

MUSEUM EDUCATORS TEACHING OTHERS TO TEACH

by

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Abstract

Currently there is minimal understanding of museum educators' practices of teaching others to teach. Museum professionals have identified this as an area that warrants investigation if museums are to further their educational potential. This research examines museum educators' perspectives of their practices as museum-based teacher educators to gain insights into their beliefs regarding practice, generate new understandings about teaching others to teach in museums, and provide direction for professional development.

This qualitative study is framed by concepts embodied in collaborative self-study methodology and community of practice and addresses the following questions:

- 1) What beliefs are evident in the way museum educators discuss their practice as museum-based teacher educators?
- 2) How do museum educators understand and reconcile the tensions that emerge from their beliefs about practice?
- 3) How does the opportunity to engage in conversations with colleagues about their practice, framed within collaborative self-study, contribute to museum educators' practice?

Participants' discussions of their practice as museum-based teacher educators focus on two distinct groups of teachers, new and experienced interpreters and docents. Their practice includes five areas: interpreter selection, initial training, creating space for reflection and peer feedback, shadowing and mentoring, and professional development. They described the purposes of their work as preparing interpreters and docents for program delivery and helping them develop judgement about their teaching. Participants' beliefs about practice are examined through beliefs about teaching as a craft, teaching as an art and experience as a good teacher.

Conflicts between participants' beliefs and their perceptions of their organisation beliefs are evident in their discussions of tensions in their practice. Analysis suggests that many of the tensions relate to the purpose of visitor experience, the nature of teaching, and the structure of the interpreter position, and in most cases remain unresolved.

Participants found the opportunity to engage in conversation with colleagues a valuable form of professional development that contributed to their practice as museum-based teacher educators by presenting alternative perspectives of practice, ensuring time and a degree of accountability to reflect on practice, and positively affected their identity as a museum educator by engaging with others who share similar challenges.

Preface

The following statement is a requirement of the Faculty of Graduate Studies at The University of British Columbia (UBC) for research that required the approval of a UBC Research Ethics Board.

Ethics approval for this research was provided by the UBC Behavioural Research Ethics Board, certificate number: H09-00357.

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During my career as a museum educator, I have had the good fortune to work with a number of educators who have in their various ways challenged, supported, and provoked me. A few who stand out include Elin Kelsey, Viviane Gosselin and Jill Baird, with whom I've had many conversations about bridging the worlds of academia and practice in museum education. I would like to thank numerous friends and colleagues who have been supportive of me not only in writing this dissertation, but also throughout my journey of pursuing a PhD.

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Chapter 1 Introduction

A group of educators talk around a table – they represent a science centre, an art gallery, a community-based museum, an historic site, a wildlife refuge and a planetarium. They are just beginning a series of regular meetings to talk about teaching in museums. One characteristic this diverse group of educators has in common is that they all work in settings that are collectively described as museums. Commonality also exists in their desire to better understand teaching and learning within museums, to explore how their personal pedagogical views shape their practice and to change the way they work with interpreters and docents as they learn to teach.

Every fall museum educators, much like their counterparts in Kindergarten to Grade 12 classrooms, prepare to teach; not just teach museum visitors, but also educators new to their organization as they learn how to facilitate experiences for children and adults alike. Teaching others to teach is an important role of museum educators, but one for which there is minimal understanding of their practices, beliefs and personal theories guiding those practices. This gap in understanding has been identified by museum professionals as an area that warrants further investigation if museums are to reach their educational potential. This qualitative study begins to address this gap by examining museum educators' practice of teaching others to teach.

The motivation for this research comes from my professional experiences, including my dissatisfaction with my own practice as a museum-based teacher educator, a desire to find other influences to broaden my thinking about museum education, and a belief that museums and museum education can and should have a greater impact within society. My experiences and beliefs about teaching and learning serve both as a frame to guide the research as well as a lens through which I interpret it. The following brief biographical sketch helps to provide some context to this study.

I have worked as a museum educator for over twenty years. I began, similar to that of many of my colleagues, as a volunteer. My volunteer educator position at the local aquarium eventually turned into my first paid job as an interpreter. I came into the position with little more than a science degree, a passion for marine sciences, a willingness to overcome my shyness, and an inclination to listen more than talk. I started as an interpreter because of my interest in science, but I pursued museum education as a career because of a growing passion for science education; a passion that has grown into a deep appreciation for the importance of learning in informal settings and the potential contributions museums and museum educators can make to society.

My professional experiences to date have been enriched by opportunities to work with inspiring, innovative educators and begin to reconceptualise teaching and learning in museum

environments. I have worked in three different museums (an aquarium, a maritime museum and a planetarium), and have also worked extensively with an array of museums through providing training for museum educators and interpreters. I am also involved with various museum education groups within British Columbia and Canada.

I am at that point in my professional career where I have more experience than many of my colleagues (I am older than most) and with that comes the perspectives that time and experience affords. However, both time and experience can also narrow one's perspective. In part, my motivation for pursuing a graduate degree and this research is to look at teaching and learning in museums from diverse perspectives.

I write this thesis with two audiences in mind. For museum educators, I hope that illustrations of challenges faced by your colleagues and their actions to examine and enhance their practice will help you to interrogate and expand your practice. For educators who work outside of museums, I hope that thinking about teaching in a setting different from your own will enrich your thinking about teaching.

The remainder of this chapter provides a general overview of the study conducted with a group of museum educators to explore their practice of teaching others to teach. The following introduces the research questions, the context and rationale for the study and defines key terms.

1.1 Research questions

Museums¹ constitute a diverse array of organisations, each with a distinct culture, purpose and philosophy, and an increasingly prominent public education mandate expressed through exhibitions and facilitated experiences with the purpose of, “engaging their visitors, foster deeper understanding and promote the enjoyment and sharing of authentic cultural and natural heritage... As educational institutions, museums provide a physical forum for critical inquiry and investigation” (Canadian Museums Association, 2009).

Currently, museum professionals, including educators, are critically examining roles of museums within contemporary society and debating how museums can become these forums for critical inquiry and investigation while creating experiences that are more relevant to today's world, and meaningful to visitors. Although it is the intention of museum educators to facilitate encounters for their visitors that are enjoyable, relevant and meaningful learning experiences, it is not always the case (Tal & Morag, 2007; Cox-Petersen, Marsh, Kisiel, & Melber, 2003;

¹ I use the term museum as an inclusive one encompassing history museums, science centres, parks, zoos, interpretive centres and other similar organisations. A more in depth discussion of the term museum is presented later in this chapter.

Lankford, 2002). Further research is needed to better understand these encounters from both the learner or visitor perspective as well as the perspectives of museum educators.

Educators often begin working in museums with discipline expertise and qualifications relevant to the subject matter addressed in their museum such as history or botany, but lack knowledge or professional training and experience with contemporary educational theories and practices (Grenier, 2005). Additionally, unlike their counterparts teaching in Kindergarten to Grade Twelve classrooms, museum educators are not required to obtain a certification as a museum educator and there are few opportunities for formalized training in this area.

Literature suggests it is successful museum educators who are tasked with teaching others to teach and they are doing this with little formal background, isolated from peers or other professional educators, and limited by resources and time to reflect on their practice (Castle, 2001). These conditions are impediments to furthering the general educational mandate of museums and more specifically to providing valuable experiences for museum educators to learn how to teach others to teach.

Recently, researchers in North America have begun to work with museum educators to better understand teaching in museums with the intent of improving visitors' learning experiences (Tran, 2007; Castle, 2001; Grenier, 2005). Recommendations from this research suggest museum professionals must more vigorously support museum educator professional development and must better understand practices of museum educators teaching others to teach, the focus of this research.

This research study examined museum educators' perspectives of their practices as teacher educators² with the intent to gain insights into their beliefs and issues regarding their practice, generate new understandings about teaching others to teach in museum settings and provide direction for future professional development. This study adopts Lemke's (2001) suggestion that beliefs connect members of a community together and are a part of individual's identity. Beliefs address both educational beliefs as well as beliefs that directly affect teachers' practice (Pajares, 1992).

The following questions guided the study:

- 1) What beliefs are evident in the way museum educators discuss their practice as museum-based teacher educators?
- 2) How do museum educators understand and reconcile the tensions that emerge from their beliefs about practice?

² I use the term teacher educator to refer to the part of museum educators' position that specifically addresses teaching others to teach. This is further elaborated in Section 1.2.

3) How does the opportunity to engage in conversations with colleagues about their practice, framed within collaborative self-study, contribute to museum educators' practice?

This research was set within a sociocultural perspective of learning (Wertsch, 1991). Wertsch's sociocultural perspective of learning suggests that learning [mental action] is "situated in cultural, historical and institutional settings" (Wertsch, 1991, p. 15). Increasingly, museum professionals and researchers are considering sociocultural theories of learning to inform their perspectives of museums as learning environments. Much of the research to date is influenced by frameworks such as Leinhardt and Knutson's (2004) conversational elaboration model informed by Wertsch's interpretation of Vygotsky, and Falk and Dierking's (2000) contextual model of learning. Both of these perspectives of learning focus on visitors' conversations within their social groups and suggest that museums can support meaningful learning experiences that value "attention, curiosity arousal and imagination expansion more than they value the naming of scientific terms or painters' styles" (Leinhardt & Knutson, 2004, p. 6). Despite the prevalence of sociocultural theory in museum education research and its potential impact on thinking about learning in museums, few studies have examined museum educators' interactions with visitors or their practices in teaching other museum educators to teach.

1.2 Terminology

As with many communities, some words within the museum education community have developed their own unique connotations. What follows is a brief discussion of the following key terms, museum, education, interpretation, museum educator, training, and teacher educator.

Museum: The term museum is challenging because it may elicit a powerful, but not necessarily positive image. For some, a museum is a quiet, dark building protecting old objects encased in glass. Contemporary museums are struggling to move beyond this impression by redefining museums as places that provide a welcoming, provocative atmosphere for visitors, excellent facilitated experiences, and demonstrate the museum's relevance to society.

The Canadian Museums Association (CMA) recognizes a variety of types of institutions as museums including, art galleries, science centres, botanical gardens, zoos, heritage centres, historical monuments and ethnographic sites. These institutions are all considered museums because in addition to their mandate to collect and conserve, they have an educative purpose related to fostering deeper understanding through authentic and enjoyable experiences (Canadian Museums Association, 2009).

Another term that is used to describe museums is informal learning settings (U.S. National Research Council, 2009). This term is also problematic as a way to describe this

collective group, not for the strong image it conjures up, but for the lack of image. It is a term that has little meaning outside the museum community, and from conversations with museum educators, some feel that the term 'informal' suggests a hierarchy of learning, with informal learning positioned as inferior to learning in formal classrooms.

Throughout this dissertation, I use the term museum as an inclusive one for cultural and/or natural heritage organisations that focus of learning. This collective of museums includes places such as museums, science centres, zoos, and art galleries, and even natural settings such as parks, which have a mandate specifically to support conservation, education and recreation. I use this term primarily for its ease of use although I always use it with some trepidation because of its powerful, and sometimes negative, connotations.

Education: From some perspectives everything a museum does is considered education, whether it is a facilitated program for school children, an impromptu interaction between visitors and museum staff, a phone conversation between a curator and a prospective donor, or an exhibition in its galleries. The term education is not always used in museums, in part because of the perception of education as transmission of facts (G. Hein, 2006) and strong connotations with teaching in formal classrooms. In my experience, the term education is often used to describe only the guided programs offered to school audiences (primarily Kindergarten to Grade 12) while educational endeavours for general visitors are usually referred to as programming or interpretation.

In this dissertation, I use the term education not in a programmatic sense, but as a broader ideal that guides museum professionals in the creation of experiences with the intent of facilitating learning. Although these experiences encompass nearly all functions of a museum, I focus primarily on facilitated experiences between museum staff and visitors.

Interpretation: Interpretation is the term used to describe an educational activity, which usually takes place in informal settings such as museums or parks. Freeman Tilden (1957) was one of the first to write about interpretation as a field. He defined interpretation as, "An educational activity which aims to reveal meanings and relationships through the use of original objects, by first hand experience and by illustrative media, rather than to simply communicate factual information" (p. 8). Tilden also described six principles of interpretation, which are often shortened by interpreters to 'provoke, relate, reveal':

- Interpretation must relate what is being displayed or described to something within the personality or experience of the individual.
- Interpretation is not the presentation of information; it is revelation based on information.
- Interpretation is an art, combining many arts. An Art can be taught and successfully learned.
- Interpretation's primary purpose is provocation, not instruction.
- Interpretation must present the complete story and should relate to the whole person.

- Interpretation for children should be specially prepared and not be a dilution of the adult version (p. 9).

Subsequent to the introduction of Tilden's principles, others such as Field and Wagar (1976) and Beck and Cable (1998) and have continued writing about interpretation, integrating perspectives from environmental education, tourism and visitor studies.

Museum educators: There are many job titles attached to those who facilitate and develop educational experiences in museums. Rarely is the title teacher employed. Those whose primary role is to facilitate learning experiences with public (general visitor or school group) use titles such as docent, volunteer educator, interpreter, guide, naturalist, animator, explainer, or gallery instructor (Castle, 2001; Grenier, 2005; Tran and King, 2007). Individuals whose primary role includes program development (which may include exhibit development) and training and supervision of other museum educators may use descriptors such as museum educator, public or school programmer, education manager or curator of education. In addition to program development and supervision, museum educators may also facilitate programs with visitors. The diversity and often-esoteric nature of the titles can result in a poor understanding of museum educators' roles within the museum (Castle, 2001), by the learner, and even uncertainty in those who bear the title. While the diversity of titles is confusing, they all have learning at the heart of their roles.

In addition to a range of possible job titles, it is also common within museum education to have both paid and unpaid positions. Many museums would not be able to offer their educational programs without the assistance of volunteer educators (often called docents). These volunteers usually work directly with learners (visitors), but they may be involved in all aspects of the running of an education department including program development, volunteer recruitment and training.

Unlike their Kindergarten to Grade 12 counterparts museum educators do not necessarily possess any formal training in education at a university or college level. As such their understanding of contemporary educational theories and practices is developed in situ and through experiences as a learner in a variety of settings.

In this study, I refer to those who work directly with visitors to the museum as interpreters (paid staff) or docents (unpaid volunteer). I use the term museum educator to describe those responsible for program and staff development, particularly the development of interpreters and docents.

Training: Training is the term commonly used to describe the development of new interpreters and docents. The term is problematic as it implies a theoretical perspective of learning to teach as primarily a technical issue, or teaching as craft (Hoban, 2005) where learning to teach is conceived as the development of a repertoire of techniques. Although the

perspective of learning to teach as craft reflects the approach many museums adopt for training their interpreters and docents, it is not a perspective that will serve contemporary museum education well. As it is a term the research participants generally used I continue to use it, particularly when it applies to experiences that are more technical in nature.

Teacher educators: The development of new interpreters and docents (training) is usually part of a museum educator's role. This may include working directly with the interpreter or docent, arranging for other museum staff such as curators to deliver a lecture to new interpreters and docents, or contracting a trainer external to the organisation to deliver part of or all of the training the interpreters or docents receive. Looking to analogous settings such as post-secondary institutions where people are becoming teachers, the term teacher educator is commonly used to refer to those who work with beginning teachers. While this is not a term used in museum education it is a useful one as it refers specifically to one aspect of the role of many museum educators, teaching others to teach. I will preface the term teacher educator with either 'museum-based' or university-base' to indicate more specifically whom I am referring to.

1.3 Rationale for the research

In 2004 thirty-five million people visited Canadian heritage institutions, including museums, art galleries, zoos and aquaria and other similar sites (Statistics Canada, 2006), with many of them participating in experiences facilitated by interpreters and docents. Museums are increasingly charged by their educational mandate and their visitors to be more relevant in an increasingly pluralistic society. Given the dearth of research into teaching in museum settings, it is important and justified to ensure that educational experiences for museum visitors are consistent with contemporary pedagogical practices.

As museum professionals strive to increase the relevancy of museums, a maturing body of research investigating learning in museums informs their work. Much of the research to date has been conducted by academic researchers situated primarily outside daily museum practice and has been focused on visitor experience and learning (for example, Anderson, Storksdieck, & Spock, 2007; Falk, & Storksdieck, 2005; Griffin, 2004; Falk & Dierking, 2000). This type of outsider researcher (Herr & Anderson, 2005) provides valuable insights to theoretical and methodological issues, but may not reflect the cultural contexts of museum educators as clearly as insider research, where the researcher is part of the community at the centre of the research.

Research in museums is increasingly receptive to diverse epistemological and methodological perspectives. Although current literature investigating teaching in museums is limited, research addressing museum educators' practices is emerging as an important area of study, even if peripherally. Studies have begun to investigate pedagogical approaches used by

interpreters and docents (see for example Cox-Peterson, Marsh, Kisiel & Melber, 2003; Sweney, 2003; Bailey, 2006; Castle, 2001; Grenier, 2005; and Tran, 2004). Although limited to the practices of interpreters and docents, the research recognizes the need to further investigate the training processes (Castle, 2001).

Both museum professionals and researchers have acknowledged that there is minimal understanding of museum educators' practices of teaching others to teach in museums and of the beliefs guiding their practice (see for example, Sweney, 2003; Bailey, 2006; Castle, 2001; Grenier, 2005; and Tran, 2004). This gap, identified by museum professionals as an area that warrants further investigation, must be addressed if museums are to reach their true educational potential. Further understandings of museum educators' practices can also be informed by a critical examination of insights into learning to teach in more traditional settings such as classrooms.

There are multiple reasons for examining the practices of museum educators as they work with interpreters and docents. First, museum educators have the potential to affect visitor experience through their work with interpreters and docents in their organizations. Second, parallel to the increased interest from the research community to better understand teaching in museums is a demand from practitioners to interrogate and critique their own practice. This is evident in newer journals such as *Museum and Society* and *Museums and Social Issues* and long-established journals such as *Curator*, *Museum Management and Curatorship*, and *Journal of Museum Education*. These journals increasingly provide a forum for practitioners and researchers to interrogate, critique and challenge the current state of teaching in museums.

There is also an increased interest in teaching in museums from key organizations representing practitioners within Canada. Interpretation Canada, an association of interpreters, has had a long-standing role of providing professional development through formal courses, workshops and conferences and is currently re-evaluating their roles with respect to professional development (personal communication, S. Fast). Parks Canada, Canada's largest single employer of interpreters, is also examining the types of professional development and support for their interpretive staff (personal communication, S. Rochette). Both organisations plan to improve the practices of those involved.

Finally, in the working lives of many museum educators there is very limited professional development specific to their practice as museum-based teacher educators and they are afforded limited opportunities to explore their practice with colleagues, both of which is needed to advance teaching in museums. This need for effective professional development within museum education also reinforces the need for methodological approaches such as action research and self-study that contribute to professional development. The framework adopted for

this research serves as a form of professional development for the participants and will hopefully help participants to foster skills and attitudes as to further use reflection as one way to interrogate their own practice.

Adopting self-study methodologies in museum education uses a research tradition that examines teaching others to teach in museums and will build towards improving the practice of teaching in museums. Loughran and Russell (2007) view researching one's own practice as a powerful way to advance the field, "...self-study is an important vehicle for explicitly building understandings of teaching as a discipline." (p. 225). Framing reflections on one's own practice through self-study promotes a systematic and intentional form of inquiry (Dinkelman, 2003) and will move these reflections from a personal level into a more accessible public domain (Berry, 2007b). These approaches are beginning to be applied in museums such as Lemelin's (2002) use of participatory action research with her museum educator colleagues as they developed a collaborative understanding of their practice. This research study, using collaborative self-study will further build on Lemelin's use of participatory action research.

1.4 General overview of research design

This research examined museum educators' perspectives of their practices of teaching others to teach with the intent to 1) gain insights into their beliefs and issues regarding their practice, 2) generate new understandings about teaching others to teach in museum settings, and 3) provide direction for future professional development for this part of museum educators' roles. This study was framed by concepts embodied in collaborative self-study methodology (Louie, Drevdahl, Purdy, & Stackman, 2003; Bodone, Guðjónsdóttir & Dalmau, 2007) and community of practice (Wenger, 1998). The research was located in the Metro Vancouver area in the southwestern corner of Canada. It is a region with a vibrant museum community with dozens of museums of various sizes and foci. Within the museum community, there are also a number of professional networking groups for museum professionals. During the research, I worked with a group of six museum educators over an eight-month period to discuss elements of their practice specific to teaching interpreters and docents to teach. Each of the eight meetings were approximately two and a half hours long and was augmented with email correspondence before and after each meeting.

Data collected included semi-structured interviews with each participant, transcriptions from audio-recorded group meetings and artifacts of practice (handouts given to interpreters, articles or books used, as well as my own reflections and writings as a museum educator). Coded data revealed seven broad categories reflective of their practice as museum-based teacher educators. The results present rich descriptions about belief and actions regarding the

preparation of interpreters and docents to teach and a framework for training new and experienced interpreters and docents. Findings suggest that museum educators actions related to training are primarily from a technical perspective, but often this conception of training conflicts with their beliefs about teaching as an experience of recognizing, judging and acting appropriately in the moment.

As with all research, there were limitations to the methodological approach chosen. The weaving of collaborative self-study and community of practice was compatible with the research questions, but was limited by the relatively short duration of the research. A substantial amount of time was needed for the participants to develop a high level of trust with each other and for group dynamics to develop (in essence for the development of a community of practice). Despite the limited time, the research generated useful insights.

This approach to research adopts an approach suggested by Bradbury and Reason (2001) regarding the usefulness of research. They suggest that researchers address a series of issues under an overarching question “am I doing good work?” (p. 447). The value and validity of the research will ultimately be judged by the wider museum education community.

This chapter provided an overview of the research examining museum educators’ perspectives of their practices as museum-based teacher educators with the intent of gaining insights into their beliefs and issues regarding their practice, generate new understandings about teaching others to teach in museum settings and to provide direction for future professional development for this part of museum educators’ roles. The following chapter (Chapter 2) provides background for the study, establishes the context of the work of museum educators and identifies some key issues in contemporary museum education. It also frames conceptions of teaching and learning to teach as they apply to this study. Chapter 3 presents the theoretical foundations for the study. Chapter 4 focuses on the study’s methodology. Chapters 5 and 6 present an analysis of data, beginning with the research participants views of the interpreters and docents they work with and their own practice teaching others to teach followed by an analysis of how participation in the research group contributed to their practice as museum-based teacher educators. The study concludes with a discussion and implications stemming from the research (Chapter 7), recommendations for the practice of museum educators in their work of teaching others to teach in museums (Chapter 8), and a short epilogue.

Chapter 2 Literature Review

Teaching others to teach in museums has not previously been the subject of in depth investigation. This study is informed by scholarship in a number of areas associated with museums, learning, and teaching. This chapter reviews literature relevant to this investigation of museum educators' practice of teaching others to teach in order to provide context to the study as well as introduce themes and concepts relevant to the research.

2.1 Museums and education

The purpose of many early museums was to preserve the past through amassing collections of artifacts as documentation of the past. The influence of past practices and the theories influencing those practices resonate in today's museums, serving both as catalyst and barrier to changing practice and re-imagining purpose. The following brief history grounds the operations of many contemporary museums and helps position some of the tensions felt as museum professionals and scholars contemplate the future.

With the age of exploration came a tremendous growth of what would later become museums. These cabinets of curiosity largely held as private collections accessible only by society's elite, housed ethnographic and natural material. Art museums had a similar beginning. Private collections became public "bastions of aesthetic contemplation" (Lankford, 2002, p. 141) with the intent to educate the public about Beauty as an ideal (H. Hein, 2002). Although both museums and art museums were declared public institutions, they were (and still are) exclusionary to many in society (Bennett, 2006).

The first publicly accessible museum in Britain (1649), what would later become the Asmolean Museum, provided guided tours (Abt, 2006). The Louvre became the first public European museum in 1793 when Napoleon guaranteed access to the people of France. Napoleon later established a nation-wide system of museums to serve as repositories for his plunders and to promote patriotic sentiments, thus beginning a long tradition of national museums showing their mastery of the world (MacDonald, 2006). The Age of Enlightenment influenced museums by promoting an encyclopaedic, scientific approach to collections. Gradually museums took on a broader mandate, adding research and conservation to their collecting mandate and eventually education. During the 19th and 20th centuries museums in the United States developed in part to enculture new immigrants and advance specific morals and manners (Abt, 2006).

Science museums began at about the same time but for a different purpose. Much of their technology-based collections came into the museum directly from factories where they were made and were used by universities and industries as teaching tools for designers and craftsmen. Initially science museums became the training ground to build a workforce for the industrial revolution (Friedman, 2007). With the launch of the first satellite, *Sputnik*, in 1958, there was a renaissance in science museums, particularly in the United States. This was driven by a nation-wide concern about achievements in science and resulted in increased interest in science education. Influenced by educational theorists such as Piaget and Dewey, science museums evolved into what is the dominant model today, interactive, hands-on centres such as San Francisco's *Exploratorium*.

Museums, not unlike other institutions with their beginnings during the Age of Enlightenment are firmly entrenched within empiricism, its belief in an objective reality and its quest for objective knowledge and reason (Hooper-Greenfield, 2000). With this as the dominant paradigm, which still exists in many museums today, museums viewed themselves as the repository of knowledge and through this authority, could decree what society should learn. This established the two principle functions of museums, collections and education. These two functions, sometimes viewed as competing interests, establish one set of tensions experienced in many contemporary museums.

Museums as collections: Despite public acknowledgement that education is a museums' primary purpose, museums with collections often view themselves as a collection-based, as opposed to an education-based, museum. O'Neill (2006) describes these museums as essentialist, concerned primarily with the internal functions of collection and research and "committed to the ideal of knowledge and beauty for their own sake" (p. 96). The power of collections, the artifacts they hold, and those charged with caring for them (curators), are well entrenched in museums and often a site of tension between curators and educators (Lankford, 2002).

Museums historically have systematically collected, catalogued and preserved objects as a way of ordering the world and displayed objects to present the world as objective reality (MacDonald, 2006). While these types of collections are still found today in art, history and natural history museums, within contemporary museums the concept of collection has expanded and may no longer represent only objects deemed valuable by curators for their historic, aesthetic or rare properties. An emerging view of collections includes collections as living plants and animals either selected and held within a specific location such as in zoos and gardens or within a bounded, protected natural setting such as a park; collections of objects created to exhibit a specific phenomena such as those commonly found in science centres;

representations of natural phenomena such as the points of light projected by planetaria to re-create the constellations of a night sky; exhibits in children's museums that re-create the world and encourage play and exploration for their young visitors.

