research goals. (p.121)

Reflective field notes take the form of a more personal, subjective account of the course of the inquiry. Here, the emphasis is on speculation, feeling, problems, ideas, hunches, and impressions. With reflective field notes, the researcher "confesses mistakes, inadequacies, prejudices, likes and dislikes" (Bogdan & Biklen, 1998, p. 123). The researcher reflects and records ideas about what he or she is learning, what will be done next, or what the outcome of the study may be. "In order to do a good study, the researcher must be self-reflective and keep an accurate record of method, procedures, and the evolving study" (Bogdan & Biklen, p. 123). Possible categories that reflective field notes may fall under have been suggested by Bogdan and Biklen. These are reflections on analysis, on method, on ethical dilemmas and conflicts, and on the researcher/observer's frame of mind (p. 124). As all researchers hope to accomplish strong and competent studies of inquiry, it is this aspect of the subjective voice in qualitative research which some say is a strength while others, a limitation. The reflective part of field notes is one way of attempting to acknowledge and control observer's effect. Bogdan & Biklen summarize this best,

In no other form of research are the processes of doing the study and the people who do it so consciously considered and studied as part of the project. The

reflective part of field notes insists that research, like all human behaviour, is a subjective process. (p. 125)

Ethical Considerations

According to Eisner (1991), there is unanimous agreement among researchers and evaluators that their work and behaviour should be ethical (p. 213). In carrying out any type of research there are principles, concepts, and considerations to be employed by the researcher. It is critical to the success of qualitative research efforts that everyone involved has a clear understanding of the intimate and open-ended nature of the research process and that the participants are not "wronged" in the name of research (Gay et al., 2006). Qualitative research is intimate because there is little distance between researchers and their study participants. It is open-ended because the direction of the research often unfolds during the course of the study.

To this end, "informed consent" was obtained from the participant visual arts teachers taking part in this study. By "informed consent," all of the participants entered the research of their own free will (after being invited by the researcher) and with an understanding of the nature of the study. "Freedom from harm" was also a consideration made on behalf of the study participants by not exposing them to undue risks (Gay et al., 2006). Under "freedom from harm," the study implemented issues of confidentiality on behalf of the participants and issues related to personal privacy. Throughout this dissertation, pseudonyms for all names of individuals and the schools where they taught were used in order to maintain this confidentiality. Access to the data collected throughout this study was limited to only me as the researcher and my dissertation advisor. It is important to note that before this study began and before any

data were collected, a "Summary Protocol Form" from the Concordia University Human Research Ethics Committee (UHREC) was completed through the Concordia Office of Research. Under this agreement, all participants knew that they had the freedom to discontinue participation in the study, without any negative consequences, at any point of the study if they so desired. For the purpose of the inclusion of photographs in the sharing of the results of this dissertation, participants did give consent for the public use of photographs taken of them while participating in the study.

When considering issues of ethics in qualitative research, one cannot dismiss a very important feature which differs from quantitative research. This feature, as mentioned earlier is this dissertation, is that qualitative researchers typically are personally engaged in the research context. Data collection methods such as interviews, debriefings, and the like bring the researcher and participants in close personal contact (Gay et al., 2006). This closeness between the participants and the researcher helps to provide deep and rich data, but it may also create unconscious influences that raise issues for objectivity and data interpretation. It is issues such as this which could lead to limitations in the study. This and other limitations will now be discussed in the following section of this dissertation.

Limitations of Study

Although careful consideration has been given to all stages of the procedures for this study, the study was subject to certain limitations. With the sample size of participant visual arts teachers taking part in the study being only 3, the results of the study will by no means make any generalizations of the visual arts teaching profession at the secondary level as a whole. What the results will show, however,

will be a detailed account of the actions, behaviours, and practices of the individual participants involved and the particular research project that they themselves engaged in at their respective secondary schools with their individual grade 11 visual arts class.

As mentioned in the previous section on ethical considerations, qualitative research may at times lead to a level of closeness among the participants and the researcher, which may then lead to the questioning of objectivity as the study is carried out. All efforts were made on behalf of the researcher to be as objective as possible, yet it was through this occurrence of "authentic subjectivity" that the true richness of qualitative data collection could and did take place.

Other limitations that may have affected the outcome of the data collected could have been individual existing biases on the part of the participating visual arts teachers taking part in the study. By this, reference is being made to the possibility of biases being a result of past teaching experiences, past museum/gallery field trips and/or partnerships, technology experiences and levels of integration, and exchanges of various types. All of these practices, if ever incorporated or experienced in their individual teaching careers, may have, over time, instilled preconceived notions of success, failure, or of varied importance. When looking at each as serving as some sort of contribution to their teaching practice and philosophy as a whole, these biases may themselves have served as limitations to the study. Consideration of this possibility was taken into account in the data analysis and reporting of the research findings.

A final limitation that affected the study was the practical limitation of not being able to be in two places at the same time. As the project was taking place

simultaneously in both Montreal and Toronto, it was not possible to be in both classes with both visual art teachers at all times. Gaps in the observation schedule caused by the sheer logistics of using the two study sites may have occurred. Accommodations were at times made to help the study flow at a smoother pace and to try to have as few interruptions to the timeframe of the procedures as possible. Consideration and respect were always given as a top priority to the 2 visual arts teachers who were, all along, following the demands of a rigid high school timetable which at times involved unexpected and unpredictable events which had to take priority. This, in the end, served as a catalyst to gather only richer and more authentic data, as it was the real world and the context of everyday high school teaching that I was looking for in the research project design.

Data Analysis

In their text *Introduction to Research in Education* (2002), Ary, Jacobs, and Razavieh describe three stages involved in data analysis:

- (1) Organizing the data (coding)
- (2) Summarizing the data
- (3) Interpreting the data

These stages were followed in order to conduct the analysis of the data collected in this action research study. Each of these stages will now be clarified, with specific reference being made to their significance to the study carried out.

In the first stage, the pages of the data collected were organized in a numbered and structured fashion. The data were then reduced through the process of coding.

Coding is the sorting of the data collected into specific categories. Once overarching

categories were identified, they themselves were further subdivided. All the data collected, interview transcripts, journals, and field notes, were categorized. The categorizing process continued by sorting the data by looking for units of meaning in relation to the original research question asked—word phrases, subjects' ways of thinking, behaviour patterns, and events that seemed to appear regularly and that were relevant with respect to the research question—all under the two overarching coding themes identified. These categories grouped similar ideas, concepts, activities, and themes. Codes were then given to these categories, which further facilitated the review of the data. The codes were then put through a "constant comparative method" which combined inductive category coding with simultaneous comparison of all the units of meaning obtained (Ary et al., 2002). At this stage, each new unit of meaning (topic or concern) was examined to determine its distinctive characteristics. The categories were then compared and grouped with similar categories. This process was one of continuous refinement of the data collected.

The next stage, summarizing the data, was where I as the researcher began to see what was in the data. After examining all the data entries with the same code, categories were merged into patterns by finding links and connections that were common to one another. This process further integrated the data, and I was able to make statements about relationships and themes found in the data.

The final stage involved the interpretation of the data. Here, I went beyond the descriptive data to extract meaning and gather insight from the data collected. It was at this stage that I was able to tell what I found "which is important, why it is important and what can be learned from it" (Ary et al., 2002, p.178). This stage of interpreting

involved reflecting about the words and acts of the study's participants and abstracting important understandings from them. This was an inductive process, where I made generalizations based on the connections and common aspects among the coding categories and patterns found. It was at this point that I evaluated the plausibility of some of the hypotheses that had evolved during the analysis. This evaluation of the hypotheses was carried out by going through the data once again and searching for supporting data as well as any negative or deviant cases.

CHAPTER 4: RESEARCH FINDINGS

After designing and carrying out action research that involved two grade 11 visual arts classes, two school sites, and two art galleries, all in two different provinces, Ontario and Quebec, and then engaging in an on-line exchange, this study produced a considerable amount of rich data. Once the interviews were transcribed, the journals collected, and the observation notes analyzed, the task of coding, summarizing, and interpreting the data took place. As described in the final section of the previous chapter, this process involved a series of reviews of the data, which led to a constant categorizing to a point of logical refinement. This refinement involved the process of establishing a system of organizing the findings into a clear stream of purpose and function which would ultimately refer back to the thesis question posed in Chapter 1. This question reads:

How does a visual arts exchange project, containing both actual and on-line components, between two schools and two museums in Montreal and Toronto, offer teaching opportunities within an art curriculum, as seen from the perspectives of the teachers and the exchange co-ordinator?

Organization of Findings

With the goal of organizing the findings in mind, this chapter reveals the dissertation findings through a distinct and carefully selected categorization of the data. The findings were first divided into two overarching themes: (a) Museum/Gallery Field Trips and (b) On-line Communication/Technology. These two themes address the thesis question terminology of actual and on-line components utilized in the research study. The actual components concern themselves with the viewing and working from real art

objects in the museum/gallery, while the on-line components concern themselves with the internet exchange. Each of these overarching themes was then broken down and discussed under a variety of subthemes. These subthemes evolved from the various forms of data collection utilized in the dissertation. When analyzing the data collected by the 3 research participants, all of the data were found to fall into at least one of the subthemes provided. Of interesting note, many of the subthemes in each of the two overarching themes were almost identical. This provided insight into the actual structural and organizational thinking of the art teacher participants. These subtheme categories also reflect the various factors and "players" which, upon examination, influenced the daily reality of the teacher participants.

Who Are The Players

Before an in-depth analysis and sharing of the data, I would like to paint a clearer picture of the 3 participants involved in the research study. Each of the 3 participants brought with them varied levels of professional and personal experiences. These differing aspects as to who they were and what they brought to the table created a diversity of approaches to the teaching which took place throughout the project.

Sonja, our first participant had been in the teaching profession for 15 years.

Born and raised in Toronto, Sonja attended York University as an English major but studied Visual Arts as her minor. A practicing artist with photography as her medium, Sonja began her teaching career as a photography instructor at a college/CEGEP in the city of Montreal. The majority of her teaching here was made up of noncredit courses for all ages of adults who had an interest in photography. Before and while teaching at the college/CEGEP level, Sonja had worked part-time as a documentary photographer for

other professional artists, photographing their art pieces as they were assembling their professional portfolios. Sonja had also recently pursued and completed graduate school, receiving a Masters of Art Education degree through the Department of Art Education at Concordia University. At the time of this research project, this was Sonja's third year teaching high school at School A in Montreal. Having been hired to teach English and Media, this was her first year teaching Visual Arts. This particular year, Sonja was teaching grade 9 and grade 11 Visual Arts, as well as grade 11 English and Media.

Birgitta, our second participant, was in her sixth year of teaching. Birgitta was born and raised in Black Lake, Quebec, just outside Quebec City, studied Fine Arts at college/CEGEP, and then received her university education in Fine Arts at the University of Laval. Birgitta did not start teaching right after graduation. Instead, her adventurous edge took her to the Dominican Republic. Here, she and a friend opened their own school and taught 30 elementary aged children for a period of 10 months. Birgitta wanted to expand her life experiences. While in the Dominican Republic she also learned Spanish. Upon returning to Canada, Birgitta began the search for her first teaching job. She landed a teaching position at a high school in Welland, Ontario. Here, she taught Visual Arts to grades 9 through 12 for 5 years. At the beginning of this study, Birgitta was in the first year at a new teaching position in a high school in downtown Toronto. Her timetable included teaching grades 10, 11, and 12 Visual Arts as well as Spanish. Not being officially qualified to teach Spanish, but being the only one on her new staff able to speak the language (from her experience in the Dominican Republic), Birgitta accepted a teaching position where she could teach her first love, Visual Arts, but had to accept the Spanish classes as part of her timetable. With very low seniority in her

school board, the situation of teaching subjects one is not officially qualified in is often the reality one finds oneself in as a relatively new teacher.

The third teacher participant in this action research is me. Born and raised in St. Catharines, Ontario, art was always my favourite subject in elementary and high school. I moved on to pursue Visual Arts as an undergraduate at Brock University. After 4 years in an honours degree program, I continued my studies at the Faculty of Education, University of Toronto. Here, I obtained my Bachelor of Education degree with Intermediate/Senior teaching qualifications in Visual Arts and Geography as my two teachable subjects. After a few years of teaching a mixed bag of Visual Arts, Geography, and ESL, I finally landed a full-time Visual Arts teaching position at Riverdale Collegiate with the then Toronto Board of Education (current Toronto District School Board after amalgamation of five Boards into one in 2000). During my years as a Visual Arts teacher, I had often taken my students on field trips to art galleries, museums, outdoor sketching trips and so on. The field trip experience was for me key to my teaching philosophy. I firmly believed in experiential learning for each of my students. After 10 years of teaching Visual Arts in the classroom, an opening came up at the board level for a new Visual Arts Consultant. Having taken part in many board-wide initiatives during my 10 years as a classroom teacher, I applied and was offered and accepted a permanent position as a consultant. During the 5 years of serving in the role as a consultant, I had pursued and completed my Masters of Education degree in Arts Education at the Ontario Institute for Studies in Education at the University of Toronto. It was also while serving in the role as a Visual Arts Consultant that I established strong partnerships with many institutions in the

Toronto cultural sector. Examples of these institutions were the Art Gallery of Ontario, the Gardiner Museum of Ceramic Art, the Power Plant Art Gallery, and the Royal Ontario Museum. From teacher workshops to intensive student/visiting artist collaborations, these institutions proved to me to be places of such great learning that their influence on my philosophy of teaching was monumental. After 5 incredible years of professional and personal growth in the role as a Visual Arts Consultant (1997-2002), I pursued a new goal, doctoral studies in Art Education. After looking into a number of graduate programs, the PhD program in Art Education at Concordia University was where I wanted to go. Once I received the great news of my acceptance, I wrote and submitted my leave of absence letter to the Toronto District School Board. It is at this juncture in my career, as a doctoral candidate with almost 20 years of art education experience, that I conduct and take part in this action research project as part of my dissertation.

Museum/Gallery Field Trips

One often meets successful adults, professionals or scientists who recall that their lifelong vocational interest was first sparked by a visit to a museum. In these accounts, the encounter with a real concrete object from a different world – an exotic animal, a strange dress, a beautiful artifact – is the kernel from which an entire career of learning grew. For others with an already developed curiosity about some field such as zoology, anthropology or art, the museum provided an essential link in the cultivation of knowledge – a place where information lost its abstractness and became concrete. In either case, many people ascribe powerful motivation to a museum visit, claiming that their desire to learn more about some aspect of the world was directly caused by it. (Csikszentmihalyi and Hermanson, 1995, p.35)

As described in various earlier sections of this dissertation, museums and galleries have played a major role in the field of Art Education. Through the words of Csikszentmihalyi and Hermanson (1995) quoted above, the particular impact of a visit to

a museum or gallery may take the form of a life-changing revelation to many a student who is brought by her/his teacher on a school field trip.

In this action research dissertation, the success of the overall investigation relied heavily on the co-ordination of both grade 11 art classes attending their respective museum/gallery on the two assigned dates for their class. The museum/gallery visits served as the foundation and take-off point for the research as a whole. It was here where the initial seeds were planted for the eventual creation of the art works by the students in both grade 11 art classes from Montreal and Toronto. Once the data from the entire research were collected and analyzed, it was discovered that many factors came into play that affected the outcome of the museum field trips as a formidable (or not) teaching experience for each of the 2 teacher participants. These factors were divided into nine categories. They are: (a) Personal Reflections on Past Nonschool Learning Experiences, (b) Teaching in the Museum/Gallery Environment, (c) Teaching in the Classroom After the Gallery Visit, (d) Role of School Administration,(e) Role of School Board, (f) Museum Commitment, (g) Student Commitment, (h) Fellow Teacher Colleagues, and ultimately (i) The School Timetable. These categories were established from a complex coding system of all the transcribed interviews conducted, the journals of the teacher participants, and the study observation field notes. The following sections of this dissertation will now elaborate on each of these nine factors as they were described by the teacher participants.

Personal Reflections on Past Nonschool Learning Experiences

Often when we are invited to reflect on our own personal experiences when we

were in elementary or high school, the field trips our teachers took us on hold a special place in the memory banks of our school experience. For teachers in a public school system, it is only natural to want to integrate such experiences, which we thought were highlights of what at times can otherwise be remembered as just a jumble of tests, projects, assignments, and often mumbling teachers. Through the interviews conducted in this research project, the study participants were asked to share their personal experiences of field trips and other nonschool learning experiences they took part in when they were in elementary or high school.

Sonja, from School A, was able to recollect a number of positive nonschool experiences when she was a student in high school. Her first recollection when asked about such experiences was of a field trip to the Stratford Festival Theater in Stratford, Ontario. It was when she was in grade 13. Sonja recalled:

You know for 5 years, every year studying Shakespeare in English, and so to actually see it on stage ... and we had such excellent seats! To see that, especially in a theater like Stratford, the audience is a part of what's going on. And they (the actors) of course came out and talked to the audience afterwards, because it was a school audience. So they took off their costumes, and that made such a difference in how, here's a real person, an actor, that can recreate themselves on stage and it just, it just wasn't the same thing as on paper, that's for sure! (Sonja, transcription, p.1-4)

Having not been able to take art in high school due to timetable restrictions (as Sonja shared she was in the "academic" stream with a math and science focus), she was able, though, to take classes in another art form, music. It was here, in music, that she recalled another wonderful nonschool/field trip experience. Sonja continued:

Not only did we go on field trips, we actually sang at Massey Hall in Toronto! I have sung at Massey Hall four times! Once with a 500-voice choir, and we would perform for a real audience that filled Massey Hall! It was, it was incredible! (Sonja, transcription, p. 1-6)

When asked what made these concerts so memorable for her, she replied:

Well, what made them memorable was that part of the Massey Hall experience was that we traveled on our own as students. The subway tickets were supplied for us to go there, and the conductor was actually singing. It was incredible! We all met there, but we went with friends, so we would be sitting in the subway and a group of us would be singing our part while we were on our way. (Sonja, transcription, p. 1-6)

As the action research was also to involve the idea of a student exchange experience,

Sonja was asked what her opinion was on student exchanges and whether she had

ever taken part in an exchange while a student herself in school. Her face lit up! I

knew she was about to share another wonderful experience with me:

I took part as a student in grade 13 and the exchange I was one of a group of students chosen from a select group of high schools to go to York University and actually have York professors from the English Department teach the group. The same group that was chosen also had a group of professors from York University come to our schools because it was an exchange and York was very new at that time and they wanted to tell people that they were educational leaders. (Sonja, transcription, p. 1-12)

As Sonja continued, I noticed that this particular nontraditional learning experience she was sharing had a very powerful impact on her. The experience made her feel very special. It made her feel a strong sense of self-esteem. She was important. Sonja continued:

There were a couple of schools selected and we had Saturday morning classes with these professors and then the last couple of months we went to York. They taught... we had seminars with these professors. The likes of Eli Mandel, who I met there for the first time and became friends with. It's an incredible opportunity as a student to not be treated as a student, you know... in the regular classroom...(Sonja, transcription, p. 1-13)

When Birgitta was first asked about her recollection of nonschool/field trip

experiences, her response was more direct and notably less enthusiastic than Sonja's.

Where Sonja grew up in a large urban city (Toronto), Birgitta grew up in the small

Quebec town of Black Lake. Her first response was short and sweet:

No, we didn't go. (Birgitta, transcription, p. 1-23)

With a bit of prodding, after being very surprised by this response, I added,

Did you go to Quebec City? (Peter, transcription, p.1-23)

We went to Quebec City, but not for my art class. We went as a school. (Birgitta, transcription, p. 1-23)

Still very short answers. I could see already how different the 2 teacher participants were. I realized that Birgitta needed to become more comfortable with me before she was to offer more "giving" answers. As these were semi-structured interviews, I was able to assist in providing more prompts to Birgitta in order to get the conversation flowing. I then asked her again:

Did you go on any other field trips? (Peter, transcription, p.1-23)

Her response:

Yes, we went to New York too. In Secondary 5. In high school, the last year, we went to New York for 4 days and we did the museums and stuff like that. It was not for a specific course, it was just a school trip. (Birgitta, transcription, p. 1-23)

When asked about what was significant about that particular trip, Birgitta shared that after that year she would be attending CEGEP to study Visual Arts. Up until this trip to New York, she had never been to a museum in her life! She continued:

It's weird but it was true, and we saw all these museums and all these paintings. I was amazed to see the real things. (Birgitta, transcription, p. 1-24)

Birgitta surprised herself right there and then during the interview, as it was just then that she realized she had been studying art in school for years yet never saw "the real

thing."

For me, it was the contrast of, you know, here I was taking art courses all these years but I had never been to a museum. It's kind of weird. I just realized that now! (Birgitta, transcription, p. 1-24)

When asked to reflect on my own past nonschool/field trip experiences when I was in elementary or high school, I was not at a loss at all to share my thoughts.

These were quick to come to mind, and I remembered the excitement around which they were undertaken.

I am from St. Catharines, Ontario. That's where I went to high school. I do not recall going to any art galleries in St. Catharines, but once a year we did go to the Art Gallery of Ontario in Toronto. I remember that was the big trip to the big city, and we all looked forward to it and there were big blockbuster shows! Maybe there was the Egyptian show on at the Art Gallery of Ontario. I remember going to see that show. There was a lot of excitement built around that and looking forward to it and then a lot of preparation that we did in class. It was probably one of the highlights of each year when I was in high school in St. Catharines. (Peter, transcription, p. 1-36)

What was it that made these field trips so memorable?

Well, I believe I had elevated the status of the Art Gallery of Ontario. Here we were, an hour outside in a small town of around a hundred thousand people. So we came into the big city of Toronto, which was a large arts and cultural center, and maybe it was the fact that everything was organized and we had field trip forms and there was a lot of preparation for it. It was a memorable event all around when I look back! That's going back already more than 20 years so that's what I do remember. There were many of us -two bus loads, and it was a "shared" experience. It was something different from the everyday classroom experience to go to Toronto and to go to the Art Gallery of Ontario. I think we also went to Yorkville, to a number of galleries there. Our teacher took us there. I remember that. (Peter, transcription, p. 1-36)

When looking back at the 3 teacher participants and their respective recollections of their own field trip/nonschool experiences, all 3 were able to provide at least one experience that was relevant to their education experiences

while in high school. No experiences from the elementary years were shared. This was possibly too long ago, or simply these experiences were not strong enough in one's memory to recollect on the spot. All 3 shared experiences relating to cultural activities found in a larger urban center. This could only be found outside one's hometown if growing up in a smaller center as was the case with Birgitta and me, or in Sonja's large hometown. One exception, Sonja's recollection of her trip to Stratford shared the importance to her of visiting this specialized theatre center, which was located not in a large city but a few hours away in a smaller town. It was, though, the one-to-one meeting with the actors after the production that provided the shining glow in her eyes.

The next section of this dissertation will explore the subtheme of teaching in the museum/gallery environment, the direct environment that is being explored in the thesis question. It will share what is unique about teaching in such an environment and will also delve into the field trips the study participants had been on with their own students during their varied teaching careers. The information shared is derived directly from the interviews conducted before, during, and after the project took place.

Teaching in the Museum/Gallery Environment

It is important to note that the art museum and the school are fundamentally different institutions. Stone (2001) notes that the mission of a museum is to acquire, preserve, protect, and interpret works. On the other hand, the mission of a school is to educate its students in an effort to prepare them for the future once they leave school. For a school to be successful, it must provide students with the knowledge and skills necessary to function as citizens and members of society. In order to achieve their respective missions, art museums and schools offer distinct learning experiences.

Stone discusses further that related to these inherent differences between museum and school environments are the individual concerns of museum educators and classroom teachers. When students are in a museum, the museum educator or docent directs much of their attention to the objects exhibited. They, at times, may not be attuned to the responsibilities that current teachers face in the classroom. These responsibilities revolve around aspects of school culture and concern themselves with areas such as the curriculum, pedagogy, time, schedules, and order.

Each of the 3 research participants were asked their opinions about "teaching" outside of the regular classroom, with a particular reference to teaching their students in a museum or gallery environment. This question was asked at different stages of the research. Their responses once again varied and reflected the unique circumstances and experiences of each individual participant. We will first take a look at Sonja's initial response before her students visited the museum as part of the research process.

I really like the idea. I think that going outside of the classroom enhances whatever is around you, that you become much more sensitive. I mean, if you are teaching about landscape, then it's better to be out in that landscape than to either try and look at pictures of it in the room. I just think it makes it more palatable as to what you are doing. Again, if you are talking about nature, you could feel the sun on you if it was sunny, or you could feel the cold if it was cold. You can add more senses to what is happening and involve the entire body rather than just the eyes as would happen in the classroom. (Sonja, transcription, p. 1-2)

When asked directly about teaching in a gallery or museum environment, Sonja began to elaborate more in detail about past specific teaching situations.