In addition to the concept of collection changing in contemporary museums, a collection's status and purpose is also shifting. Collections will always have a role as archives of human thought and action (Crane, 2006) and provide valuable resources for historical and scientific research. They also have an educative purpose, the second element integral to museums. Education, like a collection, has always been part of museums, but the aims of museum education have changed as museums renegotiate their relationships with society.

Museums as educational endeavours: While education in its various guises has always been part of public museums, it has not always been effective (G. Hein, 2006), nor has it always been responsive to changes in society or educational theory. Visitors to the Asmolean Museum, England's first public museum were toured by its 'keeper', British naturalist and gardener, Tradescant (Abt, 2006). In some ways, modern museum education experiences are not all that different from visitors' experiences over 350 years ago with Tradescant. Museum tours are a common example of the two main avenues through which museums enact their educational mandate, exhibitions and programs facilitated by museum educators,

Early American museum professionals including George Browne Goode (1851 – 1896), Benjamin Ives Gilman (1852 – 1933) and John Cotton Dana (1856 – 1929) drew inspiration and guidance from American pragmatists such as Dewey and Peirce (G. Hein, 2004). Museums of this era were viewed as “useful civic instruments for a young, democratic and industrious nation” (p. 264) to promote specific civic lessons (Bennett, 2006). Education remained ancillary to museums into the mid 1900's, when after World War II it was acknowledged as a profession (G. Hein, 2006), although still largely delivered by volunteer educators or docents.

Over the past 30 years there has been marked change in museum education, starting with a questioning of the dominance of the curatorial voice in the mid 1970's and an increase in the number of museum educators (Munley & Roberts, 2006). Museum education began to shift from its ancillary departmental status to a core function of museums. Today, museum education is “positioned within the field of museum work as social conscience of the institution to critically analyze how, why, and which knowledge is interpreted in museums” (Rose, 2006, p. 87) and is integral to the purpose of contemporary museums in society.

2.1.1 Museums in contemporary society

For some people today, the word museum conjures up a stereotypic image; a dark, dusty building filled with unusual objects in glass cases, populated by a few reverently quiet visitors (probably old) who gaze at 'sacred' objects. The range of organisations that may identify

themselves as museums is growing increasingly larger and encompasses museums, nature centres, science centres, children's museums, heritage sites, zoos, and art museums (H. Hein, 2000). Museums are breaking free from this stereotype. It is a difficult process as the myth of the museum is well entrenched not only with the public, but also with museum professionals (Hooper-Greenhill, 2000) and the pervasiveness of this myth makes contemplating the potential of contemporary museums even more difficult.

The purposes of museums are hotly contested (Lord, 2006). Museums over the centuries have had a number of purposes, many of which are still evident today. Freidman (2007) describes first generation science and technology museums as those with a collection, research function as well as a role in training; second generation museums, a result of merging with large scale public exhibitions such as world expositions, focus on general public visitors and are often closely associated with industry; third generation museums became exclusively focused on public education. Freidman suggests elements of all three types of science museums co-exist today and the same could be said for museums in general, although the majority of museums today would publicly describe their purpose as an educative one.

For many working in museums, conversations about theoretical perspectives are largely limited, due perhaps to the realities of a busy work place, a lack of familiarity with different perspectives, someone who is at least willing to listen, or a general acceptance of the dominant paradigm and, therefore, no need to question it. Hilde Hein (2007) also comments on a perceived lack of theory and suggests for those that do not declare a theoretical perspective, action and professed belief are often incongruous. Hein advocates for theory as:

a stabilizer that advances investigation into new territories and sustains inquirers through moments of doubt. In the absence of theory anything goes; there are no rational grounds for either adopting or rejecting any position. At the same time, theory is not fixed ideology. It does not curtail thinking by imposing a rigid system, but rather opens lines of pursuit for fresh exploration, while signaling inconsistent ideas that challenge complacency. Theory is not incorrigible; it discourages erratic experimentation, but thrives on testing and the correction that follows (p. 30).

Hein also suggests that a museum with a clearly articulated theoretical perspective will not only be better able to address moral issues, but will be more consistent in their actions.

Despite a possible reluctance to explore theoretical perspectives, they are erupting through museums' realist trappings. If the tradition of the empiricist paradigm is eroding in museums, how will it affect the future of museums? Is it possible for museums to move away from a realist epistemology and is it desirable? Hein, Lord and O'Neill, present museums through different epistemological lenses as a way to provoke and problematizes museums purposes.

Hilde Hein (2007) examines museums through feminist theory, which she describes as open-ended and pluralist, receptive to new ideas and looks at old ideas in new ways. She suggests museums embodying this perspective:

will not create the world anew by changing their orientation and that is not their mission. But they can, by shifting to a fresh vantage point, think the world in some of the myriad ways that others have found, to unfold and fold it differently and help visitors and supporters to do the same (p. 34).

Hein suggests that adopting a feminist perspective will address some of the problems inherent in museums such as exclusion of 'outsiders', the lack of participation between museums and community as well as disrupting traditional pillars of museums (particularly art museums) such as the 'masterpiece'. She describes her introduction of a feminist perspective into museums as not necessarily to replace existing perspectives but to "advocate a radical shake up of received ideas that might even lead eventually to thinking differently about how the world turns" (p. 39).

Lord (2006) invokes a postmodern perspective and describes museums as spaces of representation and difference where visitors can reflect on and contest the relationship between things and concepts. Building on Foucault's description of museums as heterotopias, which undermines the museum's traditional system of representation, Lord suggests museums are places that "can liberate ourselves from the belief that particular concepts, interpretive frameworks and ways of thinking are metaphysically necessary or essential" (p. 86).

O'Neill (2006) advocates for an epistemology he describes as an "object-based, visitor-centred, storytelling epistemology" (p. 95) and incorporates Rawls' theory of justice as a way of avoiding issues of representation and exclusion found in traditional museums. O'Neill questions the compatibility of social purpose and function of museum knowledge. This question is an important one to consider when looking at the future of museums, their educative role and how the practice of museum educators will be affected.

2.1.2 The future of museums

In addition to describing museums as places for enjoyable, social learning (Kelly, 2007), the rhetoric in contemporary museum literature suggests the purpose of museums within today's societies is to promote life-long learning, moral development, and thoughtful debate in support of civic engagement (Falk & Dierking, 2000; Hooper-Greenfield, 2000; Gurian, 2006), concepts that could contribute to societal good. It is in these three areas that museums are beginning to experience colliding paradigms. These collisions prompt further questions about museum education and its purpose: is a focus on life-long learning, moral development, and thoughtful debate the purpose of contemporary museums and if so how will this focus support

museums in reaching its educative potential? The following addresses the concepts of life-long learning, moral development, and thoughtful debate within museums.

Life-long learning: Providing opportunities for life-long learning is one stated purpose of contemporary museums. Falk and Dierking (2000) argue that with the transition from a goods-based to a knowledge-based economy, increasing amounts of information inundates society and in order to survive individuals need to learn strategies for assessing information. Falk and Dierking describe, “free-choice learning – learning that is intrinsically motivated” (p. 213) as a strategy that most people choose to support learning throughout their lives. This will result in the “informed citizen, not to be confused with the learned citizen, ... [as] the archetype of the twenty-first century” (p. 213). They suggest museums are well placed to assist in this role.

While valuing active learning through one’s life is important and role museums are well placed to nurture, museums should challenge the conception of life-long learning. Is the ‘informed citizen’ Falk and Dierking (2000) speak of really the role museums should be fulfilling in contemporary society? Does the ‘informed citizen’ limit the potential for museums and society to contest the notions of education and decrease its value to merely technical approaches and the transmission of facts?

Morality and advocacy: Scholarly works tend to anthropomorphize museums with many of the attributes of the Enlightenment era, such as moral agency and intentionality. Hilde Hein (2000) suggests a museum is a “suprapersonal entity” with a moral character and that it is well placed “to both preserve and influence values”, and that “sources of moral leadership may be found in some controversial exhibitions, especially in the public discourse that accompanies their planning and execution” (p. 103).

Promoting particular sets of moral values and ideals has always been part of museums. With the Enlightenment era came the notion “that reason and rationality could produce a better world” (Popkewitz, 1997, p. 19). Early museums were explicit about the moral purpose behind educational experiences and viewed education as a process of shaping the ideal citizen (Hooper-Greenfield, 2000; Abt, 2006; G. Hein, 2006), promoting values such as patriotism and social responsibility in an effort to support the dominant power (O’Neill, 2006). With the rise of empiricism, morals or values were not discussed openly, but displayed through objects, expressed not as concepts to be challenged, but as objective fact to be accepted unquestioningly.

Moral values are part of museums today, but are more often disguised as advocacy. Advocacy or stewardship is integral to organisations such as zoos and aquaria (Koster & Schubel, 2007) where they not only promote conservation of endangered species and habitats, but also may actively contribute through captive breeding programs of endangered species, re-introduction of animals into natural environments, sponsorship of scientific research and the

protection of habitats at risk. As conservation-minded organisations adopt more ecological worldviews, they explore perspectives that privilege relationships, including the relationships between humans and the rest of the world and question human acts of exploitation of resources (Davis, Sumara and Luce-Kapler, 2008; Thayer-Bacon, 2003). Through this they begin to move away from their traditional role of demonstrating mastery over the world by cataloguing and exhibiting collections (Macdonald, 2006) to a role advocating for a new perspective.

This type of work is not just found within zoos and aquaria, but is moving into more 'traditional' museums and science centres. Cameron (2003) describes an exhibit in an Australian science museum, which promotes behaviour change in its visitors, such as power or water conservation, as a step towards more sustainable living. Worts (2006a, 2006b) and Sutter (2008) also acknowledge museums' potential and responsibility to facilitate public dialogue, raise awareness and public engagement with issues in an effort to promote behaviour change. Worts (2006b) works with a group of Canadian museums interested in museums' roles in "creating a culture of sustainability" (p. 153), something that Worts (2006a) suggests museums are well situated to address. Sutter (2008) describes that in the exhibit, *The Human Factor*, sustainability is not addressed solely from a scientific or ecological perspective, but incorporates multiple perspectives and provides opportunities for visitors to examine their attitudes, values and beliefs related to issues raised in the exhibit. The exhibit and associated programming with its agenda of promoting sustainability as a societal necessity, advocates a move towards a society that bases its values and actions in an ecocentric perspective and away from industrialisation.

Advocacy in museums, especially framed as conservation or sustainability, currently receives broader acceptance and active support from both the general community and museum professionals than if it were framed from a moral perspective. An example of this is the Creation Museum in Kentucky³, a new museum (opened 2007) that claims to provide scientific proof of the Bible. Their overt moral agenda, set within a religious paradigm, but portrayed as science, clashes with the museum community's traditional perspectives on objectivity and truth.

In contrast to the Creation Museums' proselytizing approach, is the way in which the U.S. Holocaust Memorial Museum portrays its moral agenda. Ellsworth (2005) describes the museum as an attempt to teach "moral imperatives without absolutes", without "specifying what visitors should do" (p. 110). The concept of not prescribing action or thought, but promoting the idea that moral values are important and should be openly discussed within society will further

³ The Creation Museum describes itself as "a walk through history...[that] brings the pages of the Bible to life... [They've] just paved the way to a greater understanding of the tenets of creation and redemption" (www.creationmuseum.org/).

challenge museums epistemological beliefs, but this challenge is necessary to truly engage communities.

In some ways, a contemporary museum's role as an advocate or promoting a moral agenda is not any different from earlier museums. Although one difference is in whose agenda or morals they are championing. It is no longer just the state's agenda, but may come from special interest groups in the community. As museums are more open to representing and exploring multiple perspectives (Jennings, 2007) their role is not as an advocate for specific values or causes, but to be explicit about their values and beliefs and demonstrate an awareness of how their values shape their thinking and actions. This public acknowledgement will be one catalyst for thoughtful debate within museums and between museums and their communities.

Thoughtful debate: Gurian (2006) suggests that museums should be safe places for visitors to discuss "unsafe ideas" (p. 12). Cameron (2003) also discusses 'safeness' and contends that safeness is not the untroubled view suggested by Gurian, but a place for courteous debate and an environment in which no one, including the museum, is harbouring an agenda. This is reminiscent of how Munley and Roberts (2006) characterize the role of museum educators as facilitators of civil dialogue amongst community members. Cameron (2005) explores a similar concept to 'unsafe' ideas through discussions of contentious ideas, ideas that "engage an individual's or group's values, beliefs, ideologies or moral position and conflict with empiricist modes of knowledge" (p. 216). She sees that in addition to the more traditional roles of providing information and social experiences, there are opportunities for museums to foster debate and problem solving, challenge thinking, and transform society.

Part of positioning museums as places for thoughtful debate is a need to teach public disagreement (Dunne & Pendlebury, 2003) as part of democratic citizenship, seen by some as an obligation of the public school system, but an obligation that museums could be well positioned to meet. This shift reflects a changing view of museums' roles in society from one of promoting good citizens described as well-trained people, such as the aims of the early science museums, to one which views good citizens as active participants in societal debates. This is similar to Noddings (2006) suggestion of a change to the current curricular approach in schools to one that builds curriculum around significant problems and requires students to formulate questions, discuss alternatives and make decisions. This too could be an approach to museum education so that the educative experience moves from talking at visitors about objects deemed important by a higher and often hidden authority in the form of a curator, collections policy, organizational mandate, or funder, to exploring relationships between people, concepts (often as represented or sparked by objects), museums and community. An approach such as this may be unexpected for visitors. In Kelly's (2006) research about people's use of museums as

information sources, focus group participants reported that museums shouldn't lead public debate, but be objective sources of information and were concerned that museum remain unbiased, trustworthy and objective sources of information.

To what end will museums become places for thoughtful debate? Henry (2006) describes the role of museums in building civic engagement and places museum education as integral in that process. Munley and Roberts (2006) also place museum education as the driving force for change within the museum and particularly in their roles supporting of civic engagement. With the intention of sharing diverse perspectives in a respectful way, museums can help communities towards, what Davis et al. (2008) argue is imperative for the world in its present state, "knowing differently, not merely knowing more" (p. 8). If thoughtful debate catalyzed by museum experiences helps visitors (and museum professionals) think and know differently, how will that support the discussions of what Biesta (2008) calls "the significance of education in the light of the urgent questions of our time: questions about identity and difference, about social and ecological justice, and about meaningful and peaceful human co-existence" (p. 1 – 2)? Is thoughtful debate the purpose of contemporary museums? If it is how will that affect the way in which museum educators teach others to teach?

2.1.3 Museum education

Museums have an educative purpose and people learn in museums. This is supported by the increasing depth of research into learning in museums, much of which is summarised in a recent report by the U.S. National Research Council (2009) about the potential for learning science in non-schools settings. We also know this anecdotally – any museum educator can give you a story of learning and how museums affect people. My current favourite story is of Elliott, the young son of a friend. Elliott's first outing, at four days old, was to a museum, and five years later this young boy has embraced both the collecting and educative purposes of museums into his daily life. He is an experienced collector of objects, not unusual for a young child, but his collections are not private. He makes them public through the creation of exhibits. Elliott displays his artifacts, most recently items he found by digging in his backyard, in cabinets that most closely mimic traditional museum display cases (cabinets with glass doors). He seems to be using his exhibits as a physical representation of his own learning and the care and attention he gives to his exhibits and how he displays objects is a testament to his understanding of museums' collecting and education mandate. This understanding in someone so young did not come about from a single visit, but through repeated visits to a variety of informal learning sites which were facilitated by a parent with an understanding of learning, the needs of her son, and how to access the range of learning resources available in museums.

Elliott exemplifies what researchers are discovering as they try to better understand the nature of learning and teaching in museums.

Currently, sociocultural theories are more commonly used by museum professionals and researchers to inform their perspectives of museums as learning environments. Research into learning focus on visitors' conversations within their social groups and suggest that museums can support meaningful learning experiences that value "attention, curiosity arousal and imagination expansion more than they value the naming of scientific terms or painters' styles" (Leinhardt & Knutson, 2004, p. 6).

The premise that learning takes place within a social framework and not within an individual's mind (Lave & Wenger, 1991), and that social interaction is necessary for learning to take place (Vygotsky, 1963), are central to sociocultural theory. It views learning, thinking and knowing as relations among people in a socially constructed world (Lave & Wenger, 1991). Modifying the purpose of learning should be congruent with the theoretical perspective and the context to avoid issues such as those described by Griffin (2004). Griffin suggests that one of the major impediments to learning on school field trips to museums has been the teaching strategies used, primarily strategies appropriated from classrooms which inhibit social interaction and meaning-making amongst the students and between students and teachers as co-learners. This transforms the perspective of learning from the acquisition of information, a conception still prevalent in museums today, to learning as participation that "changes who we are by changing our ability to participate, to belong, to negotiate meaning" (Wenger, 1998, p. 226). Wenger (1998) describes his theoretical approach to social learning not as a replacement of other theories, but one which conceptualizes learning as knowledge of and competence in an activity valued by the community gained through active participation, and results in meaning making.

Research into learning in museums: There is a rapidly growing body of research into learning in museums and although museums profess that learning is an integral part of their mandate, visitors' primary motivation is for an enjoyable, social experience with family or friends (Kelly, 2000). The research into learning in museums, particularly in relation to the visitors' social agenda, provides an important piece of the teaching-learning context and is relevant to museum educators to better understand the nature and influences of learning within museums. An important implication to current research is that the conception of learning no longer fits an empiricist model of the world (or the museum). Current research recommends that educators who facilitate learning experiences with visitors acknowledge the importance of the social construction of meaning, social interaction, visitor choice and motivation, and the influences of social, personal and historical contexts (U.S. National Research Council, 2009).

Beginning with basic visitor behaviour studies in the 1980's, initial research measured aspects such as demographics and time spent at exhibits (Tran & King, 2007). Current research has a much broader focus and is exploring a multitude of variables that may affect learning. Increasingly researchers are examining many aspects of museum experiences, such as the impact of sociocultural, physical and personal contexts on the learning experience (Falk & Dierking, 2000), learning with specific groups such as families (Borun, Chambers & Cleghorn, 1996), school groups (Anderson & Lucas, 1997; Dierking & Falk, 1994), and young children (Anderson, Piscitelli & Everett, 2007), long term impact of museum exposure (Falk & Dierking, 1997), exhibit design as it influences learning (Gutwill, 2008), how museum experiences affect further learning (Anderson & Lucas, 2001), and how interactions with museum staff affect learning (Castle, 2006). Through these studies and others, researchers are attempting to develop frameworks to better understand learning in museums, how to assess it, and possible benefits to adopting specific frameworks of learning.

Leinhardt and Crowley (1998) described learning as conversational elaboration and attempted to analyze the type of talk related to meaning and the nature of the museum that occurs within a group during a museum visit. In their work they explored how elements related to identity, the attempts of visitors to make meaning about exhibits and how the environment attempts to 'mediate' learning. One reason they adopted this view of learning was because it reflected the actions of visitors; conversations are a key part of their visit. Recommendations from the work about conversation in museums suggest that care is given to the environment created for visitors particularly the ways in which museum exhibits support visitor conversation (Leinhardt & Knutson, 2004).

Falk and Dierking (2000) proposed the contextual model of learning, an attempt to acknowledge the complexities of learning while providing a systematic way to think of learning in museums. They describe factors affecting learning in three interconnected contexts: Personal context (motivations and expectations; prior knowledge interest and beliefs; choice and control), sociocultural context (interactions within their group and experiences facilitated by individuals from outside their group), and physical context (advanced organisers and orientation; design; events outside the museum which reinforce the museum experience). In addition to these three contexts a fourth element, time, is integrated to acknowledge that learning takes time.

2.2 Teaching in museums

Teaching is something we all have experience with, whether as a parent guiding a child, helping a colleague learn a new task, as an educator working in a museum, and more commonly as a student. It is estimated that individuals have approximately 15,000 hours of

familiarity with the setting and processes of teaching, although as a student in a classroom and not a teacher (Russell & Korthagen, 1995). Preservice teachers tend to teach as they have seen others teach, and often in contradiction to approaches they are introduced to during university-based instruction (Guojonsson, 2007). This experience with teaching is particularly problematic in museums, as museum educators, as well as others working in museums, bring with them this classroom-based experience, but relatively limited experience with teaching in museums.

Hoban (2005) discusses the nature of teaching by describing it as craft, labour, profession or art. Teaching as craft adopts a mechanistic view of learning to teach centred on the development of a repertoire of techniques and skills. Knowledge about teaching is associated with rules that indicate when to apply proper techniques and discrete pieces of knowledge (Hoban, 2005). The desired outcome of this view of teaching is developing a “practitioner-proof mode of practice” (Dunne, 2005 p. 375). It views learning as accumulative and disregards particularities of context or the knowledge and experiences of the learner. Training a teacher within this view of teaching would most likely consist of classroom-based sessions where new teachers accumulate and integrate knowledge about content and rules for teaching. This view of teaching is reminiscent of what Bevan and Xanthoudaki (2008) describe as influencing teaching in museums, a transmission approach. They suggest that most museum educators have been taught through transmission and this approach influences their program development, delivery and assessment.

Similar to teaching as craft is teaching as labour (Hoban, 2005), in which a teacher uses prescribed skills to implement a set of pre-determined goals and lesson plans. Necessary skills associated with teaching as craft or labour may include time and group management, and the use of activity-oriented instruction such as discovery or ‘hands-on’ approach to teaching (Popkewitz, 1998) with pre-determined end points. Teaching as craft and labour presents learning as knowledge acquisition and learning to teach in this way as a matter of imitating or copying the performance of technical experts, something that is transmitted to developing teachers.

Teaching as art moves teaching beyond technical and includes judgements. In this conception teaching is viewed more as a dynamic relationship that changes with changing context and learners (Hoban, 2005). This view of teaching requires teachers to learn more than a repertoire of techniques and rules to apply them effectively. It requires teachers to make informed judgements with a theoretical basis and to constantly read changes in the context. Learning to teach in this view would include opportunities for new teachers to think about teaching and to help them understand the connections between elements. This view is consistent with a sociocultural theory of learning.

Examples of teaching as craft and art are evident in the museum education literature. It is apparent in the research by Castle (2001), Grenier (2005), and Tran (2007) that museum educators are making judgements in their teaching about how to modify program content for different audiences, what objects to include, or how to shorten programs when groups start late. Tran (2007) found that museum educators were adept at modifying technical aspects of their teaching such as timing for workshops and classroom management. Any teaching, in a museum or a classroom, requires the teacher to make judgements daily, whether the judgements are deliberated over or hidden as a result of years of routine. How museum educators contemplate and act on these judgements will shape teaching interactions, both present and future.

Interest in research into teaching in museums is increasing, but it is still somewhat limited. Looking to the literature from other areas of teaching and extrapolating to museum settings offers alternative perspectives to understand teaching in museums as well as the practice of those who fulfil the role of ‘teacher educators’ in museums. Although research from other areas provides insights into teaching in museums, it is used with caution, because of differences in key influences in different educational settings. Museum education differs from formal education settings in that they do not have a mandatory curriculum (although it could be argued they do have a guiding curriculum, it is just not sanctioned by a government agency), and they lack formal assessment of learners. Additionally, learners usually have a degree of choice about their actions in a museum and the museum educator as “teacher” has a different type of authority with respect to learners that a teacher in the formal learning setting (Falk & Dierking, 2000). These factors do not preclude the use of literature from different areas of education, but are raised as they form a backdrop to the review of literatures from both formal and informal learning.

The conception of teaching as art or craft (Hoban, 2005) is used in the analysis of data for this study. Conceptions of teaching should help museum educators think about their practice with respect to their unique circumstances, and to strive towards teaching that is “more about the provocation to think than any communication of knowledge” (Aoki, 2000, p. 15). The following section describes the practice of museum educators and current research about teaching in museums.

2.2.1 Museum educators

Although the museum education literature does not articulate well what teaching is, it is rich with indications about beliefs towards teaching. Commonly used words to describe teaching in museums include teaching as dissemination of fact (delivering, instructing, explaining, lecturing); teaching as discovering, teaching as presenting different interpretations (interpreting) or teaching as facilitating (Castle, 2001; Cox-Petersen, Marsh, Kisiel, & Melber, 2003; Lankford,

2002). Similar to the diversity of descriptors used to describe teaching in museums, there are a plethora of titles used to identify museum educators. Those whose primary role is to facilitate learning experiences with public (general visitor or school group) use titles such as docent, volunteer, interpreter, guide, naturalist, animator, or gallery instructor (Castle, 2001; Grenier, 2005; Tran and King, 2007) and descriptors such as museum educator, public or school programmer, education manager or curator of education are generally used by individuals whose primary role includes program development (which may include exhibits) and 'training' other museum educators. Castle (2001) speculates that the diversity of titles contributes to a poor understanding of museum educators' roles within many organisations. While the diversity of descriptors is confusing, they all have learning and teaching at the heart of their roles.

In addition to the diversity of job titles they may hold, museum educators have another element in common, their initiation as educators. Museum educators often enter the museum field with discipline expertise and qualifications in such areas as history or botany, but lack knowledge of and experience with contemporary educational theories and practices. There are, however, a proportion of educators that come to the profession with training as classroom teachers. Notwithstanding, these educators often have no experience or formal training specific to museums' informal learning environments (Sweney, 2003) and may struggle to adapt their professional knowledge to this different learning environment. Because of the differences between the contexts for teaching, Sweney (2003) questions, whether this experience as a classroom teacher serves museum education well.

Even with this diversity of job titles and terms describing the acts of teaching, museum educators are fairly consistent in differentiating teaching in museums from what they perceive their counterparts do in formal classroom settings. Museum educators describe the differences in that teaching in museums is centred on an experience with a real object, artifact or manipulative, learners have a choice whether to participate or not (Bailey, 2006), and as museum educators they specialize in a discipline area (Tran, 2008).

There are few detailed illustrations of teaching in museums within the museum education literature. Two examples of facilitated school programs in natural history museums (Tal & Morag, 2007; Cox-Petersen, et al., 2003) portray the museum educator as an expert delivering 'knowledge'. These two studies provide descriptions of facilitated experiences that reflect a transmission perspective where the teacher is portrayed as an expert delivering unquestioned knowledge. Tal and Morag (2007) found that in the museum tours they observed the majority of the learning activities were interpreter-centred with students mainly answering questions related to content knowledge about the exhibits (which they spent little time engaging with). They also noted that often the interpreters would answer their own questions. Students who participated in the tours observed by Cox-Petersen et al. (2003) fared slightly better.

Docents used some thought-provoking questions at the beginning of the tour and students were given an opportunity to briefly explore the galleries on their own during the tour. However, most of the tour was still docent-focused, with transmitting content information one of their primary activities. The majority of the tour appeared to follow a set script with delivery of facts as the primary aim, and the open-ended questions asked at the beginning of the tour were not revisited.