When I take students to art galleries, I feel that this enhances the learning of the visual arts. It's very different as well. I mean when I was teaching photography, I always found it interesting that I would show a photograph on a screen (in the classroom) and they would be huge. I would then take them to see the actual photographs and it's like looking at a different work all together! The scale makes such a difference to it. (Sonja, transcription, p. 1-3)

One aspect of teaching in front of real works of art is the detail that can be scrutinized by the viewer. When teaching such lessons as painting or sculpture techniques from a text, Sonja elaborated on the frustrations that may arise:

It's the same thing when you're looking at a reproduction in a book (in the classroom). You don't get the texture. When you are looking at a real sculpture, it is so different of an experience to see a real sculpture. You can walk around it rather than seeing one facet of it in a certain lighting as in the textbook. (Sonja, transcription, p. 1-8)

At this point Sonja brought in her lens of experience not only as an art teacher but that of a fine art photographer. This proved very interesting, as it was only Sonja who made this a point of concern when teaching art. Sonja shared:

In doing that (photographing art work for a text), the photographer and the artist decide on a particular, ah, let's say viewpoint, that they want to express for their viewers. So it is that you share according to that viewpoint which isn't necessarily an observer's viewpoint. The photographer and the artist decide how they want it to be seen - whether it's dramatic lighting, flat lighting, or all of those things. (Sonja, transcription, p. 1-9)

Before Sonja's students visited the Montreal Museum of Fine Arts for their first visit, she shared these thoughts about teaching students in a museum setting in our first interview:

Students have a different attitude when they are there. I think that they are willing to listen more. They are in a different space, and because a lot of them don't actually go to art galleries very often, it's a very foreign environment. It seems to displace them into a locale where they've said, "well, okay, I have never been here so tell me about it." They become more open to listening. (Sonja, transcription, p. 1-10)

When Birgitta was asked about her thoughts on teaching in nonschool

Environments, and in museums and galleries in particular, her ideas touched upon different aspects of the overall experience. Birgitta noted:

I think it can be really good because students are not made to be sitting for

I think it can be really good because students are not made to be sitting for 6 hours a day learning. On top of that they have to be quiet in the classroom in math, in French, in English, in Spanish, in whatever, in science. I think it can be

good, but the problem is, it is so rare that we can take the students out that when we do, they are kind of crazy sometimes, you know? (Birgitta, transcription, p. 1-21)

It was interesting to notice Birgitta's first interpretation of the nonschool experience was one from a classroom management perspective, whereas Sonja's was more from a curriculum perspective. Birgitta began to reflect on her experience in the Dominican Republic where she went to learn Spanish. With this reference, she made note that

When they are learning on a field trip, I think they will remember more because it is something different. If it was always just in the classroom, it would be the same, but because it was so exceptional, they will not forget. (Birgitta, transcription, p. 1-21)

When working from a real art work in a gallery, Birgitta shared thoughts similar to those of Sonja. In Birgitta's words:

I think students can see for real the impact of colours, the impact of what the artist has done. When you look in a book or at a slide, it's not the same. It doesn't have the same impact. I think for students to see the real thing, they can see the "power" of the actual art piece. (Birgitta, transcription, p. 1-30)

At the close of the opening interview, Birgitta elaborated on what frustrated her about not only teaching in museums and galleries but also other aspects such as their lack of availability to a greater audience. She shared her thoughts on the rules of the public gallery and how she thought many of the rules and realities contradicted the mandate of museums and galleries as supposedly being "buildings for the people." In her own words,

In a museum, maybe it's nice to see all these pictures but maybe if they (my students) were able to actually paint in front of the painting, it would be good. It is limited as to what you can do because of the rules of the museum. You can't talk loud. You have to just look and take notes. You know for people who are so liberated, or, you know, artists are really open. That contrasts a lot, I mean museums and galleries are not just for people who have money, but it costs a lot to come into these kinds of places. And many artists don't have that kind of money and are poor. So I find that ridiculous with all this fancy architecture and

stuff. It's really for wealthier people, the upper class. They put money into the gallery and museum itself, but why don't they give money to the artists? To create? (Brigitta, transcription, p. 1-33)

When I was interviewed at the start of the action research about my thoughts regarding teaching in museums and galleries, I could not agree more with Sonja and Brigitta with regards to the impact of being out of the classroom and the effect this could have on my students. I recalled:

I am very much for teaching in nonschool environments. I remember when I was a high school teacher, I was known as the person that went on more field trips than any other teacher. I believed in bringing my students out to museums and galleries. With each of my grades that I taught, we went on at least one field trip to a museum or gallery each year. I just think it is good to expose students to different environments and different places for learning so that they have an awareness, a greater awareness of the arts on a broader scale. I believe you are very limited to what you can do in the confines of a classroom environment. (Peter, transcription, p. 1-35)

The intention of the particular museum/gallery visits incorporated into this action research was based on successful past experiences as a classroom visual arts teacher by me, the research co-ordinator. These experiences left a huge impact on how and what I taught as a secondary visual arts teacher. I noted:

When I was teaching in Toronto, I went on field trips every year. I took my students to the Art Gallery of Ontario. I took them to the Royal Ontario Museum. We went to the Gardiner Museum of Ceramic Art and The Textile Museum. Whenever there was a show on somewhere, be it in Yorkville or in a major gallery, I would design a project around that particular exhibition. I would coordinate a visit for my students to see that show. I firmly believed in trying to stay current and keeping my students current and abreast of contemporary art trends. I wanted to expose them to what was happening because I thought if they were going to be graduating soon and then going on in art, I wanted them, when they were in university or college, to be able to say "Well, back in high school, we did experience this artist or we did see that show at that gallery." That way, they would already have had a background and a grounding in contemporary visual arts and art practice. (Peter, transcription, p. 1 -37)

When asked what was so unique about teaching in a museum or gallery environment,

I elaborated on aspects raised by both Sonja and Birgitta in their interviews.

Just getting out of the classroom, the seeing of the real object, nothing can compare to seeing real pieces of art in an art gallery! We use text books and slides in the classroom, but in different text books, we can look at the same piece of art and the colours look completely different! Or with slides, the colour might be very off as well. Just to see the texture of a piece or the impasto of a painting. To walk around a sculpture; that to me is something that I personally get excited about. I love to travel and to go to museums and galleries around the world to see the actual art works I teach about. I wanted to share this excitement with my students! (Peter, transcription, p. 1-37)

When looking at the actual teaching strategies or assignments implemented when working in conjunction with a particular museum or gallery exhibition, I elaborated on what I was looking for through these gallery visits. The preparation for these assignments often overlapped how I spent my spare time. This was not only a job for me. It was who I was and what I did for my own personal enjoyment. Sharing these ideas in my interview I explained:

I was always the type of person that would go to a lot of exhibitions in Toronto on my own and try to stay on top of things in the art scene. I would try to come up with innovative lessons that I would not be able to conduct in the classroom. I enjoyed conducting tours myself when it came to going to the Art Gallery of Ontario. As I became very familiar with the permanent collection and the temporary exhibitions, I would come up with unique assignments for my students around these exhibits. These assignments would be so designed as to only be able to be completed in the museum or gallery space in front of the real art works. We would then have follow-up activities in the classroom in the periods afterwards. (Peter, transcription, p. 1-39)

After each of the study participants had been interviewed about their overall opinions on teaching in museums and galleries, the actual museum visits took place in both Montreal and Toronto. These class visits reflected, once again, the differences in approaches to conducting a field trip experience on behalf of the 2 teacher participants involved in the study. Sonja was quite content in her reflection of that

first visit to the Montreal Museum of Fine Arts, especially over the fact that she received some positive feedback on what she had been teaching her students over the past while. She also made clear her views of the docent who took the group around. She shared her thoughts in her journal:

It was fun watching the group's excitement and their attention to detail. It was heartwarming that they have heard my words in class. Marion and a couple of others were concerned with the guide's forceful words as to what the images represented (See Figure 1 in Appendix B) or what they should pay attention to in the image. They simply wanted to absorb and be allowed to look. They also wanted to get down to the task of sketching. (Sonja, journal entry, p. 3)

The individual, in this case a volunteer docent, who receives a class at the museum and then proceeds to "teach" and take the group around, plays a huge role in the success of a museum/gallery field trip. This success depends much on the communication and relationship between the museum Education Department representative (i.e., docent or museum education officer) and the visiting classroom teacher. As each is coming from a very different reality, as mentioned at the start of this section, each individual's expectations and assumptions should be clarified before the visit is carried out in order for it to be as successful as possible. This rang true at my own arrival at the Montreal Museum of Fine Arts, fifteen minutes before the class from School A arrived with Sonja.

I met Joan (the docent) at 1:45 p.m. at the museum, 15 minutes before the class was to arrive, and filled her in on my PhD project. I discovered that she had confused the school which was coming and was expecting a different one and had thought also that the group wanted to know a whole history of the Montreal Museum of Fine Arts as opposed to a selected viewing of the permanent collection of the gallery, as was arranged weeks earlier with the Head of Education from the museum and me. I filled her in on the mistake, and she was very easygoing and adaptable. Thank goodness! (Peter, journal entry, p. 3) And so began the first visit of School A to the museum. Without a review of any

rules or expectations on behalf of the museum normally presented by the docent, the

group set off for the afternoon. A climate was established. As Sonja had mentioned in her journal entry about the students' "concerned" responses to the docent's attempt at explaining various art pieces, I was initially taken aback by their behaviour. I wrote in my journal:

As we went around a few galleries and Joan was trying to explain some works (give a context, describe, etc.), I noticed that a number of the students just walked away and were not interested in what she had to say. This irritated me because I found it to be very disrespectful. I approached the three students (who had walked away) and asked them to rejoin the group and to listen to Joan. They said they did not want to because they did not like how she was telling her ideas and opinions, which were affecting and distorting what they, the students, saw in the works themselves! At that point I just said "Okay, good point." I did not know what to say. I was hoping Sonja would have stepped in but she did not even attempt to bring the group together. (Peter, journal entry, p. 5)

In my role as co-ordinator, observer, and researcher of the study, I did not want to interject my ideas on how Sonja was conducting or supervising her group. I had quickly witnessed how different visiting teachers have completely different expectations when visiting a museum or gallery. Having worked on both sides of this situation at one time or another, as a visiting teacher and one-time gallery educator, I was taking note of the behaviour patterns condoned by the study participant. What I had been accustomed to, and was expecting, was support from the visiting teacher for the docent, especially when it came to group cohesion during the walk through the gallery. This, to me, was part of the role of "teaching in the museum context." To me, one need not be in front of the group to be teaching, but contributing from the sidelines in situations such as this in the form of support to the museum docent. This was not to be found. On a brighter note, the students were interested in the art that they saw around them (refer to Figures 2 & 3 in Appendix B).

One excellent point though was that the students were very intrigued by the paintings they were seeing! They seemed to really enjoy discussing the works, talking amongst each other about what the piece was about, what the artist was trying to say, etc. (Peter, journal entry, p. 5)

Joan picked up on this, and the afternoon carried on quite well:

Joan was wonderful—she saw that they were not listening to her (except for maybe three of four of the girls) but otherwise she just took us around the galleries and did not try to explain much. (Peter, journal entry, p. 5)

Maybe I was being too conservative with my expectations. I think we were just very lucky with the flexibility and generosity of Joan. As the group continued to walk around the museum, Sonja was taking note of the extent of the content of the permanent collection that we were looking at. She was thinking ahead about future visits and other art classes from her school. Sonja noted in her journal during that visit:

The MMFA's permanent collection is huge and good. I was very impressed by it. I'd seen it last several years ago, before the works were placed in these new installations. It also comes to mind that it would be relatively easy to bring a group and just let them look! (Sonja, journal entry, p. 3)

In Toronto, Birgitta's students had visited the permanent collection of the Art
Gallery of Ontario. Upon arrival at the gallery, we were greeted by a security guard.

The security guard was the individual who was going to accompany the class while we were walking around the permanent collection selecting the pieces that would inspire the students' own art creations back at school. Arrangements had been made with the Head of Education to allow the class into the gallery before the gallery was officially open to the public that day in order for the visit to coincide with the timetabled art and following lunch period of School B. (Schedules and timetables, and their inherent restrictions, will be discussed later in this dissertation.) Due to a

major renovation currently taking place at the Art Gallery of Ontario, a number of sections of the gallery were closed to the public. Due to these section closures, only a limited number of pieces from the permanent collection were up for public viewing. The gallery renovation had only recently started and was the beginning of a future multiyear, full-gallery closure due to a complete reinvention of all the gallery spaces by the renowned Toronto-born architect Frank Gehry. Our first visit ended up being somewhat of a disappointment for Birgitta and her students:

We went into the Art Gallery of Ontario, down to the Education Department, and met our escort/ security guard Barb—an artist herself who had studied Fine Arts at Queen's University. Barb took us around the different galleries. It was unfortunate. We could not see any contemporary work! It was all in the vaults! A number of galleries were closed as well due to the renovations taking place. Birgitta really wanted her students to see the modern works. (Peter, journal entry, p. 29)

On the second visit to the gallery, when the students selected their final art works from the AGO's permanent collection that were to serve as inspiration for their own art pieces, only 5 of the 11 students in the class were present. (Attendance had also been an issue with School A in Montreal.) The other 6 students were on other field trips with other classes. As the 5 students present were walking around and making final decisions about their selected art works, one student was playing with a set of knitting needles that she had brought with her to the gallery. These knitting needles were her current "toy"/hobby. The teacher, Birgitta, had said nothing about the needles which the student was playing with as she walked through the gallery. Finally, the security guard asked if she could put them away. I was very surprised Birgitta had said nothing.

These visits to the AGO by Birgitta and her students proved to be much of a letdown. The students were at first excited when informed that there would be a great variety of works that they could choose from in the AGO's vast permanent collection. This proved not be the case when our visit dates were actually here. I, as the project co-ordinator, was not aware that so much of the collection would be not be up for viewing. When I was preparing for the gallery visits for School B in Toronto, I was working closely with the AGO's Head of Education. Being in full support of the research and wanting to help out as much as possible, she had informed me that the "highlights" of the collection would be up and that there would be plenty of pieces for the students to choose from. In actuality, I thought there was a good variety of works hanging, but Birgitta and her students thought differently. Once again, a very different set of circumstances existed between the two classes involved in the research, their teachers, and the two galleries which attempted to accommodate us so willingly.

After each class completed the second visit to their respective museum or gallery, the students began their work back in the art classroom at school. At this point, the teachers were interviewed a second time as to their thoughts about the gallery visits, how they saw their role as the "art teacher" during these visits, and whether or not the visits served as a valuable tool in the overall teaching process (refer to the Appendix for the complete list of questions).

In this second interview, Sonja, from School A in Montreal, took the opportunity to reinforce how important she thought it was to teach from real objects as opposed to reproductions. The concept that the students also had more control over the pace of their learning, as well as what they were learning about through their conscious decision making over what and what not to take the time to look at, was also noted. Sonja

elaborated:

Again, it has to deal with the actual object. I remember saying in the first interview that size really matters. To look at the real object in the museum and to perhaps walk around it or to sit and contemplate it for a while, with no one else really telling you . . . because I would structure the pace in the classroom as to what they would see, whereas at the museum, I think the students structured their own pace. I think that's a really big, important difference. They also have all this choice which they wouldn't have in the classroom. (Sonja, transcription, p. 2-1)

When asked about how the visits contributed to her overall teaching philosophy,
Sonja explained about how, when working with a real work of art, she prefers to let
her students respond with what they see from their own particular backgrounds (See
Figure 4 in Appendix B). This approach was supported not only in a museum context but
in her classroom back at school as well.

We do this even when they are responding to each other's own work at school. I try to set that up. It's difficult because they haven't been through that kind of experience. So, its been difficult trying to set that up. But, at times, you know, there is a glimmer that they do understand what I am trying to do! (Sonja, transcription, p. 2-2)

Sonja was adamant about this approach to teaching about art and was proud of her students and how they put into practice what she was teaching them in class. She believed strongly in the voices and opinions that her students brought with them when they were looking at art works, either at school or in the museum. Sonja continued:

I don't want received ideas. We had the guide, and she described what this was supposed to mean or why this was like this. I am not really interested in going there! I prefer art history to be a more general type of thing or to deal with issues of a particular period, rather than say "this is what this person is trying to communicate." I'd rather have a dialogue between the viewer and the object. (Sonja, transcription, p. 2-2)

Sonja related this teaching practice to what had just taken place at school only a few days earlier:

We had been through a talkback session or a response, and I've been asking them not to do that. I've been asking them to sort of try and figure out what the piece means to them rather than trying to understand what might be meant by the piece. So yes, they were quite annoyed by it (the guide's approach) because I think they wanted to sit in front of these pieces of work and just really look at them and respond. (Sonja, transcription, p. 2-2)

Overall, Sonja believed that her role as the "art teacher" was not much different when accompanying her students on a museum or gallery field trip. The emphasis in her answers lay in the fact that she believed that good teaching includes bringing students to such learning environments. This practice was one that started early in her own schooling and is one that has been carried out in the present in her role as "teacher" today. Her confidence as a teacher and in her approaches to her teaching of art, both inside and outside of her classroom, were evident in the strong answers she delivered in this second set of interview questions.

In contrast, Birgitta, saw her role as "teacher" as being very different when she was in the museum/gallery environment. Her perspective was focused more on her "performance" as a teacher and on the fact that she could not be as "prepared" as when she was teaching in her classroom. Birgitta elaborated:

Well, of course my role is different! When you are in a gallery like that, you cannot be prepared as if you are in a classroom. It was more for me to guide the students there. They were there [at the gallery] to choose a piece of art, so I can't really guide them in a fact because, you know, they just have to choose a piece that they like and that they feel a connection with . . .but at the same time, they asked questions. But, you are not really prepared, so, yes of course the role is different than when you are going in your classroom and you have your lesson all planned and you know what you are talking about. Of course it is impossible to know everything about all the artists and all that, and I am not a museum myself, you know. I am not a history book . . . so it is different, yes. (Birgitta, transcription, p. 2-16)

This reaction was in great contrast to Sonja's and came from a place from a

teacher with much less experience and much less self confidence in her role as "the teacher." Sonja did have many more years of teaching behind her and, with that, many more opportunities to take students out of the classroom to museum and gallery environments. This experience enabled her to go more "with the flow" and to be more in tune with the experience itself as opposed to always having to be prepared to the exact minute as to what was to happen here and what was to be said there. This latter approach is one that can be found in the lesson plans and thinking strategies of a relatively new teacher. Birgitta seemed to not realize the importance of the role she was playing when her students asked her questions and were relying on her expertise as "the teacher" to assist them in their art selection process. Her students entrusted her as to who she was, yet she did not seem to see it. She was still their teacher, even though they were not in their classroom back at school and she was not delivering a formal guided tour or, as she saw it, not formally "teaching" them in the gallery.

When Birgitta was asked if she enjoyed the role of "guide" or "facilitator," or in her words, the role of someone who was "not completely prepared for her students," she was indifferent. At first she expressed strong opposition to that role, but then, in the same sentence, expressed another side of her "teacher self," which she seemed reluctant to share. Her response:

There is a good part to that because you know, students can see something [in a gallery], study something, which you as the teacher have not chosen. On the other side, in the teacher role, no I don't like that because I like it when I know what I am talking about! When a student comes to me and asks me a question, I know what the answer is! At the same time, I like the fact that we see things that I am not prepared for. Life is like that. (Birgitta, transcription, p. 2-17)

After Birgitta presented her answers in response to her role as a "facilitator" to her students' learning, she was asked about her perspective on how the museum/

gallery environment could offer her alternative art teaching strategies for the delivery of her own lessons. Pausing first, she gathered her thoughts and then shared a rather poignant expression of her teaching philosophy. Her answer provided great insight into her personal thoughts on the teaching of art.

It would be great if it was possible to go into a museum and teach there and have your paints there! Your students could create there! But that is not possible. It would be great, you know, I can say different teaching strategies. It would be nice to teach out of the classroom but in fact it is impossible! It is nice to go there [the gallery] once but it can't really change your strategies because it takes time to get there and back, so it's not, it's something that you can do a couple of times during the year. But, besides that, this is a special project. You can't, the museum is not made for you to be there and be able to teach there. (Birgitta, transcription, p. 2-19)

From this response, it was clear that the potential for teaching in the museum/gallery environment was one still to be developed in her growth as a teacher. Birgitta's reference to good teaching strategies was still rooted in the security of her own art room back at school. There, she was in control of the variables. She could be prepared for what her students might ask her. This was a top priority for Birgitta. When observing Sonja's approach to teaching, the museum/gallery was more or less an extension of her art classroom.

After all the gallery visits had taken place and the interviews were conducted with the 2 participating art teachers, I was interviewed about my views on the role of the art teacher in such a situation. Playing multiple roles, the main one being that of observer during the gallery visits, I had the opportunity to reflect on what I saw take place and then share my thoughts as to how I would have handled the given situation based on past experiences with my own students.

Based on the responses delivered during my interview, I had expressed that I

would have viewed my role as the art teacher present in the gallery in a slightly different light. My role would have been one of more involvement in that of "facilitator" as well as "partner" in the learning taking place. To explain in more detail, my response was as follows:

There are objects there [in the gallery] that I may not be too familiar with so I would be working with the students to help them enquire and ask questions about the works they were looking at. I would see that my role was to help them select a piece, because each student had to pick a piece from the permanent collection that spoke to them in some form. They were then eventually going to create an art piece in dialogue with their chosen piece. Knowing that, if I was one of the 2 participating art teachers, I could possibly suggest certain ideas about works which I thought were linked to what I knew about them, my students. Yes, these would be my opinions, but I would know what their personalities were like and I could assist them in their selection. I would try not to plant any ideas in them, but I would definitely help make suggestions to facilitate the selection of an art piece by each student. (Peter, transcription, p. 2-34)

When reading over my response to the posed question, I could not help but think about the reasoning behind my answer. Knowing that we were under a limited time crunch, the idea of making sure students were making the best use of their time at the gallery was of great importance for me. With myself as the art teacher present with my own art students on the field trip, I would have been in role as "art teacher" through the one-on-one facilitation in the decision-making process that needed to be completed by the end of each of the two visits to the gallery. From personal experience, I knew that the quality of what was to follow in the classroom depended on the thoroughness of the task needed to be completed on our two visits to the art gallery.

With the question being asked as to whether or not the museum/gallery visits offered any new teaching strategies, I once again was answering from the perspective of observer, with my own experiences tying in to my understanding of what I saw

taking place before me.

I believe, as the art teacher back at school, I was also in the role of facilitator, but working now in a museum environment, it went down a different road. Here, it was the actual art work that would make me think of certain ideas. Then the students would think of other ideas and we would then work bouncing ideas off each other! It was almost like a triangle between the artwork, the student, and myself. That's what I had done with my own students in the past, and that's what I believe could have taken place in this situation. (Peter, transcription, p. 2-36)

Through the sharing and interpretation of interview responses and various journal entries, it is already clear that three distinct approaches to teaching art are being explored in this study. This first subtheme served as a strong foundation to the following section, which will be discussed under the overarching theme of Museum/ Gallery Field Trips. This next subtheme shares a presentation and analysis of the data collected by the study participants with a perspective on teaching in the classroom versus teaching in the gallery environment.

Teaching in the Classroom After the Gallery Visit

The art room was a very particular kind of place. It wasn't another classroom, it wasn't a service room, it was an atmosphere. When you moved into the art room, you moved, in a sense, out of the school into another world. It had a different smell, a different look, a different quality. It was a visual experience as well as a learning situation. (Wall quote dedicated to Anne Savage, from "Anne Savage: The Living Spirit and Her Concordia Legacy" exhibition held at Concordia University Art Gallery, July 9–Aug. 17, /07)

These are the words of artist and art educator Anne Savage. Through them, one can begin to understand the unique environment an art room holds. The art room is often that special place, that refuge, that place where teaching and learning take place for the perpetuation of the discipline of visual arts. In this particular project, the art classroom was the follow-up location for the two museum/gallery visits by the two

participating grade 11 classes. The art classroom was where the students were to create art works that were inspired by the pieces from the museum permanent collections that they had selected, to which they could "relate" or felt a particular affinity towards.

The role of the art teachers in this instance was one of close integration with what had just taken place in the museum context as well as how they were affected by their individual classroom environments and other contributing factors while at school. The primary issue of concern, which was discussed at length in the previous section, is that both participating teachers were constantly reinforcing the importance of seeing the real art object versus reproductions in whatever form was available to them at their respective schools. At one point, while the students were working on their art pieces and sharing their thoughts about what they had seen at the museum, Sonja made this reference to seeing a famous master work on a past museum experience:

When I saw the image of the Mona Lisa for the first time, and I had only seen reproductions of it, I was shocked with the image in front of me! So, it's not the same. It's just not the same. I don't know whether it has to do with my particular experience or where I'm coming from, but I do know that whatever you are confronted with, you can only associate it with what's in front of you. (Sonja, transcription, p. 2-12)

Sonja had expressed earlier the idea that seeing art works in a classroom context through a reproduction in a slide or in an art text book was also a much more "mediated" experience than if students were to see it in a gallery or "live" situation. This sense of mediation was described by Sonja as to how the form of images may be cropped in a textbook, so that one could only see a detail of an art piece. In a discussion with one particular student, this mediation was defined through the explanation of the documentation of an installation as to what the viewer is left to see

after a particular art installation project has taken place. With this point of reference, Sonja was making the connection to what she described as "facing the same sort of problems that Robert Smithson was facing with his art." Sonja continued:

Or you have to go directly to the site to see the entire thing. The documents are only part of it (referring to Robert Smithson's *Spiral Jetty*), even though he filmed it, and like Christo as well, it's a very different experience in one of Christo's pieces to see it in reality and interacting with it, than seeing even his sketches of the documentation of it. It's a second hand experience. That's what I mean by mediation. (Sonja, transcription, p. 2-13).

This discussion came out of Sonja's sharing of how she was trying to help one of her students back in the classroom try to come up with a way of making his ideas for an art piece become a reality. His ideas, unfortunately, never materialized. Sonja explained:

Well, he was planning to use his car, the car that he is building at home, and then it became rather unrealistic because it was way too big for the particular site where the works will be shown in (postproject exhibition of art work at the gallery). So, I suggested to him that he document something and do a piece about either the process of putting together a completely unorthodox kind of car, a very artsy kind of car, because everything in there is chrome, including the screws. He intended to bring the car but that never materialized. So, it is too bad the intent and the actual didn't happen. I think he feels bad about it, but somehow these students haven't been able to get that kind of thing together in order to bring it about. (Sonja, transcription, p. 2-13)

The previous quote expressed a sense of frustration and sympathy on behalf of Sonja and how she felt about not being able to help a student accomplish his ideas in her classroom. These were ideas that he had come up with after viewing and being inspired by some pieces in the permanent collection of the museum. Her willingness and dedication to her student was shining through her teaching, even though she was not able to assist him to a form of success through a completed art work.