While there are examples of teaching in museums that are more consistent with a sociocultural perspective of learning, why are the above examples all too common? Bevan and Xanthoudaki's (2008) claim that teaching in museums is still informed by a transmission approach, as illustrated by the two examples above, which they attribute to the way in which most museum educators have learned (through transmission) and the limited opportunities for professional development in which museum educators can reflect on and analyze their practice. A review of the limited literature examining museum educators' conceptions of teaching provides some insights into how museum educators learn to teach and may provide direction for better understanding of the types of experiences that would support museum educators as they train others to teach.

Researchers are beginning to examine the intricacies of teaching in museums through the perceptions of those who teach, museum educators. Bailey's (2006) study of science educators with at least five years experience working in museums found that those interviewed considered a combination of skills, attitudes and characteristics critical to their success. These include knowledge about teaching and learning, program and exhibit development skills, presentation skills, content knowledge in science, project management and problem-solving skills, as well as characteristics such as organizational savvy, self-motivation, ability to work within a climate of change, and risk-tolerance. This combination of skills and attitudes reflects the broader role more experienced museum educators often play within an organization which includes tasks other than teaching and provides some direction as to concepts that should be addressed when working with new interpreters as they learn to teach in museums.

Grenier's (2005) study of 'expert' docents examined the interaction between docent and learner in an attempt to elucidate the characteristics of expertise in docents. She asked educators working in four organizations to identify people they considered to be 'expert' docents. In observing the experts' interactions with learners and through interviews, she suggested their expertise is related to their ability to facilitate learning, which includes communicating information, having appropriate subject knowledge, reading the audience, and being adaptable to changing situations. Other characteristics included the ability to integrate prior experience, enthusiasm, a high level of commitment, and a sense of humour about themselves and their work.

In addition to looking at what skills, attitudes and characteristics museum educators describe as necessary for success, researchers are also examining how museum educators think they learn to teach. Through interviews, museum educators suggest that the primary way they develop their teaching practices is through observing the practice of other museum educators (shadowing), the experience of teaching, both in the museum and previous teaching experiences such as working in classroom settings, and acquisition of information (Castle, 2001; Grenier, 2005). Although these can be very effective ways for museum educators to start to learn to teach and are commonly used in museums, a further examination of shadowing, experience and content acquisition is useful to ensure teaching approaches are congruous with the museum's educative aims.

Shadowing: Observing others as they teach, or 'shadowing' as it is commonly called in museum education, is an integral part of the process most new interpreters undergo as they learn to teach in museums. Shadowing may consist of simply watching a more experienced interpreter deliver a program or may involve a more substantial extensive relationship similar to an apprenticeship, during which the new educator learns to teach and is encultured into the community (Pratt, 2005).

Regardless of the extent of the shadowing, museum educators found the experience valuable as it served as a refresher about programs, was an opportunity to see other educators' techniques, and was an opportunity to learn new "tricks of the trade" (Grenier, 2005, p. 112). Shadowing is not without its challenges, particularly if, as a result, teaching becomes simply replicating the approach used by others, and is not reflective (Clarke & Erickson, 2007). The following comment from one of the museum educators interviewed by Castle (2001) illustrates this realization of a need to move beyond replication, "I can't work the way she does. I DID at the beginning. I almost SOUNDED like her because that was how I learned" (p. 289). Castle (2001) argues an observer is not cognizant of the intentions and thought process of the person (the 'expert') being shadowed. Castle also found that the success of shadowing is determined in part by the conceptions of learning held by the novice museum educator. She found that those who held an objectivist view of learning were more passive when shadowing, and once required to lead a group attempted to replicate the experience they shadowed. Loughran and Russell (2007) describe a similar experience for student teachers observing teachers in a classroom. They suggest that when student teachers don't have access to the teacher's pedagogical reasoning, "...sophisticated, skilful teaching practice is often confused with good performance, a fun activity or an enjoyable experience" (p. 219).

One approach that could help provide the observer develop insights into an experts' thinking is framing an experience in such a way that both observer and expert focus on specific elements. This approach resonates with Davis, Sumara and Luce-Kapler's (2008) suggestion

that new teachers start with meaningful, but peripheral learning experiences. As museum educators have more experiences, the size and types of frames is increased. In some ways, Sweney's (2003) use of a tour observation form was an initial step towards framing an experience. Her form included eight questions for new docents to answer after observing the tour. The questions primarily addressed tour mechanics such as reviewing security rules, transitions between objects in the tour, involving people ("make sure the visitors were active participants rather than passive observers"), the use of questions and group management ("With children what tricks (if necessary) did the docent use to maintain discipline?"). One question asked about the main ideas covered in the tour, and two questions were focused on visitor interaction (listening to visitor responses and "assisting the visitors in reflection on their experience" p. 435). Sweeney comments on the lack of success with the form used by new docents, which she attributed, in part to the lack of preparation for her new docents and not seeking permission from her experienced docents to be followed by new docents. With a strong bias towards tour mechanics, the types of questions used on the form seem to indicate a strong bias towards learning to teach as a technical endeavour.

It is important that shadowing experiences end with opportunities for both the observer and the expert to discuss their different perceptions of the experience. This complicated process can be made more difficult by the comfort level and familiarity with giving and receiving feedback, openness to diverse perspectives, and even the time and a quiet place to sit down together to do it (Castle, 2001). These debriefing sessions not only provide an opportunity to discuss technical aspects of teaching in museums, but also provide a forum to discuss more conceptual matters. Phelan (2005) suggests that when groups of pre-service teachers from different disciplines work together they begin to realize how those disciplines frame their thinking and develop an understanding of other ways of interpreting the world.

The question of the choice of 'expert' to learn from or shadow is also raised in the literature. Lunenberg, Korthagen and Swennen (2007) question the success of modelling as part of classroom teachers learning to teach. They note that teacher educators who are required to 'model' teaching for their students seldom receive formal training to support this and, as a result, they doubt the effectiveness of modelling. The situation is similar in museum environments. In interviews conducted by Grenier (2005) and Castle (2001), it was not apparent how the choices to shadow particular museum educators were made. Sweney (2003) also discusses observation as an integral part of the development of new museum educators (volunteer art educators in this case). As part of their preparation for delivering tours, each new volunteer was requested to observe five tours led by five different people. It appeared the choice of whom to view was left up to the individual. In my experience of pairing new and experienced educators, pairings are made as a result of a combination of factors, with the

choice often made based on availability rather than matching a new museum educator with one who exhibits a high level of expertise in teaching.

Experience: During shadowing a museum educator is often solely a spectator of an experience – watching the acts of others' teaching. Museum educators claimed they learn to teach through experience (Castle, 2001; Grenier, 2005). As they begin teaching on their own, they shed their spectator role and become involved in the experience. Experience plays an important part in learning to teach. But because as Russell and Korthagen (1995) suggest "...real world and first-hand experience speak so loudly, although not always clearly" (p. viii) it is worthwhile to examine how museum educators describe the contributions of experience to their development as educators.

Experience provides a level of familiarity and comfort when teaching. From Castle's (2001) interviews, museum educators often equated experience with comfort: the more experience they had the more comfortable they were in presenting programs. Those interviewed commented on drawing from a range of experiences including classroom-based teaching and teaching in other museums. They reported applying their experiences in both mechanical and interpretive, creative ways. Even for those without previous teaching, novice museum educators, much like their classroom based counterparts, bring with them vast amounts of experience and familiarity with processes of teaching, although as a student and not a teacher (Russell & Korthagen, 1995) and, to a lesser degree, as a learner within a museum. New educators use this to shape their initial practice, as it is common for teachers to begin teaching much in the same way they were taught (Davis et al., 2008; Blume, 1971).

Museum educators frequently mentioned teaching experience as integral to their development, whether the experience was from the setting they were currently teaching in or previous teaching experiences, in either formal or informal settings. Museum educators commented that learning through experience was highly effective and because of that they attempted to provide similar experiences for their learners (Bailey, 2006; Grenier & Sheckley, 2008). Bailey (2006) reported that museum educators felt that their depth of experience contributed to their 'practical know-how' and sharpened what they described as their intuitive ability to engage learners. Many acknowledged the influences of their own learning experiences. Their personal preference for learning was through experiential and 'hands-on' approaches and, as a result, felt that was the best approach for them to use when teaching others.

Experience should not be blindly accepted as instructive. Britzman (1992) discusses experience as part of teacher education and suggests, "...when experience is perceived as a map, experience seems to organise perception. Absent from this version is the social activity that confounds our meanings and shapes our views of the world" (p. 29). Russell describes an alternative way experience is conceived, as a lens to filter "what is practical and what isn't" (p.

143). Much like Britzman's analogy of a map, this practical filter will also serve to organise, and perhaps limit perception. One way experience is 'mapped' is through experience teaching in classrooms. Sweney (2003) questions whether prior classroom teaching experience is useful for museum educators as she views museum education as substantially different from classroom education. From interviews with museum educators who were retired classroom based teachers Castle (2001) speculates that, from one perspective, prior experience teaching in a classroom is helpful as it provided new museum educators with a greater repertoire of techniques to choose from. Conversely, classroom experiences could narrow the choices museum educators make when teaching, resulting in educators falling into routines, relying on the same techniques and approaches regardless of learners or context.

Information: Museum educators recognise that information acquisition is part of how they learn (Castle, 2001; Grenier, 2005). Many museum educators spoke of the desire and need to acquire information when discussing their development (Castle, 2001; Grenier, 2005; Bailey, 2006). This is evident through the interpreters' use of fact based questions and the delivery of an extensive amount of information in the guided tours reviewed by Tal and Morag (2007) and Cox-Peterson et al. (2003) The desire to acquire new information is encouraged by approaches to training that focus primarily on mastery of content. This will be further elaborated in the following section.

Examples of teaching in museums with its emphasis on content knowledge, accumulation of experience and shadowing as imitation appears to equate teaching with the delivery of content that requires only technical skill, a craft, with good teaching promulgated through craft wisdom and recipe knowledge. This can result in wonderfully entertaining experiences, but limits the potential of museums as educative experiences and is an impediment to considering different perspectives of teaching. The three components museum educators say contribute to their teaching, observation, experience, and information, will always be a critical part of the journey to becoming a museum educator. If museums are to reach their educational potential, it will be necessary for museum educators to broaden their thinking about teaching as good performance or a set of procedures to thinking about teaching in a much deeper way. As Loughran and Russell (2007) suggest for teaching in more traditional settings (including teacher education programs) that a shift from thinking of teaching as a set of technical skills to thinking about teaching as a discipline is needed:

Developing knowledge, skills and abilities and creating powerful learning experiences require high levels of competence and discipline—competence in knowing what and knowing how in ways that combine to inform intentions and actions in the practice setting, and discipline in gaining personal control over one's teaching behaviours. Such an understanding of teaching is dramatically different from a view of teaching as the delivery of information. Such an understanding can only be based on awareness that teaching is constructed on a foundation from which disciplined studies of practice lead to

knowledge about the field. That knowledge matters because it is the basis on which skilful practitioners further develop, test and refine their knowledge in order to shape quality pedagogical experiences for their students. Monitoring such development, testing and refining of practice in action is central to the growth of knowledge of teaching and captures the essence of what it means to conduct disciplined studies of practice (p. 220 – 221).

The research into what makes good museum educators as well as how they view their learning to teach should be used by museum educators to think about their own practice of teaching others to teach and the programs they develop to support the development of teaching skills and attitudes in their interpreters and docents.

2.2.2 Teaching others to teach

To date most of the research focused on museum educators examines the interaction between educator and visitor. Although not a main focus of research there are some examples in the literature about the interactions between museum educator and interpreters, or their “training”. These examples provide additional insights into why a transmission approach is prevalent in museum teaching experiences.

Cox-Petersen et al. (2003) state that training provided for docents in their study was delivered using very complex language by museum-based scientists and consisted of an extensive amount of information about the exhibits. While there was some focus on teaching techniques, it was limited in comparison to the amount of content information. They postulate that the emphasis of content over theoretical perspectives of teaching and learning during training conveys to the docent group that content has priority over teaching techniques or theories. This dichotomy is not unusual. It is also evident in the training outlines provided by Sweney (2003) who describes her training as primarily lecture based although as she states “...we still tried to close as many of these lectures [slide lectures] as possible with some time in the gallery” (p. 266). The recollections of those interviewed by Castle (2001) remark on a similar approach to training. They described training as either a thorough introduction to the site’s subject matter with few opportunities to question what they were learning and to link to their pre-existing knowledge or techniques, or a collection of readings about the program augmented by following veteran museum educators as they delivered the program. Docent training at the Monterey Bay Aquarium was also similar, with docents participating in the equivalent of an undergraduate course in marine biology with a couple of hours of interpretive techniques added on at the end of training (E. Kelsey, personal communication, April, 2004).

Museum educators also access information about training interpreters and docents through manuals written to guide them through training. Publications such as *The Museum Educator’s Manual* (Johnson, Huber, Cutler, Bingmann & Grove, 2009) or Cunningham’s

(2004) *The Interpreters Training Manual for Museums* attempt to provide procedures and reproducible worksheets to assist museum educators with training and program development. These publications and the examples of training above provide limited theoretical background into teaching and present learning to teach as a craft with emphasis on development of a repertoire of techniques, rules to apply them and subject matter knowledge.

These approaches to training could be, in part, due to museum educators possessing in-depth content knowledge, but lacking expertise in training for content delivery or facilitating discussion of learning theory (Grenier, 2005). Recommendations from the limited research on the practices of museum educators suggest that museums take greater responsibility for the development of their museum educators (Tran, 2008, Castle, 2001, Grenier, 2005, Sweney, 2003). Critical to this is further study of museum educator training specifically to support a “more thoughtful and reasoned approach and commitment to the definition and creation of teacher in the museum setting” (Castle, 2001, p. 330).

Grenier and Sheckly's (2008) approach may offer a different avenue for docents to learn to teach. They advocate for an alternative approach to docent training, one which more closely mirrors what many museums, especially science museums, advocate for their visitor experience. They suggest a more experiential-based or case-based training in which docents participate in a common experience within the museum, which becomes the focus for learning through discussions and augmented by classroom sessions to provide relevant background information. These discussions would be one way for docents to begin to develop an understanding of the interplay between changing context and learners and their judgements about the particulars of the situation signifies an approach to teaching that is more than the application of skills and the delivery of content.

While insights into the practices of museum educators teaching others to teach is limited, there is a relative abundance of research in a related area, teacher educators in more traditional teaching settings (classrooms), to provoke thinking about learning to teach others to teach in museums. In a review of the literature addressing both teacher educators and museum educators, the two groups have similarities including influences on their teaching and their transition from teacher to teacher educator.

Museum educators charged with the responsibility to ‘train’ other educators have little expertise in training or learning theory (Grenier, 2005) and much like their counterparts in more traditional settings, a common assumption is that good teachers will make good teacher educators (Korthagan, Loughran & Lunenberg, 2005). Berry (2007b) and Ritter (2007) describe similar path as they began their careers as teacher educators in a university setting. They were largely initiated into their role by being ‘thrown’ into teaching others to teach, relying largely on

their own experiences in teaching in the classroom or their recollections of their own 'teacher training'. This is not unlike the experience of many museum educators. As they continue through their career, museum educators are charged with preparing others to teach in the museum, often with little exposure to contemporary theories and practices related to teaching others to teach. They too may rely on previous experiences as a learner.

These experiences with teaching are influential when learning to teach others to teach. Influences of prior experiences with teaching are striking. With approximately 15,000 hours of familiarity with the classroom setting and processes, although as a student and not a teacher (Russell & Korthagen, 1995), pre-service teachers tend to teach as they have seen others teach, and often in contradiction to approaches they are introduced to during university-based instruction (Guojonsson, 2007). While many museum educators lack formal training in education or museum education they also bring with them extensive experiences with teaching, although not necessarily from the perspective of a museum setting nor as teachers, but as students in formal classrooms. Museum educators' prior experiences with teaching (as students) could be one of the factors resulting in the types of experiences observed by Tal and Morag (2007) and Cox-Petersen et al. (2003). The predominance of shadowing as a technique for interpreters learning to teach (Castle, 2001; Grenier, 2005) contributes to the predominance of a transmission approach. If they are learning from someone using that approach they will likely emulate what they see and the same approach to teaching will be propagated through replication.

Bevan and Xanthoudaki (2008) suggest that approaches to teaching in museums will not change unless museum educators have the opportunity to re-examine their epistemological and pedagogical beliefs. They advocate for ongoing professional development that provides opportunities to reflect on and analyze their beliefs as part of an effort to align teaching practices with more contemporary theoretical perspectives.

2.2.3 Beliefs about teaching in museums

Beliefs are one of many factors that influence teaching and learning to teach (Berry 2007a). Current research addressing museum educators' beliefs about teaching is limited to work conducted with interpreters and docents and their experiences teaching visitors (Grenier, 2005; Castle, 2001; Tran, 2004).

Grenier (2005) interviewed "expert docents", as identified by museum educators, in order to better understand what contributed to their expertise. The docents interviewed identified a number of attributes they believed contributed to their expertise. These include acquired characteristics resulted from training and experience and include content, how to communicate effectively and how to integrate prior experiences into their practice. Docents also believed pre-

existing characteristics, qualities they have coming into their role such as adaptability, enthusiasm and commitment, and a sense of humor, contributed to their expertise.

Castle's (2001) study examined how interpreters think about teaching and what they believe they need to know to teach in a museum. As described during interviews, interpreters believed that they learn to teach through acquisition of information, shadowing experienced interpreters as they teach, as well as their own experiences of teaching in museums. Castle suggests that interpreters learning to teach are affected by their beliefs about learning and learners in museums as well as the beliefs held by those who provide their training.

Tran's (2004) study examined how interpreters made changes to short, one-time science lessons in museums. One element of her study addressed interpreters' beliefs about what motivated the changes in their practice. She suggested that their beliefs about the purpose for these experiences, to provide students with a positive experience with science, to encourage them to return to the museum with family, and to consider pursuing science on their own, influenced them to change their actions. Interpreters recognized that conceptual gains may not occur because of the limited nature of the lessons, but believed the positive affective nature of the experience was more important to support their beliefs in life long learning.

2.2.4 The gap in practice

Like many institutions in today's rapidly changing world, museums are contemplating the relevance of their current role and postulating what might be the roles of museums in the future. Much of this thinking is coming from museum professions who are challenging their community to re-position museums as socially responsible organisations (Gurian, 2006; Janes & Conaty, 2005; Worts, 2006a), which become hubs for thoughtful debate about society's most compelling issues. As museums make this transition, they are forced to examine closely held assumptions about the nature of knowledge and objectivity. Museum educators are an integral part of this transition, and they are re-examining their practices to ensure they support thoughtful debate.

A research agenda focused on learning in museums provides much needed documentation of experiences, frameworks to think about learning in museums and provokes questions to further expand conceptions of learning and teaching in museums. These conceptions are increasingly filtering through to practitioners. The growth in research about learning in museums has not yet stimulated growth in research about teaching in museums, an area of considerable importance, particularly with reference to how museum educators help others learn to teach.

Teaching in museums is well served by expanding perspectives of what teaching could be and by looking to research about teaching in other areas of teaching such as adult

education, post-secondary and K-12 education. Museums need to take teaching more seriously and ensure that it incorporates contemporary approaches and theories that are supportive of the educational purposes of museums. Castle (2001) recommends that a “more thoughtful and reasoned approach and commitment to the definition and creation of teacher in the museum setting” (p. 330) is needed. One way to contribute to this is through the development of a research tradition in museums that supports the generation of new knowledge about teaching others to teach as well as supports the professional development of museum-based teacher educators.

Chapter 3 Theoretical Framework

A group of museum educators talk around a table. They have been meeting regularly for the past six months and the shyness to question each other and challenge ideas has diminished. They are actively working to better understand teaching and learning within museums, their own practice as museum-based teacher educators and their personal beliefs about teaching and learning. Today they are discussing how to share what they have learned through collaboratively studying their practice with others in the museum community.

This vignette and the vignette that introduces the first chapter illustrate the intersection of sociocultural theory, community of practice, reflection and teachers' beliefs about practice, and the basis for this research. This research examines the work of a group of museum educators, formed into a community of practice, as they strive to better understand their practice of teaching others to teach and how discussions may provide insights into their beliefs about their teaching.

Sociocultural theory of learning, based on the work of Vygotsky (1963) and further elaborated by other scholars (for example Wertsch, 1991; Lave and Wenger, 1991), emphasizes the role of social interactions. The premise that learning takes place within a social framework and not within an individual's mind (Lave & Wenger, 1991), and that social interaction is necessary for learning to take place (Vygotsky, 1963), are central to sociocultural theory. This theory views learning, thinking and knowing as relations among people in a socially constructed world (Lave & Wenger, 1991) and transforms the perspective of learning from the acquisition of information, a conception still prevalent in museums today (Bevan & Xanthoudaki, 2008), to learning as participation that "changes who we are by changing our ability to participate, to belong, to negotiate meaning" (Wenger, 1998, p. 226).

In a sociocultural perspective, learning is both situated and mediated. Learning as situated emphasises the interactive nature of relationships between people and their environment, including cultural, social and historical contexts (Lave & Wenger, 1991). Lave (1991) describes learners and the world as interdependent, with "learning, thinking and knowing" as relations among the people engaged in the activity that take place within a socially and culturally structured and constituted world.

Learning occurs in a social interaction, which is mediated through some form of guidance or collaboration between a 'learner' and a 'teacher'. Learning is mediated through language or symbols. Vygotsky uses the term Zone of Proximal Development (ZPD) to describe where learning takes place. This metaphorical site is the difference between what a learner can do on their own compared to what they can achieve under the guidance of or in collaboration

with others (Vygotsky, 1963). These two concepts, learning is mediated and situated, have great relevance to learning within social settings such as communities of practice.

The concept of community of practice as articulated by Lave and Wenger (1991) is a result of their work on learning through apprenticeship. Lave and Wenger describe learning as a situated activity that requires legitimate peripheral participation, a process which resonates with a societal perspective interpretation of Vygotsky's description of the ZPD which concentrates on a "process of social transformation" (Lave and Wenger, 1991, p. 49). With legitimate peripheral participation, new members gradually transition from new to full members through involvement in modified forms of participation. This modified participation exposes them to actual practice, but in such a way that there are minimal risks. In addition to participating in modified forms of practice, new members must also be granted legitimacy, which may be done through a master-apprentice type relationship, with the master providing legitimacy by their sponsorship of the new apprentice. There are different levels or types of memberships in the group, often with new members at the periphery. As they learn from the group and develop an increased competence in the practice of the group, they gradually adopt their identity as a full member of the group, but their learning does not stop. Learning is also mediated through discussions within the community between full members, as a community of practice is not solely a space for newcomers to learn.

Wenger (1998) adopts a social theory of learning on which to base his conception of community of practice. This social theory of learning integrates four components that Wenger suggests "characterizes social participation as a process of learning and of knowing" (p. 4) and include; "meaning – learning as experience; practice – learning as doing; community – learning as belonging; and, identity – learning as becoming" (p. 5).

Wenger (1998) further elaborates on the concept of community of practice. He describes it as a group of people with a common focus working to improve practice through collaboration. Participants in a community of practice join together around a common focus or joint enterprise through which they negotiate activities that are unique to their community of practice, but reflect the broader systems they function within (Wenger, 1998). Learning is situated within a community of practice and mediated through interactions amongst its members. Wenger's work describes in detail the conditions necessary to support the development of a community of practice, and how through participation within the community of practice, individuals negotiate new meanings and understandings of practice as defined by the community. Wenger suggests practice is situated in "time and space because it always exists in specific communities and arises out of mutual engagement" (p. 130).

Participation in a community of practice offers insights to participants as they share and learn, and over time their role within the community changes, as they become core members. In

communities of practice, practice as a source of community coherence is defined by mutual engagement, joint enterprise and shared repertoire, elements that must be negotiated and sustained through participation.

Mutual engagement: Mutual engagement requires more than just membership in a group or a network of personal relationships. It takes effort and attention to enable engagement. This effort and attention comes from participants being involved in meaningful ways in events that matter to the community. These events occur on both a social and professional level. Mutual engagement requires diversity and homogeneity within the community. Through this, each individual develops a unique identity and place within the community. Mutual engagement draws on what individuals know and what they don't know and relies on individuals' ability to make complementary contributions to the community. Through engagement in shared practice participants connect to each other forming mutual relationships and mediating learning.

Joint enterprise: Joint enterprise contributes to community coherence through negotiation of shared activities. These negotiated activities are unique to the community of practice, but reflect the broader systems they function within. From this arises mutual accountability among the individuals and supports the formulation of community held beliefs used to determine what is important and why and may extend to interpretation of formal policies and delineated practices. Mutual accountability helps participants judge the appropriateness of their actions within the community.

Shared repertoire: Shared repertoires are developed over time through the activities of a community of practice and become resources for negotiating meaning and mediating learning. They include routines, stories, and actions and may be extended into the community through participation or through formal systems such as documentation of procedures. These resources reflect the community's past engagements and remain open for interpretation and negotiation. This ambiguity adds to the community's sustained engagement, as participants need to address and resolve misunderstandings that arise from the ambiguity.

Another element of community of practice that has relevance to museum educators teaching others to teach is identity formation. Wenger (1998) suggests that learning "...changes who we are by changing our ability to participate, to belong, to negotiate meaning. And this ability is configured socially with respect to practices, communities, and economies of meaning where it shapes our identities" (p. 226) and that it transforms "who we are and what we can do, it is an experience of identity. It is not just an accumulation of skills and information, but a process of becoming or avoiding becoming a certain person" (p. 215). The experience of being an active member of a community of practice shapes one's identity and continues to shape identity as roles within the community change over time (Lave & Wenger, 1991). A community

of practice is where participants develop, negotiate and share understandings and theories about their world. It is an ideal space to articulate, examine and reflect on beliefs about practice.

Lave and Wenger's (1991) suggest that "...communal forms of memory and reflection..." are supported through "...talking about and talking within a practice..." (p. 109) such as what occurs within a community of practice. Reflection may be described as an approach to help a teacher better understand practice (Loughran, 2002). It is a term frequently used by educators, including museum educators (Grenier, 2005, Lemelin, 2002; Castle, 2001; Tran, 2005), when discussing aspects of their practice. LaBoskey and Hamilton (2010) describe reflection along a continuum that extends from a focus on the individual, their development of life-long learning and problem solving capabilities and their reflections on their beliefs, assumptions and actions on one end, to the transformation of institutions and systems that support democracy, equity and social justice at the other end of the continuum. They stress that this continuum should not be viewed as a developmental progression or in a hierarchical manner, but is presented as a continuum to encompass a range of purposes of reflection.