At numerous points of the interviews and in their journal entries, both participants shared frustrations about the inadequate facilities at their schools and in their art rooms. Both echoed the belief that "where we teach, affects how we teach." Sonja expressed at one point," I'm concerned about materials and the fact that we don't have a permanent space to work in." At her school, Sonja felt it was a constant challenge to teach her program. She found the lack of art materials available had a negative effect on the effort her students dedicated to her subject. What at first seemed to be a strong sense of enthusiasm among her class for the project was soon followed by a roller coaster of work habits. One period they would be on task, the other they would spend talking the period away. This became very discouraging at times for both Sonja and me. Near the midpoint of the project, after seeing that Sonja's resources were incredibly limited, I suggested we go on a shopping spree to the local dollar store for some "unique" and "different" materials. These stores had always been a saving grace for me in my own teaching, and I had constantly recommended them to teachers during my consultant years. Things appeared to turn a corner after that:

After a shopping spree this weekend for materials, the students were more enthusiastic regarding their projects. However, many projects changed due to the materials available, and many students took material home to work on their projects. (Sonja, journal entry, p.10)

The introduction of new materials is almost always bound to bring new ideas to students when they are stuck for ideas in the creative process. Once one student charges forward, others often catch on, and a domino effect can take place. In her journal, Sonja wrote:

As works become completed, others see points of interest and incorporate the elements into their own work. John is working well and in a focused manner. This is wonderful to see. (Sonja, journal entry, p. 10)

These journal entries by Sonja were a true reflection of how I observed her teaching strategy in her classroom. Very much a "hands off" approach, she was always, though, very keen at noticing what each of her students was doing. She would often give constructive suggestions to her students (See Figure 6 in Appendix B), yet what they did with those suggestions was up to them, and not always in her favour. Sharing her students' individual and often "detouring" sense of direction when it came to their work habits, Sonja noted:

It seems few are committed to their original design, and they drop what is in progress or aimlessly "experiment." I'm talking mostly about certain boys in the class who did not have a sketch (from the gallery visit) despite the number of times I requested it. But certain girls have changed their minds a couple of times, both after having gotten to a certain point in their work. (Sonja, journal entry, p. 11)

When looking at the various aspects of the teaching philosophy of an art teacher, the concept of talking and conversation amongst the students themselves during art class is always one of individual distinction. After visiting literally hundreds of art classes in action during my time as an art consultant, I believe that I have witnessed everything from a teacher demanding silence while doing work (stemming from a belief that one can not concentrate if one is talking) to that of almost mass chaos, where the students would at times be talking and laughing across the room with friends, even while the teacher was trying to conduct a lesson. In this instance, in Sonja's situation, her classroom rules, which serve as a defining component of one's teaching strategies, fared on the more lenient side. During this project I witnessed a very loose and open atmosphere while the students were working. Sonja was, on most occasions, a very laid back personality in her classroom. This was reflected in the

expectations she had for her students. She allowed much freedom to her students when it came to classroom conduct. Always aware though of what was going on, and with that, possible learning opportunities, Sonja shared in her journal these unique insights from one class, making specific reference to alternative forms of communal sharing:

Conversation around the table in the "nonworking" corner was active and very focused. I believed many learned from Paul's telling of the Jewish-Palestinian situation. I said nothing of this, but feel that this kind of talking is very important and very much a part of art-making in the presence of a group. It reminds me of the *quilting-bee*. The other group is very much into producing and trying out as much material as it can. At best, for those who wish to work, there are a number who are not very serious at all. (Sonja, journal entry, p. 12)

This entry proved very enlightening to me. The idea that Sonja related those students not working on the presented task (yet who were thoroughly engrossed in a very intellectual conversation) to that of a quilting-bee, was an observation I had never thought of. It was, to me, an observation of complete legitimacy, when I considered Sonja's overall approach to teaching.

Over the course of the term, as her students continued working on their projects, the focus of why some of the students were doing what they were doing was fading.

This did not upset Sonja. Instead, she went with the flow. About some of her students' supposed museum inspired art pieces, Sonja wrote:

It seems that the original stimulus has been dropped. That is OK, but what remains as a connection isn't always clear. (Sonja, journal entry, p. 13)

This connection back and forth to the museum piece, depending on the success they were or were not achieving, was also at times part of Sonja's response to the interview questions. Here, she shared:

They kind of flipped out of one mode, if the piece wasn't working for them. Then they went to another particular piece, or they went to the internet and saw what images were posted on the net on the museum site and used one of those. So, they kind of directed their own response mechanism to how they developed their pieces. (Sonja, transcription, p. 2-3)

This sense of independence for the student's own progress was clearly evident throughout the project.

Once the students completed making their art works in their classroom at school, Sonja shared her enthusiasm over a number of the finished pieces. She became very engaged and articulate when asked to describe them:

I think that probably the strongest ones for me are John and Sharon's pieces because John used copper and solder in order to put his piece together, which is a chair, and he did that, as he described, because he is going into plumbing. He felt this would help him too as he wanted to practice with the material he would be using in his trade. It's also that he is preidentifying with the profession that he is going into-the trade that he is going to have later on. As for Sharon, her very, I gather, Catholic, but I say religious background showed very much in her piece. She identified very strongly with the elements that she used. She even went to the point of using objects she had made before in a different context, not even in my class, to include in the piece (See Figure 7 in Appendix B). So, it's a very, very personal expression of who she is. (Sonja, transcription, p. 2-6)

These descriptions were evidence of a strong sense of pride and identification with the work that her students had accomplished. This pride was, to me, a reflection of why Sonja is a visual arts teacher.

A final component of Sonja's postmuseum visit, back-at-school teaching experience was her determination to showcase her students' work in the school environment for others to see. This exhibition was an integral part of the overall teaching process for Sonja. She believed strongly that students should have the opportunity to view their work "professionally installed" in order to appreciate their own and each other's individual concerted efforts. The exhibition was also an avenue

whereby students had the chance to look at their completed works in relation to those of their peers. In one journal entry Sonja expressed clearly why she believed in putting time and effort into the student exhibition. In her own words:

The way that work is presented goes a long way in seeing what is really there. (Sonja, journal entry, p. 17)

A critique and sharing of the art works produced took place on one of the final classes in the library of School A in front of the works themselves. This critique was one carefully planned and orchestrated by Sonja. Students were required to speak about their piece for approximately 5 minutes (See Figure 8 in Appendix B). In this 5 minutes, they were to discuss the process they went through in creating their works, including reference to the museum work that inspired them. Students were to also entertain questions and concerns raised by their fellow classmates in what was to be a respectful and rather sophisticated exercise. Upon reflection of the critique session, I wrote in my journal:

Today we were in the library. Sonja and some of the students had hung all the pieces beautifully, and each student had to make a presentation to the rest of the class. The presentations went OK. These students are such a mixed bag. Many of them were sitting at a table in the library, not even paying attention to the presentations, while others were talking during the presentations. One girl came up to me with her work in hand (in the middle of a presentation which I was listening to) and said her work was ready to be hung! I motioned to her that someone else was talking. How disrespectful I thought! Once the bell went and the period was over, the students all left the library. Some who were sitting at the table left a mess on their table. How little respect for each other and others' property. (Peter, journal entry, p. 16)

Even after all the work that Sonja had put into the exhibition of her students' work, she still had to deal with a lack of respect, empathy, and general attitude that a number of her students had displayed throughout the school year. This, along with the overall sense of exhaustion which is common during the last weeks of school,

were all factors that played a major role in who Sonja was as a teacher and how she saw and played out her role as their art teacher during these trying last days of the school year.

With Birgitta's situation, a very different postmuseum teaching experience was observed from Sonja's. This may have been due to a different sensibility to the research as a whole or even possibly a form of nervousness at being part of a research study at such an early part of her teaching career. There seemed to be a greater sense of ease with me in the classroom with Sonja, whereas with Birgitta, at times, when I was in the room, I felt as though I was the group's art teacher. Birgitta seemed to be holding back in her role as "teacher," displaying little initiative when I was there. One issue that affected the amount of observation I was able to do in Birgitta's class was that the project progressed much more quickly with her group due to the fact that they had art every other day, while Sonja's class had art only twice in a 9-day schedule. With my base being Montreal, and with the way the calendar and my schedule worked out, much of the art-making in Birgitta's class took place when I was back in Montreal right after her class had visited the art gallery in Toronto. Further timetable issues will be discussed in a later chapter of this dissertation.

As mentioned with Sonja's situation earlier, both teachers often used the interviews or journal entries as an opportunity to express concerns they were experiencing in their present teaching situation. From the start, Birgitta had shared that the room that she used to teach in at her former school just last year was "much better and more equipped than this one here." To me, as I looked around the art room, I thought it was a great room to teach in. From what I could see, there was a lot of space, natural

light coming through a wall of windows, ample storage space, a few sinks-I could not detect any immediate concerns with the room itself.

When I did have the opportunity to observe Birgitta's students working, they were always on task and working very diligently. Birgitta seemed to run a much tighter ship when it came to classroom expectations and conduct. Never did I see any students not working on their art piece and just sitting around talking.

As I walked around the classroom during one visit, I took the opportunity to ask the students to share their connections between the piece they selected from the Art Gallery of Ontario and the piece they were creating here in class. As all the students from both classes were asked to make thumbnail sketches of the art pieces they chose while at the art gallery, a number of Birgitta's students referred to these notes to explain their pieces. Some of them had problems explaining any sort of connection, vet through a discussion with them about images found in their work, techniques experimented with, feelings evoked in what they were doing, or even simply their choice of selected materials, often a connection that they were not completely conscious of was made apparent. Many of the students had some great ideas and were making strong progress in the art they were creating. They only needed to be more aware of why they were doing what they were doing. As explained earlier, I had not been present for a number of the art classes where much of the studio work had taken place for the students to get to the point where they were currently. My feeling was that Birgitta had facilitated this creative progress yet was very reserved in the sharing of how she did it. She seemed at times to be reluctant to have me witness her direct instruction or interaction with her students. She did at one point

share, however, that a few of the students did not make any connection at all to the gallery piece that they had selected, as she claimed they "were not really impressed by what they saw at the gallery." She continued:

You know, some of them didn't feel a connection between the art that was there and themselves I guess. They might like the piece that they chose but it was not an inspiration for what they have made. (Birgitta, transcription, p. 2-21)

On one of the final visits to School B in Toronto, Birgitta was having her class do oral presentations of their art work, as Sonja had done in Montreal. As Sonja had her students help her hang and then present their art work in a formal exhibition format in the school library, Birgitta had her students stand up at the front of the classroom and speak with their art work at their sides (See Figures 9 & 10 in Appendix B). Each student was to explain to the class her/his idea concept, how the piece in the gallery inspired her/him (or not), and allow the rest of the class the opportunity to ask questions or hold an open discussion about the art work itself. In my journal, I shared some thoughts about the process:

The students spoke about their art piece and the work that they chose in the AGO's permanent collection. They produced some excellent art pieces!! I was very impressed! Birgitta, on the other hand, did not seem very impressed at all. I thought the work had great diversity and came from a variety of approaches. (Peter, journal entry, p. 32)

During their presentations, most students were able to articulate the process they went through from selecting the image in the gallery to the finished creative art product.

This exercise proved to be very productive in the sense that it allowed students the opportunity to, after a period of time since the work's completion, reflect on why they made the decisions they did during the execution of their individual art pieces. After the presentations, I was still surprised at Birgitta's lack of enthusiasm for the finished

products and the accomplishments of her students.

When I was asked the interview questions regarding teaching strategies back in the classroom after the gallery visits, I could not help but think about what I had just observed with the 2 participating art teachers. I then formed an interpretation through my own memories of past class experiences that I had taken my own students on. This interpretation was based on follow-up teaching strategies that had worked in my given teaching situation at the time with regards to postvisit activities after a visit to a particular museum or gallery. My response was as follows:

New teaching strategies back in the classroom . . .I would try to bring back the sensibility of the real object. I would always make reference to the actual textures that students experienced or would ask them questions about how they felt standing in front of the actual sculpture or painting. How did it make them feel? It was more of a sensory experience . . . working from all the senses. That is to me bringing the teaching to a different level. I would constantly be making references to being at the museum and what it felt like to be in the company of the actual work of art. (Peter, transcription, p. 2-37)

After a brief pause, reflecting in my mind about what Sonja and Birgitta had done, I continued:

That would affect my teaching strategies . . . the way I would phrase my questions, the way I would assist a student in the development of their own studio project. I would make specific references to how they felt when they experienced the art work themselves in the museum and maybe, if we did have a guide, discuss how they felt when a dialogue was directed in a certain way. I would bring in different points of reference, as there are other things that could assist the learning which took place in the museum environment. If I was teaching in the classroom, from a slide or a textbook image, it would be very different. The museum experience brought more players into the actual teaching experience so the strategy would have more layers. It would be more complex. I would state more things in order that the students would have more to think about when they were developing their own art works. (Peter, transcription, p. 2-37)

The above transcriptions reflected greatly on a technique that I had used many times after a visit to an exhibition in a museum or gallery. I recalled how important it

was for me to keep my students' minds always open and to try to help them think about all aspects of their museum experience. This constant questioning and bringing one's mind right back to the place of the actual gallery, right back in front of the individual pieces discussed, was key in helping them think about and develop their own art making ideas and the creative process which was to follow.

Role of School Administration

The role played by a school administration is key not only to the overall functioning and leadership of a school itself but also in the mental health of its teachers. By this, I am referring to the level of support, or lack thereof, by a school administration given to its teachers as they perform their daily tasks required under their title as "teacher." One of those tasks is the carrying out of successful field trips. In this study, the field trip experience was core to the overall research undertaken. Both Sonja and Birgitta had words to share about their current administration and their response to this particular project as well as towards art field trips in general.

In Sonja's case, she shared that her administration had asked its teachers to make field trips available to all students in every grade. They were described as being encouraging, yet on the other hand, there was very little funding available for them to make these trips happen. At Sonja's school, a limited amount of money was allocated by the administration to assist teachers going on field trips. When Sonja had reached the point where she had decided on what classes to take where (by now it was the end of September), there was no longer money available from the office to actually help take all of her classes on the desired trips. With this dilemma, she went with the "all or nothing" rule. Instead of only half of the students in one grade's art classes

receiving funding to go on a particular trip, she decided to not take any of them at all.

What a great loss to her students.

Another area of dismay that was raised by Sonja was the lack of respect and recognition by her administration given to the exhibition of student work she had set up in the school library. Sonja shared in her journal:

The principal stated that she was pleased with the show, but it took second place to the principal's meeting that was happening in the library. Part of the way through the exhibition, Mr. Johnson, the IBO co-ordinator, came to take the podium, which just happened to have an art work sitting on it and material covering it. I didn't let it go then, but had to give it up later. It didn't come back. When I asked for it, the covering material had been ripped off. Similarly, tables which had art pieces on them were needed for the buffet to be set up for the principals, so work had to be taken down from them. (Sonja, journal entry, p. 16)

With requests and actions such as those described in Sonja's journal entry above, it was no surprise that Sonja had issues with her current administration. Why did one's hard work, in this case an exhibition of student art work, have to be moved or altered to accommodate a meeting? Could they not work around the art pieces? Was it necessary to take the podium? Could whoever borrowed it not return it right away? Frustrated, these were some of the questions Sonja kept asking herself.

In Birgitta's case, she shared similar sentiments about her administration when it came to field trips. The administration at her school also encourages teachers to take their students on field trips because "it is good for the school and the parents like that!" (Birgitta, transcription, p. 1-26). In Birgitta's situation, a major concern for her also surrounded the funding of field trips. At School B, Birgitta claimed that there were big inequities when it came to the various school activities and how they are funded. In her words:

The problem is the money! They don't want to! They are ready to pay for hockey trips, they are ready to pay for volleyball trips, but not for art trips! And these are for my courses! It's not for something extra! It's the mentality of it, you know. We have to give money for sports, which are even held after school! But for art or for music in the school, if it's a class trip, students have to pay for it! This doesn't make sense to me. When students go for a hockey trip after school, they pay for everything! (Birgitta, transcription, p. 1-27)

Birgitta explained that the principal justifies this as: "Without sports in the school, what is the school?" She then began to express strongly how her parent community looked at these activities:

The parents think that we are not there just to teach the students, we are there to babysit them from 7:30 in the morning until at least 6 p.m. in the evening. (Brigitta, transcription, p. 1-27).

Birgitta continued:

The parents are not at home yet, so they think that we have to do that for them and it's part of my job. (Birgitta, transcription, p. 1-27)

This perception that is established in a school community can very often create a negative tone around the issue of field trips and extracurricular activities in the eyes of the teachers. In Birgitta's case, the after-school supervision of sports or other activities is seen as a given in her job description. The discrepancy here lies in the purpose of the trip—one is part of an actual academic course in the school calendar, while the other is recreational.

To close this discussion of Birgitta's administration on a somewhat positive note, a gesture of support was acknowledged the morning of the first trip to the Art Gallery of Ontario. As the students began to gather in the front foyer of the school, Birgitta arrived and handed out subway tickets to each of the students to use to go to the gallery. She informed me that the office gave them to her that morning, as they were extras leftover from another student trip. A nice gesture it was; however, the office

should have supplied the tickets in the first place. They should not have been something given at the last minute, leftovers from what Birgitta shared in her interview was most likely a sports field trip.

When reflecting on the kinds of support I had experienced from administration when I was a classroom teacher, I was able to view these past "leaders" through a new lens. Their support, or lack thereof, was critical to how I felt as a teacher in their school. Their varying levels of support, at different times of my teaching career, played a significant role in how I perceived a distinct level of appreciation of myself in my job as a visual arts teacher at a high school in Toronto. I shared my thoughts:

The first principal that I had was very supportive. He had faith in his teaching staff. He encouraged us to go on many field trips! Those were also the days, though, when there was a healthy budget for supply teachers to replace us when we were away on field trips. Over the years, when there was a change in the administration, our new principal became very selective about which trips she approved. I remember having many of them denied as she did not see how they "fit into the curriculum" according to her opinion. I was shocked! I had been taking students for years on these trips. The educational value was, in my eyes, incredibly high. I was at a loss of words when I found out I was no longer granted permission to take my students on these trips. Where was this coming from? Were cuts to the budget for supply teachers already taking effect, or was this something else? Was this about power? Was it an issue of control of a principal over her staff? I was not alone. Many other teachers were forbidden to continue their trips. As the year progressed, we found out it was not about money. It was about power and control. (Peter, transcription, p. 1-38)

From the interviews conducted of the study participants and me, it is clear that a principal can greatly affect the sense of self one holds towards one's position as a teacher on a school staff. In this case, 3 visual arts teachers all expressed negative experiences where their administration was concerned. These experiences often revolved around issues of respect for the individual teacher, and the respect for the discipline of art education and how it was valued, or not, in the eyes of a particular principal and/or parent

community of the school.

Role of School Board

When carrying out school-based research as elaborate as in this action research program, the role of the school board can take a number of different forms. The main form to be discussed here is the presence of central board staff, (i.e., school board art consultants) to assist in the planning, support, and actual execution of undertakings as was carried out in this dissertation research. Having had the opportunity to fulfill this role with the Toronto District School Board for 5 years (1997 -2002), one of the most rewarding aspects of the position, in hindsight, was just that, to assist in collaborations between museums/galleries in the community and practicing classroom teachers. Speaking only from the reality in the province of Ontario, central consultants were commonplace in school boards in the 1970s. As the 1980s rolled out, these central positions were looked upon as "extra costs" to a school board--at times, even a frill. As the individuals who held these positions at boards across Ontario retired, many were never replaced. This void of central staff to help implement new curriculum, to write support documents for teachers, and to assist in the development of outreach projects in conjunction with local galleries became a memory of the past. The former Toronto Board of Education (now part of the amalgamated Toronto District School Board) did not follow this trend as severely. These central curriculum positions were seen as a vital component of a healthy school board. During the 1990s, as a practicing high school art teacher, I was fortunate to have the opportunity to take part as a participating teacher with my students in many projects organized by our board art consultant. I witnessed firsthand the importance these central consultant positions played in my role and

development as an effective classroom art teacher! As I took part in a number of these centrally organized projects, I was able to establish strong links with the Education Departments of many museums and galleries in Toronto. This tradition was one that I strove to continue and foster when I became a consultant in 1997.

In this dissertation research, one major component I found lacking in the educational systems was the concept of a central board art consultant. Neither the school board in Montreal nor the board I worked with in Toronto had a known central visual arts staff person allocated to the job of assisting such projects to be developed and carried out. I could not believe it! The participating art teachers I was working with were alone in their classrooms to deal with initiatives such as the understanding and implementation of a new provincial art curriculum or, on the home front, to advocate for the art department in their own school when dealing with an unsupportive administration. They knew of no central person whose job it was to hold semester meetings to discuss new programs, current initiatives, new assessment strategies, or just to even share project ideas! These were all things that I began to realize that those of us with the old Toronto Board of Education were lucky to have. As I write this dissertation, I must share that the current reality of the amalgamated Toronto District School Board is that it now too has cut many of its central staff positions. The era of regular subject division meetings and one-on-one support to classroom teachers is a luxury of the past. There still are a few people in central curriculum positions, but they have been reduced so greatly in number that their positions have to some degree become token names on paper, only to be contacted via email and able to have limited effectiveness on the classroom delivery of an individual art program. On a more positive note, annual projects between schools and local museums

and art galleries have taken a priority position on the agendas of those still holding these central consultant positions. These partnerships, between teachers and their students in the classroom and major museums and galleries in Toronto, continue to keep teaching and learning alive outside the classroom walls!

In a later chapter of this dissertation, when discussing the on-line component of this research, I will elaborate on the good fortune which was had through the assistance of one central board staff in particular, Mr. Brian Seltmann, the Montreal School Board computer consultant. At that time, his eager and generous assistance with the research undertaken will be outlined in detail.

Museum Commitment

When looking back at the partners involved in the execution of this action research, the commitment put forth by the Montreal Museum of Fine Arts and the Art Gallery of Ontario was one of extreme generosity. From the very beginning, each of these two institutions offered everything they could to help make the project flow more easily and be carried out successfully. The two Heads of Education, as stated earlier in this dissertation, were eager and enthusiastic to take part in the study. Both had given free admittance to their respective galleries to the research participants and their students and were very accommodating with the scheduling of the visits of each of the two grade 11 art classes. Both had so generously offered from the very start, prime exhibition space and installation assistance for the display of the student art work once the project was complete. At every stage of the research, communication was efficient and ongoing between me, the research co-ordinator, and the galleries. Any requests that were made were granted. I realized that as a researcher carrying

out a rather complex research program I was incredibly fortunate to have such sincere co-operation from two of the largest art galleries in Canada! Below are more detailed accounts of how each museum/gallery tried its best at accommodating both School A and School B on their respective visits.

In Montreal, the Montreal Museum of Fine Arts Education Department provided a docent for our group's initial visit. This was a gesture of support on behalf of the department, yet as described earlier in the section entitled "Teaching in the Museum/Gallery Environment," the docent was *not* well received by Sonja and her students. Yes Sonja was a firm believer in bringing her students to the museum and working from real objects, but when it came to following the discussion led by the docent, this was not part of her or her students' plan. The docent, Joan, was very flexible and realized immediately what was going on. She was not distraught at all by this strong resistance to what she was accustomed to sharing on her regular school tours. Instead, she stuck with us. She saw that Sonja's students were not listening, so she adapted her "tour." She fell quickly into the role of our "escort" and basically took us around the museum and made sure we saw the highlights of the museum's permanent collection. She even stayed with the group in overtime in order to bring the class down to the African and Asian galleries! That was dedication!

In Toronto, accommodations were arranged by the Education Department in order to allow the students early access into the Art Gallery of Ontario. This was done in order to meet the schedule needs of Birgitta's and her students' timetables. A security guard escorted the group from one room to another as we walked around the gallery. As a limited amount of artwork was on display at the time due to a major

renovation project which was underway, much of the permanent collection was not up for viewing. As much as the gallery was trying to accommodate the group, Birgitta and her class were disappointed. In consolation, the Education Department had later mentioned that the permanent collection was all up on the museum's website. The students were informed that they could go to the site and select works that may not have been up during their visit. This, to me, defeated the purpose of seeing the real thing on the initial visit, so most students had selected an art work that they found hanging in the gallery.

In the case of the MMFA, the Education Department had also informed us that the entire permanent collection was available on the museum's website. If a student needed another look at the piece they had selected on their visit, they could just go online and access each work in the collection and have another look at the art work right there. A more in-depth discussion of the use of the museum/gallery websites will be covered in the section entitled "Museum Commitment", under the second overarching theme of this dissertation, on-line communication/technology.

Student Commitment

During the first phase of the action research, the museum/gallery visits and classroom art production phase, the students exhibited varied levels of commitment to the project as it moved from one stage to the next. From my own experience, I have come to realize that teaching is a two-way street. It is a direct partnership of sorts between the teacher and her/his students. After hours of planning and preparation, the success of a lesson often depends on how it is received by the students. Their level of participation or acceptance of a particular teaching strategy or project idea

often depends on many factors. These factors may stem from deep-rooted, established patterns of behaviour (both positive and negative), be it a response to a poorly taught lesson, or it may be a reflection of something as simple as a student (or teacher) having a good or bad day! In these particular situations, as is the case in many teaching situations, the response of the students often had much to do with the personal teaching satisfaction levels of the teacher participants involved.

At the start of the research, I went into each grade 11 art class, formally introduced myself, and presented the details of my dissertation. The initial response, on behalf of both classes that first day, was very positive. They were both excited at the concept that they would be taking part in a very unique research undertaking which would take them to the Montreal Museum of Fine Arts or the Art Gallery of Ontario and eventually an on-line exchange with students from another province. At this early stage, Sonja wrote in her journal about her and her students' feelings:

I was very excited about the project Peter proposed. I thought it would be a good experience for both myself and my students. (Sonja, journal entry, p. 1)

Birgitta noted the anticipation felt by her students over a new learning experience:

They were really excited about it! The fact that we were going to the museum and because, you know, I hadn't brought the students there before. There was a lot of anticipation about the visit and the project! (Birgitta, transcription, p. 2-15)

As days passed between the initial introduction and the first museum/gallery visit, the tone began to change with Sonja. One day she felt good about this particular class taking part in the research; the next day, doubts arose. She reflected in her journal about these conflicting thoughts:

As plans became more concrete I began having my doubts that this particular group would be a good choice, but interaction with Peter was uplifting and I was determined to go through with our plans. (Sonja, journal entry, p. 1)

On the day Sonja's class was to make their first visit to the museum, she was worried about administrative "housekeeping" details involved in taking her students on the field trip. Many of her students had not handed in their permission forms to go on the trip. Without this parental authorization, Sonja was legally not allowed to take her students out of the school. In a state of frustration, she shared her disappointment in them and how they were also letting down many other people and the institution they were about to visit. That first day, a soccer game also kept three students from attending. Two other students who said that they would meet the group at the gallery did not. Approximately a third of the group was absent for the first visit to the gallery. With Birgitta's group, the first visit to the gallery was well attended, yet on the second visit, approximately a third of the class was attending another field trip. Between other extracurricular events and student absences, this is often the reality for many teachers taking students on field trips today. Schools, especially at the secondary level, have become incredibly busy places, not always just for teaching the curriculum.

Once the students were involved in the creation of their art pieces in the classroom, they were working at varied paces. Part of this may have been a result of the large gap in time between classes for Sonja's students. At times, Sonja expressed once again a sense of frustration at the pace they were working. In the midpoint interview, when asked about the progress of the work being completed, Sonja shared a sense of helplessness in respect to the slow pace of her class:

Yes and then they were kind of dawdling. They do tend to dawdle. If I didn't give them a date for the vernissage in the library, they would never have finished. It's just that they dawdle I guess. (Sonja, transcription, p.2-9)

With reference to a climate of procrastination in regards to the work habits of her students, Sonja continued:

Yes, they left it to the last minute, and the fact that a lot of them chose not to work on their own pieces at school sort of left that time thing nebulous. I couldn't say, "Look, you have a deadline next week! It's got to be done!" I couldn't say that. (Sonja, transcription, p. 2-9)

With the work habits displayed by her students, Sonja seemed to have felt helpless in an attempt to provide a sense of a structure or the establishment of a timeframe for the projects undertaken by her students. Her frustrations seemed to burden her with a feeling of constant despair that was being realized by me as an observer. Why could she not say that the project was due that next week? Had her students created a climate where she felt she had no control over the pace of when things were to be due? What was happening here?

When asked about how the museum visit, the viewing of real objects, influenced the work habits and the art works created by her students, Sonja shared the results of a few students who really pushed their creativity and displayed a concerted effort.

Before this project was introduced to her class, Sonja had just completed a unit with them that had touched upon the self-identity theme. In following up with the works produced in this current project, Sonja made a comparison between the quality of the work found between the two projects:

The difference in the pieces that resulted from the museum visit are very noticeable. It seems that they were able to go a little bit further; they were able to see something else. They used different media. I think they delved a little bit more into their own, or perhaps focused on one particular aspect of their own identity. It [the museum inspired piece] seemed to be a more focused kind of

exercise for them. It was interesting. I don't know what would have happened, let's say, if they hadn't done those pieces first and they were introduced right into these. One could only conjecture what might have happened. (Sonja, transcription, p. 2-4)

At some points in the project, Sonja did make notes in her journal about shining moments with her class and what they were doing. Here, she shared the initiative taken by a group of her students:

Some students have made a real personal connection with pieces [in the museum]—a couple have gone ahead and looked at the MMFA website and downloaded pieces they were interested in. (Sonja, journal entry, p. 6)

Sonja continued writing extensively in her journal after the above quotation, stating articulate details of the individual pieces being created by a handful of her students. These details made direct connections to the students as individuals, each with a distinct personality. It seemed that when she was in her classroom teaching, she allowed the negativity of either her students not working or their often lack of overall enthusiasm to take over her entire being. It was the writing of these journal entries, however, which gave her the opportunity to reflect on positive progress she saw taking place in her class.

On the day of the exhibition of the student work in the school library, Sonja had once again shared more positive thoughts about the contributions made by her students in her journal:

Today was the day of the school exhibition of the pieces done for this project. Students came through in many ways. Several volunteered to help install the work, and we were able to put up fabric to cover the windows of the AV Room. This allowed pieces to be shown on both sides of the glass. The black semisheer fabric helped pieces to stand out. (Sonja, journal entry, p. 15)

In Birgitta's class, the level of student commitment to the project at hand was again more consistent. As mentioned earlier, during each visit to School B, the

students were diligently working on their art pieces. When recognizing one particular aspect of student commitment during the project, Birgitta shared her thoughts as to how the students were working and communicating with each other during their visit to the Art Gallery of Ontario. This communication, or their sharing of ideas with one another, was interpreted by Birgitta as a result of her seeing herself as *not* being available to them as the "teacher in charge." In her own words:

They [the students] interacted in the fact that they asked one another many questions. What do you think about this piece? Do you like it? Don't you? I think they discussed a little bit more about the art pieces they were seeing because I am not there in front of them, in front of the class. So you know, if I am not there if they have any questions, they will turn to a friend to ask them . . . at least what they think, you know? Maybe, yes, they were interacting a bit more about the art they saw. They do it in the classroom but not as much. (Birgitta, transcription, p. 2-18)

When commenting about their behaviour in the art gallery versus their behaviour in the classroom, Birgitta could make note of no significant difference.

I don't think they really behaved any differently. They were pretty much themselves. I guess maybe they were a little more quiet because they can't be loud in the museum but they are not really [loud] in my classroom either. They were pretty much the same. (Birgitta, transcription, p. 2-17)

When reviewing my thoughts about the overall commitment of the participating students involved during the museum/gallery visits, I reviewed my responses to the interview questions on their behaviour while at the respective museums. Overall, my perception was very positive. I noted:

They were well behaved. They were respectful of the space that they were in. They shared their ideas with each other. They seemed more intrigued in certain situations because possibly the mundane of being in the regular classroom, everyday, just no longer grabbed the students' attention. Whereas, all of a sudden, here we were in a museum, not the regular classroom environment, and they seemed to be on their best behaviour. They were more inquisitive. They were excited! It was a positive excitement that was encouraged by being in that

particular environment as opposed to their classroom! (Peter, transcription, p. 2-35)

While at the museum, the students' interaction and commitment to one another, was very noticeable to me. This collegial behaviour seemed much more prevalent in the museum environment than it was in their regular classroom. Their interactions were described in my interview as follows:

The students, I noticed, went around the art works in groups of about three or four. They were literally running from one to another saying, "Oh, look at this!" and "Look at that!" They were pointing things out to each other. They knew each other's personalities, as many of them were quite close. They were friends, and so what I observed was that it looked like they were helping each other make some decisions-the choices of which piece they or their friends should pick. They then started developing their own ideas as to how their own art work would be in dialogue with the piece they selected. They were coaching each other and facilitating each other. I think, I mean that happens to a certain extent in the classroom, but once again, the novelty of being in front of the real object encouraged a greater sensibility to each other's personalities and to each other's differences. (Peter, transcription, p. 2-36)

A final reflection was made on how the students seemed to have made a special connection to the individual art works they were seeing alongside their peers:

Their interaction was facilitated not just by each other but by the art works themselves. The works took on lives of their own, which real works can do, as opposed to images in a text book or seeing them on a screen. Being in the museum environment encouraged a stronger dialogue amongst all the students. That's how I would describe what I saw. (Peter, transcription, p. 2-36)

Teacher Colleagues

When teaching in a high school, the relationship one has with one's fellow teacher colleagues can often determine levels of comfort as well as overall happiness experienced in the workplace. In the situations experienced in this research, the issue was raised during the interviews of class coverage (of remaining classes) by fellow teacher colleagues or supply teachers when taking only one class on a field trip, as

was the case in this research. At school A, Sonja shared the fact that no supply teachers are hired to cover remaining classes when one is away on a field trip with a class or group of students. Teachers work on a one-to-one "favour" basis of covering classes for each other when away from school with another group of students. There was also no "on-call" system set up by the administration whereby a roster was set up and the teachers, through a rotation, take turns supervising classes wherever a teacher is needed due to an absence for reasons such as field trips or sporting events. As Sonja shared, the system at School A was quite complicated, and teacher relationships became strained with the pressure of "owing favours" to colleagues if they asked one too many times to cover one's classes for the distinct purpose of going on a field trip! With this pressure so clearly evident, why would a teacher want to deal with these hard feelings harboured by one's colleagues?

In Birgitta's situation, the story was the same. No supply teachers were hired at School B to cover absences incurred when taking students on a field trip. Teachers were themselves responsible to find coverage for those classes that needed to be supervised while one was away on a field trip with students. Once again, as with Sonja's school, why would a teacher want to deal with negative feelings harboured by one's colleagues if one were to take her/his classes out of the school environment for field trip purposes one too many times? For these 2 participating teachers, it seemed to not be worth it.

When asked to reflect on my own past teaching experiences, the occurrence of field trips, and the relationship between me and my teacher colleagues, I could ultimately relate to what Sonja and Birgitta had to contend with. Early in my

teaching career, budgets allowed for the hiring of supply teachers to cover my remaining classes for every field trip I wished to take. As years went by, the budgets became tighter. The new rule at our school was that supply teachers would be hired for the first three teachers absent on any particular day. This was the case for coverage for either an absence due to illness or a scheduled field trip. After that, on-calls would kick into play. With on-calls, the situation described earlier where a rotation of coverage by fellow teachers covering classes during their spare periods, was conducted. In the end, fewer teachers took their classes on field trips due to the pressures expressed by Sonja and Brigitta. One did not wish to have to deal with resentment from colleagues for reasons one thought were purely "educational." Again, it was just not worth it.

Besides the strain caused by colleagues due to the covering of one's classes during a field trip, other types of stress induced through one's relationship with one's colleagues was also shared by one of the participating teachers. These situations were ones where relationships with direct colleagues, often in the same department, created anxiety and stress, which ultimately affected how the teacher felt about her role as an art teacher in her school and, indirectly, as a participant in such action research as was being carried out.

At School A, it was on a regular basis throughout the project that Sonja expressed various levels of frustration with her colleagues. These strained relationships caused Sonja to express herself quite poignantly in her journal reflections. For example, in an early entry, Sonja wrote:

What happened between the initial setup and the introductory class was burdensome to me. I am referring to the state of our art classroom and the

frustration of personalities clashing through their specific aesthetic style: we are the "tortoise and the hare" in a race set by administration. (Sonja, journal entry, p. 1)

In the journal entry shared above, Sonja was making reference to the other visual arts teacher in the art department. Starting from the point just after our first visit with her students to the museum, Sonja was reaching out to me as a listening ear for her concerns over the strained relationship she was experiencing with her colleague. These concerns encompassed such aspects in her daily work as lack of communication, issues of bullying, lack of structure and order in the art department, to no collaboration with her colleague whatsoever. Knowing of my experience as an art consultant in Toronto and having worked with art departments who were experiencing such conflicts, Sonja had hoped, in some sense, that my presence in her school could serve as some form of intermediary between her and her colleague. As observer, participant, and ultimately researcher of the action research being conducted, I refrained from making any recommendations. I did, however, take on the role of listener.

As the study progressed, Sonja continued writing her thoughts in her journal. At the close of the first part of the project, just after the hanging of the exhibition of the student art in the school library, Sonja's frustrations with her colleagues at school were becoming very apparent:

Just finished installing the art work in the library alcove and, in talking with Peter for the second interview, it dawned on me that NO ONE from the staff has made comments on either the work that was on display or the display itself!!! The students working on it say proudly how professional it looks and they chose a piece they like best, but little has come from other students or the staff. I have spent hours doing this and, it seems, to no avail. It's a good thing that I get satisfaction from seeing a good installation! (Sonja, journal entry, p. 14)

A week later, a somewhat redeeming entry was made by Sonja in her journal:

Only two teachers from the staff came to see the show. One was very complimentary and the other commissioned a work for her home! (Sonja, journal entry, p. 15)

At School B, at no point in the project did Birgitta express such frustrations or concerns over her fellow teacher colleagues.

The School Timetable

The day-to-day operations of a high school, at the very least, can be described as being the operations of an institution of great complexity. In order for efficiency in that operation, the structure of any high school's timetable is one of many constraints. In order that classes run as smoothly as possible, that students' academic requests in subjects are met to the best of their ability, and that at the same time hundreds of staff, both teaching and nonteaching are all scheduled according to collective agreements of their union and individual expertise, the result, most often is a school timetable with minimal flexibility.

Over and over in this study, the topic of the school timetable came up as a solid barrier to students having a field trip experience for both participating teachers.

Sonja, at School A, made it very clear that she takes the photography club, as opposed to her scheduled art classes, on more field trips, as the photography club takes place after school hours. Sonja explained:

It's not during school time, so I have a lot more control over where we go, how we go, and when we go, because during school time you are limited to when you have them. The schedule puts a really huge constraint on field trips because I don't teach art all the time, so I have to be here to teach the other classes. (Sonja, transcription, p.1-7)

One other major concern of Sonja's, which was directly related to the school timetable, was mentioned earlier in this dissertation. This concern was the number of

cycle, Sonja saw her grade 11 art class only twice. This not only limited the time
Sonja had with her students but made it incredibly difficult to teach her subject with
any sense of continuity. With such a huge time gap between classes, much was lost
in the sense of momentum towards the completion of any large art project undertaken.
Whatever had been built up in the form of excitement around what they were doing
needed to be reintroduced almost each period due to the sheer time span since she and
her students had last seen each other. In the end, this initial first part of the research
project ended up taking up a few months of Sonja's and the students' year to
complete. This major concern was directly linked to the school timetable established
by the school administration.

In the situation at School B, the need to find coverage for one's classes left back at school when away on a field trip was the major timetable concern expressed by Birgitta. To circumvent this, Birgitta found that having her grade 11 art class just before lunch, as was the case this year, allowed her some sense of flexibility to take her grade 11 art class on field trips overlapping into their lunch hour. This solution worked quite well for the two visits to the Art Gallery of Ontario. As for the frequency of art in her teaching schedule, Birgitta had the good fortune to see her grade 11 art class every other day. This allowed the project to flow very smoothly, and a strong sense of continuity was established and easily maintained. This continuity enabled the students to visit the gallery and then produce their art works back at school in a very short period of time.

On-line Communication/Technology

Every art educator intuitively knows that using technology in the classroom has its benefits and its drawbacks. Sometimes technology can be a great addition to our classes and sometimes it can become our biggest barrier to learning. Whether we personally like to use technology or not, see it as useful or not, we do need to begin to understand what it means to the field of art education and our students because it is present in our culture and not likely to go away. (Orr, 2004. p. 2)

The second part of this action research involved the introduction of technology to facilitate an on-line exchange of images and text between School A and School B. In the quotation above, Penny Orr, an art education professor from Florida State University, shared her thoughts on technology in the visual arts classroom in an NAEA Advisory Report in the spring of 2004. The title of this report, "Technology and Art Education: What Do We Really Know About It?" and the points made in the above quotation hold much truth in the development of this dissertation research. Technology is an integral part of not only education today but of almost every part of our lives. With this ever-increasing involvement of technology in our schools, the understanding of it and the constructive integration of it are of key importance to all involved in the education process.

As timing and sequencing play a major role in all aspects of the roll-out of any particular curriculum project, this action research proved no different. As was described in the previous section of this dissertation, the timetable concerns at Sonja's school in Montreal led to the first part of the research (the museum visit and art creation) taking a much greater amount of time than had been anticipated. As a result, part two, the on-line component of the research, was delayed until both schools were at the same place in the project. This did not occur until the last 2 weeks of school, or early June 2004. Pressed for time, knowing that the end of the school year

and everything that goes along with that was just around the corner, the stress levels of Sonja and Birgitta were naturally rising. This lack of time led to a compressed implementation of part two in order for the action research to be completed before the end of the school year.

The following sections of Chapter 4 will describe, through various subthemes, how the attempt to introduce technology as a teaching tool into two grade 11 art programs played out among the teacher participants and their students in the given situation. The integration of technology was implemented in two stages. In the first stage, a digital photograph was taken of each student's art work. Digital images of the museum/gallery pieces that inspired the students were also gathered from the education departments of the respective museum or gallery. These images were then placed side-by-side on a website in order that they would be accessible, all in one location on-line, to the opposite school. The second stage of technology integration was the actual on-line exchange and communication between the students from each school. This communication revolved around the viewing and discussing of the art works created by the students and the museum masterworks that inspired them. At all times in this research, the issue at hand was how the various components related to teaching opportunities for the teacher participants. As reported earlier in the introduction to this chapter, the majority of the subthemes found in the first section under Museum/Gallery Field Trips also evolved as major contributing factors in the reality of implementing a technology component into a high school art program. The subthemes of the following sections under On-Line Communication/Technology are (a) Teacher Self-Reflections and Technology, (b) Teaching Using Technology,

- (c) Role of the Administration, (d) Role of the School Board, (e) Museum Commitment, (f) Student Commitment, (g) Fellow Teacher Colleagues, (h) Technical Support, and
- (i) The School Timetable. The next sections of this dissertation will elaborate on these nine factors as they were described by the teacher participants.

Teacher Self-Reflections and Technology

As with any new teaching tool or strategy, one's familiarity with it or previous experience using it can play a major role in how it is implemented into one's own teaching program or curriculum. In this action research, the various levels of success achieved by the teacher participants were often directly related to their knowledge, past experiences, and ultimately comfort in using new technologies in their art programs.

From the very beginning, Sonja, from School A, shared a strong sense of self-confidence in using technology in her teaching. Besides Visual Arts, teaching Media was also part of her timetable. Because of this confidence, she claimed that she would not hesitate to try new teaching strategies that included new technologies. When asked about her personal experience with using computers and how this affected how she went about using computers and new technologies in her teaching, Sonja elaborated:

The more you know about something, the more you are able to cope with it. I have taken courses, on Photoshop for example, and then I taught a little bit of it myself. I think it just facilitates. If you know technology then you are willing to experiment, and that's really what it takes. We just got a digital camera [at school] and I have never used a digital camera before, but I was confident in using it. I came to the conclusion that even though I know photography and I can use a regular camera, I still have to learn how to use a digital camera because it has its own specifics. (Sonja, transcription, p. 3-8)

When asked specifically how she coped with learning about a new piece of digital equipment, Sonja quipped:

It seems because it is digital, you think you can push buttons and it will happen. But, in fact, you can't! The more you want to control the item, the more you have to know about it. Again, it is kind of a superficial thing, but I think it is true. The more experience one has with technology, the easier it is to say "I can cope with it! It's not a difficult thing!" (Sonja, transcription, p. 3-8)

Sonja continued to elaborate with a sense of pride about how she welcomed technology into her classroom based on her experience. Eagerly, she shared her own sense of growing flexibility and how she now did not hesitate in "diving into the deep end" with her students when it came to integrating new technologies into her program. In her own words:

The other thing that I did initiate that I didn't know anything about was website creation. I learned along with the students, basically, as to how to do it! At the beginning of the year, that was not where I would have gone! (Sonja, transcription, p. 3-9)

With Birgitta, at School B, her past experience with technology was much different. Where Sonja immediately shared enthusiasm and welcomed technology due to past experiences with it, Birgitta was the exact opposite. Even though she believed that such technology integration into her art program was a positive thing, she knew that it was not one of her strengths. Already in the first interview, before the action research was to be carried out with her students, Birgitta shared her personal views about the concept of on-line exchanges:

I am, well, primitive! I know how to survive in the world of computers but I believe more in personal contact and live exchanges . . .let's say for sending people for a week there and for the real thing! (Birgitta, transcription, p. 1-31)

When asked her opinion about exchanging student art images over the internet,

Birgitta immediately shared her concern with the problems one can experience with

technology:

I think it can be really good, but the problem is the technology-the connection and sending images. If it's too big, the size of the images, you can have problems with that. But I think the idea of that is a good thing. It can relate two people from one side of the world with another, you know, like in China for example, and you can learn a lot from that, but you still have to have access to these computers. You have to have a scanner and you need to have lots of money to do that. (Birgitta, transcription, p. 1-31)

Right from the start, with her introduction of her lack of personal experiences of working with technology, I knew that Birgitta was coming from a very different place than Sonja. Before anything had even happened, red flags were already appearing in her mind. These flags were obviously raised due to how she had experienced the use of technology in her limited years of teaching—as a teaching strategy wrought with numerous concerns.

Having also had the opportunity to share my personal thoughts on the introduction of technology during the first round of interviews, my limited experience in the field did not limit my vision as to where I knew education and technology were heading. I shared the following words:

The internet is changing the way education is happening. It is changing the way teachers are teaching. All of our students today are almost completely computer literate, and many of them have computers at home. They converse with each other over the internet. It is the medium of the younger generation. I firmly believe an effective teacher should engage in working with technology, and I believe exploring a possible exchange of ideas in visual arts over the net would be something that is very exciting! Students could benefit from it! It is a new area for me. I am not that knowledgeable when it comes to technology, so this is something that I personally would like to explore. We will see what the results will be! (Peter, transcription, p. 1-41)

From the transcribed interviews conducted before the technology component had taken place, it was very clear that not only were there three distinct working levels of technology amongst the 3 teacher participants but there were overall differences

in their respective outlooks towards technology and its role in the education process. Sonja's and my viewpoints were along the same line, yet Sonja's experience was much greater due to her exposure to technology in her past teaching of the Media course. It was very evident that each participant's past experiences played a key role as to where they each were coming from in terms of a comfort level at the outset of the introduction of technology about to take place in the action research.

Teaching Using Technology

As stated in the previous section, Sonja was well into conceiving the role of technology in her teaching and in her curriculum. In her introductory interview, Sonja shared that she was currently engaging her Media class in the construction of websites. She shared her progress with this as follows:

We're in the mounting stage, so we have all sorts of technical problems that we need to work through. It's amazing how much experience these kids have about the internet! One of my students already has his [art] work on the internet! And he's in grade 9! He's an excellent and wonderful artist! I don't think we as teachers are aware of how much engaged with the technology our students already are! (Sonja, transcription, p. 1-15)

As Sonja was pushing full steam ahead with the teaching and use of technology in her Media class, a number of issues were arising as the technology component of the action research being conducted was taking shape. After Sonja took digital images of all the student art works created by her grade 11 art class, she shared that they were having problems putting these images onto a website for viewing. Her original plan was to have her Media class develop websites that could be accessed as links from the main school website. As classes and time moved on, the Media class was having difficulties connecting to the school's website. This process created a strong sense of frustration in

Sonja. As she expressed:

We've had problems with actually connecting to the school's website because there is really nobody who is taking care of the website! We have no technical support within the school, so it's sort of been with whatever the students knew, whatever I knew, whatever I have been able to read up in the meantime and sort of feed to them! I have done all the photography of the pieces in order for them to include on the website and it's just we have to do everything ourselves it seems! (Sonja, transcription, p. 2-7)

It was at this stage in the second part of the action research, the beginning of the integration of technology, where serious issues began to arise. Many pieces of the puzzle were supposed to be coming together, yet instead they seemed to be falling apart. It was here where Sonja first shared her frustrations with the lack of support in her school when it came to technology assistance with her teaching. Here she was trying to take part in a research undertaking where technology played a key role, yet for numerous reasons, roadblocks kept appearing in her way.

As time was of the essence, and Sonja was not able to get any technical support in her school, we made some phone calls to the school board about obtaining some help from the board computer consultant, John Beard. After numerous attempts to reach him, leaving voicemails and emails, a meeting was set up to meet with John about potential assistance with regards to posting the student art work images on a link to the school website. The day before John was to meet Sonja and me at the school, he cancelled due to another appointment that required his immediate attention. The clock was ticking, and Sonja's hands were tied. All we could do was wait. The last days of school were quickly approaching. John rescheduled his visit to the school to one of the last days of formal classes. The timing had fortunately worked out, as the exhibition of the student work was still up in the school library.

On the day of his visit, John reshot digital photographs of all the student art works. He knew that the plan was to put these images on-line as quickly as possible in order that the students at School B in Toronto could view them and take part in the on-line email exchange of ideas. On that day, I had also given him a CD of images of the original works from the Montreal Museum of Fine Arts that served as inspiration for the works the students created in art class. He took the CD and was eager to help us with this crucial technical step of the action research. He knew what we were hoping to achieve and said that he had everything under control. It was the Friday before the last weekend before the last week of classes of the school year. He left that day, and Sonja and I breathed a mild sigh of relief. We hoped an unexpected major hurdle was overcome. By Monday morning, the website link was complete. John had come through for us! He had created a link that posted each student's art work directly beside its museum inspiration.