Although LaBoskey and Hamilton clearly articulate their view of reflection, it is a term that is used in many ways often without clear definition (Loughran, 2010; Loughran 2002; Zeichner & Liu, 2010; Rodgers, 2002). Rodgers (2002) suggests that unclear definitions of reflection can result in reflection being distilled into little more than a checklist of observable behaviours or delineated set of standards.

Reflection's extensive use by educators and its presence in the literature may result in a number of assumptions about what reflection is, and most critically for this study, the perception that reflection is a solitary endeavour. A number of scholars have addressed reflection as a collaborative process, which is more consistent with sociocultural theory. Hoffman-Kipp, Artiles and López-Torres (2003) emphasize the shared nature of reflection, where reflection is "understood as a process that is embedded in everyday activities situated in school cultures that are social in nature, where interactions with others are an important medium in which reflection occurs" (p. 250). Their description of teachers acting as resources for one another and providing assistance to newcomers as they develop "reflective dispositions" (p 251) are consistent with Vygotsky's (1963) Zone of Proximal Development as well as Lave and Wenger's (1991) legitimate peripheral participation.

Rodgers (2002) also highlights the role of collaboration in reflection. She adopts one of Dewey's criteria for reflection, "Reflection needs to happen in community, in interaction with others" (p. 845). She suggests that through collaborative reflection individuals have their understanding broaden by alternative insights and perspectives from collaborators. In addition, collaboration provides a feeling of responsibility and accountability to others to reflect.

There is value in reconceptualising reflection as more than just a solitary pursuit, but one that benefits from collaboration. The presence of collaboration in reflection is widespread as indicated in Loughran's (2010) review of the literature about reflection and collaboration. Loughran suggests that using reflection collaboratively deepens and enriches the reflective process by providing alternative perspectives on one's actions and ultimately reconsidering practice. Conversely, the absence of collaboration in reflection can have negative consequences including isolation and teachers "see[ing] their problems as their own, unrelated to those of other teachers or to the structures of schooling" which may result in a "preoccupation with their own individual failures (Zeichner & Liu, 2010, p. 72). Zeichner and Liu suggest that reflection in collaboration with others can be used to help avoid this feeling of isolation as well as providing support to interrogate one's practice.

Reflection in collaboration with others, particularly when used to examine beliefs about teaching, can move reflection beyond just technical aspects of teaching and support the development of a community's coherence as defined by mutual engagement, joint enterprise and shared repertoire. It also provokes discussion within the community and becomes a forum for educators to reflect on, articulate, question and develop alternative understandings about their beliefs about practice.

This study begins to examine beliefs museum educators hold about their practice as museum-based teacher educators. Beliefs must be inferred based on what people say (Parajes, 1992). Lemke (2001) suggests that a belief is "more than the acknowledgment of bare facts or an assent to logical relationships; it is a felt commitment, a component of identity, and a bond with a community" (p. 312). It is these characteristics of felt commitment, connection to identity and bond with community that make studying beliefs challenging.

Parajes summarises a number of assumptions relevant to studying teachers' beliefs, the most relevant to this study being that beliefs influence the actions of teachers (Pajares, 1992; Korthagen, 2004). This does not imply a direct causality, and from a sociocultural perspective this influence occurs in both directions, while one's beliefs influence actions, actions also influence beliefs. Beliefs are created through social construction and a process of enculturation, and those that are developed early are generally more difficult to change (Pajares, 1992). Pajares further describes how beliefs, on a sociocultural and personal level, "reduce dissonance and confusion, even when dissonance is logically justified by the inconsistent beliefs one holds" (p. 316).

Beliefs related to teaching include educational beliefs related to epistemology, self-esteem and self-concept, efficacy, discipline specific beliefs, as well as beliefs about issues that may affect teachers and students such as control, motivation or anxiety related to learning

(Pajares, 1992). Pajares also describes teacher beliefs, beliefs about the process of schooling, teaching, learning and students. Investigating teaching others to teaching in museums brings about interesting opportunities to better understand educational and teacher beliefs as articulated by museum educators. Their beliefs about teaching have been constructed socially, largely through their experiences with formal schooling. With museum educators as part of a community of practice they have the opportunity to reflect on their beliefs in relation to those of the community. Instances where there is incongruity between beliefs and actions results in tensions in practice (Berry, 2007b) These tensions may be readily recognized and attributed to problems related to self (teacher) or systemic issues that influence teachers' practice.

Elements of sociocultural theory, community of practice and reflection and beliefs are tightly interwoven and will be further elaborated on in the following chapters, specifically within the context of teaching and learning in museums. Sociocultural theory is becoming increasingly prominent in research about learning in museums as is evident through the work of Leinhardt and Crowley's (1998) conversational elaboration model as well as Falk and Dierking's (2000) contextual model of learning. What these applications of sociocultural theory of learning do for museum educators is stimulate contemplation on and discussion about the nature of knowledge used in teaching, how we envision learners and how we formulate our own identities as teachers. It transforms the perspective of learning from the acquisition of information to learning as participation that changes who we are and the concepts inherent in sociocultural theory of learning are also beginning to influence the way we 'teach' our visitors. What the theory does not do for us as teachers is provide a structure or set of procedures for our teaching (Kozulin, Gindis, Ageyev, & Miller, 2003). If sociocultural theory were a lens with which to understand visitors, then it would be justifiable to use it to frame the way interpreters learn to teach.

Chapter 4 Methodology

This research study examined museum educators' perspectives of their practices as museum-based teacher educators to gain insights into their beliefs and issues regarding their practice, generate new understandings about teaching others to teach in museum settings and provide direction for future professional development for this part of museum educators' roles. The following questions guided the study:

- 1) What beliefs are evident in the way museum educators discuss their practice as museum-based teacher educators?
- 2) How do museum educators understand and reconcile the tensions that emerge from their beliefs about practice?
- 3) How does the opportunity to engage in conversations with colleagues about their practice, framed within collaborative self-study, contribute to museum educators' practice?

This study was framed by concepts inherent in collaborative self-study methodology (Louie, Drevdahl, Purdy, & Stackman, 2003; Bodone, Guðjónsdóttir & Dalmau, 2007) and community of practice (Wenger, 1998). This chapter describes the overall design of the study, the development of the research group and its the participants and data collection and analysis.

4.1 Self-study and collaborative self-study

The self-study movement began with teacher educators in universities and currently focuses on a wide range of issues related to teaching and learning to teach (Zeichner, 2001). Self-study, often described as a methodology that borrows from other, more established research methods (Bullough & Pinnegar, 2004), seems to be a methodology that benefits from a plasticity that enables researchers to experiment with its forms. Self-study is most commonly described as research specifically about the practice of teacher educators and has been described as “an intentional and systematic inquiry into one's own practice” (Dinkelman, 2003, p. 8). LaBoskey (2007) characterizes it as inquiry that is focused on improving practice (the practice of teaching others to teach), is interactive with colleagues, students and the educational literature, and is made accessible to the professional community. These three criteria will be further discussed to provide a basis for understanding the complex and variable nature of self-study, the increasing prominence and acknowledgement of collaboration in self-study, and how it relates to studying the practice of museum educators in this study.

LaBoskey (2007) describes the aim of self-study as improving practice, but perhaps a more compelling description of self-study's improvement focus is from Bullough and Pinnegar (2001) who suggest self-study's aim is "to provoke, challenge, and illuminate rather than confirm and settle" (p. 20). This description better captures the "elusive" and "tentative" nature of self-study results (Bullough & Pinnegar, 2001, p. 20). Improvement to one's practice as a teacher educator comes about through self-study by helping teachers articulate their philosophy, check for consistency between action and beliefs, as well as making their pedagogical reasoning explicit (Berry, 2007b).

One contribution of self-study is its role in professional development. Zeichner (2007) describes self-study as a form of professional development that teachers can use throughout their teaching career. Not only does it provide a supportive system for individuals' professional development, it also contributes to the professionalization of the work of teacher educators (Zeichner, 2007). Whereas the values and processes underpinning professionalization may be contested, professionalization through self-study is generated through the practitioners themselves, as opposed to a process or values that they are subjected to from an external authority. This would all serve to add dignity to work often undervalued (Zeichner, 2007), a situation that aptly describes teaching in museums with educators often in positions at the margins of the organisation (Nolan, 2009).

LaBoskey's (2007) second descriptor addresses self-study's interactive and collaborative nature. The role of interaction and collaboration in self-study is also emphasized by other researchers. Labeling an approach to inquiry as "self-study" when interaction or collaboration is an integral element may reinforce certain assumptions about the nature and extent of collaboration. As Bodone, Guðjónsdóttir and Dalmau (2007) illustrate in their analysis of self-study research, collaboration appears in self-study in a number of forms; subtle collaboration such as interactions between researcher and the educational literature or conversations between researcher and a 'critical friend', or more overt, purposeful collaboration where many are collaborating in the research.

A range of examples depicting types of collaborations within self-study can be found in the literature. One example is the decade long collaboration of the Arizona Group. Placier, Pinnegar, Hamilton, and Guilfoyle (2005), members of the Arizona Group, have collaborated for over a decade since the beginning of their careers as teacher educators and use self-study both individually and collaboratively to better understand their work as teacher educators. Another example of collaboration in self-study is Kosnick and Beck's (2005) study. They initiated a self-study project with a group of coordinators in a teacher education program to work collaboratively and explore how and why they used assignments with student teachers. Clift, Brady, Mora,

Choi, and Stegemoller (2005) used self-study as part of their work as a research team. Their study looks at the coming together of a number of research assistants using self-study as they negotiate the relationships between individual and group and work to develop a collective voice. This range of types of self-study may be indicative of the flexibility of self-study as well as a transformation of a research approach so that, as Kitchen (2008) suggests, collaboration becomes increasingly more significant.

Researchers are beginning to identify potential issues and benefits to collaborative self-study. Bodone et al.'s (2007) review of self-study literature to examine aspects of collaboration across self-study reveal issues and questions for consideration including the role of self in collaboration, the vulnerability teachers may feel as they explore their practice within a collaborative setting, and how collaborative self-study influences practice, not only of the individual, but for the profession. Louie, Drevdahl, Purdy, and Stackman (2003) describe numerous benefits to using collaborative self-study. These benefits stem from the social support garnered from co-researchers, which may increase the meaningfulness of the work and "foster a culture of reflectiveness that results in higher-level discourse and critique" (p. 156).

The prevalence of collaboration in self-study raises an interesting question about the focus of the study, that is, who is the 'self' in the study? This would depend, in part, on the type of collaboration and its role in the study. In forms of self-study that may be more readily recognized as self-study such as Ritter's (2007) examination of his transition from classroom-based teacher to teacher educator, collaboration plays a minor role in the study either through conversations with a critical friend or with the literature. In this example 'self' is clearly the researcher. In examples in which collaboration is an overt part of the research (Louie et al., 2003; Clift et al., 2005) the identification of the 'self' in the study is not as clear. In Clift et al.'s (2005) study, research assistances (graduate students) worked collaboratively with the principal researcher, and what evolved from the initial project, a self-study of a teacher educator's practice, was a collaborative self-study of collaboration. In this case, the 'self' shifted from the teacher educator's practice to the interactions and collective voice that developed in the group.

Using self-study in a collaborative manner (Clift et al., 2005; Placier et al., 2005) with a group of museum educators exploring their practices related to teaching others to teach could have an impact far beyond the individual educator. In speaking with local museum educators, reflection is part of their practice. But these reflections occur in isolation of their professional colleagues and alternative theoretical or philosophical frameworks. Framing reflections on one's own practice through self-study promotes a systematic and intentional form of inquiry (Dinkelman, 2003) moves these reflections from a personal level into a more accessible public domain (Berry, 2007a) and may form the beginnings of a research tradition looking at teaching

how to teach in museums. Loughran and Russell (2007) view researching one's own practice as a powerful way to advance the field. The development of a research tradition will build towards increasing credibility of museum education, and particularly of those focused on teaching.

LaBoskey's (2007) third descriptor of self-study is that it is made accessible to the professional community. This is important as it helps address some of the issues and concerns raised about self-study as research. These issues reside within the qualities of self-study research that make it an engaging, challenging and rewarding process for those engaged in it. The individual-focused, collaborative, context-dependent, and iterative nature of the research (Guilfoyle et al., 2007) raises issues to its legitimacy, issues that are common with other forms of Action Research (Zeichner, 2001). Questions arise primarily around the concepts associated with positivist paradigms such as generalizability, validity, and replicability. Researchers (Denizen & Lincoln, 2003) counsel against focusing on conventional research issues such as these and suggest alternative strategies and standards are needed to determine the value of self-study research.

Communication of the research to the wider professional community provides the research with a degree of trustworthiness. Trustworthiness is a concept used in place of criteria around which quantitative research is judged such as validity, credibility and reliability. The willingness of participants and stakeholders to act on the results of self-study research resolves, to a degree, this issue with the methodology (Greenwood & Levin, 2003; LaBoskey, 2007). Bradbury and Reason (2001) suggest researchers address issues of generalizability and validity by asking a series of issues under the overarching question "am I doing good work?" (p. 447), which would help them to reflect on their own research, as well as research of others. The questions relate to five issues affecting quality of research. The issues are 1) "relational praxis" - full participation in research is strived for there is an increased faithfulness to the issues or situation of the inquiry; 2) "reflexive-practical outcomes" - the extent to which the knowledge produced is useful to the participants; 3) "plurality of knowing" - the outcomes of inquiry include a new theory, use of different epistemologies and methodologies to see the situation in a different light; 4) "engaging in significant work" - the participants value the work and feel significant questions have been addressed; and, 5) enduring consequences - the inquiry has long term impacts on the community (pp. 450 – 453).

The application of these concepts, or the 'testing' of self-study research is succinctly summarized by LaBoskey (2007) and provides sound guidance to both self-study researchers and those reading self-study research:

Those of us in the field need to continue the process by incorporating into our teaching and research practice the understandings and procedures we deem trustworthy enough to risk trying, with appropriate adaptation and assessment, in our own programs with our own students (p. 860).

Approaches commonly used to both generate and communicate findings from self-study include written forms such as autobiographical works (Bullough & Pinnegar, 2001), book-length analyses of a self-study (Berry, 2007a; Brandenburg, 2008) or publications in academic journals (Dinkelman, 2004; Ritter, 2007). Less common approaches include use of dialogue (Guilfoyle, et al., 2007) as well as a variety of visual artistic modes such as photography, performance and art installations (Weber & Mitchell, 2007). Diverse approaches to both generating and communicating findings from self-study may be another indication of the flexibility of self-study and a transformation of a research approach. These varied approaches present opportunities for researchers in settings such as museums to represent findings in ways that may be more accessible to an audience of museum educators. These approaches could include presentations at meetings and symposia as well as more traditional forms such as journal articles.

The contributions self-study makes to better understanding teaching others to teach is increasingly well documented within formal education. Museum education would be enriched by similar contributions to understanding the nature of teaching in this unique environment and self-study of museum educators' practices would provide an important source of practitioner generated knowledge (Zeichner, 2007).

4.2 Research design

My choice of research methodology was informed by the nature of the research questions, which aimed to better understand teacher educators in museums as they teach others to teach. In addition to an approach that could provide insights into museum educators' practice, this methodology has the potential to supporting professional development. With this in mind, the following concepts inherent in community of practice (Wenger, 1998) and collaborative self-study (Bodone, et al., 2007; Louie, et al., 2003, LaBoskey, 2007) were useful around which to construct the study:

- Learning is social: learning is a social process involving identity formation (Wenger, 1998) within communities of learning, an approach which supports dialogic communities, common in self-study research (LaBoskey, 2007) where knowledge is socially constructed and assumptions are challenged;
- Knowledge of practice: knowledge of practice is best understood from the perspectives of teachers in collaboration with others (LaBoskey, 2007);
- Collaboration: collaborative processes fosters a "culture of reflectiveness that results in higher-level discourse and critique" (Louie, et al., 2003, p. 156) necessary to develop a greater understanding of teaching.

Locating a study of museum educators' practices within collaborative self-study and community of practice is advantageous to the future of museum education, as it will help museum educators identify with others in similar roles within the wider education community. It will also provide access to a rich and growing body of work into teacher education that will stimulate and provoke thought about their teaching in museums.

4.2.1 Research context

This study involved museum educators from around the greater Vancouver area. This region has an active museum education community supported by numerous professional organisations including the B.C. Museums Association, Interpretation Canada and the Lower Mainland Museum Educators. These organisations provide professional development opportunities, primarily conferences and workshops, as well as networking opportunities for educators. Educators associated with these groups work in a wide range of museums including art galleries, history museums, science centres, and parks, which vary greatly in size, with some as small as two paid staff to others with over 100 staff. Museum educators also represent a variety of academic backgrounds and span the typical museum educator career path from entry-level interpreter to senior management positions.

The most locally active of these groups, the Lower Mainland Museum Educators (LMME), a volunteer-run group, organises guest speakers for their bimonthly meetings as well as opportunities to share resources and ideas at events and through on-line forums. This group has also, on occasion, come together to address issues that affect access to museums' educational programs such as transportation for school field trips and issues that affect practice such as the integration of technology into museum education. The strength of the meetings is that it provides opportunities for educators to network and establish contacts with others in the local educator community. Those who attend meetings tend to be early in their career as a museum educator, although this depends on meeting topic; meetings can attract individuals new to the field as well as the long-time members of the community. The nature of the short, bi-monthly meetings does not often support sustained, in-depth dialogue about issues of practice, dialogue, as described by Guilfoyle, Hamilton, Pinnegar and Placier (2007) that is "a combination of inquiry and critique" (p. 1152). During the research study, participants invited primarily from LMME worked together to form a community of practice in which dialogue provided a way to "explore ideas, theories, concepts and practice to develop understanding that allow confident action" (Guilfoyle, et al., p. 1111).

4.2.2 Participant recruitment and selection

I was interested in working with educators from a variety of discipline-based museums such as art, history or science, so their diverse perspectives and backgrounds would enrich discussions and help expose similarities and differences in thinking about teaching in museums across discipline and across types of museums. This diversity of perspectives and experiences in participants were balanced with the ability of the participants to quickly form as a cohesive group. The synergy from a well-functioning group was important to the success of the project, as was our ability as a group to challenge our own and each other's assumptions about teaching. Louie, Drevdahl, Purdy, & Stackman (2003) and Pedretti (1996) recommend that the selection of participants proceed carefully and suggest researchers consider the following criteria when choosing participants:

- Group needs to be unified in purpose and goals, but heterogeneous in experiences and perspectives
- Motivated and committed to participate
- Ability to trust and take risks
- Open to honest critique
- Available to attend meetings and follow up activities
- Willingness to uncover and confront contradictions in one's practice
- Ability to be supportive and critical
- Ability to provide diverse perspectives

I considered the above recommendations and generated the following criteria to guide participant selection:

- Worked in a museum (using the broadest definition of museum).
- As part of their position individuals were responsible for training and development of other educators (staff and/or volunteer). This included developing and delivering formal training programs, acting as a mentor, or daily supervision.
- Interested in how museum educators learn to teach others to teach.
- Willing and able to participate. This included participation in meetings and some preparation and follow up for meetings.
- Open to collaboration.
- Was supportive and constructively critical within a group.
- Was like-minded with respect to purpose and potential for change in their practice and in thinking about museum education.
- Was open to challenging their assumptions about teaching and learning in museums.

Additional criteria I considered included:

- Participants from diverse types of museums (content, size, mandate) to develop a more heterogeneous group with more diverse experiences to draw from.
- Only one educator from each organisation. While having participants from the same organisation participate would provide an ideal forum for them to continue the discussion between meetings, it could result in the group conversations skewing towards one organisation.
- Location along career path: In Pedretti's (1996) example of science teachers working together on curriculum development, the majority of teachers had similar amounts of experience. The one beginning teacher in the group expressed concerns that she did not have enough to contribute in comparison to those teachers with more experience. I excluded those who did not have any experience training staff and volunteers.

I used two strategies to recruit participants for this study. The first, a more targeted strategy, used my existing network of contacts within the museum education community to solicit interest in the study from museum educators who fit the criteria for participation. To ensure a more heterogeneous group of participants, I also distributed an information flyer about the project through the following museum educator networks:

- Lower Mainland Museum Educators listserve
- Interpretation Canada listserve
- British Columbia Museums listserve
- Parks Canada interpreter discussion board (electronic)
- Poster to Interpretation Canada BC training workshop

Those who expressed interest in participating completed a brief questionnaire (Appendix A) addressing their reasons for participating and their experiences as an educator. This was followed by a brief conversation to confirm that each individual understood the scope of the research and commitment level required and to confirm that they met the criteria.

4.2.3 Research participants

Six local museum educators volunteered to participate in this research project. The participants met the majority of criteria. One element of the additional criteria I was looking for, no more than one participant from an organisation arose as an issue. Two people from one organisation had expressed interest in participating. My apprehension about having two people from one organisation came from a concern that one organisation's issues and approaches would dominate the discussion. In looking at the backgrounds and experiences of these two potential participants, I decided this may not be an issue as one person had worked at the organisation for approximately ten years and the other was relatively new, having been hired only six months previous to the beginning of the research. In addition, this individual had

extensive experience working in other museums to draw from. Before accepting both participants, I spoke with each individual to discuss potential confidentiality issues that could arise as the two individuals worked in the same organisation. Neither expressed concerns about this, so they both joined the research group. These six participants (see Table 4.1) formed a diverse group representing a variety of the backgrounds, experiences and types of museums they worked in. I included myself as a participant because of the nature of the study, but acknowledge that my role in the study differed from the others in the group.

Prior to the formation of the research group I was acquainted with all the participants through the LMME meetings and other museum educator events. I had worked more closely with two of the participants. I had provided training for the interpretive staff at the organisation that Amn works during the previous three years (Amn attended the training during the first year). I had worked with Azy when her organisation hosted an event I helped to organise.

The following is a brief introduction to each participant. Their paths of becoming museum educators are common to other museum educators. At the request of the participants, their real names are used. They did not convey concerns about maintaining anonymity and expressed that it was important to them to have their participation in this research publicly recognized. Additional details about each participant are listed in Table 4.1.

Amn worked at a federally funded national historical site located about an hour's drive from Vancouver. He has worked there for nine years, starting as an interpreter. In his current role as heritage interpreter and supervisor, he develops programs and supervises interpretive staff. He has been involved in training for about half the time he has worked as an interpreter. He has also worked as an interpreter for a small local museum, leading guided walks through heritage areas. Amn attended university for a few years in theatre and Asian studies. It was a university career councillor who suggested he apply for a summer interpreter position at the historic site, suggesting that the interview would be a good experience. Amn was hired on as a summer interpreter, and it rekindled his boyhood passion for BC history. He remained working at the site after the summer and did not return to university.

In the initial interview, Amn identified his biggest weaknesses as a museum educator as his limited experience working in other museums and his limited familiarity with other ways to teach new staff how to teach. He described his motivation for participating in the research group as an opportunity to learn from colleagues and to learn more about how others train their staff.

Azy was the wildlife education and volunteer supervisor at a wildlife refuge, that is part of a privately owned, local resort located just outside Vancouver. Like many museum educators, she started working at the site as a volunteer because of her interest in animals and was eventually hired on as an interpreter. When her supervisor left she was promoted into her current position as wildlife educator. She works directly with contract wildlife interpreters and

volunteers and is responsible for developing programs and training staff. She also delivers programs when necessary and liaises with staff in other departments. At the time of the research Azy was taking distance education courses to complete her Bachelor's degree and had quit her job at the wildlife refuge to dedicate more time to completing her degree.

She viewed her participation in the project as an opportunity to learn from other educators and to learn what teaching methods others use. Azy commented on an interest in connecting with other museum educators. She felt isolated in her work place, as she was the only trainer in her organisation.

Jarrid worked at a local non-profit science centre in Vancouver. At the beginning of the research project he had only worked for the science centre for about five months. His role was to help classroom-based teachers increase their comfort level with teaching science as well as to redevelop the organisation's approach to interpretation. Of all the participants Jarrid had the most diverse experience working in museums. While working on his education degree he was hired on for his first museum job working for a provincial park as an interpreter. He also worked at an aquarium and a small conservation education organisation. He has a B.F.A. and a B.Ed. degree, but other than his practicum never taught in a traditional classroom. During the research he was completing his thesis for a Master's degree in education.

Jarrid expressed a number of reasons for participating in the research. He recognized the potential for the discussions with the research group to assist him in his role at work in changing the organisation's interpretive approach. He also thought it would help him develop a broader understanding of the needs with respect to training for other informal organisations, perspectives that would help him in his volunteer role with Interpretation Canada. He was also eager to share with colleagues some of the questions and concepts he believed were important to museum education.

Nadean was the arts and heritage programmer at a community museum located next to the historic site where Amn works. The community museum is a municipally funded institution that was recently moved from the city's planning department to its recreation department. Nadean was responsible for program development, training, and supervising paid interpreters (mostly auxiliary staff who only work when programs are booked) and a large group of docents responsible for delivery of the museum's school programs. Nadean, like her parents, went into teaching and had a summer job at the community museum while completing her Bachelor of Education degree. In previous summers she had worked for more tourist-oriented companies

that incorporated the use of costume and story to talk about history⁴. She worked as a classroom teacher for four years before beginning her current position in the museum. She kept her status as a “teacher on call” with the local school district. This provided her with easy access to professional development programs for teachers and helped her stay connected with issues affecting teachers and their potential use of museums to enhance learning. During the research Nadean was working on her Master’s degree educational leadership.

Nadean’s reasons for participating in the research were to hear what others are doing with respect to training, to have a forum to share ideas, to work collaboratively with colleagues, and help to further research in museum education.

Rhoda worked at the same science centre as Jarriid. She first worked at the science centre as a university (science) co-op student. She intended to go into a Bachelor of Education program, and she took the initial placement in part to gather experience working with both high school and elementary age children and help her decide which age to teach. The opportunity to work as a facilitator at the science centre expanded the possibility of teaching to include the informal world. She knew she always wanted to go into teaching, but had imagined it as a classroom teacher. During university she also worked for a university-based science education initiative. She liked the diversity of teaching in informal settings so decided not to pursue a B.Ed. She has a B.Sc. degree during which she also took part in courses normally only offered to education students. She has been in her current position of curator/educator for about five years where she is responsible for overseeing the science centre’s natural history gallery, a space that has a large number of live animals as well as touchable props such as skulls, rock samples and models. She provides training for interpretive staff and volunteers about the gallery.

Her reasons for participating in the research were to share ideas with colleagues outside her work site, to evaluate and improve her own practice with respect to training and to better understand research about teaching and learning in museums. She also commented on the value of having dedicated time to think about her practice.