Meanwhile, at School B in Toronto, Birgitta kept reconfirming her inadequacies with technology throughout this second phase of the project. Using the school's one digital camera, she had taken digital images of the student art works as soon as they were completed. At this point, mid-May, the art works had been completed almost a month before, as Birgitta's students had many more scheduled art classes in their timetable. Since the time Birgitta had taken the photos of her students' work, I had obtained a CD from the Art Gallery of Ontario with images of the selected permanent collection pieces chosen by her students. During this past month, Birgitta and I were also seeking technical support from the computer teacher at School B. The same concerns existed as with School A. We were looking for assistance in placing the images of the

student art work on a link that was accessible from the school's website. Birgitta had attempted to complete this stage herself but did not have the technical skills to accomplish it. She was becoming very frustrated with the project and did not hesitate to share this frustration in our conversations. Confusion also arose as to whose role it was to complete the various parts of the technology integration. In her words:

I didn't think that it was my part of the project for me to do that! I thought that I would give you the pictures and you would send them over to the other teacher. I would then receive the other class's images. For me, now, it's a little bit of a headache! Yes, I can take the pictures and send them by email and stuff like that. I am able to do that, but to put them on-line, on a website, it is kind of complicated now! (Birgitta, transcription, p. 2-22)

Birgitta continued in her state of frustration and began to share her ideas of expectations being put on teachers today:

I guess it is part of my job right now, you know, they ask you, the government asks you, to do a lot of internet assignments and integration, but I am not qualified in that kind of thing! (Birgitta, transcription, p. 2-23)

When asked about how she saw her role as the art teacher at this stage of the research, Birgitta did not hesitate to share her opinion, often repeating how the students could take a greater role in the implementation of such technology initiatives. She also expressed her views on how she did not see the execution of these tasks as part of her role as "teacher." Birgitta explained:

Well, I will take the pictures. Again, it will be my work, it's not the students' work. I should give the camera to the students and they could do it themselves! If they had to do it themselves, the project, it would be great, but it's my responsibility, so now that the project is mine, it takes me more time! It would be great if the students took the pictures and put them on the website, or sent them to the other students. If it was their responsibility, it would be great, but it is not! So, for me, it is not in the role as the teacher. For me, it's not the role between my students and myself. (Birgitta, transcription, p. 2-23)

As Birgitta continued to reflect on her role as the teacher, she began to share other

frustrations she had with the lack of resources available to her in her current teaching situation. Beginning once again with reference to her lack of technology skills, Birgitta elaborated:

I am not qualified in that, and I just don't know exactly how to do it! If I did, I would be able to teach the students how to do it! But because I don't know myself, well, it's complicated. And we don't have computers. You know if we had a room that we could use, well, the students could do it by themselves! (Birgitta, transcription, p. 2-24)

At School B, technical assistance was required in order for the technology phase of the research to move to the next step. As was stated earlier, I had sought assistance first from the computer teacher at the school. Being a relatively smaller school, this was the person to whom most teachers went in times of need when it came to technology concerns. With the request of assistance to place images of student art on a link to the school website, the computer teacher directed us to the vice-principal. All concerns dealing with the school website were to be directed "to the school vice-principal, who is in charge of what goes on the website." So off I went to speak to the vice-principal. The run-around continued. The vice-principal informed me that I needed to contact the board technology consultant who has the password to access the school website. He gave me the consultant's email, and that evening, I sent an email explaining the research project and the assistance we were seeking. The email bounced back to me. It was Friday afternoon, so I waited until Monday to contact the vice-principal to get the correct email for the computer consultant. By this point, I was becoming very frustrated myself. Once contact was made with the consultant, he informed me that he would work with Birgitta and place the images of the student work alongside the images from the Art Gallery of Ontario which he obtained from the CD. Two weeks later the job was done. It was

Monday, May 31, 2004.

The second phase of the technology integration, the on-line exchange, was now ready to take place. The two computer consultants (one from each school board) created links to the school websites which enabled a viewer to access a site that held images of both the work from the museum/gallery as well as an image of the art work completed by each student. The consultants were able to place the two images one beside the other in order that a meaningful comparison could be made by the students in the opposite school.

At School A in Montreal, with time basically having run out, Sonja and I spoke about how we could complete the on-line exchange with basically no formal class time left in the school year. By this stage, Sonja was frustrated and tired. She had exams and final report cards to take care of as well as numerous other year-end administrative duties to complete. I knew she had given everything she had to the project. I had one final solution. At their last class, I presented an invitation to the students to come one afternoon during the following week, between their exams, for an on-line exchange gathering/pizza lunch. The offer was to any students who were interested in taking part in viewing School B's web site and then engaging in a discussion/writing exercise where they would share their thoughts based on comparing the student art works created to the museum works from the Art Gallery of Ontario. Sonja thought that this was a good idea and said that she would have no problems securing a computer lab for the exercise to take place. As formal classes were now over, the labs were no longer being used.

Three quarters of the class volunteered to come in for the exercise! Sonja could

not believe it! At this point of the year, she thought no one would put up their hand.

Sonja immediately phoned the lab and we booked a 2-hour time slot that followed the students' English exam early the following week (See Figures 11 & 12 in Appendix B).

In her journal, Sonja shared her thoughts about that afternoon in the computer lab:

The girls of the class came for pizza at Peter's invitation and to respond to the work done in Toronto. They were excited and stayed for 2 hours engaged in the exchange! (Sonja, journal entry, p. 18)

Reflecting back on that afternoon, as the students were concentrating on the images on the screens in front of them (the works created by the students at School B), Sonja made notice of something very intriguing:

There was a cross-section of attraction to the piece each student wished to respond to. School B in Toronto chose to show the artist/student with her/his art work. This allowed a biographical connection to the work, and some students actually chose the work to respond to based on who had made it—whether it was the "cute" male or the nationality/race of the artist. (Sonja, journal, p. 18)

This entry made by Sonja in her journal was very significant. She could not help but compare School B's web images, which included the artists themselves holding their own art pieces, to the website created for her own students. Sonja's school's website link included only tightly cropped images of the students' work (no pictures of the students themselves) directly alongside a cropped image of the work from the Montreal Museum of Fine Arts that had inspired them. As Sonja had written in her journal, having a sense of how the student artists looked affected which pieces they selected to write about when responding to School B in Toronto. This "biographical connection," as Sonja called it, ultimately influenced what and how they wrote about their chosen pieces. After roughly 2 hours, the students had finished viewing School B's website link. They had written a paragraph to describe the relationship between the work

created by each student in Birgitta's class and the related gallery piece. They then sent these paragraphs to me via email in order that I would have a complete record of all the written comparisons. The on-line component for Sonja's students was now complete.

Due to travel and scheduling issues, I was not able to visit School B in Toronto until Thursday, June 11. This was the last formal art class of the school year for Birgitta's students. As Birgitta was also trying to bring her school year to a close, she was able to give me only 10 minutes of her students' time. As they had already completed their art pieces almost 2 months before, I knew that the class and Birgitta were ready for the school year (and this research) to be over. It was a long haul for Birgitta. When I had contacted her by phone a few days earlier about having some time with her students on that last day, her answer was, without hesitation, a quick "No!" I shared with her how we had conducted the on-line component at Sonja's school in Montreal. She could not see how returning at a later date and working in a lab could be a possibility with her students here at School B. She said that they were doing an in-class project on the last day and that the last period was also needed to prepare for their final exam. That was that. After a few minutes of reluctant discussion, Birgitta agreed to allow me the first 10 minutes of that last class to speak with her students.

I addressed the class and thanked them for their participation in the action research. I apologized that the timing of the exchange did not happen earlier due to the extended gap in the completion of the artworks on behalf of School A in Montreal but also shared how we were able to accomplish the on-line component at School A after all! I got right to the point and asked if any one of them would be

interested in taking part in their on-line exchange/response during the next few days. As was the case in Montreal, this component would be carried out on their own time, most likely at home. Three students put up their hands! At that point, I was so relieved to see any hands go up at all. Birgitta was very surprised as well. She thought that it was over and done with. As far as she was concerned, time had run out and the on-line component would not be taking place. After my 10 minutes with the group, I waited until the class was over to speak with the three students who had put up their hands. I gave each of the students the website address of School A in Montreal and divided Sonja's class into three. Each of the three students took a third of Sonja's class and agreed to write a short paragraph about the relationship between the pairs of art works that they were responsible for—the student piece and the related museum work. Once they completed the written comparisons, they were to email me their written paragraphs. I left that day feeling grateful to the three students who volunteered to take part in this final phase of the research. Five days later, they had completed the given task. I received all of the written comparisons from the three volunteers from Birgitta's class. The on-line component with School B was complete.

The following sections of this dissertation will elaborate on how various further contributing factors (subthemes) individually affected how and why the teacher participants achieved the varying levels of success or failure in their attempt to integrate technology into their teaching as was described in the previous section, Teaching Using Technology.

Role of School Administration

As was discussed earlier under the theme of museum/gallery field trip experiences, the importance of the role support from one's school administration plays is also key when it comes to the implementation of new teaching strategies either at the whole staff or individual teacher level. In the action research carried out in this dissertation, each teacher participant had her concerns when it came to how her administration provided help in the area of technology assistance if she wished to use it to deliver her particular curriculum program.

At School A, Sonja tried to do as much as she could when it came to her teaching without going to her administration for help. For her, she looked at her principal not as someone to go to for encouragement or support but as one who presented challenges in her daily life as a teacher. From my observations throughout the research, Sonja felt as if she was more alone than supported by her principal when it came to her job as "teacher." The administration was not an option for Sonja when it came to helping make her life any easier. In hindsight, no mention of assistance from any vice-principal was also ever mentioned by Sonja while the action research was being carried out.

When issues arose during the research when she needed assistance in placing the images of the student art onto the school website, Sonja first sought help from her students. Being the school's Media teacher, she often found that the students enrolled in her Media classes were more skilled in technology than she was. This has become almost the norm in many classrooms today. Having a fairly honest and relaxed relationship with her students, Sonja would not hesitate to ask them for help in the

ever-changing and advancing field of technology. It was only when she or her students could not solve the problem at hand that she agreed that we go outside of the school and seek assistance from John, the board computer consultant. This action was done without consulting the principal.

At School B, the situation between Birgitta and her administration was a more positive experience than was the case at School A. As mentioned earlier though, a runaround was experienced when technology assistance was sought. Having little personal experience with technology herself, Birgitta, along with other teachers, would often consult the school computer teacher when help was needed with a curriculum or program initiative requiring technology knowledge beyond their means. As this research required her students to access and work with the school's web site, the computer teacher directed us to the vice-principal for assistance. As noted earlier, all website issues at School B were to be handled by the vice-principal. The vice-principal, being very pleasant, than directed us to the board computer consultant. It was only he who knew the password to access and make changes (i.e., create links) to the school's website as was required in this situation. The board computer consultant than gave us the complete assistance requested. At School B, no communication with the principal over the issue of technology ever took place.

Role of School Board

As mentioned previously in this dissertation, assistance from the school board level was key in the success of the completion of the action research taking place at both School A and School B. Without the generous assistance offered and carried out by the computer consultants, both working as central staff at each of the 2 school boards, the

action research being conducted would have stood at a standstill. This grateful support received by the 2 teacher participants is just one clear example of the important role played by a school board consultant for classroom teachers who wish to explore new technologies in the expansion of their teaching repertoire.

The role of the school board was also a point of reference when the teacher participants were asked about what resources were made available to them at the board level. These resources were in reference to in-service opportunities for the advancement of their technology skills in the form of workshops, professional development, and so on.

Sonja had very positive comments to share when reflecting on the various workshops made available that past year to teachers in her school board. Numerous 3-hour courses were available at different times dealing with new technology training in areas such as video or computer skills. According to Sonja, these courses were offered through a partnership between the school board and a government agency that realized the importance of teachers' continual upgrading of their knowledge and teaching skills.

When Sonja was asked about whether she took any of the offered courses or workshops, she shared that with her background, that of being the Media teacher, much of what was being taught in these sessions was far too basic for her. The various course offerings were most often geared towards those with limited technology skills, the novice.

Sonja had complimented her board for having taken the "first step" in getting everyone to understand technology but was very clear to make suggestions as to a more "teacher-friendly" approach to how the workshops should be delivered. To her,

she believed that the instructors of these school board offered courses should come to the actual school site where the teachers were teaching to teach the course as opposed to the teachers all going to one central location. If this were the case, the actual learning taking place would be much more effective, as the teachers would be learning in their daily workplace environment (the classrooms where they would be teaching their students), and it would also be much more accommodating to the schedules worked by a classroom teacher. This final comment was made with reference to the fact that at times teachers had to take time out of their teaching schedule in order to attend such a workshop.

At School B in Toronto, Birgitta had only very negative comments to share when reflecting on any technology/new media course/workshop offerings presented by her school board. When asked about the availability of these opportunities for growth and learning, Birgitta expressed her thoughts not only on these types of courses but on the lack of time available for teachers to take advantage of any professional development opportunities in her school and board in general. In her words:

For me to learn more about technology, absolutely not! We don't have time during the year. We have only four PD days (professional development days). And they are already taken for meetings at school! Two are at the end of the school year, so they don't give us any opportunity. You have to learn by yourself! (Birgitta, transcription, p. 3-21)

Birgitta's response clearly displayed her belief that for teachers who would like to upgrade their instructional skills or personal knowledge through workshops or classes, opportunities should be built into the school year timetable in order for that learning to take place.

When asked to reflect on my own perspective on opportunities for learning more

about technology through school board offered workshops and courses, I could not help but reflect on my time of working as an Art Consultant with the Toronto District School Board. When looking back at what we as a central team of three Art Consultants could offer a system of over 600 schools (both elementary and secondary), there may have been only three or four workshops offered over the course of the year for teachers to take the opportunity to focus on the use of technology in the Visual Arts classroom. These workshops, taught by a colleague with much expertise in the field, consisted mainly of the teaching of certain Visual Arts computer programs that could be integrated into a high school Visual Arts curriculum. They were offered at different locations across the board in order to try to meet the needs of the large geographic reality of the Greater Toronto Area. With literally thousands of teachers in the board, the workshops were filled virtually overnight! Having the time to take such courses was a factor for many of the teachers, and having the time to teach such courses was a challenge for my colleague! As was shared in my interview:

For many teachers, it just does not fit into their schedule. The intention was there. We tried to meet the needs, but the reality was that with so few staff in these central roles as Art Consultants, we could not physically offer it in the limited time we had. In large boards, the proximity and location to these workshops can also cause a problem. Teachers just couldn't make it there after school. That's what we found in Toronto as well. (Peter, transcription, p. 3-37)

From the above quotation, it is clear that many issues arose between what was needed and what was provided when it came to technology workshops we as a central team of consultants could offer our teachers. We were all very frustrated with the huge gap between the needs expressed in the schools and what opportunities could be made available to our teachers in the system. With only one Art Consultant with expertise

in the field of technology, and each of us with a full plate of numerous other responsibilities, the reality was evident. The needs far outweighed what could be provided when it came to technology course and workshop offerings with a focus on Visual Arts and technology programming.

Museum Commitment

When reflecting on the role the museums played with reference to the integration of technology in the action research carried out, one would have to examine how the museums were prepared, or not, when it came to providing access to their permanent collections through a digital format. As has been mentioned throughout this dissertation from the very outset, both Heads of Education were incredibly accommodating at every stage of the research. It must also be stated that, if not for their sincere generosity, this research would not have been possible.

When looking at the museum/gallery commitment from a technology perspective, the first reference made to the permanent collections was in the first part of the research undertaken. When both teacher participants were working with their students in their classrooms after their two visits to the museum/gallery, there were a number of times when students went on-line to the respective museum/gallery websites as a reference to refresh their memory of the art work they chose as inspiration for their own art piece creation. At both locations, School A and School B, when students attempted to go to the museum/gallery websites to look up their pieces, there were a number of times when selected pieces from the permanent collections of each institution were not available to be viewed. The students would

type in the title of the work that they were searching for, and up would pop only the title of the piece, the name of the artist, the media, and the year it was created. Underneath that information, would be written "Image Currently Unavailable." This was quite upsetting for the students as well as their teachers, as both institutions advertise and share the fact that their entire permanent collections are accessible online. The reality was not so. When inquiring to the Heads of Education about this concern, both individuals shared their frustration with an issue which was out of their control. They apologized for the missing images on their institution websites and shared that they would look into it and see what they could do. When it came to the reality of the students working in their art classrooms, the image was needed then and there, when the class was taking place and the materials were all laid out. It was already too late. Some students ended up changing their art piece to a work that they found on-line, as they claimed to have forgotten the details of their originally selected pieces, thinking that they could just go on-line and see the image whenever it was needed.

On a positive note, when the time came for a second digital reference of the masterworks selected, each institution was asked to provide a CD of the student-selected images from the permanent collections in order for the images to be placed on the website links connected to the individual school websites. Both Heads of Education were immediately forthcoming and provided CDs which held clear, crisp image reproductions of the art pieces selected by the students from the museum/gallery permanent collections. These CDs were then passed on to the two computer consultants at the respective school boards in order that they could work on constructing the website

links.

Student Commitment

Throughout the action research, the role played by the students was central to the teaching which was taking place on the part of the research participants. In this section, where technology was the major focus of the research being carried out, the students displayed various levels of responsibility and commitment when looking at what was happening at both School A and School B.

At School A in Montreal, when the students discovered that a number of works were not available on the museum websites, one student offered to go to the museum to take digital images of the museum works selected by his student peers in order that they would have a digital reference for their own creations. This level of commitment and interest in helping his peers was very encouraging. However, after a number of absences by that same student and his missing of a series of visual art classes, nothing ever came of his offer. Enthusiastic were Sonja's students at times, yet dependable was not always the case.

As Sonja had many times shared the technical expertise that many of her students brought to the classroom, Birgitta made mention of a number of her students who lacked even basic computer skills. One student of Birgitta's in particular, a new student to Canada who had just recently arrived from Congo in Africa, had minimal experience when it came to technology. Birgitta explained the situation, beginning with the fact that the student had never even used the basic application of email:

She's learned that [email] during the year with friends, but it's just new for her. If I had to tell her "Okay, you have to take a digital picture and send it to someone, put it in a jpeg", you know, she would be totally lost! She would quit. She almost

did quit after that actually! Before the project she said "I can't do it!", and I said, "Yes you can do it!" But she said, "No, I don't want to do it! It's too complicated and I will have to speak English you know" [English was not her first language]. So I said to her, "Just relax. We will get through it." (Birgitta, transcription, p. 2-30)

Birgitta expressed how the young student must have felt at the beginning of this research:

When you feel that you start behind, you don't want to be there! (Birgitta, transcription, p. 2-31)

As was displayed at the conclusion of the action research in the two schools, a number of the students showed a strong commitment to completing the on-line technology component. Taking place at the very end of the school year, even after formal classes were already finished and they were in the middle of final exams, I was extremely grateful, as the research co-ordinator, for the students' participation and support in the final phase of the research being conducted.

Teacher Colleagues

When reflecting on one's teacher colleagues in today's school environment, it is commonplace for the concept of technology to be a major point of discussion and one of required workplace co-operation throughout the school year. Computers are used in a variety of ways in the daily tasks of a teacher teaching in a school today. These uses revolve around such tasks as the sharing of school and board information via a board email network to the teaching of the curriculum or the completion of on-line report cards. The use of technology and how one handles one's expertise or inadequacies with that technology can often cause stress in how a teacher handles her/his daily reality on the job. Through open communication with one's colleagues, this stress level can be either

reduced or increased depending on one's approach to one's actions taken or not taken when it comes to accepting the advancement of technology in the daily world of teaching.

In the action research carried out, Birgitta expressed a constant concern regarding a feeling of "pestering" one's colleagues when it came to asking for their assistance with issues around technology. In line with her own insecurities regarding the use of technology, she shared an inner sense of resentment when expressing her feelings around asking for assistance from her fellow teacher colleagues once the research entered this second phase. Just prior to her students completing their studio art projects, Birgitta was thinking about the on-line exchange and how she was going to approach this part of the action research. In her interview, Birgitta shared how she felt. She was anxious once the research went down a road with a teaching/instructional strategy she was not familiar with. In her own words:

So actually I had to bother another teacher to do that, and that's something I don't really like, it's kind of bothering me, that part. I would find it would be easier if the students had their email exchange already and they could send the pictures to the other students. (Birgitta, transcription, p. 2-22)

During the final interview, Birgitta was asked about her views on taking part in research with a focus on technology use. Her response was based on her personal experience that had just taken place in her own school. Her seeking of assistance from colleagues was something she certainly did not feel comfortable about. She noted:

For support, you have to ask people in your school, and they are doing you a favour. "Okay, I will do it," they say, but as a favour. "Okay, I will do it!" but as a friend, you know. So actually, you just bother people!
(Birgitta, transcription, p. 3-22)

Throughout the research being conducted, Sonja stuck to her own devices when it

came to confronting issues in her classroom, including technology. As was shared earlier, she never approached her administration to ask for assistance. As there was an unhealthy relationship and little communication with the other teachers in the art department at School A, Sonja would not go to them for assistance either. Sonja was a very independent individual. Her approach to issues when they arose in her teaching was to figure out her problems by herself or try to work them out with her students.

When I was asked to reflect on the aspect of integrating technology into my own teaching strategy, I had shared my personal thoughts on the importance of open communication with one's teacher colleagues. As one explores the vast and ever-expanding teaching possibilities that advancements in technology are creating, this communication with one's colleagues is key to establishing a personal comfort level in what can often be a confusing and frustrating journey of learning and discovery.

As I shared in my interview:

The requirements of doing teaching research like this, diving into the unknown, requires good communication skills on behalf of the teacher with the rest of the staff, with members of the administration of the school and the school board. Projects like this evolve at many different levels. I think when I was watching the teachers and how they were apprehensive in some ways of going for help to the administration, or going for help to the other teachers, be it the computer teacher or somebody else who worked with new media before, there was apprehension there. We need to go beyond that in order to look at the learning that we want the students to experience. To make projects like this run smoothly we need to look at our own inhibitions, overcome obstacles, and work on those things-risk taking, being flexible, and being good communicators with other teachers and staff at our schools and school boards. That's what we need to work on. (Peter, transcription, p. 3-44)

Technical Support/Availability

When carrying out research that involves new media and technology in a school

environment, the concept of technical support/availability can be represented in a number of ways. In previous chapters, support in the form of people available or not available to help when problems arise has been presented and discussed. As Sonja expressed in her final interview, she alluded to the fact that having only one computer consultant available to the entire school board was simply not enough. In line with the previous chapter, asking for support from others in one's school soon became a bothersome exercise. In her own words:

Yes, John [the Board computer consultant], I would definitely go to him! I am actually trying to get him to help me with another project, but he is not as forthcoming. I think because of his own particular schedule. I mean, he can only fit in so many things and he probably has to make choices as to what he does and does not accept. There is only one person at the board! There are people at school who know about technology, but they too can't take the time off to concentrate on that or haven't got the desire to do it. So, it's a difficult thing! I think everybody espouses the use of technology, but we don't really have the back-up support for it! (Sonja, transcription, p. 3-7)

Access and availability to the technology in one's school was the other major issue that arose while the action research was being carried out. Both participants, Sonja and Birgitta, shared stories of inadequate facilities and equipment for the proper engagement of technology in their visual arts programs. In Birgitta's situation, she shared this point in her final interview, after having the opportunity to reflect on the research as a whole:

It made me realize that we are not ready for the integration of technology. We have no access to computers easily. We have to fight to get the lab. And, because there is already a class who is in the lab, we have to ask them if we can use it! It gets really complicated! I don't think the schools are ready for this kind of project. We can't really. I would like to use more computers in my class, more technology, but we don't have the equipment to do it! (Birgitta, transcription, p. 3-19)

In Sonja's final interview, she shared the fact the situation was slowly improving

for her at School A when it came to equipment for her to properly teach using technology, even for her new Media course. She shared a story from the year before:

Last year, I was lacking the technology I needed because I wanted to do some video. Well, we did a film called "After Hamlet." The students had to find their own video cameras! They had to find their own editing means and so on. It just made it very difficult to come up with high-quality products because it was left up to the students to get all the equipment and do all the work. This year would have been the same, but we did invest in some laptops, and the students were able to use those to help create a website for their class projects. (Sonja, transcription, p.3-6)

When I took the opportunity to reflect on my own experiences of visiting many different high schools in Toronto during my years as a consultant, I shared my thoughts about the range of opportunities I saw that teachers had to integrate technology due to the access or lack of access to computers in their art room or school in general.

There are limited opportunities I observed across the system. Different teachers had different levels of access to computer labs. Many of these labs were overbooked by all the different groups in the school. Computers that were in the classrooms, in the art rooms, would have old software that was out of date. Many times the computers were broken and not functioning any more as the board and schools had to lay off technicians due to budget cuts. So, these computers would never be repaired! (Peter, transcription, p. 3-37)

Due to the simple fact of the lack of technology or technical support available for the teacher participants to carry out the various components of this action research, or even for basic technology integration to take place in their regular visual arts programs, limited technology had been integrated in Birgitta's past visual arts teaching. Sonja, even though her situation was improving, still had many issues around having inadequate equipment and support for the program she wished she could deliver to her students.

The School Timetable

One of the ultimate constraints of working in any high school is the school timetable. High school timetables, most often due to the complexities of scheduling the classes of high numbers of students and, with that, a high number of teachers to teach those classes, create levels of inflexibility that often hinder creative and alternative strategies of program delivery. As mentioned earlier in this dissertation, when looking at the museum/gallery component, the sheer infrequency of the timetabling of art at School A (two classes every 9 days) led to a very disjointed delivery of the art program. This lack of continuity, on top of the numerous other concerns presented by Sonja when it came to the integration of technology into her art program, did not help in the reality of her attempts at technological success. As the calendar dates moved quickly forward and her students seemed to move at a slower pace, reminders were constantly needed as to the purpose and goals of the work being carried out. A certain level of lethargy had set in. What early on seemed as excitement for the closing on-line exchange between the two classes at times became lost in the "drifting" sensibility due to the dragging of classes over the extended timeframe. In her journal, Sonja alluded to this lethargy and even at times a sense of confusion of purpose:

I also am beginning to lack understanding of what is expected by whom. We have fallen into a certain rhythm, I realize, with our classes spread throughout a 9-day cycle. (Sonja, journal entry, p. 9)

Continuity in flow serves as a great stimulus to the success of any particular lesson or unit. In this situation, through Sonja's journal entry, it was clear to see that that flow, due mainly to the structure of the school timetable, was lost.

At School B, as she was waiting for School A to be ready for the on-line exchange, Brigitta was becoming frustrated with the lack of continuity taking place between the 2 teachers and their respective students. Having a schedule where she saw her students every other day enabled her to move swiftly from one step in the project to the next. This was not the case with Sonja. When asked her thoughts on whether the expectations of such research being conducted were realistic or not, research that involved 2 art teachers and their respective students in two different provinces, Birgitta immediately shared her thoughts:

No, it's not realistic! For me, it's nice on paper but after a while you just want to quit because it's adding and adding! You don't know when it's going to finish. I have other things to do and other things to teach. Maybe after 20 years of experience my time will be more structured, and I will be able to do such a project because I will know exactly what I am teaching and you know everything. But, it still takes a lot of time and delays . . . and, you know, to be able to match the time at the other school, because we don't have the same schedule . . . We are ready right now to move on to the next part of the project and you know, it will take maybe another month until this project is done, so, in between, we will work on another project and they will have to respond to the Montreal work later. I don't know exactly how it's going to fit in the schedule. (Birgitta, transcription, p. 2-15)

Another concern found in many secondary schools which is often a direct result of timetabling issues is that of a wide variety of achievement levels and prior knowledge found amongst the students enrolled in a single senior visual arts class.

This concern not only deals with technology knowledge but general subject knowledge and, in this case, the basics of visual arts. The common reality found in many high schools today is that in order for a class to run, a certain minimum number of students must be enrolled. At the senior level, students are very selective as to what courses they take, as their focus is very often already on postsecondary aspirations, and therefore little room is left for elective courses. The reality of a senior

visual arts class is that it is often an elective course for many students. There are at times students enrolled who plan to continue on in visual arts in a postsecondary visual arts program, but the majority of students are there taking it as an elective.

This was the case found at School B. Birgitta found that, in her mind, the group of students that made up her grade 11 visual arts class were of great diversity in achievement levels. This created an added challenge when planning her curriculum and subsequent teaching and delivery styles, especially concerning the integration of technology. Even though the school calendar may say that certain prerequisites are required to be in a particular course, in order for it to run, student numbers are what's important. When looking at the makeup of her grade 11 art class, Birgitta expressed:

It's a mix of students in that class, and that is not easy to teach because you would like to be advanced for your advanced level students but you also need to reach your beginner students. I think that just the fact that you can put a student who never took art in grade 10 into grade 11, makes it pretty hard! They should at least be at an equal level. (Birgitta, transcription, p. 2-29)

With these varied achievement levels found in one class due to timetabling restrictions, this expectation of "differentiated instruction" on behalf of the teacher has become quite common in secondary schools today. Birgitta continued her argument regarding her dismay with this expectation placed on teachers and the reality of her grade 11 art class:

I have some students who have had only one year of art (grade 9 art), and to have all these levels in just one class, it's very difficult. The government thinks that we can do miracles and we should teach differently! I should teach different classes for all of my levels in my one classroom. So, that means I will have four preparations just for one class! (Birgitta, transcription, p. 2-29)

Referring to one student in particular, Birgitta expressed her concern over the fact that one female student, as was mentioned earlier in this dissertation, just recently

arrived new to her grade 11 art class. This student came from Africa, and not only could she not speak English, she had never used a computer before in her life. During the course of the year her friends taught her how to use email, as this was the major form of communication amongst teenagers at the school. Birgitta had to literally give this student private tutoring and counseling every day for many weeks, as the student became very frustrated with the setbacks presented to her when she found herself behind due to the immediate challenges she faced as a new immigrant to Canada.

When Sonja at School A was asked specifically how her everyday timetable next year would allow for projects like this to be carried out, she replied without any hesitation. Her answer was one of thoughtful, honest reflection from a teacher with many years of teaching experience behind her:

I don't think so! I don't know. I think sometimes teachers are kind of crazy and try to do projects like this, but I think that's what also keeps things interesting. I know from myself that's what would keep something interesting and alleviate not necessarily the boredom but the repetition of doing something over and over again. (Sonja, transcription, p. 3-9)

When looking back at the various timetabling concerns expressed by both Sonja and Birgitta when it came to the integration of technology in their teaching programs, commonalities could be found. Defined levels of inflexibility due to a regimented schedule or timetable played out obstacles of varying proportions depending on such determining factors as the frequency of scheduled classes or the general composition of the make-up of students in each of the two art classes involved. These were both issues of timetabling which ultimately affected the implementation of the technology component in ways that hindered a smooth transition from one step in the research to the next.

Showcasing the Student Artwork-Celebration!

As explained in Chapter 3, once the research was completed and the participant interviews were conducted and transcribed, a final sense of closure was to be brought to the research through the co-ordination of an exhibition of the student art work at the museum/art gallery in their respective cities. As for what was to be included as data collection for the research, all was complete and had been submitted (i.e., interviews, journals, and field notes while research was taking place). The exhibition was an added "bonus," a celebration and reward for the students (and an honour for the teachers as well!) after taking part in what had ended up being a lengthy and at times a very frustrating endeavour. Each exhibition was to showcase the completed art piece of each student, a photograph of the art piece from the museum/gallery that inspired it and a text piece written by a student from the opposite class, the results of the on-line exchange of ideas. As expressed earlier, "the pedagogical objectives of the teacher and the learning process of the students became the primary objective of the exhibition" (Richard & Lemerise, 2001, p. 13).

Working closely with the Heads of Education at both the Montreal Museum of Fine Arts and the Art Gallery of Ontario, the dates of the exhibitions were to co-ordinate with the programming and schedules of these institutions, two of Canada's largest art museums. Knowing the complexities and the commitments around such an agreement, much was invested by all the parties involved—the galleries, the teachers, the students, and me, the researcher/teacher participant. The two exhibitions were to be installed that following September 2004, and were to be up for the fall term in each gallery's Education Department's exhibition space.

As July and August passed that summer of 2004, I had been reading over the journals and the transcribed interviews and had begun the coding of the data collected. In mid-August I touched base with the two galleries and set up the dates when I would come in with the student art work in preparation for the installation of the student exhibitions. I had told Sonja and Birgitta at the end of June that I would be in touch with them first thing in September in order to fulfill my commitment of the student exhibition and to arrange to pick up the art work from the schools to bring to the galleries. I told them I would take care of this, as I knew that the beginning of September was a very busy time with the start of a new school year. Both had agreed and expressed how they were looking forward to their much-needed summer breaks.

The first week of September arrived, and everything was in place at the two art galleries. I contacted Sonja at School A in Montreal, and she was very excited about the forthcoming exhibition of her students' work at the Montreal Museum of Fine Arts. She knew what an honour this was for her students and herself to have the work showcased in this prestigious venue. We set up a time for me to pick up the work at her school, and she even volunteered to help bring it over and install the exhibition after her classes were finished that day. She was thrilled!

The next day, I contacted Birgitta in Toronto. Having just experienced the positive energy and excitement with Sonja, I was anticipating a somewhat similar reaction from Birgitta. This was not to be. When I asked Birgitta when would be a good time for me to come and pick up the student art work to bring to the Art Gallery of Ontario, she said she had some bad news for me. I did not know what to expect.

My mind raced. What could the news be? She continued to share with me that when

she arrived back at school in September, the art work was missing from the back of the classroom where she had left it at the end of June. "The art work is missing?!?!?" I exclaimed. She proceeded to explain that she believed the caretaker had thrown everything away when he was cleaning the art room that summer. That was that. There was no real sense of remorse because of the loss of the art work in her voice. It was gone. She apologized and said that they, School B, could not take part in the exhibition any more as there was no art work. The conversation was quite short, and I believe I was in shock. I thanked her for her participation in the project and hung up the phone. All I could think of was her students. I had made a commitment to them that their art work would be on exhibition at the Art Gallery of Ontario, and now I would no longer be able to keep that commitment. That bothered me and left me very unsettled. There was nothing I could do at that point. The research project was complete, and this exhibition was to be a final celebration for the students. The students at School B in Toronto never had their celebration.

The installation of the exhibition at the Montreal Museum of Fine Arts was a huge success! It looked beautiful! Sonja felt like a proud mom, and the Head of Education at the museum and I were both very pleased with how it all turned out (See Figures 13 & 14 in Appendix B). The exhibition continued until January 2005. Many congratulations and positive comments about the concept of the project and the student work were directed to the Education Department over the course of the exhibition and then passed on to me or Sonja. I was happy. As the students who took part in the project had all graduated and were dispersed all over, either working or at CEGEP somewhere, there was not really an opportunity to have an official opening. This was unfortunate. What

was positive, though, was that over the 4 months that the exhibition was up, the majority of the students had come around to see it. This information was shared by the museum staff. The students brought their friends and families to look at their art work on display. Many also went back to visit Sonja at School A and thanked her for the project and shared their sense of pride at having their work on exhibit at the Montreal Museum of Fine Arts. That was enough for Sonja.

CHAPTER 5: COMPENDIUM, DISCUSSION AND CONCLUSION

This chapter is presented to bring a sense of summary, context, and closure to the action research conducted in this dissertation. The chapter is divided into six sections:

(a) Introduction, (b) Compendium of the Action Research Conducted, (c) Discussion,

(d) Positioning of the Research in the Greater Field of Art Education, (e) Implications for Further Research and (f) Conclusions. Each of these sections will extract, contextualize, and apply what has been derived from the research findings in order to present reasoned conclusions to the thesis question posed in Chapter 1.

Compendium of the Action Research Conducted

When looking back at the thesis question posed in this dissertation, the focus was on observing the *teaching opportunities* offered within a newly designed art curriculum. In this case, the newly designed art curriculum was a carefully implemented art exchange project that contained both actual and on-line components. These teaching opportunities were examined from the perspectives of the research study participants. As outlined in the introduction to Chapter 4, under the section entitled "Organization of Findings," the overarching themes under which the data were divided were introduced. These overarching themes were (a) Musuem/Gallery Field Trips and (b) On-line Communication/Technology. These two themes best addressed the thesis question terminology of actual (the viewing and working from real art objects in a museum/gallery) and on-line (internet exchange) components that were utilized in the research study itself. Each of these two overarching themes will now be summarized to present a clear picture of the action research conducted.

Museum/Gallery Field Trips

After reviewing the data gathered around the experiences of the research participants during the first half of the project, the museum/gallery field trip and subsequent classroom follow-up, it was clear that there were many factors that affected how the participants perceived the teaching opportunities in the respective museum/gallery visits and then back in their art rooms at school.

Each of the participants came into the research project with a variety of nonschool learning experiences from their own schooling when they were growing up. These field trips proved to be very positive experiences and were pivotal in how the participants framed how they saw the role of field trips in the overall school experience for their students. To them, and often because of their own high school experiences, field trips were an important part of teaching in the high school system.

When asked about teaching in a museum environment, Sonja and Birgitta approached their answers from two very different perspectives. First, Sonja looked at teaching in a museum from a curriculum perspective. For her, it was the details in the art works that could now be scrutinized by the viewer as they, the students, were right in front of the actual art pieces themselves. With a background in photographing art work for other artists, Sonja also read into the lens with which art works are portrayed in text books, slides or on the internet. To her, a particular viewpoint had been deliberately set up in order that the viewer sees objects in a certain perspective. Viewing art from a reproduction was to Sonja a much more "mediated" experience. When seeing art works live in a museum, students can make their own interpretation. They see the art work with their own eyes-it is a firsthand

experience. This firsthand viewing experience in turn also helped when Sonja was teaching her students about such tactile elements such as texture in an art work, or when a piece was to be viewed in the round, such as sculpture.

For Birgitta, teaching in a museum was more about classroom management as opposed to curriculum. Throughout her interview, Birgitta stressed such details as the behaviour of the students in the gallery. She felt at times that she could not always be in complete control of each of her students. This made her feel uncomfortable. Birgitta did however agree with Sonja on the fact that with real works of art, students can get the full impact of such elements as colour in a painting or the individual brushstrokes by an artist on a canvas. These were much richer viewing experiences than looking in a text book or at a slide. Both agreed that nothing compares to seeing the real thing, and the students can now see for themselves the "power" of an actual work of art.

When in the museum or gallery, each participant had a very different approach as to how their students were to conduct themselves and what was acceptable behaviour. In Sonja's situation at the Montreal Museum of Fine Arts, her students were encouraged to look at the pieces in the permanent collection and come up with their own interpretations of the art based on what they brought to the table. Sonja had taught them a particular approach to looking at art, and that approach did not involve direct interpretations of the work given by her, the teacher. Even though there was a docent present who was trying to explain the backgrounds of some of the works as they walked around, Sonja's students would simply walk away. They wanted to explore and make their own conclusions as to what they were looking at. Sonja

supported this reaction, as she had been teaching them for months to make their own judgements. She was quite happy to see that they had listened to her and had acknowledged and accepted her approach on how to look at art when in a museum.

Birgitta, when visiting the Art Gallery of Ontario in Toronto, also seemed to take a more "back seat" approach when it came to assisting and helping her students. She was coming at it though from a different angle. At the AGO, the students were supervised by a security guard as they walked around and viewed the permanent collection. As a major gallery renovation was currently underway, much of the collection was in the vaults. What was up was a series of rooms of the highlights of the AGO collection. Birgitta seemed to focus on what was *not* up on the walls instead of what was up. She seemed to lose interest quite quickly in the works that her students were looking at. One student, as she was walking around, began to play with a set of knitting needles which she had brought with her on the trip. Birgitta never said a word to the student, but after a few minutes, the security guard made sure the student quickly put the needles away. Later, during her interview, Birgitta shared the fact that she did not see herself as the "teacher" while in the gallery. Her perspective was focused more on her "performance" and she felt that she could not be as "prepared" in the gallery environment as she could for a formal lesson in her classroom. In her classroom, she knew what art pieces her students would be looking at and when. It was a very controlled environment. According to Birgitta, while at the AGO, that control could not be there.

Once the museum/gallery visits were completed, the research moved to the classrooms of the 2 teacher participants. Back at school, a whole other set of

factors came into play, which affected the teaching carried out by the research participants during this research study. Many of these factors came to light when the participants tried to facilitate the art making process on behalf of the students after their visits to the museum/gallery. At numerous points in the interviews and in their journals, both participants shared frustrations about the lack of materials and the inadequate facilities at their schools and in their art rooms for effective teaching to take place. Just as in the museum/gallery, both teachers took a very reserved approach to "teaching" their students during this phase of the research. Sonja would at times give constructive suggestions to her students, yet the students did not always take her advice. She seemed to be very low key in how she presented herself in the role as "teacher," even here in her own classroom. It was a very laid back atmosphere, and this was reflected in the expectations she set out for her students. Always aware of what was going on in her classroom though, Sonja would take advantage of her journal entries as a place where she could express what she saw going on in her classroom. One particular entry of hers was around the conversation she allowed to take place while her students were working on their art pieces. This conversation she compared to the idea of a "quilting-bee" where most students were busy with the task at hand, yet also took part as active participants in a communal discussion that was taking place around various non-art-related topics. Once the students completed their art projects, Sonja was not hesitant to share her enthusiasm for the completed pieces in her journal. Here, she articulated how a number of students had produced amazing works of art which were well thought out and executed. These pieces were true reflections of the individual students. It was also clearly visible how the pieces they

chose at the museum influenced what they created and the creative directions they explored through their art-making. When all the students finished making their pieces Sonja also took great pride in organizing an exhibition of the student work in the school library. This exhibition was an integral part of the overall teaching process for Sonja. Here, it became even more evident how the inspiration from the museum visit shone through each of the individual art works created by her students. This exhibition also led to a class critique, which was carried out in the library in front of the works themselves.

With Birgitta's situation at School B in Toronto, a very different postmuseum teaching experience was observed. Where a very laid back atmosphere was felt in Sonja's classroom, and I was able to circulate around the classroom right next to Sonja, it was not so at School B. When I was present, Birgitta seemed to step back and not "lead" her class in any truly observable way. She seemed to hold back in her role as "teacher" and would almost always just let me walk around alone and converse with her students while they were working away on their art pieces. When I asked Birgitta's students how they felt about the connections that they were making between what they saw in the art piece from the gallery and the piece they were creating, many were hesitant to speak confidently about their work and what they were doing. I had noticed myself that a number of strong connections were being made. However, Birgittta's students seemed often not able to articulate the meaning behind what they were doing. My thoughts were that when I was not there, Birgitta had facilitated that creative process yet was very reserved in the sharing of how she did it with both me and her students. On a final visit to Birgitta's class, her students also gave oral

presentations about their art pieces. These presentations took place in their art room with the students going to the front of the room, holding up their work, and then explaining the concept behind their work and which piece in the gallery inspired them. Many of these works were very well executed, yet Birgitta seemed very reserved with her praise for them.

When looking back at how Sonja and Birgitta had conducted this first part of the research when looking at it from a teaching perspective, it could be concluded that the many more years of experience that Sonja brought with her to the study were evident in a sense of greater ease with which she carried herself throughout the research. As was described earlier, she was able to allow herself to focus more on what was going on and the curriculum and teaching behind the museum visit and then back in her classroom, while Birgitta was more focused on her own performance as opposed to the performance taking place between her and her students. Birgitta had more concern over the fact that she was being observed as part of "official" research taking place, while Sonja, who herself had completed a master's degree in the recent past, was much more familiar and comfortable with her role as a research participant in a study involving herself and her students.

As described earlier, a number of other factors played a key role in how the field trips themselves and how the in-class postmuseum teaching unfolded. These factors revolved around many realities the teacher participants felt they had no control over.

Issues such as lack of support from the school administration were a key factor for both participants. The administrations of both Schools A and B encouraged their teachers to take their students on field trips, yet very little money was made available

to them to make these trips happen. Both participants made note that little respect was given to the art departments at their schools. This lack of respect was shown either in the inequities when it came to supporting athletic field trips yet not art trips, or in the form of disrespect shown when it came to not respecting and acknowledging the work put into an exhibition of student art in the school library. Both of these were examples experienced by Birgitta or Sonja in their respective schools. Similar experiences were shared by me when reflecting on past administrations I had had when I was a high school teacher in Toronto.

A surprising discovery made by me as the research unfolded, was that there was no central staff person in the role of an art consultant at either school board of which School A or School B were a part in Montreal or Toronto. This was surprising, as I came to this research with the past experience of having served in that capacity. While in that role, I had assisted many teachers in collaborative projects between themselves and various museums and galleries across the Greater Toronto Area (GTA). Not having any visual arts central assistance or resource person available proved to serve as a great disadvantage to the teacher participants when reflecting upon what was or was not possible when planning and implementing such collaborative initiatives between their school and the local cultural institutions in their community.

Working with the Education Departments of two of Canada's largest cultural institutions, the Montreal Museum of Fine Arts and the Art Gallery of Ontario, proved to be a very positive and valuable experience. Each institution provided much support when it came to accommodating the two visits of each group of students

when they came to view the respective permanent collections. From the very beginning, the Heads of Education from both galleries were generous with their time and resources when it came to supporting this first phase of the research being carried out.

When co-ordinating a class field trip, a full commitment by one's students is what a teacher ideally seeks. With both grade 11 art classes involved in this research, and as is often the case with any high school field trip, attendance was an issue. There was either another commitment that a student had (i.e., sports), or students were absent that day for whatever reason. Never was there full attendance on any of the visits to either museum/gallery on either of the two field trip days for each school. Once the students were working on their art pieces back at school, the levels of commitment on the part of the students varied as the time went on. At School A in Montreal, large gaps of time often fell between art classes. Due to this time gap, lethargy moved in, and frustration rose in Sonja. This sense of lethargy in her students was one that Sonja could not cope well with as a teacher. Instead, despair set within her and she was at times at odds with the research taking place and the work being completed, or not being completed, by her students. Every once in while, though, Sonja shared a positive note about her students in her journal. With Birgitta's students, however, a more consistent level of working took place. This was due to the fact that Birgitta saw her students for art class every other day. This regular every-other-day scheduled routine helped maintain a sense of continuity, which showed in the pace and commitment at which Birgitta's students completed their art pieces in class. One other noted time of strong student commitment took place while the students were visiting the museum/gallery in their respective cities.

During these visits, strong communication and interaction were taking place amongst the students when it came to selecting the piece that they were going to use as inspiration for their own art production. Being in the gallery environment seemed to encourage a stronger art-related dialogue amongst the students themselves versus when they were in their art classroom back at school.

Relationships with one's fellow teacher colleagues was another major issue that affected the participants in this research. As neither School A nor School B hired supply teachers to cover one's remaining classes when away on a field trip, this job was done by Sonja's or Birgitta's colleagues. There was no "on-call" system in place at either school where an organized roster of coverage rotating through every teacher took place. Sonja and Birgitta had to ask their fellow colleagues themselves if they could watch over their remaining classes, if needed, each time they were going to be away. This "inconvenience" to one's colleagues dampened the enthusiasm for anyone to take their classes on field trips. Sonja also had the misfortune of having colleagues within her own art department who did not support her and her regular teaching activities, let alone assist covering her classes if she was going to be away on a field trip. These harboured feelings of distrust, and at times dislike, truly affected the teaching that occurred during this research.

As mentioned earlier in this compendium, the school timetables/schedules of School A and School B were very different. Sonja saw her grade 11 art class only twice in a 9-day cycle, while Birgitta saw her students every other day for the whole year. This was the timetable set by the administration and was an issue of great concern to Sonja. The lack of continuity in the seeing of her students led to

major gaps in the flow of Sonja's teaching and, in turn, the dragging work ethic of her students. She found herself having to constantly reteach concepts and reexplain lessons over and over. This led to much frustration on the part of Sonja, both personally and professionally, which greatly affected her teaching efforts.

On-line Communication/Technology

The second overarching theme that the data were divided into dealt with the integration of the on-line/technology component of the research. As with the Museum/Gallery Field Trips theme, a series of similar factors played a major role in how the teacher participants found teaching opportunities made available during this part of the research. A short summary of the overall on-line component will first be shared before an elaboration of these factors.

In order for the on-line exchange to take place between School A and School B, both grade 11 art classes needed to be at the same point in the project. As School A in Montreal had their art classes much more spread out, it took them a longer time to reach the point where they had completed their art pieces. As a result, this common point was reached 2 weeks before the end of the school year for both grade 11 art classes. As the last few weeks of the school year are usually filled with much stress due to a series of year-end procedures, the situation was no different for Sonja and Birgitta.

The next step in the research involved each teacher participant trying to place the digital images of their students' art pieces onto a link from their school's website.

This was where complications arose, along with frustrations and short tempers. After many attempts by both the participants and their students, it just would not work! It

was at this point in the research that both Sonja and Birgitta began to strongly express their concerns with what was expected of teachers today when it came to integrating technology into their programs and what the reality was for them. Both shared the fact that their schools lacked proper equipment for such projects to take place and also the support to help the teachers if they wished to implement such initiatives. After much inquiry and a long game of telephone tag, this next step in the research was successfully completed, but only with assistance from each school board's computer consultant. Had it not been for their support, the research would have stood at a standstill.

As the last days of school quickly approached, the on-line exchange had yet to be completed. On their last formal day of school, Sonja and Birgitta each generously gave me 10 minutes of class time to speak to their students about how to make this final leg of the research take place. With Sonja's class, the majority of the students agreed to come in the following week, right after their English exam, to spend 2 hours in a computer lab to engage in the on-line exchange. Sonja booked the lab right there on the spot! With Birgitta's class, that was not possible. Instead, three students volunteered to engage in the exchange on their own time, at home, during the next few days. A week later, the on-line exchanges had taken place between School A and School B.

As explained earlier, it was noted that a series of factors (many very similar to the Museum/Gallery Field Trips component), played a key role in how and why this online component played out as it did and thereby either established an environment for effective teaching on behalf of the teacher participants to take place, or not. These

contributing factors dealing with the technology aspect of the research will now be summarized.

When implementing a new component to one's teaching strategies, previous experience in that particular component's area can play a major role in how one perceives embracing it for what it is worth. This reality came into play when it was discovered that each research participant had a different knowledge/experience base when it came to using technology in their teaching repertoire. Sonja was the most familiar with technology as she had been teaching the Media course at her school for a number of years. I had limited experience in the integration of technology yet was aware of the potential role technology could play in the curriculum if incorporated properly. I was also well aware of the keen interest held in technology by many of today's students. Birgitta was the most apprehensive, had the least amount of experience, and shared her immediate nervousness when it came to integrating technology into her classroom. Much of this nervousness was based on negative past experiences she had had with it and how she saw it being used (or misused) in her direct teaching environment.

The role of the school administration, once again, was a key factor in how the technology aspect of the research played out. In Sonja's situation at School A, she tried to stay as far away from her principal as she could. For her, it was her principal who presented challenges in her daily life as a teacher, not someone to go to for support when trying new initiatives. Throughout the research, I could sense a very strained relationship between Sonja and her principal. In her mind, she was alone at her school when confronted with problems that arose in her teaching or within her

art program.

At School B, the opposite occurred. Here, the vice-principal was very supportive of Birgitta and the research being conducted. He did not give direct assistance but directed Sonja and me in the right direction in order to receive the help that was needed to move the technology aspect of the research forward when a roadblock was reached.

As mentioned earlier, the assistance of the school board computer consultants was what enabled the project to continue at a crucial point in the research. This assistance from central school board personnel was key in supporting the teacher participants in the progress of their own development as effective teacher practitioners. Their contribution to this research can not be expressed enough.