Susan has worked at the art gallery for twenty years. The art gallery is a large, well-established organisation in the Vancouver. Susan develops educational programs for school groups, supervises paid interpreters who deliver workshops to students and oversees the docent training for guided gallery tours. Susan comes from a family involved in theatre and prior to working at the art gallery she worked as an actor and theatre educator. She also has a master’s degree in education (focus on creative arts in learning).

⁴ Nadean described these experiences as living history interpretation that had very little credibility or accuracy behind it but it provided her an opportunity to talk about her passion, history.

Susan was interested in participating in the research project to improve her own practice, the programs they offer at the art gallery and their docent program. She also viewed the research group as a forum to share her ideas about teaching in informal sites, to receive feedback on those ideas and to generate new ideas. She viewed the research group as a place to have collegial discussions about practice. The feeling of isolation was also an issue Susan raised when discussing her reasons for participating in the research group.

My own story about being a museum educator is not all that different than the other participants. I've been working as a museum educator for about twenty years. I began as a volunteer at the local aquarium and was eventually hired on as an interpreter. I moved into a supervisory position that included training interpretive staff. I viewed my first job at the Aquarium as an opportunity to talk about my passion for marine life and use my new science degree before I got a 'real job'. I started as an educator because of my interest in science, but I pursued museum education as a career because of my growing passion for education; a passion that has grown into a deep appreciation for the importance of learning in informal settings within society and the contributions of museums and museum educators to lifelong learning. In addition to working at an aquarium as an interpreter and supervisor I have worked in a 'history' museum where I developed school programs and worked with docents. I currently fulfil an administrative role where I oversee school and public programming, exhibits and staff development at the local planetarium. In addition to working within an organisation I work with staff and volunteers from other organisations to provide professional development.

The other participants expressed feelings of isolation in their role as museum educators without easy access to collaborating with peers and a frustration with trying to balance time dedicated to operational aspects of working with time to more deeply reflect on practice and implement change. I have felt the same. My motivations for undertaking graduate school were to both push my own practice as an educator and to explore more deeply the potential of teaching and learning in settings like museums. My choice of research methodology reflects this as well as providing me with a forum to explore my practice as a teacher educator in museums.

Table 4.1 Overview of research participants

	Amn ⁵	Azy	Jarrid	Nadean	Rhoda	Susan	Lisa
Current site	Historic Site	Wildlife Refuge	Science Centre	Community Museum	Science Centre	Art Gallery	Planetarium
Size of Organisation	21 – 50 FTE ⁶	11 – 20 FTE	More than 50 FTE	11 – 20 FTE	More than 50 FTE	More than 50 FTE	21 - 50 FTE
Role	Heritage interpreter & supervisor	Wildlife educator, volunteer supervisor	Teacher professional development, educator	Arts and heritage programmer & supervisor	Curator/educator	School programs	Administrator
Staffing structure	Full-time contract interpreters; some docents; museum educators with similar roles & experiences to Amn	On-call interpreters; some docents	Full-time interpreters; museum educators with similar roles & experiences to Jarrid	Docents; on-call interpreters	Full-time interpreters; museum educators with similar roles & experiences to Rhoda	Docents; part-time interpreters; museum educators with similar roles & experiences	On-call interpreters; full-time museum educators
Academic background	A few years of university – theatre and Asian studies	Animal sciences diploma; animal welfare cert.; BSc in progress	BFA, BEd; MA in progress	BA, BEd; MA in progress	BSc, took a few education courses during BSc	BA, MEd	BSc, MA; PhD in progress
Other related experiences	Police museum	NA	Provincial Park, Ecological society, Aquarium	Tourism with a history focus	Science outreach	Theatre education	Maritime Museum, Aquarium
Years working as educator/interpreter	5 – 10 yrs	2 – 5 yrs	10 – 15 yrs	2 – 5 yrs	5 – 10 yrs	More than 15 yrs	More than 15 yrs
Years training interpreters	2 – 5 yrs	2 – 5 yrs	10 – 15 yrs	2 – 5 yrs	5 – 10 yrs	More than 15 yrs	More than 15 yrs
Other types of teaching experience			BEd practicum	4 years as a classroom teacher		Theatre educator	

⁵ At the request of participants their real names are used. Each felt it was important to have their participation publicly recognized

⁶ FTE – Full time equivalent staff. Museums often have a number of part-time employees. FTE is commonly used to describe the size of an institution.

4.3 General procedures

Once an individual expressed interest in participating in the research I asked each to fill out a short questionnaire (Appendix A) to assist me in determining that individuals met the basic criteria. After the six participants were selected, an initial interview was conducted with each participant prior to the first group meeting. This semi-structured interview (Appendix B) provided an opportunity for participants to speak with me about their backgrounds, their experiences as a museum educator, issues they would like to address during the research, and concerns and question they may have regarding the research process. Interviews also provided some insights into the range of potential issues with respect to teaching others to teach. Interviews were audio recorded and participants received a transcription of their interview to review.

4.3.1 Research meetings

We met as a group eight times over a period of six months to discuss various aspects of our practice as museum educators. Our group meetings were the primary way we interacted as a research group. Meeting dates were tentatively set for a six-month period by the group, with a preference for mornings, to limit the potential for work issues to become an impediment for individuals to attend the meetings. Meetings lasted approximately two and a half hours. The location of the meetings rotated through the participants' work sites. I brought a selection of snacks and beverages for each meeting. We met together eight times over a period of six months from July 2009 to December 2009. At the end of the eighth meeting, the original commitment from the group, we decided to continue to meet regularly and continue our discussions.

The basic structure of the meetings was consistent through out the research cycle. Prior to each meeting I sent an email suggesting a focus for the meeting in the form of a problem, concept or questions. These topics were chosen from current trends in the broader museum community, tensions identified by one of the participants in their personal practice, or problems raised during previous group meetings. In the initial stages of the research the focus for the meetings primarily came from me, but as the group developed participants suggested topics.

A consistent pattern to the meetings quickly developed. Each meeting started with an opportunity for participants to share ideas, concerns or achievements regarding their practice that arose since the previous meeting. We would then discuss these as a group. As time allowed we would then discuss the specific topic sent with the meeting agenda. In addition to a focus or problem for discussion I included additional resources such as journal articles (see Appendix C for a summary of topics and resources provided in advance of each meeting).

In preparation for the meetings I occasionally asked participants to bring ‘artifacts’ of their practice, such as supporting materials from their work place (e.g. documents used in staff training) or documents from relevant professional organisations (egg. museum educator occupational standards or the American Association of Museum’s museum education standards and principles). I also occasionally asked them to complete specific activities.

One such activity was to complete an online inventory to help participants reflect on and talk about assumptions and values in their practice as museum-based teacher educators, the Teaching Perspectives Inventory (TPI). The TPI is an online instrument developed from Pratt’s (2005) research into perspectives of teaching. Pratt describes a teaching perspective as a “lens through which we view teaching and learning” (p. 2). He describes five perspectives of teaching, transmission, developmental, apprenticeship, nurturing, and social reform (Figure 4.1). The inventory was reviewed and tested by adult educators to ensure consistency with the conceptual framework (Pratt, Collins & Jarvis-Selinger, 2001). I chose to use the TPI for the following reasons: 1) It is identified as a useful entry point for meaningful conversations about teaching and learning (Pratt, Collins, & Jarvis-Selinger, 2001) and to identify underlying values and assumptions in teaching (Pratt, Arseneau & Collins, 2001); 2) it is based on a theoretical framework, but is easy to use for a diverse group in terms of familiarity with theoretical constructs and language commonly used in education; and 3) the inventory is easily accessible as it is online (www.teachingperspectives.com).

Figure 4.1 An overview of Pratt's five perspectives of teaching

Transmission - In the transmission perspective, good teachers are subject matter experts who can systematically take learners through a set of tasks so they will achieve a level of content mastery. They present content accurately, efficiently and with enthusiasm and develop objective means for assessment. They may be viewed by their students as "virtuoso performers of their knowledge or expertise" (Pratt, Arseneau & Collins, 2001). Learning in this perspective is facilitated by a clear and organized presentation of information that is transferred from teacher to learner.

Apprenticeship - Good teachers from the apprenticeship perspective are highly skilled and knowledgeable about what their learners can do on their own and where they need guidance. Learning proceeds from simple to complex. As their learners become more competent the teacher's role changes, with the teacher offering less direction and giving the learner more responsibility as they progress. Good teachers are attempting to enculture learners into a set of social norms and ways of working within a community. Learning is viewed as a process of integration into a community of practice.

Developmental - A good teacher from this perspective understands learners' thinking and reasoning. They plan their teaching from the learner's point of view, adapting their knowledge to their students' experiences. Through using questions and helping students connect concepts good teachers help their learners develop a more complex and sophisticated understanding as well as more complex reasoning strategies. This perspective views learning as a search for meaning.

Nurturing - Good teachers encourage a caring environment and develop a relationship of trust with their learners. They establish a balance between caring and challenge, provide clear expectations and reasonable goals, and ensure their learners are encouraged and supported. Good teachers recognize that learning is both intellectual and emotional and assess learning based on individual progress while ensuring the required standards are met.

Social Reform - Good teachers in this perspective strive to change society and therefore are more focused on the collective as opposed to individuals. Values related to power, privilege and authority permeate learning and the teacher's role is in part to help students recognize and challenge values and ideologies in common practices.

Each meeting was audio recorded. Following the meeting I sent a short summary to the group followed later by a complete transcription. On occasions I would also send out additional resources relevant to the topics raised during the meetings. Figures 4.2 and 4.3 provide examples from one meeting of the types of correspondence in preparation for the meeting and the follow up.

Figure 4.2 Sample email sent prior to meeting

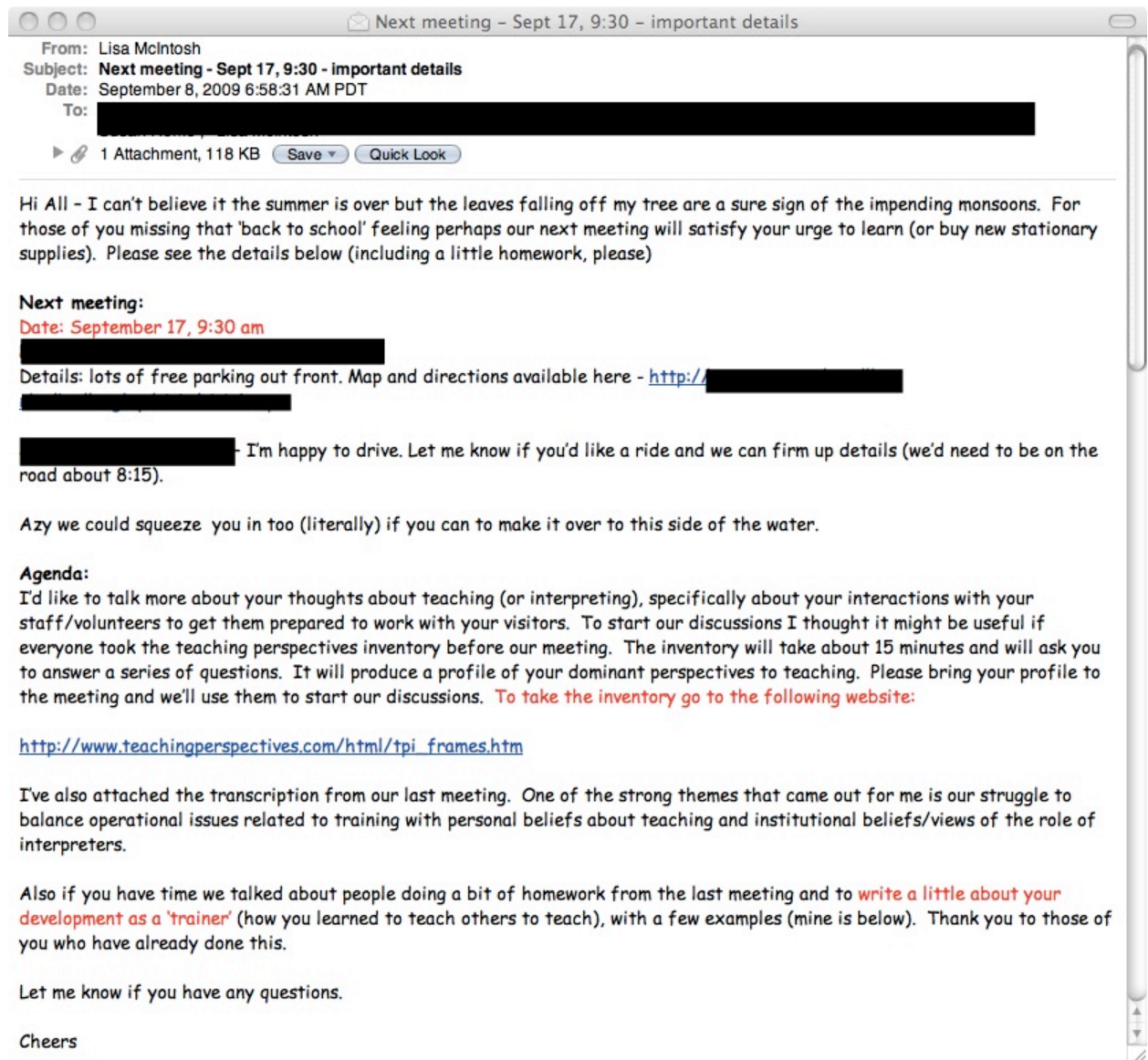
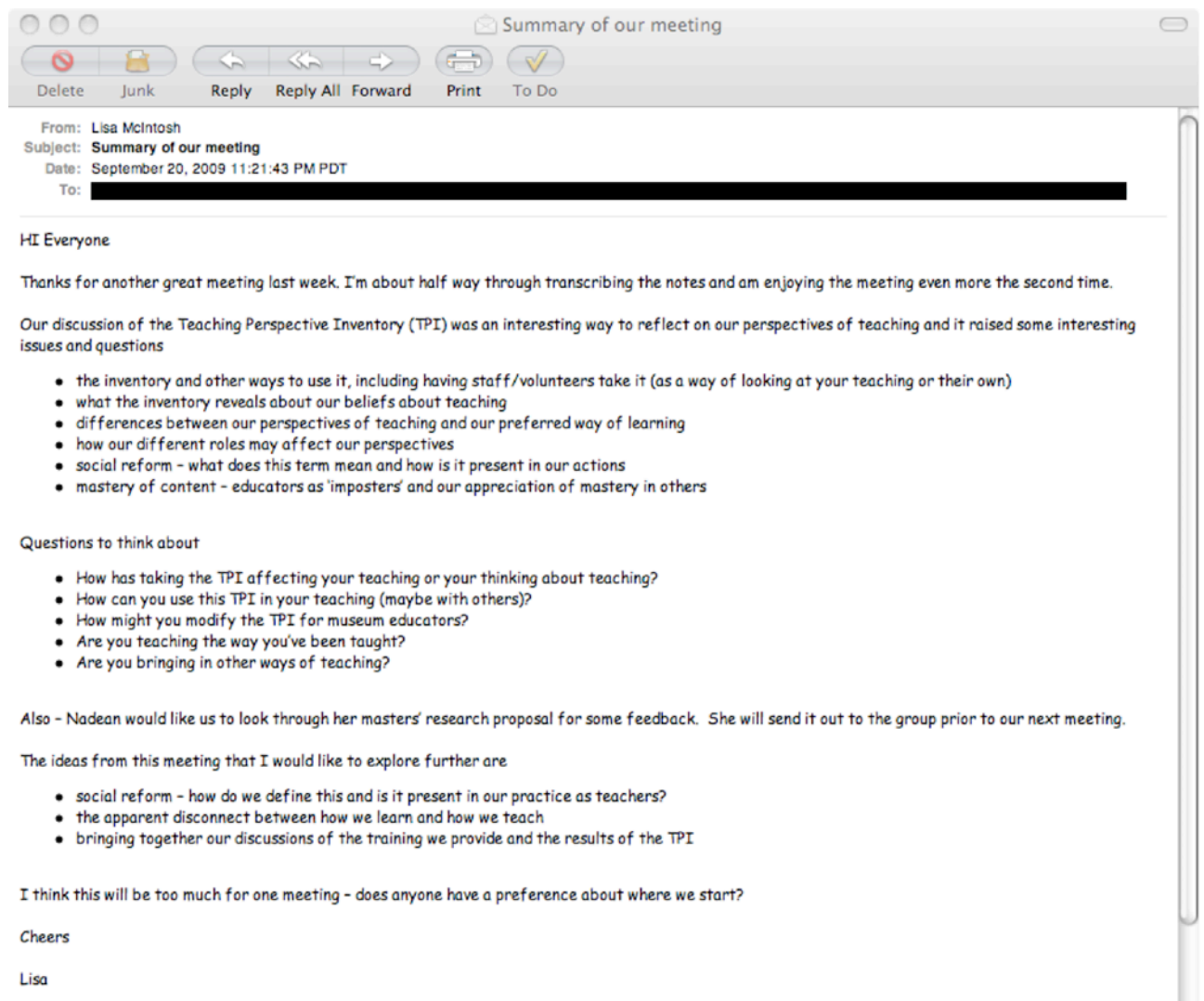


Figure 4.3 Sample email sent following up from meeting



4.3.2 Data collection

Data to support the three research questions was gathered over a six-month period from individuals participating in the research, group interactions, as well as from my reflections on both my practice as a museum-based teacher educator and the research process. The following describe the types of data gathered.

Audio-recorded conversational interviews with individual participants: Semi-structured interviews were conducted with individuals. Questions (see Appendix B) provided an opportunity to learn more about their background and roles as a museum educator as well as to explore their beliefs about and experiences with teaching others to teach in museums. Interviews were audio-recorded, transcribed, and given to each participant to review to confirm that their intentions were accurately captured (Stringer, 2007).

Audio-recorded group discussion: Regular group meetings provided an opportunity for the group to engage in dialogue about their practice as museum-based teacher educators and identify and challenge their assumptions about teaching and learning in museums. To help guide discussions and increase the usefulness for self-study either the participants or I introduced a focus for each meeting in the form of a problem or question. This focus acted as a catalyst to further delve into beliefs and assumptions that affected their teaching (Louie, et al., 2003). These discussions helped museum educators problematize their practice and experiences and provided a rich opportunity for discussion about pedagogical issues (Louie, et al., 2003; Kroll, 2005). Transcripts of these discussions were provided to the group for comment and further discussion.

Artifacts of practice: An artifact is an object made by a human being that usually has some cultural or historic significance. As museum educators our artifacts include materials given to other educators such as evaluation forms and teaching notes, and written reflections about our own practice. During the research I collected artifacts from the group in the form of results of an online teaching perspectives inventory, emails, and handouts they used in their practice as well as a short questionnaire (Appendix A) each participant completed prior to the start of the research. I also took this opportunity to look at my own artifacts, primarily the handouts I use when working with other museum educators.

Reflective writing: Through the research I wrote about the process and reflected on my practice as a museum educator. These writings about the research process were primarily focused on the synergies of the group and my concerns around whether the participants found the experience worthwhile. This usually occurred while preparing for the meetings, transcribing the minutes, and in response to my follow-up emails to the group after each meeting.

Writing during the research was also an opportunity to reflect more deeply on my practice as a museum-based teacher educator. Writing as a way of reflecting on my practice took two forms. The first was a reflective narrative about my experiences and influences in becoming a teacher educator in museums. This personal history was the result of conversations with a visiting scholar from China with an interest in museum education and resulted in a book chapter about museums and education for museum professionals in China. The second form was a response to specific activities I conducted as a museum-based teacher educator such as training sessions for interpreters. Although these writings are not presented in the body of this text as data they were useful as a tool to help me continue reflecting on issues related to participants' practice as museum-based teacher educators as well as my own practice. These cycles of reflection helped me to develop deeper insights into my own practice and the experiences and challenges shared by participants.

4.3.3 Data analysis

Self-study may be described as 'messy' research where data gathering and analysis are a recursive process (Stringer, 2007). One of the appealing qualities of research such as this is its "recursive and ongoing process allows for responsive adaptation with regard to the forms of data collected and the means of analysis" (LaBoskey, 2007, p. 850). This approach relies on hermeneutics, the "search for meaning without expectation that exactly one meaning will be found or that it will be anchored in an unassailable foundation" (Noddings, 2006, p. 76). With this approach understanding is based on interpretation through which meaning is generated in a participatory, dialogic, conversational manner (Denizen & Lincoln, 2003). Guba and Lincoln (1989) describe this as a hermeneutic dialectic and the success of this process means that the process changes all involved and as they change they in turn affect the process. As such, I, as the researcher, am affected by the experiences of the research group and our discussions about the practice of teaching others to teach, the analysis of the data as well as the process of writing about the data. My analysis further informs and influences the subsequent data I collect and my interpretations of that data.

Data for this study took the form of transcriptions from group meetings and interviews; artifacts of practice such as handouts and resource materials; email correspondence; the teaching perspectives inventory results as well as my own writings reflecting on my practice as a museum educator. I applied a variety of interpretive approaches to the analysis in an effort to extend and deepen my understandings of participant's beliefs about their practice, to further understand my own practice, and to recognize the emergence of a collective group voice.

Analysis attempted to consider the individual and the collective voices as it evolved from examining the responses of individuals ('self' as individual participants) to interpreting responses within the context of the group ('self' as collective group). In addition, there was a level of analysis associated with my practice as an educator ('self' as researcher). To address this I distilled data into a series of codes and reflected on the analysis in the context of the group. Although presented linearly the data analysis was an iterative process and employed the following steps:

Interviews and group meetings: Discussions during individual interviews and group meetings were analyzed in the following ways:

1) Recursive and responsive reflection on data gathered: After reviewing the audio recording of the meetings and interviews I summarized the discussion and shared my initial reflections with the participants through email. I continued to reflect and make notes on the meeting as I transcribed the audio recordings. Each transcription was shared with the participants for further comment. These reflections were responsive in that they informed the directions of our subsequent group meetings. My reflection on data was also recursive as I continued re-reading and reflecting on the data and my subsequent course of actions as a result of initial insights.

2) Coding: The meeting transcriptions and individual interviews provide a rich array of stories and ideas to be explored. The data went through multiple iterations of coding to assist in identifying recurring themes related to the research questions. In reviewing the transcripts, I identified phrases that addressed specific concepts. These phrases varied in length from multiple sentences to short phrases. From this analysis the following seven categories emerged:

- a. Interpreter – comments about the interpreters and docents that they train to deliver programs,
- b. Visitor – comments about the visitor experience such as learning, what makes a good visitor experience, etc.,
- c. Practice – comments about their own practice as educators. It includes evaluation, thoughts about teaching approaches, theories, how they train their staff, etc.,
- d. Self – personal comments about themselves such as observations about their confidence level,
- e. Role – comments about the role and purpose of museums and of their position within the museum,
- f. Organisation – comments about organisational issues, historical perspectives, operational practices, issues, etc.,
- g. Research process – about the research process.

These categories provided an initial structure to the data and facilitated the identification of trends. Comments in these themes were further analyzed to elucidate statements participants made about beliefs and actions related to their practice as museum-based teacher educators. Statements were assumed to reflect a belief if they were an overt statement of belief (“I believe...”), were relayed in an emphatic nature, either in tone of voice or by choice of words (“interpreters must...”), or were raised repeatedly by an individual over the course of the research. Actions included descriptions of their practice or the practice of interpreters. Actions include “both behaviors and the meanings of those behaviors for the actors in their contexts” (Trumball, 2004, p, 1217) and cannot be describe with any certainty. Table 4.2 provides an excerpt from one of the participant’s comments to illustrate how coding.

From this analysis the following two themes emerged and were used to address the first two research questions, what beliefs are evident in the way museum educators discuss their practice as museum-based teacher educators? and, how do museum educators understand and reconcile the tensions that emerge from their beliefs about practice?

- a. Participants’ conceptions about what makes a “good” interpreter: This theme was primarily derived from comments in the (a) interpreter and (b) visitor categories.
- b. Participants’ practice as teacher educators in museums: Comments from the (c) practice category were the primary data that supported this theme. Comments from categories (d) self, (e) role, and (f) organisation, provided additional support in the form of context.

Table 4.2 Sample of the coding process - Rhoda

Comment from Meeting 2	Code	Belief / Action
We are a unique site. What we ask people [interpreters] to do is a little bit different than if they've worked at the PNE or worked at a museum before.	Organisation	- belief – about type of organisation
They [interpreters] think they will give tours all day. When really they rotate galleries every hour or they may present a formal program, like a school program or a show or they might be taking tickets in the theatre.	Interpreter	- action – interpreters' activities
So my ultimate goal in interpreter training is to remind them that from an educator standpoint what we want visitors to walk out with.	Practice	- belief – about goal of interpreter training
It is not that piece of knowledge $e=mc^2$ or how cold liquid nitrogen is. You want them to leave having a more positive view of science and have them going 'oh science isn't that hard to wrap your head around' or it isn't that scary. It is interesting or fun.	Visitor experience	- belief – about outcome of visitor experience
Also this role of interpretation or facilitation being different than a lecture or being different than a tour guide so those are two points that I try and get across.	Interpreter	- belief – about interpretation
We talk about what is memorable. We talk about age levels and at different age levels where people are at and techniques to talk to them. If you're talking to 5 year olds you get down on your knees and have a more engaging experience with them and how to talk to teenagers. I really focus a lot on good questioning and we give them a handout and play some different games about asking good questions. (Meeting 2, p. 7 – 8)	Practice	- action – what is covered in training

3) Comments about the research process and participants' involvement in the community of practice (coded as category (g), research process) were used to address the third research question, How does the opportunity to engage in conversations with colleagues about their practice, framed within collaborative self-study, contribute to museum educators' practice? The data were examined in the following ways:

- a. *My interpretation of how participation contributed to participants' practice:* Key stories and examples of ways in which participants used the meetings were analyzed. Significant events such as interactions between participants, stories, or questions about practice were identified by reviewing my pre and post meeting notes and meeting transcripts to identify changes in the patterns of interactions amongst the group members and events that continued across multiple meetings. Analyses of the development of a community of practice focused on two events that occurred during the beginning of the research project, the discussion of initial training and the discussion about the Teaching Perspectives Inventory (TPI). These events were chosen because of their significance to the research questions. The transcriptions from these events were

analyzed using Wenger's (1998) list of indicators that a community of practice had formed:

- absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process
- local, lore, shared stories, inside jokes, knowing laughter
- jargon and shortcuts to communication as well as the ease of producing new ones
- knowing what others know, what they can do and how they contribute to an enterprise
- ability to assess the appropriateness of actions and products
- specific tools, representations and other artifacts
- share discourse reflecting a certain perspective on the world (p. 125).