Another aspect of the role of the School Board was as a supporter of professional development for their teachers when it came to learning about new technologies and how to implement them into one's teaching practice. In Sonja's situation, she praised her school board for the ample opportunities it made available for teachers to expand their technological expertise. Sonja herself did not enroll in any of the past year's workshops, as she found them to be more for the novice practitioner. She did suggest however that these workshops should be delivered in the schools where the teachers themselves are teaching. To her, this would make the learning more practical and easier to adapt to the everyday classroom practice of the teachers enrolled. In Birgitta's case, she felt very strongly that her school board did not offer enough professional development opportunities for its teachers. For her, a major concern around the issue of professional development was when it was to take place. Birgitta

believed that these growth opportunities for teachers should be integrated into the school calendar so that teachers would actually have programmed time to take them. The four professional development days on her school calendar were already booked with meetings and other commitments, leaving little time for personal professional development to take place. Upon reflection of my past experiences as an art consultant and the workshops we were able to deliver as the Toronto District School Board central Visual Arts Team, I could relate more to Birgitta's sentiments. Of the three art consultants at the school board, only one had expertise in the role of technology and the art curriculum. With so many responsibilities already on her plate, my colleague was able to deliver only a handful of workshops for teachers to sign up for in the area of technology and visual arts. A point well taken on behalf of Sonja was that with the sheer size of the Toronto District School Board, and these workshops being offered after school hours, limited numbers of teachers seriously considered signing up and actually attending these workshops due to the distance they would have to travel to attend them.

In this second component of the research, the museums visited had two roles to play. One of those roles was providing up-to-date and complete access to their permanent collections on-line. When the students were back at school working on their own individual art pieces after their visits to their respective museums/galleries, a number of them wished to refresh their memories about their chosen museum piece and went on a computer to find the art work which they had selected. Both institutions informed us that their entire permanent collections were available on-line and that at any time the students could access an image of their chosen piece, with information about it being provided (i.e., title of work, name of artist, year completed, possible

description). At times, these images were not to be found. When a few students typed in the title of their art piece, "Image Currently Unavailable" would appear. This discouraged many of the students as well as Sonja and Birgitta at a key time when they were working away during their scheduled art class and needed that visual reference right then and there. A number of those students found it necessary then to select a new art work from the museum collection to work from. This in turn, caused a delay in their progress. In a second role played by the museums when it came to digital access of the pieces chosen by the students, greater success was achieved. When the website links were being created through the help of the board computer consultants, each institution provided us with a CD with images of all the art works chosen by the students who visited that institution. The images were then taken from the CDs and placed alongside an image of the art piece which was created by the student whom it inspired.

The role played by the students throughout this second part of the research and how it affected the teaching being carried out by Sonja and Birgitta varied as to what class it was and at what point in the research we were at. Sonja's students overall were working at a higher level when it came to the use of technology than Birgitta's. This was due mostly to the fact that many of them were also enrolled in Sonja's Media class. At various points of the research, Sonja went to her students for help around computer-related issues, and they gladly offered their assistance to her. This type of honest sharing and flexibility in teaching style on the part of Sonja was very honourable. She knew that in today's youth technoculture, teaching about and using technology requires the teacher to accept the fact that at times the students can teach the teacher.

Today, teaching using technology is a reciprocal undertaking. In Birgitta's situation, however, she did make mention of a few students who did lack basic computer skills. One in particular, a new student from the Congo, had never used a computer. Birgitta shared that her other students had to teach the newcomer the basic application of email. At the close of the research, when it came time for the on-line exchange, many students from both School A and School B came forward and showed a strong commitment to bringing closure to the research. Even after classes were officially over, they came out on their own time to complete the on-line exchange. The dedication was there.

Healthy working relationships with one's teacher colleagues are important in any school environment. At a time when government-introduced curriculum is encouraging teachers to integrate technology through various teaching strategies such as team teaching or facilitated/coached instruction, teachers now more than ever need to work together. In this research, both Sonja and Birgitta did not find this model of co-operative teaching to their liking. During this component of the research, which involved new technologies, each teacher participant expressed numerous times how they felt that they would be pestering their colleagues if they were to go to anyone for help. Birgitta felt she was "bothering" them, and Sonja did not even attempt to seek help from her colleagues at all. Both preferred to work on their own, without the help of other teachers at their school. This conscious choice of working alone affected the progress of their teaching at various points in the research. When reflecting on my own personal thoughts about this topic, I shared the importance of strong relationships with teacher colleagues. This is key at a time when more and more responsibilities are being downloaded onto teachers by their administration, at the same time that less

assistance is being offered from these administrators to help carry out these various initiatives and responsibilities.

At both School A and School B, the teacher participants shared stories of inadequate facilities and equipment for the proper engagement of technology in their visual arts programs. After the research was complete, both Sonja and Birgitta claimed that neither of them was ready to teach using the integration of technology in such a project as was conducted in this research. Sonja said that the situation was slowly improving in her school, but there was still a long way to go. Reflecting on my own past experiences working with many different art teachers in a variety of high schools across Toronto as an art consultant, a vast range of opportunities to use technology in their classrooms was recalled. Some schools had no computers available to the art department or had old, nonfunctioning equipment sitting at the back of the room, or the complete opposite was seen. A handful of schools had fully equipped art rooms with access to labs lined with computers and the latest in computer technology. School A and School B, the sites used in this research, fell into the first category, with very limited access to technology.

The final factor that affected the outcome of the on-line/technology component of this research is that of issues surrounding the school timetable. As was mentioned previously in this compendium, Birgitta's students were ready to engage in the on-line component of the research over a month earlier than Sonja's but had to wait until Sonja's students were at the same point as they were. This was due to the fact that the two schools had very different timetables, which directly affected the pace at which the various stages in the research were completed. Another concern around this varying

days, by the time they were ready for the on-line exchange, much of the momentum of the research had disappeared. Without this sense of "flow," which is often found in exemplary teaching, achieving success with one's students is at risk. That was the issue worrying Sonja.

The school timetable was also the cause of differentiated class composition, which was also found by both Sonja and Birgitta. This presented many challenges in respect to teaching not only about technology but the entire art curriculum for the teacher participants. What Sonja and Birgitta shared in their interviews was that when the administration was creating the student timetables at the beginning of the school year, students of varying prior knowledge and achievement levels were all placed in the same class in order to keep the class numbers high enough so that particular classes would not be cancelled. This led to the teachers having to teach, at times, three or four different lessons, each to different students, yet all who were in the same class! This was mostly the case with Birgitta. She found that there were some students put into her class who did not have grade 10 visual arts and one new student to the school, new also to Canada, who brought language challenges as well as a knowledge deficit in visual arts which was expected by Birgitta for placement into the grade 11 level. These concerns stemming from timetabling decisions made by the respective school administrations greatly affected the teaching strategies used by both Sonja and Birgitta throughout the research.

Discussion

To engage in a discussion around the research conducted and the compendium previously presented, let me introduce this section with a restatement of the thesis question:

How does a visual arts exchange project, containing both actual and on-line components, between two schools and two museums in Montreal and Toronto, offer teaching opportunities within an art curriculum, as seen from the perspectives of the teachers and the exchange co-ordinator?

When deconstructing the thesis question, the focus of the research was to look at the teaching opportunities experienced by the participating teachers while the research itself was being carried out. The first point of discussion to be put forward is that the action research conducted brought to the forefront the multiple and layered complexities that were experienced by Sonja and Birgitta, the teacher participants at School A in Montreal and School B in Toronto, as they engaged in the various components of the research study itself. These complexities resulted at times as a direct reflection of the individual personalities of the teacher participants and most often the school environments within which each of the participants worked teaching their respective grade 11 art classes. Through the analysis of the data collected, the definition of teaching opportunities expanded to not only include the traditional understanding of teaching involving direct lesson instruction in front of one's students but to everything emcompassing these 2 individuals on a professional level as the research itself progressed from one stage to the next. These many emcompassing contributors, either directly or indirectly, had a significant impact on

how the teacher participants conducted themselves in their daily role as "the teacher" as the research unfolded.

After reading Chapter 4, the Research Findings, and the summary in the Compendium, examples of these encompassing contributors that affected the teaching opportunities of the two teacher participants were discussed in terms of a standard set of factors. These factors were very similar for the two overarching themes that evolved in the data analysis: (a) Museum/Gallery Field Trips and (b) On-line Communication and Technology. The list of the factors discovered to contribute to these two themes served as the basis of the organizational structure given to the sharing of the research findings in Chapter 4 of this dissertation. They are: (a) personal reflections on the particular themes (either museum/gallery field trips or on-line communications and technology), (b) role of the school administration, (c) role of the school board, (d) commitment made by the museums, (e) commitment made by the students, (f) role played by one's teacher colleagues, and (g) the school timetables. One additional factor that played a major role under the On-line Communications and Technology theme was that of technical support. Each of these listed factors had a contributing effect as to how each teacher participant made daily decisions in her individual art classroom, how she perceived her role as an "art teacher" and what that role actually involved, and how she responded to the various demands made on her by her respective students, teacher colleagues, and administration.

As each of the factors above were previously elaborated upon in great detail in Chapter 4 and in the preceding Compendium, this discussion will now take a closer look

at connections made between the literature review in Chapter 2 surrounding the various fields of research that contributed to this study and the subsequent findings that came as a result of the action research study carried out. Through a theoretical analysis, a number of relevant parallels of discovery can be identified.

As Bullock and Gailbraith (1992) identified four themes that characterized K-12 art teachers' concerns in the day-to-day practice of art teaching, much of what Sonja and Birgitta experienced throughout this study echoed these concerns. Such realities, expressed as "a sense of dissonance between what teachers want to do and what they can actually do in schools" (p. 20) was clearly visible in how both teacher participants had a vision of how to implement the technology, yet when it came right down to it, lacked the skills and proper equipment in order to carry it through. "Frustration with scheduling," "widely varying abilities in the same classes," and "lack of time to teach the sort of art experiences that students should have" (p. 20) all became apparent as the research undertaken went from one phase of the study to the next.

As the students at School A and School B used the museum/gallery art works as inspiration for their own art making back in the classroom, they were "encouraged to generate their own questions, engage in relevant investigations and reflect upon their own individual progress" (Steward & Walker, 2005, p.15). Each of these key learning experiences occurred while the students were forced to make their own decisions in the selection of an art work at the museum and then directly following when they created their own art pieces in the classroom back at school. While this was all taking place, the roles played by Sonja and Birgitta shifted from what Stewart and Walker called "one who dictates information to one who is a fellow inquirer as students construct knowledge"

(p. 15). When observing their teaching practice, they became facilitators in the learning process as opposed to always giving direction and instruction as to what was to happen and when.

In both the museum/gallery setting and in their art classrooms, the students were seen engaging in numerous instances of co-operative education practices. As Borich (2004) stressed, the results of co-operative education, critical thinking, reasoning, and effective problem-solving skills all resulted as the students engaged in discussions both on and off topic conducted in the museum environment as well as while they were working away on their art projects back at school. It was through these social interactions that individual personalities became visible and the students in turn developed a sense of their own identities. This coming to terms with who they were as individuals was at times a topic of note in the journal entries of both Sonja and Birgitta. Sonja distinctly made note of a classroom discussion that made her reflect on the wellknown Russian psychologist Lev Vygotsky (1896-1934). Vygotsky, in his Social Development Theory, believed that a higher level of knowledge was acquired through the sharing of thoughts and ideas through the direct interaction in a participatory group. This sharing of knowledge found in the art museum and art classroom focused often on intellectual content resulting in teaching opportunities embraced by both Sonja and Birgitta. In many of these co-operative situations, students often took responsibility for each other's growth and learning.

When referencing the field of situated learning, the experiences encountered by the students from both School A and School B while at their respective museum/gallery validated the concept that "learning is part a product of the activity, context and culture in

which it is developed and used" (Brown, Collins and Duguid, 1998, p. 32). When at the museum/gallery, the context of where they were and what they were viewing created a level of engagement that surpassed that which was witnessed when they were back at school. In a situated learning experience, it was Pitri (2004) who noted that it is the involvement of other learners, the direct environment, and the activities engaged in in that direct environment that allows students to engage in a constructivist learning experience resulting in deeper understanding and thinking.

When looking at the overall idea of an educational exchange experience, Choldin (1989) emphasized that the orientation and programming of the exchange itself are the two most important parts of a successful exchange experience. In this action research study, the familiarity and availability of the technology, the mechanism through which the exchange was to be carried out, played a key role in the level of success achieved by the overall exchange. With reference to Choldin, it was the set-up and development of the websites used for the actual on-line exchange in this study that paralleled the concept of the orientation and programming aspect of his traditional exchange experience carried out in his study of language exchanges amongst students across Canada.

It was by observing the work of Mary Meagher (1995), however, and how she used the Internet to conduct a language exchange in Mexico City that informed this action research study carried out with Sonja's and Birgitta's grade 11 art students. In this study, the students created art pieces which they knew would be shared with teens from another province. Knowing that their work would be seen by other teens could possibly have served as a motivating factor in the execution of their own individual art projects.

Meagher found that as her students exchanged in an on-line language exchange, it was

the fact that they were exchanging with real people, on-line, that they cared about what they said. The resulting parallel could be made between the on-line exchange between the students at School A in Quebec and at School B in Toronto. Meagher noted that the more relevant to the real world her projects (language exchange) were, the more motivated were her students to research, collaborate, and learn.

The challenges discovered in the field where exchanges involved the use of technology were also found in this action research study. These challenges, as mentioned in numerous places throughout this dissertation, revolve around difficulty experienced in learning how to use the technology and oftentimes the frustrations experienced by the students and exchange co-ordinators (the teachers) when the computers or technology did not function properly or as one had intended. These sentiments were echoed by Mengel (1998) with a clear statement of "access, time and training" (p. 64) as being the three key roadblocks around the successful incorporation of technology used by teachers in the art classroom.

When looking at Sonja's and Birgitta's overall experience of integrating the museum/gallery field trip with a technology component attached to it, they concurred with Valenza (1998), who claimed that the use of the Internet augments the museum experience, yet both agreed, as stated, it can not replace the viewing of real art in a museum. "On-line images, while good, will never reach the quality and can never be viewed in the true size, scale and vitality of the original" (p. 11).

This discussion will now take a look once again at the individual perspectives of the 2 teacher participants. Through a close look at their personal reflections, each teacher involved had her own sense of how she benefited through her participation in the research and how it opened her eyes to various aspects of her own teaching practice. It was noted throughout this dissertation, that Sonja and Birgitta were 2 very unique individuals who had varying ways of conducting themselves when in the role of "teacher" and when running their individual art classrooms. These differences are further visible in the following sharing of some of their final reflections during the third and final interview conducted.

When Sonja was asked what the most valuable part of the research undertaken was in terms of teaching opportunities, her answer came from a place focused on her personal and professional needs as a teacher. For her, it was the simple fact of having support in her classroom and also the actual museum visit. In her words:

Well, I guess just the fact that, just your presence basically. That support you gave. It was also a stimulation, because the project would not have happened had you not been there. (Sonja, transcription, p. 3-1)

Later in the final interview, Sonja elaborated on this critical aspect of professional and at times emotional support that she found she received through her participation in the research. When asked if she would be interested in participating in such a project if the opportunity arose in the future, Sonja shared:

Well, I think I would stick my head out and say, "Yes, I would like to participate." Again, I think it's because sometimes it's a very lonely job being an art teacher. And, also, it's fun to collaborate with someone! But let me go back to the lonely aspect. It sort of made me feel as if, I don't know how to put it, that someone else understood what I was going through. Art is one of those subjects that everybody feels that they should pass, not only pass but get incredible marks in! A lot of times these students, as well as the other students, thought that the art course was there to prop up their marks and that there really didn't need to be any kind of effort. It's a very maligned subject and sometimes very difficult to actually instruct. So, it felt good to have an exchange with you because you have so much experience in the field. You actually understood what I was going through. (Sonja, transcription, p. 3-11)

When asked what she, as the art teacher, believed was the most valuable part of the research for her students, her response was focused on the art her students had made, the process of how they approached making it, and the future exhibition of their finished pieces. Sonja elaborated:

I think that for some it was the fact they will get to show their work and the fact that other people will see their work. Also, the fact that it wasn't just going to remain in the classroom or even just be displayed in the school. For others, I think it was the actual making, because a lot of them weren't thinking of the ultimate end of it. There was a lot of collaboration on some of the works. I think they found that rewarding, just sharing the experience. (Sonja, transcription, p. 3-2)

This response by Sonja concerning how she perceived her students' experience of the research involvement was another window into how she reflected on her own practice as the teacher in this research. This proved interesting, as her thoughts about her students reflected mainly the traditional practice of the making and showcasing of their art, which is the core of art classroom practice.

When Sonja was asked what the least valuable part of the research project in terms of teaching opportunities was for her, she elaborated on the great length of time it took for her students to complete their art works and how this caused some students, at times, to lose sight of the overall purpose of the project. This issue of time was also the focus of her response as to what she believed her students found to be the least rewarding, of their involvement in the research.

For Birgitta, her reply as to what was the most valuable part of the research in terms of a teaching opportunity came also as a reflection of her individual needs as a teacher. As Birgitta stated:

The part that I found the most valuable is pretty selfish. It was to see how another group was able to do something with the same subject and the same project. For

me it was to compare myself and another teacher with the same project and see where I can improve and see what my strengths are and what my weaknesses are. (Birgitta, transcription, p. 3-17)

This reflection by Birgitta, once again, made notice of somewhat of a sense of insecurity in what she was doing. She was worried about her personal level of achievement, whereas Sonja was more confident with her own self as the teacher and more focused on the results of her students. This broader perspective could be attributed to the many more years of teaching experience that Sonja had at the time that the research took place.

When asked about her view as to the least valuable part of the research in terms of teaching opportunities, Birgitta focused on her concerns over what was up for viewing at the art gallery during her visits. In her words:

The least valuable for me I think was when my students had to pick from one particular collection, the permanent collection, in a gallery that, you know, was not completely open. It was like, we go there, and there was construction, and then this and then that. (Birgitta, transcription, p. 3-17)

When asked about what she believed her students felt was the most rewarding experience regarding their overall involvement in the research project, Birgitta elaborated on the excitement in her students for the exhibition of their completed works at the Art Gallery of Ontario to be held later that fall. Her answer was as follows:

I think the most rewarding part was the fact that they will have an exhibition of their work, and they had that goal to achieve. So I find that for them, it's to have an exhibition at the AGO. It's very rewarding for them! (Birgitta, transcription, p. 3-18)

When reading this transcription in hindsight, it must have been a great letdown for Birgitta's students to find out that their art work was disposed of by the school caretaker and that there would be no exhibition of their work held at the Art Gallery

of Ontario.

When Birgitta reflected on what she believed her students found as the least rewarding experience of the research conducted, she brought up the fact that due to the lateness of the on-line exchange component of the project, the majority of her students did not have the chance to see the work that School A had produced. It was just too late for many of them, and by that time they were focusing on their final exams.

Positioning of the Research in the Greater Field of Art Education

When stepping back and looking at how the research conducted in this dissertation merges with and also contributes to the greater field of art education, a number of strong contextual links can be made. These links can be found in research surrounding the two overarching themes explored in the research question (museum/gallery field trip experiences and on-line communication/technology) and their integration in the world of education.

As was discussed in Chapter 2 in the literature review, much research has been written to support teachers visiting museums and galleries and incorporating these visits into their visual arts programs (Berry, 1998; Caston, 1980; Dewey, 1900; Floyd, 2002; Jeffers, 2003; Ott, 1980). Through the research conducted in this dissertation, this initiative of utilizing museums and galleries as inspiration was only reinforced by both teacher participants. In conversations with Sonja in the following year after the research took place, she was excited to share with me that she had already taken two of her current classes to the Montreal Museum of Fine Arts for another smaller project which she herself had initiated. She thanked me for "showing her the light" and

reminding her, through her participation in this dissertation research, how powerful a teaching tool seeing real works of art could be for her students and herself! Near the close of her final interview, Birgitta shared with me as well that her involvement in this research made her reevaluate the importance of the field trip experience for her students. Even though she was frustrated with the limited viewing available at the AGO, she was already planning ahead for next year to visit a number of smaller galleries in Toronto to allow her students to see what contemporary artists were doing in their current practices. She "confessed" that she did not do that enough and, through her participation in the research, had realized that she had been neglecting this powerful teaching component of a strong secondary visual arts program.

When taking note of how Birgitta, and especially Sonja, had approached the viewing of art with their students, I was reminded of Rika Burnham's 1994 article in *Teacher's College Record* entitled "If You Don't Stop, You Don't See Anything". In her article, Burnham, an Associate Museum Educator at the Metropolitan Museum of Art in New York, came to realize that when leading a group of students around a museum or gallery, she found it was time "to stop lecturing and begin listening, not only to what the students had to say about art, but what they had to say about the experience of art" (p. 521). Burnham continued to elaborate on this topic:

The greatest gift we can give our students in the museum is the acceptance of their responses—as a group and as individuals—and an affirmation that whatever experiences and reference each brings, it is valuable to our collective understanding of a work of art. The high school students who come to the museum already know a great deal about life, and we as instructors must understand that experience is tremendous preparation for looking at art. (p. 521)

When reading Burham's words I could not help but think of Sonja and how she had

worked to develop a very similar sense around the use of personal experience when her students were taught how to approach looking at art. Burnham continued to share how she believed we should position the students' experience first to achieve a more rewarding and personal understanding of the real art work in front of us. Continuing her discussion about how teachers can make the most of seeing art in a museum with their students, Burnham explained:

The student's response and experience comes first, before one's own, before the museum's, before the history of art. To encourage this free and interactive response means that teachers need to create an arena in which students can question, search, challenge, be moved by, and ultimately bring the work into the context of their own lives without being intimidated or made to feel inadequate. (p. 524)

In 2005, Burnham along with Elliott Kai-Kee, a colleague from the Education Department at the J. Paul Getty Museum, wrote in the *Journal of Aesthetic Education* an article entitled "The Art of Teaching in the Museum." Using a synopsis of a teaching encounter with a Rembrandt painting in the collection at the Getty, Burnham and Kai-Kee proceeded to develop their theory further. At one point in the article they explain:

The instructor does not tell the students the title of the painting or the story of Europa's abduction. Instead she urges the students to make sense of the story by entering Rembrandt's visual world, trusting what they can see and understand through observation alone. (p. 70)

Both of these above references supported the approach encouraged to be used in this action research by the students from School A and School B as they visited their respective art museum or gallery and ultimately as they selected their particular art works as the inspiration for their own art creations back in their art classrooms.

When referencing the situation with regards to the on-line communication/ integration of technology aspect of the action research, the reality of what was experienced with both Sonja and Birgitta has been shared in similar situations by a number of researchers (Browning, 2006; Delacruz, 2004; Zhou, Pugh, Sheldon & Beyers, 2002). Elizabeth Delacruz concluded in her extensive study about technology and its integration in the teaching of art that three major factors had a considerable effect on its success. These factors, (a) human infrastructure/ administrative management (support from one's administrative in the implementation of technology), (b) training (sufficient technology training opportunities provided by one's school board), and (c) time (time for proper planning and implementation), were all issues that deeply affected the teaching realities of both Sonja and Birgitta. Other issues that Delacruz discussed were also found in this dissertation research. Examples of these were concerns around access to technology and how the definition of access has a vastly different meaning in different schools, or a school's lack of technology support personnel to maintain the technology equipment they do have. Delacruz quoted one experience from a teacher:

Our district has beautiful computer labs but do not hire the staff support in the labs. They tried parents but that didn't work. So, the labs go unused. (p. 11)

In her article "Teachers' Working Conditions and the Unmet Promise of Technology," where Delacruz (2004) shared her study results, she also shared stories provided by teachers who were enrolled in her technology classes about the realities they found in their daily classrooms. Many of these realities rang true within this research. In Delacruz's words:

Their stories provided snapshots of unrealistic expectations and disappointing experiences, filtered by an awareness of the complex issues that their districts attempted to address. Most teachers reported that their districts mandated that they use computers in their teaching. Many were frustrated that they were not given enough time, training or support to carry out these mandates. Teachers were expected to reach specific levels of technology proficiency, to use new software in their curricular planning, and to develop lessons that involve students in computer-facilitated learning. In one district, teachers who did not acquire basic computer skills were negatively evaluated and sanctioned. (p.11)

In her conclusions, Delacruz shared that she hoped that her article would

illuminate dimensions of teachers' technology working conditions that have been identified by others as impediments to innovative technology implementation, and that it will deflate some of the hyperbole about the promise of technology in the art room. Our challenge is to convincingly demonstrate how to engage new technologies in authentic ways that accommodate teachers' values, work conditions, time constraints, and school cultures. (p. 16)

It must be noted that Delacruz's (2004) study was based on a reality she found in American schools. To bring the context closer to home, the Canadian Teachers Federation (CTF), in 2003, published a research paper entitled *Virtual Education: Real Educators*. This research paper was written in response to online education issues and to undertake a review of its effectiveness in public education in Canada. In the study, thousands of educators from public school systems across Canada were surveyed and interviewed about many different aspects of on-line and computer technology and its use in schools. Some of these aspects dealt with concerns such as equity in relation to issues of access to technology, rising technology costs to maintain systems in schools, and teacher training and development. Through many discussions of specific examples from various schools and school boards across Canada, a number of basic conclusions resulted from the study. Noting that cuts were being experienced in education across the country during the 1990s and the turn of the 21st century, the study suggested that a central focus of efforts to improve educational quality should

be on strengthening the quality of teachers and the art and practice of teaching rather than on pouring scarce educational dollars into costly unproven technologies (p. 15). These sentiments were repeated at different points in the report, stressing the importance of quality professional development for teachers as being a critical factor in successfully implementing classroom technology. To summarize, as a closing comment from the data gathered in the Canadian Teachers Federation study, the report stated emphatically: "The point is neither to embrace nor reject technology but to use it wisely" (p. 57).

Implications for Further Research

The action research undertaken in this dissertation resulted in a data collection gathered from two particular teaching situations: Sonja at School A in Montreal and Birgitta at School B in Toronto. As was noted in the limitations of the research in Chapter 3, the research involved only the contributions of the 2 teacher participants as well as me in the role of researcher/co-ordinator and as a third high school art teacher. This was only one study orchestrated to observe the potential teaching opportunities offered at a particular time and place under a set of given circumstances. With these parameters in mind, implications for further research were sought from within the study itself. For this, a detailed analysis of the final interview question responses will now be shared.

The final question asked of Sonja and Birgitta at the close of the third interview revolved around what modifications to the project they would recommend the second time around, if they were to engage in such a project again. As the purpose of action research can serve threefold, as was discussed in Chapter 3 of this dissertation—(a) professional, (b) personal and (c) political purposes—it is the reflections of the teacher

participants that should serve as potential directional monitors as to recommendations for next steps. For the action research to truly serve as a bridge between theory and practice, it is their voice, along with the researcher's together, that is key in the discussion of further research.

Sonja's reply to the final question had three suggestions. Her first suggestion was to make the timeline of the project shorter. Explaining that this was no fault of the organization of the project itself but rather a factor of the timetable under which she was working at School A, Sonja was already looking into this. At the close of the interview she shared that her principal informed her that the following year her grade 11 art class would be timetabled as a semestered course. This would mean that she would see her students every day over the course of one term. Sonja was elated to hear this news, especially since she did not believe that her principal even knew what was going on or had little respect for the art program at her school. This change would mean that Sonia could build a greater sense of continuity into her program, thereby alleviating some of the lethargy which overcame her students due to the long stretches of time between each class. Sonja was surprised when she heard about this, but she believed her grumbling over the years had finally been listened to. She even surmised that it was possibly her involvement in this project that helped instigate the sudden change in scheduling for the coming year.

Sonja's second suggestion was to have all of the required technology in place and ready for the on-line component/exchange to take shape once the teachers were at that particular point in the project. This recommendation was well received, especially when one takes note of the runaround experienced during that phase of the research and

the dependence placed upon the computer consultants at each respective school board.

Sonja's third recommendation was that along with the images of the student art being posted on the school websites, students could also write a commentary or personal reflection of the process they went through while creating their own works of art. This commentary could then help the students at the opposite school get a greater understanding of what they were looking at when they themselves were preparing to write their own comments about the student work they were viewing, for the actual exchange of ideas.

Birgitta's reply to the final interview question provided two suggestions. Her first suggestion was that she would like to see a more deliberate sense of structure in the overall format of the research. By structure, Birgitta shared that she would have liked to see set dates posted as to when the students were to be at certain points in their project or designated dates as to when the on-line exchange was to take place. The lack of a sense of a set defined timeline, due mainly to her students having to wait for Sonja's students to be where they were in the project, created a feeling of extreme frustration for Birgitta. She had even mentioned a number of times that this frustration had made her almost ready to quit the research.

Birgitta's second suggestion echoed that of Sonja. This suggestion was the request to have all the required technology in place and ready for the on-line exchange to be performed immediately after the students completed their art pieces. It was without saying that the obstacles created by the construction of the website links to the respective school websites in preparation for the on-line exchange was by far the most challenging part of the research undertaken for both teacher

participants.

When asked the final interview question, my suggestions came once again from the dual lens of researcher and of a high school visual arts teacher. My suggestions were very similar to those of Sonja and Birgitta and were based on scheduling and technology issues. If I were to conduct a research initiative such as this again, I would look for 2 teacher participants whose teaching schedules were similar when it came to how often they saw their students. From the researcher point of view, from the aspect of trying to be at both research sites as much as possible when the teachers were working with their students, a nonsemestered, full-year program at both schools would be ideal. This would ensure that minimal numbers of classes would be missed due to commuting back and forth between Montreal and Toronto, as the drive could be scheduled on the days when there were no art classes being taught. This would also present a schedule where both classes could be at the same place in the project at the same time. This would allow for a more efficiently timed transition from the art-making phase to the on-line phase of the project to take place.

My second suggestion also revolved around the issue of technology. Before the research even began, I would take a survey of the technology available at each of the two schools participating in the research and make sure each site was equipped with the proper technology to make the on-line exchange possible. I would also make contact with the required individuals (i.e., computer consultants) at each school board in advance, in order that if their assistance was needed, they would already be on board, aware and available in case of any "technological emergencies." This would serve as a precautionary measure in order that the participating teachers would feel

more confident and at ease as they entered the second phase of the research. This measure would once again be determined by the level of technological expertise inherent in each of the participating teachers at the start of the research.

The idea of further research in the overarching themes explored in this dissertation leave many doors open for ongoing investigation. Museums and galleries are constantly implementing new strategies in their programming to bring teachers and their students to their museums either live or virtually through the use of innovative uses of technology (Roland, 2005). Whether teachers make use of these programming initiatives or not, it is how they fit into the daily reality of the course curriculum designed by the classroom teacher that is key. With the varying levels of technology expertise among practicing teachers, whatever technology is introduced into our classrooms must "fit" with the working conditions and expertise of that particular teacher. The question resulting from the data collected in this research is "How do we bring it into our curricula and use it to enhance learning when we often aren't really sure about all of it ourselves?" (Orr, 2004, p. 1).

Conclusions

As was shared earlier in Chapter 3, Gay et al. (2006) believe that through action research, classroom teachers are empowered to:

- 1. Make informed decisions about what to change and what not to change
- 2. Link prior knowledge to new information
- 3. Learn from experience (even failures)
- 4. Ask questions and systematically find answers. (p. 499)

When reviewing the compendium and the discussion from the action research undertaken, it is clear that each of the four listed potential results were achieved by both Sonja and Birgitta through their involvement in the research. By the end of the

school year, each had made informed decisions about potential new curriculum ideas for their visual arts programs based on their participation in the project. While making these decisions, new information that was acquired through exploring new teaching strategies and through the integration of new components into their art program was routinely being linked with prior knowledge with which they entered the action research. This prior knowledge was an accumulation of their personal and professional experiences going back to when they were in high school, all the way up to the present day patterns and processes of their current art teaching practices just before the project began. All of the participants, including me, learned from the experiences, especially when it came to the challenges experienced via the integration of technology. Through each stage of the research conducted, ongoing questions were being asked, and answers came from multiple sources—from within themselves, their students, me or external contributors such as the computer consultants.

Earlier this year, in May 2009, the National Art Education Association posted a document on their website entitled "Learning in a Visual Age: The Critical Importance of Visual Arts Education." This document shared the results of an indepth study that attempted to explain where the field of Art Education finds itself today, in the current digitally visual world in which we live. Discussing the different types of research that are necessary for us as art educators to come to an understanding of this world, the study purports that

there is a need for other types of research, such as qualitative studies that show the characteristics of effective teaching and learning in rich description. To achieve external validity, research on learning in the visual arts must be conducted in a wide variety of settings, both inside and outside of schools, including after-school programs, museums and community settings. (NAEA, 2009)

I believe the action research conducted in this dissertation achieves this goal on numerous fronts. The rich description of the teaching practices experienced in this action research study is a result owed to the teacher participants for their honest and forthcoming contributions. Much gratitude is given to them for these heartfelt contributions. These research findings bring us one step closer to understanding the complex world of teaching visual arts and the many variables which affect its daily execution in our schools.

References

- Ary, D., Jacobs and L., Razavieh, A. (2002). *Introduction to research in education*, Belmont, CA: Wadsworth/Thomson Learning
- Barrett, T. (1997). Talking about student art, Davis Publications. Worcester, MA: Davis
- Berry, N. (1998, March). A focus on art museum/school collaborations.

 Art Education, 8-14.
- Bogdan, R. & Bilken, S. (1998). *Qualitative research in education* (3rd ed.) Boston: Allyn & Bacon.
- Bolin, P. E. (1998). NAEA advisory sheet: Art museum and schools as partners in learning, Reston, VA: NAEA Press
- Borich, G. (2004). *Effective teaching methods* (5th ed.), Upper Saddle River, NJ: Pearson Education.
- Brown, S., Collins, A. & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.
- Browning, K. (2006). Digital applications in elementary visual arts: A case study in Ontario and Newfoundland schools. *Canadian Review of Art Education*, 33, 24-41.
- Bullock, A.L. & Gailbraith, L. (1992). Images of art teaching: Comparing the beliefs and practices of two secondary art teachers. *Studies in Art Education*, 33(2), 86-97.
- Burden, P. & Byrd, D. (1999). Methods for Effective Teaching, Boston: Allyn and Bacon
- Burnham, R. (1994). If you don't stop, you don't see anything. *Teacher's College Record*, 95(4), Summer 1994, 520 -525.

- Burnham, R. and Kai-Lee, E. (2005). The art of teaching in the museum.

 Journal of Aesthetic Education, 39(1), 70.
- Canadian Teachers Federation (2003). Virtual education: Real educators, Published research study.
- Caston, E. (1989). A model for teaching in a museum setting. *Museum History*Theory and Practice. Reston, VA: NAEA Press
- Caston, E. (1980). The object of my affection: A commentary on museumness. in *Art Education*, 21-24.
- Choldin, E. (1989). Organizing a cross-cultural student exchange. *Multiculturalism*, 12(2), 22-23.
- Clark, R. (1998, November). Constructing the postmodern classroom.

 Art Education, 6-11.
- Connelly, M. & Clandinin, J. (1998). *Teachers as curriculum planners:*Narratives of experience. Toronto, ON: OISE Press.
- Creswell, J.W. (1997). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, CA: Sage
- Cruikshank, D., Jenkins, D., & Metcalf, K. (2006). *The act of teaching* (4th ed.)

 New York: MacGraw Hill
- Csikszentmihalyi, M. & Hermanson, K. (1995). Intrinsic motivation in museums: What makes visitors want to learn? *Museum News*. 74 (3), 35.
- Cumming, A., Mackay, R., & Sakyi, A. (1994). Learning processes in a Canadian exchange program for multicultural anti-racist education. *Canadian Journal of Education*, 19(4), 399-417.

- Delacruz, E. (1997). Instruction: Design for Inquiry Instructional theory research and practice in art education. Reston, VA: NAEA Press
- Delacruz, E. (2004). Teachers' working conditions and the unmet promise of technology. *Studies in Art Education*, 46(1), 6-19.
- DeLoughry, T. (1994, September). Museums Go High Tech. *Chronicle of Higher Education*. A47-A49.
- Dewey, John (1900). School and Society. Chicago: University of Chicago Press
- Dewey, J. (1954). Art and Education. Merion, PA: Barnes Foundation Press
- Dobell, J. (1984). Chairman's Message. SEVEC Document Exchanges: Assessing their Value. Ottawa, ON.
- Efland, A., Freedman, K., & Stuhr, P. (1996). Postmodern art education: An approach to curriculum. Reston, VA: NAEA
- Eisner, E. (1991). The enlightened eye: Qualitative inquiry and the enhancement of educational practice. New York: Macmillan.
- Floyd, M. (2002, September). More than just a field trip: making relevant curricular connections through museum experiences. *Art Education*, 38-46.
- Gall, J. P., Gall, M. D. and Bog, W. (2005). *Applying Educational Research*. (5th ed.)

 Boston: Pearson Education.
- Gay, L. R., Mills, G. E., and Airasian, P. (2006). *Educational Research*. (8th ed.)

 Upper Saddle River, NJ: Pearson Education
- Gragert, E. (2000). Expanding international education through the internet: No longer limited to the global studies and language. Paper presented at the Education Secretary's Conference on Educational Technology, Alexandria, VA.

- Halsey-Dutton, B. (2002, July). Artifacts in Cyberspace. Art Education. 19-24.
- Hittlemann, D. & Simon, A. (2002). *Interpreting Educational Research*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Jeffers, C. (2003). Gallery as nexus. Art Education. January, 19-24.
- Johnson, A. P. (2008). A short guide to action research. Boston: Pearson Education
- Julian, J. (1997, May). "In a postmodern backpack: Basics for the art teacher on-line.

 Art Education. 23-24, 41-42.
- Koos, M.& Smith-Shank, D. (1996, November). The world wide web: Alice meets cyberspace. *Art Education*, 19-24.
- Lai, A. (2002, July). From classroom to chatrooms: Virtualizing art education.

 Art Education, 33-39.
- May, T. (2001). Social research: Issues, methods, and process (3rd ed.), Buckingham, U.K: Open Press.
- Meagher, M. (1995, October). Learning English on the Internet.

 Educational Leadership, 88-90.
- Mengel, S. (1998-99, Winter). Bumps on the information superhighway for K-12 Education. *IEEE Technology and Society Magazine*, 25-34.
- Mertler, C. A. (2009). Action Research: Teachers as researchers in the classroom..

 Thousand Oaks, CA: Sage.
- National Art Education Association Website (2009). Learning in a visual age: The Critical Importance of Visual Arts Education.
- Newbury, D. (2001). Diaries and fieldnotes in the research process. *Research Issues in Art Design and Media, 76-81*.

- Olivia, M. & Pollastini, Y. (1995). Internet resources and second language acquisition:

 An evaluation of virtual immersion. *Foreign Language Annals*, 28(4) 551-558.
- Ontario Ministry of Education (2000). The Ontario curriculum, the arts, grades 11 and 12. Toronto, OB: Queen's Printer.
- Orr, P. (2004, Spring). Technology and art education: What do we really know about it? *NAEA Advisory Paper*, 1-2.
- Ott, R. (1980, January). Museums and schools as universal partners in art education.

 Art Education, 7-9.
- Paris, S. (2002). Perspectives on object-centered learning in museums. Mahwah, NJ:

 Lawrence Erlbaum Associates.
- Pitri, E. (2004, November). Situated learning in a classroom community. *Art Education*, 57(6), 34-40.
- Richard, M. & Lemerise, S. (2001). School art exhibitions, critical and reflective approaches. In *Student art exhibitions: New ideas and approaches*. (pp. 8-19). Reston, VA: NAEA.
- Roland, C. (2005). The art teacher's guide to the internet, Worcester, MA: Davis.
- Schon, D. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass .
- Schulman, L.S. (1986). Paradigms and research programs in the study of teaching.

 American Educational Research Association.
- Seidman, I. (1998). *Interviewing as qualitative research*. New York: Teacher's College Press.
- Society for Educational Visits and Exchanges in Canada (SEVEC). (1984). *Exchanges:**Assessing their value (Conference publication). Ottawa, ON: SEVEC.

- Stephen, V. (2001). Students as curators: Modeling museum exhibition practices through collaborative projects. In *Student art exhibitions: New ideas and approaches*, (pp.33-39).
- Steward, M. & Walker, S. (2005). *Rethinking curriculum in art*. Worcester, MA: Day's Publications
- Stokrocki, M. (1997a). A cross-site analysis: Problems in teaching art to preadolescents. *Studies in Art Education*, 31, (2) 106-117.
- Stokrocki, M. (1997b). Qualitative forms of research methods. In *Research methods* and methodologies for art education (pp.33-56). Reston, VA: NAEA
- Stone, D. (2001). Using the art museum. Worcester, MA: Davis.
- Suplee, B. (1994, November). The eccentric hanging of the Barnes Foundation.

 Art Education, 35-39.
- Unrath, K. & Nordlurd, C. (2006, Fall). Teaching art as reflective craft (NAEA translations paper). *Theory to Practice*, 2-3.
- Valenza, J. K.(1998, February) Real art museums without walls. *Technology Connection*, 10-15.
- Wollins, I. (1995). Learning theories in the museum setting" in *Building museum*and school partnerships (pp. 32-40). Washington, D.C.: American Association of Museums.
- Zhou, Y., Pugh, K., Sheldon, S. & Beyers, J. L. (2002). Conditions of classroom technology innovations. *Teacher's College Record*, 104(3), 482-515.

Appendix A

Interview Questions

Interview #1: Preproject (PP) Questions for Art Teachers

- 1. What is your name, and how many years have you been teaching Visual Arts?
- 2. Where do you presently teach? How long have you been teaching there?
- 3. How long have you been teaching Visual Arts at your present school? What grades do you teach?
- 4. What background did you bring with you when you started teaching high school art?

 Did you teach right after university?
- 5. What is your opinion on learning "in nonschool environments"? (i.e., Field trips, art gallery visits)
- 6. What is your recollection of field trips that you went on when you were in high schools? Do you remember any specific experiences?
- 7. Did you go on any field trips with your art class when you were in high school? What were they like?
- 8. What was it about these field trip experiences that made them memorable?
- 9. Do you take your art students on field trips? If yes, where do you go? How often do you go on field trips?
- 10. What do you see is the value of these field trips for your art students?
- 11. How are field trips perceived by your school administration? By your fellow art teachers at your school? By the rest of the staff? Are they supportive?

- 12. Do you see a difference in the type of learning which takes place in a gallery/ museum field trip experience as opposed to a lesson or class conducted in the classroom back at school? Can you explain?
- 13. What is your opinion on educational exchanges? Have you ever taken part in any type of educational exchanges either as a student or as a teacher?
- 14. Have you ever engaged in an educational exchange with your art students? What type of exchange was it? Explain.
- 15. What is your opinion about the exchange of ideas in the visual arts over the internet?
- 16. What factors do you believe affect the quality of learning that occurs in a given situation?

Interview #2: Midpoint (MP) Interview Questions for Art Teachers

- When the project was first presented to your students, what was their reaction upon learning that they would be working from museum objects? (i.e., paintings or sculptures)
- 2. Please describe the visit to the museum/art gallery with your students. Can you tell what happened there when you visited with your class?
- 3. How did you see your role as the art teacher working with your students, from objects, in the museum setting? Was you role different than if you were teaching a lesson in your classroom? Can you discuss that difference?
- 4. Do you think your students behaved differently in the museum environment as compared to how they usually behaved in the art classroom? Explain.
- 5. How did you observe the students interact with each other while at the museum? Can you describe that behaviour? What do you think caused this behaviour? Their interaction?
- 6. Did the visit to the museum offer any teaching strategies/opportunities for you with your students either:
 - (a) while at the museum? (b) back in your classroom?Can you describe these strategies and tell what influenced them?
- 7. How did you make connections from the objects chosen in the museum to the students' own art pieces in order to help them develop their ideas and explorations in their individual art works?

- 8. How did you see the theme of "self-identity" being expressed in the works created by your students? Can you describe some of their pieces and how they were inspired by objects they saw in the museum?
- 9. How is the next stage, the on-line exchange of the images of student artwork, developing?
- 10. How do you anticipate your role as the art teacher in this next step of the project?
- 11. Do you have any concerns or issues about this next phase of the project? What are they, and why do you believe you have these concerns or issues?
- 12. Has this project, overall, developed any new teaching ideas/strategies for you?

Interview #3: Final (F) Interview Questions for Art Teachers (End of Project)

- 1. (a) Which part of the project did you find the most valuable from your perspective—as a "teaching opportunity"? Why?
- (b) Which part did you find the least valuable as a "teaching opportunity"? Why?
- 2. From your perspective as the art teacher, which part of the project do you believe your students found the most rewarding? Least rewarding?
- 3. Has this project in any way altered the potential of how you see yourself integrating gallery/museum visits or the idea of learning from "real objects" into your visual arts curriculum? Please describe.
- 4. Has this project created an opportunity for you to analyze how you see the integration of technology affecting <u>how</u> you teach in your art program? (i.e., delivery of expectations)

 Please describe.
- 5. In hindsight, how do you see the aspect of an "exchange" experience suggesting new teaching strategies/opportunities for you in the future?
- 6. Upon reflection of the project, how do you see the teaching potential of combining actual gallery experiences with virtual/computer experiences? Do you see these experiences complementing one another? How?

Technology

- 7. Do you believe as a high school art teacher today that your school or board offers:
- (a) opportunities for you to learn more about technology? Please describe.
- (b) opportunities for you to actually integrate computers into your curriculum as constructive teaching practice? (access to labs, computers in your classroom, etc.)
- 8. Would you initiate a project like this on your own? What level of technical support exists for you as an art teacher if you wanted to? At your school? At your board?

- 9. How did this project affect your level of confidence as an art teacher, in integrating a new technology aspect in your art program?
- 10. Do you find that your personal experiences with computers and how you have integrated them into your life had an impact on how you integrate them professionally?

General

- 11. Do you believe that your everyday timetable/reality at school allows for projects like this to be carried out? Is there support?
- 12. What part of the project do you believe required the most from you in your role as the "art teacher"? Discuss how you saw your role at that point in the project.
- 13. Did you yourself change any approaches as to <u>how</u> you taught because of the nature of the project? (i.e., more or less structured, students taking more ownership, more one-on-one, objects played more important role than usual)
- 14. Did the project encourage you to reevaluate any part of your teaching practice? If yes, which parts and how?
- 15. Would you be interested in participating again in a project such as this if the opportunity arose in the future? Why or why not?
- 16. What modifications to the project would you recommend the second time around based on this first experience?

Appendix B

Figures



Figure 1 – MMFA docent sharing ideas with students from School A in Montreal.

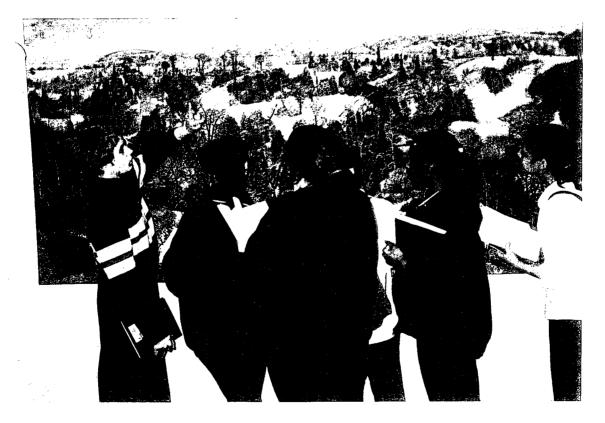


Figure 2 – A group of students from School A deconstruct a painting amongst themselves.



Figure 3 – School A students engaged in an art work at the MMFA.



Figure 4 – Sonja observing her students responding to a work of art in the MMFA.



Figure 5 – Susan, a student in Sonja's art class was the first to complete her studio project.



Figure 6 – Sonja giving advice to her students as they work on their art projects back at school.



Figure 7 – Sharon (foreground left) puts the finishing touches on her art work.



Figure 8 – Sonja conducts a class critique in the school library where an exhibition of the student art was installed.



Figure 9 – A student discusses her completed art piece at School B in Toronto.

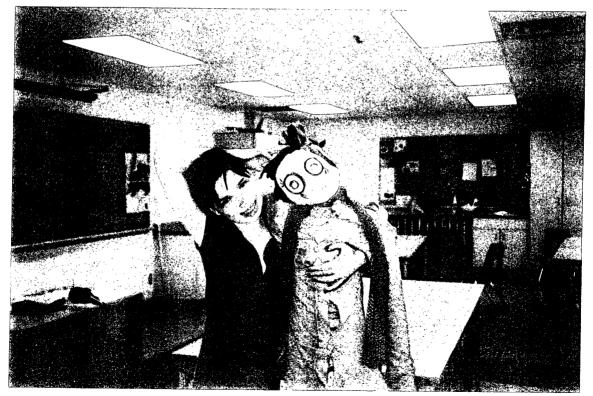


Figure 10 - A number of students worked in a sculptural form as did Bonnie at School B in Toronto.



Figure 11 - Viewing the art from School B on the computer, students from School A in Montreal engage in the on-line exchange.



Figure 12 – Working in the computer lab, School A students share their interpretation of the work created by the students at School B.

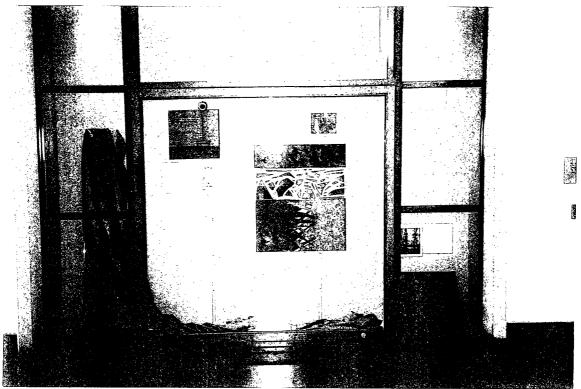


Figure 13 – A completed exhibition window at the Montreal Museum of Fine Arts showcasing the School A student artwork, a photo of the MMFA piece which inspired it, and text provided by a student from School B in Toronto via the on-line exchange.



Figure 14 – Sonja and Peter finishing the installation of the School A student exhibition at the Montreal Museum of Fine Arts.

Consent Form To Participate In Research

This is to state that I agree to participate in a program of research being conducted by Peter Vietgen, PhD candidate, in the Art Education Department of Concordia University.

A. Purpose

I have been informed that the purpose of the research is for data collection for a PhD Thesis dissertation.

B. Procedures

The research will be conducted at Marymount Academy (Montreal), Le College Francais (Toronto), the Montreal Museum of Fine Arts (Montreal), and the Art Gallery of Ontario (Toronto). The art teachers from the two schools, Julie Greto (Marymount Academy) and Isabelle Turcot (Le College Francais), will be interviewed before and after the project, and will also keep a journal throughout the project which will be collected at the end and analyzed by the project co-ordinator (Peter Vietgen). The students in the two art classes, will be asked to complete surveys before and after the project in order to assist the teachers in analyzing the learning which took place during the project. Photographs, observation, and note-taking (of both the teachers and students) documenting the project, will be conducted by the project co-ordinator throughout. The project will take place over a two month period and will involve the students and teachers visiting art musuems, creating art works back at their schools inspired by works they viewed at the museums, and engaging in a virtual exchange of images of their art works over the internet with the opposite school. The project will culminate in an exhibition of the student art works at the respective art museums.

C. Conditions of Participation

- I understand that I am free to withdraw my consent and discontinue my participation at any time without negative consequences.
- I understand that my participation in this study is voluntary

NON-CONFIDENTIAL (my identity will be revealed in the study results)

I understand that the data from this study may be published.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.

Name (please print))	
Signature		
Witness Signature		_
Date		