As data were reviewed two dominant themes emerged as catalysts for the development of a community of practice, commonalities and differences in participants' practice, and the development of a common language.

b. *Participant's insights into how participation contributed to their practice*: The discussion during meeting eight addressed how participants described the value of meeting together. These comments were coded with the following (see Table 4.3 for a sample of coded comments):

- Self – personal insights and reflections gained through their participation in the research project,
- Practice – insights and contributions to their own practice,
- Community – implications and contributions to the broader museum education community.

Table 4.3 Example of coding related to participant's insights about participation

Participant	Comment	Code
Azy	Also learning about my own teaching and learning styles and how I could possibly actually create training that is more, almost individualized	Self
Nadean	Hey they might ask – did I try this. Sometimes you'll go to a conference and you'll get all pumped up and you'll get a worksheet. You don't have anyone to share with or run it by. It is leaving it to a higher level. Not only do I try it, but I think about it – I wonder how it really works because I'm going to have to talk about it. It is a follow up for me.	Practice
Jarrid	it is the big picture. It catapults you up into that thinking. I think it helps us get to thinking about education on a higher level, our job on a higher level, our job in relation to over all goals of the organisation that we're working for. It does help thinking about the big picture. For me I'm starting to think about what is it that we're doing that does help the goals of our organisation.	Community

Artifact analysis: Analysis of the artifacts of practice followed a similar pattern. Artifacts were analyzed within the context of group discussions and further served to triangulate findings. Of specific note were the participants' results from taking the teaching perspectives inventory. While these results were not used as verification against the participants' comments during the group meetings they did help to illustrate where participants found discrepancies between their beliefs and their actions. Other artifacts were used in a similar manner.

The midden: Midden is a term archaeologists use to describe a dump for waste products related to day-to-day life such as food by-products (shells, bones), tool fragments or household goods. While on their own these items may not seem interesting, as a collection they provide valuable information for archaeologists about the daily lives of those who contributed to the midden.

During the research, discussions covered a wide range of topics, some which related directly to the research questions. I thought that other topics, such as operational issues, distracted us from talking about practice. At the end of the fourth meeting I suggested to the group that we limit the time we talk about operational issues. Although I made the suggestion, operational issues continued to surface in our discussion. In coding data, operational issues were coded as (f) 'organisation' and I created a metaphorical trash heap for these operational barriers as I considered them impediments to addressing the research questions. As I started to reflect further on the barriers, I realized this trash heap was more like a midden and an excavation of it helped to frame thinking about tensions in the participants' practice as museum-based teacher educators in museums. The midden helped to address museum educators' understanding and reconciliation of tensions about their practice and provided an opportunity for me to identify and further reflect on my biases.

4.3.4 Researcher as lens

The aim of research such as this collaborative self-study is "to provoke, challenge, and illuminate rather than confirm and settle" (Bullough & Pinnegar, 2001, p. 20). It is not to seek an "answer" to the questions posed, but to develop deeper understandings and insights into practice. The insights reported in this study are developed within a social and historical context, that of museum education, the participants' individual and collective context, as well as my own.

My interpretation of the data as well as my reactions and interactions with participants during data collection are shaped by my past experiences as a museum educator and were also informed by my present, particularly my role as an administrator of an education department in a museum. Over the past year my organisation has been addressing many of the same issues raised by participants in our discussions. I work in an organisation that is in the midst of

addressing ideas fundamental to its mission, visitor experience and operations, and is subsequently making changes. These changes include redefining our educational philosophy, re-examining the intent of our visitor's experience and redefining the interpreters' role, expectations and approaches to teaching.

As I conducted the research and analyzed and wrote about the findings my research lens is tuned by my context and as I furthered explored the ideas discussed in the research as well as faced them as a practitioner those experiences shaped my actions as a researcher.

4.4 Ethics

Even though the participants in this research were all adults, participating voluntarily, and were able to opt out during the research, there were a number of ethical considerations addressed both as part of the university's ethical review process and on-going through the research. Traditional elements such as informed consent, confidentiality, and privacy were raised and discussed with the participants through out the research process. I had spoken with each of them individually about issues related to confidentiality and explained the limitations in maintaining confidentiality in a research approach that involves other participants. We also talked about confidentiality and risk as a group during our first meeting. At this point I reiterated possible issues with confidentiality lack of anonymity and potential privacy issues that may arise from discussion of sensitive workplace issues. The participants expressed relatively little concern about issues of confidentiality and risk. When they raised sensitive personal or work issues they requested that the information be held in confidence. The participants seemed to exhibit far less concern over these issues than I did. The participants also expressed that it was important to them that their identities not be concealed by pseudonyms. At their request I have used their real names. Prior to the completion of the research project I again provided participants with the opportunity to have their identity concealed. All participants agreed to use their actual names.

4.5 Limitations

This research project embarked on a potentially endless journey of exploring practices of museum educators teaching others to teach and is the initial stage to further research into museum educators' practices. The choice of collaborative self-study as the research methodology is one that is a good fit with the research questions, but is challenging, as it is time consuming and requires a high level of commitment from the participants. The research approach demanded substantial time for the participants to work together to establish effective group dynamics. This included negotiating intricacies of dialogue, establishing common

understandings of concepts, and exposing our personal and professional vulnerabilities to each other. The importance of taking time to develop as a group is related to the development of trust within the group for without this trust it would be difficult to make the transition from just conversation to critique and inquiry. Despite the limitations of time for this study comments of the participants during the meetings indicate that there was a high degree of trust established.

Another limitation to the research comes from me as a researcher and participant. I found at times these dual roles challenging as I didn't want to bias or steer the discussions in particular directions, but I also tried to stay focused on my goal for the research, gaining insights into beliefs and issues of museum educators' practice as museum-based teacher educators.

4.6 Good and useful research

This methodology does not adopt conventional measures such as generalizability and validity as a determination of the research's usefulness to a broader community, but instead adopts an approach suggested by Bradbury and Reason (2001). They suggest researchers address a series of issues under an overarching question "am I doing good work?" (p. 447). The issues affecting the quality of the research are 1) "relational praxis" – when full participation in research is strived for there is an increased faithfulness to the issues or situation of the inquiry; 2) "reflexive-practical outcomes" - the extent to which the knowledge produced is useful to the participants; 3) "plurality of knowing" - the outcomes of inquiry include a new theory, use of different epistemologies and methodologies to see the situation in a different light; 4) "engaging in significant work" - participants value the work and feel significant questions have been addressed; and, 5) "enduring consequences" - the inquiry has long term impacts on the community (pp. 450 – 453).

Issues of validity, credibility and reliability were resolved based on the willingness of participants, stakeholders and others in the community to act on the results of the research and the trustworthiness of the results (Greenwood & Levin, 2003; LaBoskey, 2007; Guilfoyle et al., 2007). This process does not mean all of the community members necessarily agree on the analysis, but have confidence in the rigour and processes of analysis. Ultimately, the value and validity of the evidence will be judged by colleagues, critical friends, collaborative partners, and the wider museum education community.

Chapter 5 The Practice of Museum-based Teacher Educators

My supervisor was saying maybe we should bring someone in just to train the volunteers... Almost like it was a logistical thing without taking in the educational aspects into it...without taking into account all of the different things we think about as educators... It isn't just about scheduling and logistics...[and] information (Susan, Meeting 3, p. 7).

Susan's comment above captures some of the issues participants raised through our discussion about their practice as teacher educators in museums⁷. Her comment also provides a window into her actions and beliefs about teaching others to teach. This chapter summarizes data that address the beliefs evident in the way museum educators discuss their practice as museum-based teacher educators and the tensions that emerge from their beliefs about practice, the first two research questions. Procedures describe in Section 4.3.3 were used to analyse the data. Findings suggest that participants' practice as museum-based teacher educators focuses on two distinct groups, new and experienced interpreters and docents. Their practice addresses five areas: interpreter selection, initial training, creating space for reflection and peer feedback, shadowing and mentoring, and professional development. While participants discussed all components, the ways in which they were discussed varied. In participants' initial descriptions of their training much of their explanations addressed initial training. The questions and issues they raised during the meetings were primarily associated with the other four areas.

Participants' practice and their beliefs about teaching others to teach were generally consistent. Participants generally viewed learning to teach and teaching others to teach as an endeavour that involved more than just technical aspects of teaching, it also required interpreters to make judgements in response to particular issues. Participants raised a number of issues related to their practice in the form of tensions. These tensions seemed to arise where there was limited coherence between actions and beliefs. Identifying and analyzing these tensions afford museum educators further opportunities to understand their practice.

The findings are presented in the following sections: Section 5.1 addresses beliefs to provide context for an analysis of the findings. Section 5.2 contextualize participants' conversations about their actions as teacher educators in museums by summarizing their beliefs about museum education, visitor experience and the interpreters and docents they train;

⁷ This research focuses solely on museum educators' practice of teaching others to teach and acknowledges that they fulfil many other roles within a museum including exhibit development, program development and delivery, and administrative tasks.

Section 5.3 describes elements that comprise their practice of teaching others to teach; Section 5.4 addresses my practice as a teacher educator in a museum. The chapter concludes with an analysis of tensions in the participants' practice (Section 5.5).

5.1 Beliefs

I am interested in understanding more about museum educators' practice as museum-based teacher educators and how beliefs are reflected in their discussions about practice. Lemke's (2001) description of beliefs suggests that they provide connections with a community and are part of one's identity. The purpose of our discussions was not to define the 'best' set of beliefs about teaching others to teach in museums. Rather our discussions, supported by activities such as talking about training, sharing problems related to practice, and discussing the Teaching Perspectives Inventory, provided participants with a context in which to describe, question, and reflect on their beliefs related to teaching others to teach. Our discussions also served to uncover some of the discord between belief and action. This discord or tension, as Berry (2007b) describes, represents, "internal turmoil that many teacher educators experience in their teaching about teaching as they find themselves pulled in different directions by competing concerns, and the difficulties for teacher educators in learning to recognize and manage these opposing forces" (p. 32). These points of tensions are areas that I focus on in particular as they provide greater insights into participants' practice as museum-based teacher educators.

5.2 Beliefs about museums, visitor experience and interpreters

for me museums are about opening up to new ideas...Provoking ideas but also reflecting society. Museums open possibilities. Possibilities to see the world and understand it (Susan, Meeting 1, p. 12).

Informal learning organisations such as those that employ the research participants generally have a well-defined educational mandate. Ideally, this mandate, in conjunction with contemporary learning theory, provides direction for educators as they design programs for visitors. Participants' described their beliefs about the purpose of museums in today's society as "role modelling curiosity and ... a pursuit of knowledge, but not a mastery of knowledge" (Rhoda, Interview, p. 4) and to help people gain knowledge, understanding and appreciation of subject matter within contemporary society. They also spoke about the role of museum education as "helping [people] become ... more critical and conscious thinkers" (Susan, Interview, p. 5).

Participants' comments reflect an understanding of the purposes of museums that address a sense of greater purpose in society. As Amn described, "If you have a sense of community in the area and the community supports what you're doing there is a stronger sense of stewardship" (Amn, Interview, p. 3). Susan also echoed the importance of helping people to make informed decisions, "Ultimately it is about helping them to become more active, conscious citizens of the world so they will be able to make better choices" (Susan, Interview, p. 5). Azy's description of her role as "To teach them the value. I think that is really important" (Azy, Interview, p. 3) reflect the conservation mandate of her organisation and her own values, "I started as a volunteer ... because I was interested in the animals (Azy, Interview, p. 1).

5.2.1 Visitors and visitor experience

The presence of museum visitors and their experiences as learners were always just beneath the surface of our discussions about teaching interpreters and docents to teach. Although our discussions focused on events that would ultimately affect visitors, we spent relatively little time talking specifically about visitors and their motivations for visiting museums other than in rather general terms, "Visitors like it because they find us more interactive. They feel like it is more like a conversation than a performance so they can ask questions" (Amn, Meeting 2, p.4).

Amn's statement describing the visitor experience as interactive and conversation-based is consistent with contemporary socio-cultural views of learning in museums (see Leinhardt & Knutson, 2004 and Falk & Dierking, 2000). Interactive is a commonly used term to describe experiences in museums and as participants further elaborated on their meaning of interactive they revealed beliefs about what the experiences interpreters and docents facilitate for visitors should be like. Our discussions of "interactive" related primarily to two concepts, 'hands-on' and critical thinking.

Hands-on learning is a commonly used phrase when describing learning in museums. Bailey (2006) describes museum educators using hands-on learning because they believe it encourages deeper understandings. A hands-on approach implies learners are physically active during learning. It is an approach commonly used in facilities such as the science centre both Rhoda and Jarrod work in, but it does not always support intellectual engagement. Rhoda and Jarrod were working towards deepening the level of engagement during hands-on activities at their centre.

Intellectual engagement was an important element of hands-on experiences as was opportunities for critical thinking. All participants felt strongly about the importance of facilitating experiences that focused on critical thinking. Rhoda framed critical thinking as her personal

mission, an “agenda to challenge the norm way of thinking. My objective isn’t to tell them think this way, but it is definitely to challenge them to think critically. That is what I want them [interpreters] to do with our visitors” (Rhoda, Meeting 3, p. 5). This focus on critical thinking is also consistent with her beliefs about the greater purpose of museums as places that support and inspire critical thinking in visitors.

Discussions about visitor experience provide opportunities for participants to explore different conceptions of commonly used terms such as critical thinking and hands-on, and how the concepts are used to create visitor experiences that support their vision of learning in museums. These reflections also took place keeping the human elements in mind; the desire for visitors to have an enjoyable learning experience and the interpreters who facilitate the experiences. As Rhoda describes, “It is not that piece of knowledge $E=mc^2$... You want them to leave having a more positive view of science ... It is interesting or fun” (Rhoda, Meeting 2, p.7).

5.2.2 The good interpreter

Good interpreters...don’t all look like Improv comedians... Sometimes they come across subtler, low key but yet they have this cutting, dry witty sense of humour that will grab a different cohort of our audience (Rhoda, Meeting 2, p.11).

Rhoda’s comment above about good interpreters is telling, particularly of the influence of an organisation’s perception of a good interpreter. One factor that influences what a teacher decides to teach is what they believe the learner needs. This extends to teacher educators and is often a source of tension. As Berry (2007a) describes, “Many of these tensions have grown out of teacher educators’ attempts to match their goals for prospective teachers’ learning with the needs and concerns that prospective teachers express for their own learning” (p. 32). During our meetings, participants made both direct and indirect reference to what they believe are the skills and attributes of good interpreters and docents. These qualities influence their practice in teaching others to teach.

Participants’ beliefs about the qualities necessary in good interpreters are consistent with previous research conducted by Grenier (2005). Grenier suggests that an expert docent “Facilitates learning by communicating information, reading and adapting to the audience, knowing the subject matter; integrates prior experience; demonstrates enthusiasm and commitment; maintains a sense of humour” (p. 88). While participants’ discussions touch on these characteristics much of our discussion centred on personal attributes of individuals in the role. Participants described good interpreters and docents as people who love their work, have a feeling of ownership about their organisation, act as a good host, and have a certain degree of confidence that assists them when confronted with an unusual or new situation.

Another attribute participants felt was important in a good interpreter and docent was passion. Our discussion about passion included how it was often viewed in a stereotypical way, resulting in hiring one type of interpreter. In Rhoda's case, this type is the "Improv comedian". Participants felt challenged by the way passion was perceived in their organizations as the stereotypic portrayal of an overly enthusiastic interpreter and how this image of an interpreter was, at times, contradictory to how they conceived of passion. As Susan tried to describe 'passion' in docents:

engaging with high energy. You can't teach high energy and it isn't always high energy. It is a kind of energy - sometimes the energy is a soft energy and a quiet energy but there is something dynamic about it. So I think dynamism is also a good word (Susan, Interview, p.5).

One of the debates during discussions about good interpreters was whether they were 'born or made'. Trumball (2004) addresses this concept with respect to preservice teachers and teacher educators. She suggests that if this belief is influencing teacher education then one of the roles of teacher educators is merely to recognize potential within prospective teachers, which is often performed without a clear theoretical conception of good teaching. With participants in this study, the belief that good interpreters are born seems to relate to the types of characteristics and qualities that participants associated with good interpreters. Most of the characteristics discussed related to what are often termed as 'soft skills', good interpersonal skills, enthusiasm or passion for the position, and open-mindedness. Participants discussed these characteristics as being more difficult to bring out through training, although not impossible. Participants seemed to indicate it was not either a 'nature' or 'nurture' debate, but a combination of both which contributed to people becoming good interpreters and docents.

Most of our discussions focused on qualities of prospective docents and interpreters considered to be a good starting point for someone learning to teach in a museum setting. Through our discussions, participants acknowledge the importance of finding the 'right' person to become a docent or interpreter as well as having diversity in terms of approaches, interests and backgrounds within the group of interpreters. Our discussions about the qualities and skills in good interpreters and docents informed discussions about our practice of teaching others to teach in museums, and provide insights into some of the tensions in practice.

5.3 Their practice as museum-based teacher educators

Recommendations from the limited research into museum educators' practice suggest that museums should take greater responsibility for the development of their museum educators (Tran, 2008, Castle, 2001, Grenier, 2005, Sweney, 2003). To support this, museums need to reconceptualise teaching in museums, perhaps to adopt the following recommendation from

Loughran and Russell (2007) to conceptualize teaching as a discipline in which “the actions of a skilled pedagogue, knowledge of practice is continually adjusted, adapted and created in informed ways in response to the given teaching and learning context” and “it is not about adherence to a prescribed protocol” (p. 221).

With the context established in the previous sections, this section describes how participants in the research study conceptualize their practice of teaching others to teach, including their actions as museum-based teacher educators, beliefs associated with practice and the tensions that arise in practice. My window into understanding their practice as museum-based teacher educators was through our discussions about various aspects of their practice, including training. The word ‘training’ does not adequately represent the intricacies of what museum educators do in their practice of teaching others to teach, but it is the word I use in the context of this study primarily because it is the language commonly used by those working within museum education.

Museum educators generally work with interpreters and docents who have a range of experience with teaching. Most of our discussions grouped interpreters and docents as either ‘new’ (limited or no experience with teaching in museums) or experienced. Each individual in the group had a responsibility, often shared to some extent with others in their organisation, to teach interpreters or docents to teach. Discussion started with participants talking about the training they provided for their interpreters and docents in our second group meeting. Concepts were further elaborated on as participants shared problematic incidences in their interactions with interpreters, docents and others in their organisation.

A broader conceptualization of their practice of teaching others to teach in museums emerged from the analysis of their description of training. The following five areas describe their actions associated with museum educators’ practice: interpreter selection, initial training, creating space for reflection and peer feedback, shadowing and mentoring, and professional development. Findings are presented using this framework and include a representation of the actions, beliefs and tensions participants raised about their practice. This broader view of their practice extends the conception of training from a focus on preparing new interpreters and docents for program delivery to beginning to think of teaching others to teach as an ongoing endeavour involving both new and experienced interpreters and docents. This framework is not intended for museum educators to use it as a ‘prescribed protocol’ when thinking about their practice as museum-based teacher educators, but to use it to further “provoke, challenge and illuminate” (Bullough & Pinnegar, 2001, p. 20) thinking about their practice. The following section elaborates on these five action areas. They are presented sequentially, although other

than interpreter selection, they may take place either concurrently or consecutively as interpreters learn to teach.

5.3.1 Selecting interpreters and docents

In terms of hiring for diversity I really see that struggle between customer service managers and [museum educators]. We sit in on the interview. But ultimately it is the customer service manager who decides...I've seen them reject someone because they're not like us enough (Rhoda, Meeting 2, p. 11).

From our conversations about the qualities and characteristics that help make good interpreters, participants suggest that finding the right person for an interpreter or docent position was an important element for training new staff. In addition to selecting people with specific qualities or characteristics, participants described additional factors influencing the selection process. These included increasing community support by establishing a large docent group as advocates (Nadean's organisation) and finding staff that can fulfil a position that combines interpretive work with more traditional customer service duties (Rhoda and Jarrid's organisation⁸). Participants involved in the research group had differing levels of involvement in the selection of interpreters and docents and their organisations used a variety of strategies ranging from a very limited selection process such as the one used by Nadean's museum to Susan's comprehensive interview process.

Nadean's organisation had two roles for docents, to deliver educational programs and to act as a community stakeholder. Because of this second role, the museum had an interest in increasing the number of volunteers and recruited new docents even though Nadean found her large docent group (sixty people) increasingly challenging to manage. Prospective volunteers were interviewed, but her organisation had a tradition of taking anyone who was interested in volunteering, and as such the interview did little to help Nadean select docents to deliver educational programs. Nadean expressed a belief that the selection process should help to find docents with compatible values about teaching, learning, and the purpose of museums. She speculated if the limited criteria used for selecting docents contributed to a less than cohesive set of values within the docent group. She contrasted her selection process with the approach used by Susan, "Because in an institution like [the gallery] Susan can interview and screen and even though they are very diverse, they still have a lot of things in common like strong love or value of art" (Nadean, Meeting 4, p.11). Nadean's beliefs about her docents influence the intent

⁸ Interpreters fulfil a variety of functions at Rhoda and Jarrid's site. In addition to facilitating programs they also take tickets at their large-format theatre, perform light maintenance activities such as sweeping popcorn, and monitor visitor activity in the galleries.

and development of the training she provides for them in an effort to help the group develop a more cohesive set of values, “I believe something about [docents] that my training ... I don’t want to say reform them because that is such a bad word... I want to make sure they are not saying inappropriate things about First Nations or women” (Nadean, Meeting 4, p. 11-12).

Nadean’s belief that Susan’s docent group had a more cohesive set of values came from Susan’s description of their robust selection process. Prospective docents were interviewed twice, once by a volunteer coordinator, and then by Susan and another museum educator. Each prospective docent was asked for a substantial time commitment, two days per week during the school year for a period of at least two years, before they were accepted into the program. The number of candidates they accepted was relatively small, with only five new docents entering the program in the current year. Susan’s selection process for new docents was envied by Nadean, as she perceived it as a way to ensure that docents had common values about museums, teaching and learning. From Susan’s description of the process, it seems that there is consistency within her organisation about qualities and skills needed for new docents as well as beliefs about the role of docents in the organisation.

Coherence with respect to the qualities and skills needed for prospective interpreters and of the role of interpreter was raised by Rhoda when discussing her organisation’s selection process. In her organisation, museum educators participate in the interview process, but the final decision rests with a customer service manager. This reflects the structure of the interpreter position at her organisation, where interpreters have both an educative function as well as basic customer service tasks. Rhoda expressed concerns that interpreters were hired to fit a certain stereotype, “Good interpreters, good teachers come in various shapes. They don’t all look like improv comedians, acting geniuses” (Rhoda, Meeting 2, p. 11), and she viewed this stereotype as limiting their ability to build a diverse team of interpreters who could better connect with a more diverse audience.

Interpreter selection is one aspect of museum educators’ practice of teaching interpreters and docents to teach. Although not directly related to learning to teach, participants’ expressed beliefs about the importance of this step as it helped them to select candidates more closely aligned with the qualities and skills they believed important in good interpreters. Figure 5.1 summarizes the actions and beliefs associated with interpreter selection. Analysis of the discussion about interpreter and docent selection suggests that there are two main sources of tensions in museum educators’ practice. These tensions are the result of discrepancies within the organisation about the belief about the role of the interpreter or docent, and belief about the qualities of good interpreters and the broader interpretive team. An additional issue raised was

the nature of the selection process and the participation of museum educators in the process. Tensions will be further discussed later in this chapter (Section 5.4).

Figure 5.1 Summary of interpreter and docent selection

Action: Potential interpreters and docents are screened to select candidates with particular personal qualities and motivations. Staff other than a museum educator may conduct this, either alone or in conjunction with a museum educator.

Belief: Inherent qualities in a potential candidate are important in helping them become a good interpreter or docent. Participants identified humour, passion or enthusiasm for their role and for the subject matter, a commitment to the organisation, and confidence, as important qualities in prospective interpreters and docents. They also stated it is beneficial for interpreters and docents to have similar values towards the subject matter, teaching and learning as the organisation. Participants identified that communication skills and some knowledge about the subject matter are important for potential candidates to have but felt that these were areas easily addressed through training. Participants also believe in maintaining diversity within the interpretive group in terms of interests, perspectives, and skills.

Tension: Differing beliefs about the interpreter and docent position results in:

- Conflicting beliefs about the qualities and characteristics of good interpreters and docents.
- The scope of the interpreter/docent position extending beyond an educative function with additional tasks that conflict with their role as 'teacher'.
- Selection processes that lack rigor or do not screen for qualities, motivations and characteristics identified as important in good interpreters.
- Museum educators with limited input into the selection process.

5.3.2 Developing initial training

All of the participants' organisations have a relatively long history of training interpreters and docents. Participants generally viewed initial training lasting for a finite period. During discussions about initial training, participants discussed similarities and differences in their approaches to training including techniques used, beliefs about teaching and learning, and organisational pressures affecting their training. These pressures provided insights into tensions in participants' practice. Because initial training for new interpreters and docents is a major component of museum educators' practice (for this group of participants as well as more broadly), I present a synopsis of the training in each organisation. These examples illustrate similarities and differences in approaches to training interpreters and docents and may represent a range of possible approaches. A synthesis of the group's discussion about initial training and the associated beliefs and tensions is provided at the end of this section.

Amn's initial training: building the perfect interpretive team

Amn works at a historic site that interprets life at a trading post during the gold rush (1858). It is part of a large, national system of parks, historic sites and marine conservation areas administered by Canada's federal government. As a federally funded organisation, they have very clearly delineated key messages that visitors (school groups and a general audience) are to learn during their visit. Over the past five years, Amn's workplace has been going through a number of changes. Part of this change focuses on increasing the relevance of the experience to their visitors and is informed by a recently adopted framework around which to construct their visitor experience called "Quality Visitor Experience". This approach introduces a new way to think about visitors. Instead of using visual cues such as standard demographic measures (age, gender, socioeconomic background) or a favoured 'tool' used by interpreters, the "Three S's"⁹, this new approach uses an 'Explorer Quotient' that segments visitors into one of nine possible types based on motivations for visiting the site (Parks Canada, 2008).

Approximately ten paid interpreters work at the site including a few long-term employees. Some are full-time staff, but most work on a seasonal basis (either summer or winter season) and may work at other parks in their 'off season'. Interpreters at the site usually dress in clothing appropriate to British Columbia in the 1850's. The ways in which they interact with visitors include a tour of the site, 'casual' conversation, demonstrations such as making barrels or blacksmithing, or an orientation to one of the site's nine buildings. In addition to Amn, three other staff are employed year round at the site and are responsible for program development. In Amn's role as supervisor, he works with the staff on a daily basis and facilitates programs with visitors.

Amn's organisation usually offers formal staff training twice a year, in fall and spring. He describes the initial training as the beginning of a team building process, "trying to form the perfect team – knowing who is good at what ... who can be the good captain, who can be a good defence ... Everyone understands everyone else's roles. The trick is finding that team and building" (Amn, Meeting 2, p. 5). For new interpreters, training begins with operating procedures and an introduction to the site's content, primarily the main messages associated with the site. Within their first week, they begin shadowing more experienced interpreters. In shadowing, new interpreters watch at least three experienced interpreters deliver educational programs. Amn

⁹ Three S's, Students, Streakers and Squatters, refers to a common classification of visitors used by interpreters. Their names imply the behavioural clues interpreters use to identify them.

also uses shadowing as a way for new interpreters to learn the site's operational procedures. As interpreters at this site wear historic costumes, new staff also spend time becoming comfortable wearing these clothes.

New interpreters are also oriented to the site's program structure. Program structure includes the sites' specific messages and themes, how they relate to the organisation's national mandate, and different approaches used to deliver the messages. Although program development is seen primarily as the role of the four senior interpreters (of which Amn is one), all interpreters develop programs to some extent. A consistent template is used to make it easier for interpreters to learn and adapt a program developed by another interpreter. During training, interpreters are introduced to this program template. Interpreters receive a formal evaluation with Amn when they are ready to present programs to the public.

As a part of his organisation's efforts to increase the relevance of the visitor experience, the interpretive approach has changed from a script-based approach to a conversational approach in their interactions. Amn was working with interpreters to make this transition as well as working with them to incorporate the Explorer Quotient into their practice.

Amn's initial description of their training reflects not only the changes that his organisation is going through, but also his beliefs about his role as a museum educator, interpreters, and how people learn to teach. Shadowing is an important part of Amn's training of new staff and an important way he believes interpreters learn to teach at the site. His focus for new staff is not to replicate what they see when shadowing, but to use the experiences as a base to create programs that are unique to them. His desire to have interpreters create programs that are 'their own' supports his beliefs about the way he works with his interpreters.

Interpreters' comfort with their role is an important focus for Amn, "When they are comfortable they would be in costume, but not alone yet. They would be working beside another interpreter till they are comfortable with an area" (Amn, Interview, p. 5). Amn's description of how new interpreters learn to facilitate experiences are centred on delivery of the organisation's main messages in a way that is unique to each interpreter (making the program 'their own'), "we invite them to create a new program that is more based on a personal connection that they might have" (Amn, Interview, p. 5). This belief that interpreters should make programs their own reflects one of the changes the organisation has gone through in the past five years as they move away from a script-based approach.

Amn's concern with interpreters' comfort is also apparent when he spoke about new interpreter's first evaluation. Much like other organisations, Amn evaluates staff once they have completed their initial training. Before he evaluates them Amn prefers that they present to other

interpreters first as a way of building comfort and confidence, “I trust the other interpreters to give them lots of good feedback, constructive of course” (Amn, Meeting 2, p. 7).

Amn places a great deal of emphasis on the team of interpreters and how individuals fit into the team, “We have jobs for everyone. We just have to find where their comfort levels are. I think that is more important than giving them the program and saying practice doing this” (Amn, Meeting 2, p. 3). He does this in part from his belief that it is important for interpreters to have a passion for and a comfort with for what they do. His focus on the individual also extends to his belief about interpreters’ role with visitors, “the whole focus is trying to be that host. Trying to have ownership into the Fort as a worker there. Making sure that everyone is happy with what they’re doing rather than coming to work to get a pay cheque” (Amn, Meeting 2, p. 5).

Amn’s ultimate goal is to build a strong team of interpreters. With interpreter’s making programs ‘their own’, which may require them to modify a program created by another interpreter there is potential for conflict between interpreters. Amn’s that developing a strong team will result in understanding and trust, “you can trust they are doing that program even though you may have designed it. Even if ... they do it in a completely different style...as long as messages are getting out (Amn, Meeting 2, p. 3).

Tensions in practice: The issues or tensions Amn raised about initial training were primarily related to his concerns about development of individual interpreters as part of a perfect team. He recognized that it takes time for interpreters to find their passion and saw this as an integral part of ‘making programs their own’ (one of his goals with training). He uses his understanding of individual interpreters to building a team. One of the challenges, in addition to understanding what individuals have to bring to the interpretive team, comes down to the operational element, “One of the main things is when it comes down to it is the trick of scheduling. When you know who each person is and their strong point. Trying to get them on that same team each day” (Amn, Meeting 2, p. 4).

Azy’s initial training: providing all the resources to be ready to teach

Azy works at a wildlife centre that is within a larger, for-profit organisation that includes winter sports, as well as summer activities. In recent years, the organisation has been diversifying the types of experiences visitors can participate in including recreation (skiing, hiking, skating, snowshoeing), cultural experiences such as visiting a First Nation’s feast house, and viewing local wildlife, some of which is housed in enclosures. Azy works with a group of about ten contract interpreters who work based on program bookings. Interpreters are a combination of retirees and younger people. They facilitate programs for school children and are supported by volunteers when groups are large. Azy is the direct supervisor of the interpretation staff and volunteer coordinator.

Their school programs are broken into sections: the “curriculum” section has a science focus (a twenty minute PowerPoint presentation followed by a twenty minute session with artifacts); a visit to the First Nation’s feast house where they learn about the Squamish, one of the local First Nation’s communities, to fulfil a ‘social studies’ component; and either walking around the mountain to visit a bear enclosure or snow shoeing (depending on the season).

Azy had built upon the programming that existed at the site when she started in her position. Key components for training new staff are shadowing other interpreters and an extensive manual that delineates operational processes required to deliver a program. The manual contains all the information interpreters need to deliver the program, including content, procedures for meeting the groups and safety. Azy views the manual as an important resource for interpreters so if they are unsure of what to do, “Everything is broken down so they have something to refer to” (Azy, Meeting 2, p. 10).

The other component of initial training focuses on the ‘curriculum section’. The curriculum section includes a twenty-minute PowerPoint presentation followed by a twenty-minute session with artifacts and focuses on wildlife such as bears of North America. The manual contains a copy of the PowerPoint presentation with additional notes for the interpreters. Azy describes the intent for the curriculum training to provide interpreters with the content that needs to be covered so that the interpreters “have knowledge to back up what they’re presenting...There are a lot more notes than you actually have time for so I ask them to pick what they find works the best” (Azy, Meeting 2, p. 10).

As part of training, Azy tries to provide an emotional experience for new interpreters similar to the experience she hopes visitors have, experiences that, “stimulates thoughts or emotions...it is an ‘awe’ feeling that you get from being able to be so close and learning from these animals” (Azy, Meeting 1, p.13). She hopes that this kind of experience, “instils that same awe and they [the interpreters] can transfer that much easier” (Azy, Meeting 1, p.13).

Although Azy relies on her manual as an integral component of training, it does not cover any teaching techniques. Shadowing is a basic part of the initial training and the way in which interpreters learn how to deliver the content of the program as well as teaching techniques. She relies on interpreters’ shadowing experience to learn how best to interact with students, “None [of the material in the manual] actually talks about how to work with kids...Most of those things in terms of how you speak to different groups of children happens...while they are shadowing” (Azy, Meeting 2, p. 10).

After shadowing, new interpreters present sections of a program to Azy and the other interpreters multiple times before delivering programs to children. Azy emphasizes shadowing and individual rehearsal to prepare interpreters to teach, “Shadowing is big...they perform, not

perform, present in front of myself and other staff ... And then we'll throw them in. That is how we do most of our training. Most of it is practice, practice, practice" (Azy, Meeting 2, p. 10).

Azy's descriptions of her training suggest a belief that learning to teach is based on replicating the actions of others, "They've watched someone else do the introduction and they basically just repeat it" (Azy, Meeting 5, p. 20). Azy raises concerns about interpreters becoming overwhelmed when watching experienced interpreters present programs. Like the other participants, she makes reference to the importance of interpreters 'making the program their own', and she believes this is a gradual process that can be achieved with the support of the manual and time.

Content is very important to Azy as indicated by the presence of the manual. The manual seems to play two roles; it is a resource for operational procedures such as orienting students and teachers to the day's program and safety procedures, and it contains the information to deliver the program. She contrasts this focus on teaching as delivery of content which her descriptions of what she views as two powerful learning experiences; the curriculum section is a 'hands-on' component where students have a chance to examine different artifacts such as bear skulls, and the emotional experience of seeing wildlife up close.

Tension in practice: The issues Azy described related to training interpreters were related to her perceptions about her educators, image of self and to some degree organisational barriers such as their approach to staffing. She attracts two types of potential interpreters: retirees, often retired classroom teachers who enjoy the outdoor environment and working with students, and younger people interested in environmental education (making a start at their career). With interpreters working only when programs are booked Azy cannot guarantee the number of hours they will work. As a result, staff turnover with her younger interpreters was relatively high. This staffing model is not uncommon in museum education.

On a number of occasions, Azy spoke about insecurities she has about being an educator, particularly how this affected her training of interpreters, "I think ... I just get very nervous that they aren't ready to present so I keep doing training session after training session. Sometimes too many...I think me being nervous sometimes makes them nervous (Azy, Meeting 1, p. 8). She attributed this to her age, as she is younger than some of the staff she supervises, and her educational background, a bachelor of science in progress compared to some of her staff who are retired teachers.

For Azy, the presence of her 'manual' seemed to provide an element of reassurance. At one point during our conversations Azy made a comment about lacking a manual (or outline) about how to train her staff to teach. She later described that this is something she would change. She also commented about credibility and that it was important to inform her staff that

the training approach was based on her participation in a research study so that they would, “know what level this is coming from because a lot of my staff are sensitive...a good, professional area. That there are studies behind all of this stuff” (Azy, Meeting 8, p. 7). She also felt that having a manual describing her actions as a museum-based teacher educator would make her feel more confident in training.

Nadean’s initial training: seeking coherent values and approaches

Nadean works in a community-based museum in the Metro Vancouver area. The museum is a civic-run institution, and at the beginning of this research project it was transferred into a new department within the city, Parks and Recreation. The museum has had a long-standing education program with a large group of docents who deliver the programs. The museum views the docents as important museum stakeholders and values their strong connection with the surrounding community. This volunteer group is characterized by long-term service to the organisation (some have been involved for thirty five years, longer, as Nadean points out, than she has been alive). It is also an older group, many of whom are retired teachers, with an average age of around eighty years. Each year they recruit ten to twelve new volunteers to begin learning the programs. With the addition of a group of new volunteers every September Nadean has two distinct cohorts within her docent group, experienced volunteers who are familiar with the programs and new docents. Nadean, as Arts and Heritage educator, is responsible for the overall education programming and works directly with the sixty docents, who deliver the school programs.

Nadean’s programs run on a one-month cycle, with different programs offered every month. The majority of these programs have been offered for many years. Nadean provides a training session in the week between programs as a refresher for experienced docents and training for new docents. All docents come to these sessions, even the experienced volunteers who have been delivering the program for years, as socializing is a large part of why they volunteer. During this program specific training on ‘training days’, Nadean and the docents walk through the program.

Nadean describes her program training as a hybrid she developed after trying a few different strategies including, delivering the program to a group of students while docents watched, and having docents role play as students while Nadean facilitates the program. Nadean provides background resources, program outlines, and program scripts in advance of training so docents have information they can refer to in preparation for training. Nadean hopes docents read the package before training, “I write training notes so they... can read through it. It even includes things like a script that goes with the PowerPoint... I like to provide them with that sort of scaffolding” (Nadean, Interview, p. 7).

In her hybrid approach Nadean tries to involve the docents' expertise as much as possible. She asks experienced docents to facilitate parts of the program. She describes docents as modelling aspects of the program for the others while she provides input during the more challenging parts of the program, "I've found they have a harder time with the transitions and the timing and the feeling out of a group – knowing what that groups' needs are, when you've talked too much ... the different ebb and flow of teaching" (Nadean, Interview, p. 6).

Docents usually work with the same group of eight to ten people when delivering programs (based on 'their day' at the museum). Programs usually require a minimum of six docents to run effectively, and with the large docent group size there is little pressure to help new docents prepare to deliver programs. As docents have regular days in the museum, they do not have an opportunity to learn about how others deliver aspects of programs. Nadean uses program training as an opportunity for docents to not only share their subject matter knowledge, but also share ways they deliver programs:

once we've presented a station or a part of the program we do have that time for collaboration... Some groups bring in props... or dress up... The others didn't know about that till it was shared at the training session... They learn from each other, from me (Nadean, Interview, p. 4 - 5).

After initial training, Nadean's new docents join a regular group of eight to ten docents and usually begin as 'time keeper'. In this capacity, they follow an experienced docent and help with keeping time and group management. Nadean described that new docents were comfortable in the role and often remained as timekeeper for a couple of years, "I think they are actually feeling intimidated. They watch the [retired] teachers. They are really comfortable with their timing role". (Nadean, Meeting 7, p. 15)

Nadean believes that her two cohorts of docents (new and experienced) have different needs. New docents need to have dedicated time to focus on specific aspects related to teaching the programs and they need this in an environment where they will not be intimidated by the confidence of the experienced docents. Nadean believes the social nature of her current training approach is important for retention of her experienced docents and meets their social needs, but does little to support her goal of reforming some of their approaches and associated values. Nadean views training as an opportunity to address underlying issues she identified in her docents' practice, such as comments and assumptions they occasionally made about different cultural groups. Nadean believed that there was value in docents learning from each other. This is reflected in having experienced docents model parts of programs as well as the collaboration time she integrates into program training.

Tension in practice: Nadean is working with two distinct groups of docents, those who are new or have only been volunteering for a few years and those who have a long history of

volunteering with the museum. She perceives the needs of each of these groups regarding their training as different, but has difficulty in addressing their distinct needs because of her current structure of training. Nadean spoke of wanting to change the approach to training, “I’m hoping maybe that I can shift training, I don’t know how drastically, give them professional development days and train the newbies on training days” (Nadean, Meeting 2, p. 2). One of the forces that seemed to be dictating her training format was an organisational pressure, “There is a lot of pressure from our gift shop. They’ll prep the night before [training] because they’ll have added sales... our gift shop manager is very keen that we don’t just bring in the five new people” (Nadean, Meeting 2, p. 2).

Training for programs is also challenging as she is working with a large group within the museum’s very small galleries. It is physically difficult to move the group through the galleries during training. This is exacerbated because many of the docents view training as a social occasion and often talk while aspects of the program are covered.

Another issue Nadean raised related to age, her own and that of her experienced docents. Nadean was relatively new to the museum and had started working there as a student. Nadean expressed issues about how docents and staff perceive her, “I hated being judged for my age. I work primarily with older volunteers who have been volunteering longer than I’ve been alive...It was very frustrating. I have the qualifications...” (Nadean, Meeting 3, p. 10). With her experienced docents, she described additional issues related to working with an aging group including mobility, hearing loss and memory becoming increasingly common.

Susan’s initial training: mentoring new docents

The art gallery is a large organisation with a longstanding school program and a large (approximately forty), active group of volunteers who facilitate the guided tour portion of the school program. Docents are a relatively diverse group in terms of age and make a commitment to volunteer for a two-year period. Tours are divided into a number of distinct ‘stations’ and are based on exhibitions in the galleries. A new tour is introduced with each new exhibition. Paid educators deliver workshops and facilitate tours when they are short of volunteers. Susan oversees the program development and the educators and docents who deliver the programs.

Susan’s docent program runs throughout the school year with docents meeting each week for a two and a half hour training session (in addition to the time they spend delivering programs). Typically the gallery has two new exhibitions per term so docents need to learn new program content every year. Weekly training sessions cover exhibit content, teaching strategies such as the entry point approach (Gardner, 1991), theoretical constructs such as Gardner’s (1983) multiple intelligences, and opportunities to practice delivering programs. As part of the training docents watch a ‘model tour’ for the new exhibitions. These tours are delivered by staff

to a group of students. After the model tour, the docents participate in a debriefing session with staff where they review what worked in the tour and what could be changed.

In the past two years, the gallery changed their training program for new volunteers. With their current approach new volunteers work with senior docents in a mentor-trainee relationship. This individualized approach allows new docents to progress at their own pace. In the initial year of this program Susan selected mentors whom she believed would be excellent mentors. In the second year (during this research project), she asked for people to volunteer for the role of mentor and for each new volunteer she selected two people to mentor them.

New docents and mentors attend six training sessions in addition to the regular weekly training. Attending these sessions together provides an opportunity for mentors and trainees to build rapport and it provides mentors with a review of the techniques the new docents are learning. In addition to these six sessions, new docents spend time shadowing their mentor, and as Susan describes, they “learn how to tour... by shadowing their mentor and then taking on one work of art, then one station, once they get that station with their mentor they move on to another station” (Susan, Meeting 4, p. 4). This approach allows new docents to begin working with students immediately, providing opportunities to develop experience and see other docents facilitate programs. The mentor and new docent spend time after delivering a program for reflection and evaluation. For new docents, the transition from “new” into the regular docent group is marked by the completion of a written and practical test. These tests are used to ensure that new docents can apply the various teaching techniques discussed to different contexts and audiences, and they take the test when they and their mentor feel they are ready. In the first two years of the program, all new docents successfully made the transition into the regular docent group. To support this program Susan has a trainer who oversees the new docent training.

Susan’s adoption of the new training program for docents based on mentorship indicates a belief about learning to teach through apprenticeship. Her use of two mentors and the additional influence of a staff educator facilitating the training that both mentors and new docents go through indicate a value for experiencing a diversity of approaches to teaching. The ways in which new docents and mentors work together also support the belief of the importance of incorporating experience (delivering parts of a program with the support of a mentor), with theoretical approaches provided in the six training sessions, and the use of evaluation and reflection to learn to teach.

Tensions in practice: The organisation Susan works in appears to be much better resourced than most of the others. Her well-established group of committed docents attend training on a weekly basis through out the school year and in addition to training spend one day

delivering programs to school children. Her pressure to quickly prepare docents to deliver programs does not appear to be as much an issue as it is for some of the other participants. Issues related to the overall structure of her initial docent training were relatively few. Most issues Susan discussed were more related to individual docents and concerns with how they were progressing. Another area of concern was associated with mentor selection. In the first year, she handpicked mentors based on whom she knew would be a good mentor. This caused some concerns within the experienced docent group. For the second year, she asked for people to volunteer as mentors. She also expressed concerns about maintaining the high standards of their school programs and how their reputation might be tarnished if a new docent delivered a program before she was ready. The other tension she referenced is common to all participants, encouraging staff and volunteers to make the program ‘their own’ while maintaining some consistency in what the program covers.

Rhoda’s and Jarriid’s¹⁰ initial training: negotiating interdepartmental beliefs

The science centre that Rhoda and Jarriid work at is a large organisation that has paid staff for program delivery and interpretation as well as volunteers who work in specific galleries. Their organisation was in the midst of re-evaluating how they interact with their visitors. The interpreters at this site compared to interpreters from the other four organisations have additional responsibilities. In addition to facilitating one-hour workshops for school groups, delivering programs at the site’s demonstration stage and general interpretation in the galleries, the interpreters also fulfil basic customer service roles. Staff rotate through different positions on an hourly basis, and these activities could include taking tickets at their large-format theatre, sweeping spilled popcorn, monitoring galleries, program delivery and interpretation. This organisation also differs from the others in the reporting structure. Interpretive staff are supervised by customer service managers. Rhoda and Jarriid have limited contact with them on a daily basis and don’t have any direct responsibility for their daily supervision. They are however involved in their training.

Training for this organisation’s interpreters occurs at the beginning of each season (September, January, May) with the intake of new staff. New interpreters participate in a weeklong training that is primarily customer service focused and orients them to the site. During the week, new interpreters also receive an overview of each of the site’s galleries from the gallery curators and participate in a two-hour interpretive techniques session with Rhoda.

¹⁰ Jarriid works at the same site as Rhoda and had just started working at the site. He was just becoming involved in their interpreter training and as such did not have much to add to Rhoda’s descriptions.

During this session, Rhoda addresses what she hopes visitors take away from the experience, a more positive view of science, and introduces a range of concepts related to interpretation. She also addresses content specific to techniques and teaching strategies that are appropriate to different age levels and about how to ask good questions. As new interpreters often have little experience in the role, she also talks about their title, “Science Facilitator” and how facilitation differs from a lecture or guided tour.

To learn workshops and programs, new interpreters shadow more experienced interpreters or watch videotapes of past programs. They also spend two hours reviewing the materials and content with the program’s designer, usually one of the curators. Interpreters are observed and evaluated on their first program to ensure they are ready to deliver the program.

Jarrid works at the same site as Rhoda. At the time we were discussing initial training, Jarrid had only worked at the site for a few months and as such did not have as many comments specific to training in their organisation.

Rhoda’s comments about initial training and learning how to facilitate programs indicate an underlying tension between her beliefs about teaching others to teach and the barriers she perceives as a result of organisational structure and the limited time dedicated to interpretive training. Rhoda describes her ultimate goal of the two-hour interpretation training as “to remind them that from an educator standpoint what we want visitors to walk out with... not that piece of knowledge ... a more positive view of science ... [and science] isn’t that scary. It is interesting or fun” (Rhoda, Meeting 2, p. 8). Rhoda’s beliefs about initial training and its relationship to learning to teach are encapsulated in her following statement, “you can teach a technique in a two hour session. You can’t really teach a philosophy that they are going to adopt and apply in two hours. That has to come through their experience and through the reflective nature” (Rhoda, Meeting 4, p. 10). In the initial training, she provides opportunities to practice techniques such as questioning and background information such as developmental stages of children, but she believes they do not cover enough material, “they are learning a lot in training and it is never as much as we want to provide. There is a capacity – you just have to sink or swim a little bit. We give you enough to hopefully tread water” (Rhoda, Meeting 2, p. 13). This echo’s Jarrid’s description as the outcome of training, “for our staff to get green-dotted on their new programs which is go – they’re safe and we feel confident that they can go into a classroom [in the museum]” (Jarrid, Meeting 6, p. 9).

Shadowing is also an important way staff learns to facilitate programs. Rhoda introduces a dilemma associated with shadowing and a common desire to have interpreters “make programs their own”. She suggests that after shadowing when interpreters attempt to replicate what they saw does not work, “The challenge is that everyone is different. Every personality is

different and sometimes improv types present and [new interpreters] say the same jokes because they think it is really funny, but when they try it [doesn't work]" (Rhoda, Meeting 2, p. 8). She also recognizes potential problems when new interpreters try to make programs 'their own'. She was troubled by ways in which staff sometimes modifies programs without necessarily understanding the pedagogical reasons behind the programs original design, "they haven't put enough thought into why. They just think this would be cool" (Rhoda, Meeting 2, p. 8).

Tensions in practice: One of the tensions in Rhoda and Jarrid's initial training relates to the structure and scope of the interpreter position. They recognized tensions between differing intents between customer service and education and were concerned that with the broad scope of the interpreter position (from program delivery to sweeping popcorn) may undermine the value of its educative role, "the interpretive part ... of the job may be a fifth of what you do that day...that determines how much value [interpreters] place on [it] ... we don't just hire someone for the interpretive aspects" (Jarrid, Meeting 2, p.13). Rhoda expressed concerns that with the predominance of a customer service focus during the weeklong training, new interpreters are "coming to [the job] with a whole bunch of misconceptions or vagueness about what the job actually is" (Rhoda, Meeting 2, p. 7).

The broad scope of the interpreter position creates tensions during the initial training. The combination of customer service training, learning operational procedures associated with the building and interpretation training is, in Rhoda's estimation, attempting to cover too much, "just having a short amount of time during a period which is pretty intense and they're absorbing a lot of things, we hope" (Rhoda, Meeting 2, p. 8). This limited time also meant that interpretive training focused on teaching new interpreters techniques with little time to help them understand the theoretical basis of the techniques. This is an ongoing concern for Rhoda as she raised the issue a number of times during the research.

The other tension in Rhoda's practice was linked to her belief that training and support for interpretive staff needed to extend beyond the initial training period. She described how she tried to provide additional feedback to interpreters and support their use of reflection. She commented on this particularly when talking about evaluating interpreters as they deliver their first programs, "could I have avoided this in the first place ... it means that I should be checking in with them more regularly so that I can over time continue to develop that reflectiveness and get them to understand the philosophy" (Rhoda, Meeting 2, p. 13). Rhoda more than any other participant connected the interpreters' inability to facilitate a program in a certain way to something she had done wrong or omitted during training, "Trying to get them to see – do you

see how this is connected [to concepts covered in training]...I'm always trying to figure out where during the training did I go wrong that they didn't get it" (Rhoda, Meeting 4, p. 10).

Summary of initial training

The group's discussion of the initial training highlighted different approaches used by museum educators and the beliefs and theories supporting their approaches. Much of participants' discussion about their initial training framed teaching as a technical endeavour (Hoban, 2005). The discussion was also an opportunity for participants to raise and reflect on conflicts between their beliefs about teaching others to teach and organisational beliefs and operational implications of those beliefs. Figure 5.2 summarizes participants' actions, beliefs and tensions associated with initial training.

The interview process and initial training usually have a finite timeline and signifies the part of their practice that is distinct to new interpreters and docents. While initial training is the most tangible example of practice as museum-based teacher educators in museums, it is not the only approach museum educators use to support interpreters and docents in their pursuit of learning to teach. Discussions about working with interpreters and docents after initial training further illustrate participants' beliefs about their practice and are addressed in the following two sections.

Figure 5.2 Summary of initial training

Action: Museum educators organise formal training for new interpreters and docents to orient them to the organisation, introduce teaching techniques and content, and initiate them into the way the organisation functions. Initial training also introduces trainees to the specific educational programs they will be facilitating. Shadowing (new interpreters watching experienced interpreters or docents deliver programs) is extensively used as part of training to help new interpreters learn how to teach these programs. Depending on the organisation and the topics addressed, training sessions may be attended by both new and experienced interpreters and docents. For some participants, there was a need for new trainees to learn to deliver programs as quickly as possible.

Belief: Beliefs about this part of new interpreters and docents training addressed two areas, beliefs about the initial training process and beliefs about learning to teach. Beliefs about these two areas were not necessarily consistent across all participants.

Beliefs about training

- Museum educators can 'train' a certain amount of what interpreters and docents need to teach programs. This includes content, group management and teaching strategies (teaching is a technical endeavor).
- Initial training does not 'make' someone a good interpreter or docent. Additional support is needed to help them develop a deeper understanding of the theoretical constructs associated with teaching strategies and recognize the nuances of teaching.
- The structure of training is fixed, either through organisational practices, tradition, time and/or financial considerations. Museum educators have limited ability to influence organisational structure.

Beliefs about learning to teach

- Interpreters and docents learn to teach by watching others teach (shadowing). It is best to provide trainees with opportunities to shadow different people so they can learn a variety of approaches.
- Trainees need to develop experience as they learn to teach. They begin to do this through shadowing.
- Trainees need experience before they can reflect on their teaching.
- It takes time to learn to teach. Time allows trainees to understand the theory behind their teaching and allows them to "make programs their own".
- Initial training does not 'make' someone a good interpreter or docent. Additional support is needed to help them develop a deeper understanding of the theoretical constructs associated with teaching strategies and recognize the nuances of teaching.

Tensions: Differing beliefs about teaching between the organisation and the museum educator, as well as conflicts the museum educator has about teaching others to teach, results in two views of teaching: as a craft and as an art. This manifests the following tensions:

- Because the organisation needs to have them ready to deliver programs quickly initial training is brief and may be overwhelming for new interpreters and docents.
- Museum educators do not feel that they adequately addressed larger philosophical and pedagogical issues and as a result new interpreters have to "sink or swim".

5.3.3 Creating space for reflection and peer feedback

There is ... a really definable phase, where you are transitioning from ...just a content focused person to get the job done ... to develop ... that sort of reflective, introspective aspect to it. (Jarrid, Meeting 2, p. 12).

Loughran and Northfield (1998) describe reflection as a personal process of thinking, refining, reframing and developing actions. Although it is often considered a solitary activity, reflection in collaboration with others, such as peers, is useful to support change in teaching practice. Participants frequently talked about reflection as an important element in their own practice as educators. They also believe it is an important element for their interpreters and docents. They hoped their more experienced interpreters and docents used self-reflection and peer feedback in a systematic way to be more thoughtful about their practice. Most participants did not discuss creating opportunities to reflect as a deliberate part of their practice as teacher educators in museums.

Participants suggest that interpreters need to gain experiences to reflect on before they can begin to make connections between their teaching and techniques and concepts introduced in the initial training. They also commented on the difficulty of arranging time to reflect. Rhoda described her interpreters' daily schedule as rotating to a new area every hour with little time to reflect or watch other interpreters facilitate programs. Rhoda suggested reflection would happen, "if you allowed people or built in that reflective time" (Rhoda, Meeting 4, p. 10). They also acknowledged that the limited time museum educators spend with new interpreters after initial training does little to further model or reinforce the use of reflection.

Despite some of these operational constraints, interpreters seem to find time to reflect. Jarrid described an occasion when he chatted with two new staff over lunch about the programs they were delivering. The interpreters started sharing how they modified particular aspects of the program and had a number of questions for Jarrid. As a result, they scheduled time to meet and further discuss the program. This experience prompted Jarrid to think about how to support interpreters to "evaluate [programs] themselves and to start to think about how they want to improve themselves. Sharing and talking with each other"(Jarrid, Meeting 7, p. 1). The added benefit to reflecting on practice such as in this instance increases the staff's potential to have a larger impact on their teaching.

For Susan, feedback is a required component for new docents and their mentors after programs. She also incorporates time for peer feedback into her weekly training meetings and believes it is an important element for her docents' development. Reflection is included as part of the regular docents' week training and one of the reasons why Susan has weekly training

sessions during the programming year. During this time, docents discuss their facilitation of programs, ideas for modifying programs, and share stories of both successes and failures. Susan also uses this weekly training to model different approaches to reflecting on programs.

Figure 5.3 Creating space for reflection summary

Action: Participants viewed the use of self-reflection and peer feedback as an important part of an interpreter's practice. They were challenged with creating the space and time for interpreters to reflect because of organisational and scheduling issues, as well as a perception that interpreters and docents may not be receptive to it. In examples where it was used, time was scheduled into their day with support to help interpreters and docents reflect and provide feedback.

Belief: Creating opportunities for interpreters to reflect on their experiences in a systematic way is essential for developing deeper knowledge about practice and is enhanced when receiving feedback from others.

Tensions:

- Adequate time to reflect after a program.
- An approach to help interpreters reflect in a thoughtful, systematic way.
- Reinforcing good self-evaluation skills to help interpreters develop systematic ways of reflecting.

5.3.4 Being a mentor and being mentored

Much of the participants' discussions focused on preparing new interpreters and docents to teach. Other than brief discussions about professional development and supporting reflection, the only aspect of their practice that addressed working with more experienced interpreters and docents was through mentoring and shadowing.

Shadowing or mentoring differs from receiving feedback from peers in that as a mentor a more formal relationship is established and there is an expectation that the mentor has a greater level of skills and experience, which may not be the case in a peer-to-peer relationship. All participants discussed shadowing or mentoring in different ways, ranging for a longer-term relationship at the art gallery to shorter experiences often focused on a particular aspect of an interpreter's practice. Most of our discussions were from the perspective of the new interpreter or docent. The use of shadowing as a way of learning to teach in museums is also described in the literature (Castle, 2001; Sweney, 2003; Grenier, 2005) as a way to see the techniques of other educators and learn new "tricks of the trade" (Grenier, 2005, p. 112).

Although every participant used shadowing or mentoring in some way to help new interpreters and docents learn to teach, we spent limited time talking about why we use it or why we think it is beneficial. In a conversation about the "ideal training", Rhoda described her beliefs about the benefits of establishing mentor relationships between interpreters and educators as a way to participate in more in depth discussions about teaching, "I think because it would facilitate the discussion between people and would get the wheels turning instead of being in autopilot mode" (Rhoda, Meeting 2, p. 14). Providing this time for reflection and discussion is essential unless the intent of shadowing is simple replication of the approach (Clarke & Erickson, 2007).

In addition to providing a forum for dialogue and providing guidance for new interpreters and docents, mentoring is also an opportunity for more experienced interpreters and docent to improve their practice. Susan did talk briefly about how the mentors felt at the end of their first year of the new training program, "Mentors all said that their skills improved. They talked about how much more conscious they were of the process and the techniques they used" (Susan, Meeting 4, p. 5).

Our discussions addressed some of issues that should be considered to better support and guide more experienced interpreters and docents in order to become 'good mentors'. Part of our discussion focussed on what Rhoda called the "mindset of a trainer" (Rhoda, Meeting 2, p. 8). She describes one of the challenges with experienced interpreters who do not have this mindset is that they make facilitating programs look easy and don't understand how to help the

new interpreter recognize the components of a program. Rhoda believes this contributes to new staff attempting to replicate the approach used by others without reflecting on what elements work for the audience and why. In some cases, participants selected experienced interpreters to be a mentor or be shadowed based solely on their availability, not on a specific strength they have as an interpreter. Amn described using interpreters who were available as well as specifically pairing up interpreters (new and experienced) to work together based on a need of the new interpreter and a corresponding strength in the experienced interpreter.

Participants recognized the need to provide some sort of training for experienced interpreters to take on this role, primarily to help them think about how to explain their actions, discuss the intent behind those actions as well as evaluate interactions with learners. For Azy, this had particular relevance as she had an issue with one of her experienced interpreters related to his apparent reticence to take on a mentoring role with new staff. Azy interpreted his reluctance based on a lack of understanding of how to give feedback in a supportive way. She did not believe the experienced interpreter understood how to “guide someone, give them advice without being hurtful” (Azy, Meeting 8, p. 3). She felt that additional training for experienced staff would help them to develop the skills and confidence to mentor other staff.

Working with experienced interpreters to help them take on a mentor role with new staff is one aspect of participants’ practice as museum-based teacher educators focused specifically on experienced interpreters. Another area they discussed was how they evaluate experienced interpreters and docents as part of teaching them to teach. All participants in the group have a more senior position than those they are training. In this capacity, they generally have a broader understanding of what their organisation is trying to achieve as well as how educational experiences in their organisation connect to a more comprehensive view of education. During our discussions, participants referred to the importance of evaluation and adequate time for evaluation as part of improving the quality of visitor experience and contribute to the professional development of staff, “if we want to change the quality of the experience and if we want to contribute to the professional development of our [interpretive] staff we need to work that [time] into our staff schedule and their time and work plan” (Jarrod, Meeting 6, p. 10). This speaks to the need to develop a culture of evaluation within the organisation and with individuals involved.

Participants discussed a number of issues related to evaluation. During discussions, it was apparent that within Susan’s docent group there was a strong culture of evaluation. She had implemented a regular evaluation schedule, with a formal evaluation of experienced docents occurring every two years. An evaluation team comprised of other senior docents and museum educators conducted this evaluation. In alternate years, each docent receives peer

feedback. New docents were initiated into this culture through the mentorship program during which their mentor regularly evaluated them after each program. For Susan's docents, evaluation was a regular part of their practice and one way experienced docents continued to improve their practice.

Susan's experiences with docent evaluation provided Nadean with a window into an alternative practice. Nadean's museum did not have a culture of evaluation and the idea of docents meeting a standard was not part of her museum's traditional practice, "I had no idea that docents would be tested. The tradition of my institution is to train and take anyone who walks through the door" (Nadean, Meeting 7, p. 15). Nadean wanted to provide her docents with evaluation as a way to address her concerns about some of the docents' approaches, including what she perceived as a resistance to adopting a more facilitative approach to program delivery, "they only want to tell they don't want to listen and learn anymore. I'm trying not to say all of them ... I never considered that my learners [docents] might be resistant to learning" (Nadean, Meeting 7, p. 19). She also recognized other issues with instituting evaluation including the time required to evaluate sixty docents and the docents' reticence with the idea of being evaluated or even receiving peer feedback.

Over the course of three months, Nadean took steps to develop a culture of evaluation with her docents. She began with arranging opportunities for experienced docents to work with each other to see how they facilitate programs. The intent with this step was not to have them evaluate each other, but to learn what each other does. She followed this with introducing self-evaluation to her docents and provided them with a handout to guide their self-evaluation and offered prizes to those who submitted their form to her. She then provided some written feedback on their reflections. Nadean viewed this as less threatening to a group that had little feedback about their teaching. The docents, primarily her lead docents, who participated in the evaluation were positive about the experience, and Nadean was hoping that by introducing evaluation through her lead docents their enthusiasm and influence with the group would encourage those who were reluctant about evaluation to participate.

Jarrid raised an issue about the evaluations provided for experienced staff. He described their current use of evaluation as superficial with limited follow up and connected this with the priorities of initial training, limited time dedicated to reflection and evaluation, and the focus on classroom management and content delivery. Jarrid also commented on the value of evaluating experienced interpreters multiple times, but encountered resistance to this idea as it was counter to his organisation's traditional practices and challenges related to the structure of the interpreter's position.

This superficial nature of evaluation is also reflected in the evaluation forms shared by the group (Figures 5.4 – 5.6). These forms reflect a mechanistic view of facilitating a program with a focus on mechanics of presentations (speaking too quickly, including an introduction and conclusion, etc), but little addresses interpreters' practice beyond the basics.

During our discussions about evaluating experienced interpreters and docents Amn, Azy and Nadean raised an issue they described as low credibility with their interpreters and docents. For the three of them, age was a factor as all of them were younger than the people they were evaluating. Amn and Azy both expressed that their lack of university degree also contributed to their staff's perception of their credibility. Additionally Amn identified his ethnic background (different from his co-workers) as a factor when trying to establish his credibility with staff.

5.3.5 Designing professional development for interpreters

Ongoing professional development for interpreters and docents was mentioned by participants, but was not an area the group discussed in detail. Approaches discussed included special lectures, workshops, field trips and visits to other museums. As there was limited discussion, it will not be addressed further, but is included as an element of participants' practice as museum-based teacher educators because it is an important area to consider with regards to the development of interpreters and docents.

Figure 5.4 Summary of mentoring

Action: Museum educators match more experienced interpreters and docents to mentor new staff or volunteers. The choice of mentor is sometimes influenced by operational elements such as availability or interest in being a mentor. Discussions about mentoring as an opportunity for experienced interpreters and docents to improve their practice was limited, although acknowledge as a benefit. In addition to mentoring, experienced interpreters and docents can improve their practice through evaluation from museum educators. Participants discussed evaluation as an opportunity to work with experienced interpreters to move them beyond being technically competent (e.g. group management, communication skills, questioning skills) to becoming good educators who can use their experiences, knowledge and ability to read and react to a changing environment.

Belief: Museum educators can help experienced interpreters and docents improve and deepen their practice by providing systematic evaluations on their practice as well as opportunities to mentor others.

Mentoring – Mentoring is more than just shadowing. The opportunity to mentor others encourages interpreters and docents to reflect more deeply on and improve their practice. Not everyone makes a good mentor; it takes a willingness to provide supportive feedback and an ability to deconstruct one's own practice. Training and support from museum educators can help individuals become better mentors.

Evaluation - Receiving evaluations from museum educators help experienced interpreters and docents improve their practice. Museum educators need to work to develop a climate where evaluation will be readily accepted.

Tensions:

- Time to work with experienced interpreters – or treating it as a priority.
- Giving feedback beyond the technical – helping interpreters to think about what they are doing in terms creating conditions for learning.
- Selection of mentors – good interpreters/docents do not necessarily make good mentors; politics related to choosing specific people to be mentors.
- Support or training for mentors – how to help them talk about their practice and to think about the experience from a broader perspective.

Figure 5.5 Evaluation form used by Nadean's organisation

Nadean was required to use this evaluation by the Parks and Recreation department that her museum was part of. She eventually created her own form that better reflected her needs and the actions of her docents.



Volunteer Evaluation Form

Volunteer: _____

Instructor/Evaluator: _____

Season/Year: _____

Program: _____

Rating

4 = Excellent

3 = Good

2 = Satisfactory

1 = Needs Improvement

	Comments:	Rating:
Participation <ul style="list-style-type: none"> o Attends every class on time o Wears volunteer shirt o Always involved with class o Willing to learn o Helps with set-up/clean-up 		1 2 3 4
Communication <ul style="list-style-type: none"> o Follows directions o Shows initiative o Developing communication skills with parents 		1 2 3 4
Interaction with Students <ul style="list-style-type: none"> o Friendly and open o Speaks to the level of the students o Non-threatening o Helps make the class enjoyable 		1 2 3 4
Safety <ul style="list-style-type: none"> o Demonstrates safe behaviour at all times o Constantly watching class o Always has an aid in deep water (Aquatic only) 		1 2 3 4
Teaching <ul style="list-style-type: none"> o Understands course content o Able to develop a lesson plan o Successful teaching sections of the class 		1 2 3 4
Overall <ul style="list-style-type: none"> o Areas of strength o Goals for improvement o Overall experience 		1 2 3 4

Instructor/Evaluator Signature: _____

Date Reviewed: _____

Please give to Programmer or AQ Leader after completion

For Programmer or AQ Leaders only.

☐ Copy given to Volunteer

☐ Copy given to Volunteer Coordinator

Figure 5.6 Evaluation form used by Rhoda and Jarriid

Presenter:

Workshop: _____ **grade** _____

Date: _____

Feedback from: _____

Content

- ♦ covered the required content
- ♦ balance of content and fun

weak strong
◆────────────────◆

Presentation

- ♦ introduction and conclusion
- ♦ voice modulation
- ♦ used appropriate language
- ♦ pacing
- ♦ enthusiasm and class response

weak strong
◆────────────────◆

Interactions

- ♦ established and used connections with teachers and adults
- ♦ adjusted show for age and abilities of students
- ♦ maintained good rapport with class

weak strong
◆────────────────◆

Classroom Management

- ♦ equipment and materials ready and organized
- ♦ safety
- ♦ preparation and cleanup
- ♦ used appropriate strategies to get and hold attention

weak strong
◆────────────────◆

Three things that worked really well:

Three things to work on:

Figure 5.7 Susan's evaluation form

Training Docent Evaluation Form	
Name of evaluator:	
Docent:	
Duration:	
Time (start and finish): 12:30 p.m. - 1:15 p.m. (started late as class arrived late)	
Attentiveness to tour content and goals:	
Wendy conscientiously covered the tour content (as much as time allowed - the class was 15 minutes late). She was also mindful of the goals of each station.	
Effective questioning:	
The class responded to Wendy's questions and several asked their own questions. This group was eager to talk	
e.g. "In what ways have you transformed something ordinary and everyday into something else?"	
Student: "I have strung popcorn into Christmas tree garlands at Christmas time".	
Age appropriate:	
The vocabulary and concepts were entirely appropriate to the age level. This Grade 9 Prince of Wales class was quite sophisticated in understanding the concepts and, since they were a Social Studies class, Wendy spent some time in the area of Impressions of Native Art that are gouged into the walls.	
Presentation:	
Wendy has a good teaching style - she is very clear in her explanations. She very effectively used flash cards to emphasize and reinforce certain concepts; (Site specific, transformation, hybrid, conceptual art, etc.) were on a flashcard and she repeated these words throughout the tour and also the theme that Jungen used every day, ready made material in his art.	
Wendy also used a visual aid to explain the connection between the colours of the trays and the lengths of the prison terms.	
She had the class successfully engaged in the tour - it was definitely not a "silent" group.	
Suggestions for improvement:	
Perhaps at the beginning of the tour the "rules of the gallery" could have been covered. However, Wendy was rushed and the students did not break any rules.	
Wendy missed using one transition but generally she used transitions effectively.	
It was a very good tour, Wendy!	

5.3.6 Summary of participants' practice as museum-based teacher educators

This section addresses the first research question by analysing the actions and beliefs evident in museum educators' discussions about their practice as museum-based teacher educators. Our conversations provided insights into participants' practice of teaching others to teach and what emerged was a broader conceptualization of their practice: interpreter selection, initial training, creating space for reflection and peer feedback, shadowing and mentoring, and professional development. Within this conceptualization of practice are the actions and beliefs museum educators hold about their practice.

Approaches participants used to train their interpreters and docents to teach included shadowing (an approach used by all participants) as well as the transmission of content, procedures and teaching techniques. In their training they also provided "model" experiences for interpreters with the intent that interpreters would be able to replicate these experiences for visitors and would have a common basis to better understand specific teaching techniques. Strategies participants suggested beneficial for the continued development of interpreters and docents after initial training focused primarily on the use of reflection and evaluation.

In our meetings, participants' discussions about their practice at times suggested a belief of practice as a technical endeavour in which learning to teach centred on the development of a repertoire of techniques and strategies (Hoban, 2005). These more frequently arose during discussions about initial training and may be more an artifact of the nature of initial training, a short duration event with a need to quickly prepare interpreters to deliver programs, than the participants' beliefs about learning to teach. In general, participants viewed learning to teach and teaching as "learning to recognize, confront and learn from problems encountered in practice" (Berry, 2007a, p. 15). This view of learning to teach is consistent with a view that knowledge of teaching is not just technical, but also requires the development of judgement.

These five areas, interpreter selection, interpreter selection, initial training, creating space for reflection and peer feedback, shadowing and mentoring, and professional development, make up the majority of their actions as museum-based teacher educators. Generally, there is coherence between their beliefs about teaching others to teach and their practice. However, there are instances where this coherence is not evident as a result of external forces influencing their practice, including organisational norms and practices, program delivery framework (the ways in which interpreters and docents facilitate programs), operational issues, and their position as museum educator. Internal forces are also at play and arise in areas where museum educators recognise inconsistencies between their actions and their beliefs about teaching others to teach. When these forces are at play they create tension in museum educators' practice.

5.4 My practice as a museum-based teacher educator

As a teacher educator in a museum, my practice exists in two different contexts; as an employee in a museum, currently in a senior administrative position overseeing the organisation's education department, and as a consultant providing training for education staff in other museums. This section addresses aspects of my practice as a consultant as it introduces another way training for interpreters and docents occurs within museums.

As a consultant the groups I work with vary, from a group of new staff that have no background in interpretation, to a group of experienced interpreters, to a group with a mix of both. The training workshops I provide are sometimes part of a larger training program organised by a museum or a single event. The agenda for the training may be very specific, determined in advance by the organiser or may be left entirely for me to decide. The consistent elements in these training events are that I lack specific knowledge about the prospective learners and the context (including organisational culture) other than what I can glean from the organiser in advance.

Through years of providing training to different groups I have developed a repertoire of materials that reflect the aspects of teaching in museums that interpreters (or their supervisors) usually want addressed. These include skills and techniques that can be immediately incorporated into their practice such as using observation skills, asking questions, program planning, and self-evaluation and as well as techniques associated with leading guided tours (a format that is commonly used in museum programs). In addition to addressing techniques, I include some of the theoretical constructs associated with these techniques, such as inquiry-based learning and critical thinking and information about visitor motivation and learning theory.

I try to frame the training around conversation and encourage participants to ask questions. I use their questions and thoughts about interpretation as opportunities to explore concepts more deeply. I make extensive use of stories and examples from practice (my own stories as well as those shared with me) to help illustrate concepts and extend the experiences of those in the training (learning from "borrowed" experience).

Over the past decade of providing training to interpreters and museum educators my purpose has changed. Initially, my motivation was to provide the skills and techniques that I found useful as an interpreter and to challenge what I perceived as an interpreters' over-reliance on content knowledge. Currently, I view this type of training as an opportunity for participants to spend dedicated time thinking about their practice and hopefully thinking more deeply and differently than they would in the normal course of their day. In describing a "successful" training to interpreters I usually include the following elements: they have time to think about their

practice as an interpreter, have been provoked to think about interpretation as a field, and leave with a plan to challenge themselves as an interpreter.

My beliefs about teaching others to teach are, in many ways, contradictory to my actions as a consultant. My practical nature values providing interpreters with a set of techniques or skills that will help them become teachers. This is consistent with expectations for a training workshop, but it does not make them interpreters or teachers. I believe becoming a teacher, and teaching others to teach, needs to be an ongoing endeavour which embraces, as Berry (2007a) describes, “learning to recognize, confront and learn from problems encountered in practice” (p. 15). From this perspective, my role is as provocateur, encouraging participants to interrogate their practice and not as “expert”, often the way I am introduced to trainees.

Tensions in practice: In my practice as a consultant I find tensions arise in two areas, the beliefs about teaching and the lack of context.

a. Beliefs about teaching: Most tensions in my practice as consultant relate to conflicting views of teaching. I find that organisations that ask me to provide a training session often view learning to teach as a technical endeavour. They position the training session as providing a solution to a problem. The following excerpt from an email about a training session is typical in that it frames teaching as mechanistic:

my interpreters are slipping more into the 'lecture' category and are telling visitors what they want them to know. I would really like to see them acting in a facilitators' capacity - the whole education by provocation side of things. This may mean that we need to get back to basics when it comes to planning for training. I would also like to focus on 'what makes a great interpretive program.' Last year I had some staff members plan programs and they didn't have any idea how to do so. I don't have the time available to give them appropriate 'how to develop interpretive programs' but thought an initial look at basics of great interp programs it might help (Excerpt from a client's email).

Interpreters during training also frame learning to teach from a technical perspective. This usually manifests itself when they discuss problems they have encountered as interpreters and ask me for ‘solutions’. I often feel like an imposter (or think they see me as an imposter) as my responses are usually prefaced by “it depends”. This reflects my belief about the context dependent nature of teaching, but conflicts with their view of teaching as prescriptive.

My use of a range of stories illustrating different approaches and challenges commonly found in interpretation is another way I try to address the conflict in beliefs about the nature of learning to teach. I hope that by providing a number of examples and providing opportunities for participants to examine cases will help them recognize the importance of nuances in teaching.

b. Missing context: In most cases, I have limited knowledge about the individuals in training or the site they work in, including its organisational mandate, their vision for visitor experience and its culture. I can develop a superficial understanding through participants’

comments, but this lack of context becomes an issue when participants are seeking feedback on their practice. Often individuals will ask me to evaluate them after they demonstrate a component of a program in a workshop setting. I find it challenging to provide much more than evaluation on a superficial level such as mechanics of delivery. This is in part to the contrived setting (and sometimes contrived program) they deliver, but also a result of my limited understanding of their philosophical approach combined with my perception of their desire for 'the answer'. I am lacking the understanding of the nuances of their context and content and the issues their learners have.

5.5 Tensions in practice

Throughout our discussions, participants talked about issues and challenges in their practice, often framing them operationally. I initially disregarded these operational issues as I viewed them as impediments to discussing practice. It was not until I examined them more closely did I realize that they were integral to their practice as museum educators and a lens through which to understand their practice. This discord or tension represents "internal turmoil that many teacher educators experience in their teaching about teaching as they find themselves pulled in different directions by competing concerns, and the difficulties for teacher educators in learning to recognize and manage these opposing forces" (Berry, 2007a, p. 32). Analysis of the operational issues revealed patterns to their tensions related to what participants believed to be inconsistencies within their organisations about visitor learning, learning to teach, and the conceptions of the interpreter position within their organisations. These points of tensions provide insights into the second research question, how do museum educators understand and reconcile the tensions that emerge from their beliefs about practice?

5.5.1 Participants' understanding of tensions in their practice

Tensions in participants' practice related to learning and teaching were raised in two areas, their perceptions of the inconsistencies about the purpose of the visitor experience in their museum, and differing views about learning to teach.

Differing understandings of purpose or vision of visitor experience: Amn's organisation is in the process of changing their vision of the visitor's experience. Although the mandate and main messages remain essentially the same, the introduction of the Quality Visitor Experience framework and Explorer Quotient (see Section 5.3.2) necessitates a change in the way interpreters think about and interact with visitors. The adoption of this framework requires a number of changes including a change in their conception of their interactions with visitors from a predetermined, set experience ('canned') to a belief that every experience is unique; a shift

from a concept of program delivery based on a formal script to a conversation-based experience with visitors; and a change in the ways interpreters think about visitors, shifting to understanding visitors' motivations for visiting instead of categorizing visitors based on typical demographics or general behaviours. As supervisor and trainer for his organisation, Amn is internalizing this new vision of the visitor experience, but is meeting resistance from some of his more experienced interpreters who retain the old interpretive framework. As he continues to deepen his understanding of the new vision, he is examining his practice of teaching others to teach and particularly how to assist interpreters in integrating the Explorer Quotient to their practice.

Inconsistencies in the vision for visitor experiences are also evident as a source of tension with Rhoda. From her descriptions of training and the ways in which education staff interacted with customer services staff, there seemed to be differing understandings of the vision for the visitor experience. Additionally, she questioned the consensus in understanding of the educative purpose within her organisation. Her belief of the purpose of the visitor experience is to leave visitors with a positive view of science ("It is interesting or fun", Rhoda, Meeting 2, p.7) and to challenge visitors to think critically. She believes others in the organisation hold different understandings of the purpose, "administrative ...or a fundraising team...[think visitors] will leave ... knowing $E=mc^2$...[so] we can say we're making sure there are more scientists in this province.... I think we're training people [interpreters] who are getting different messages about their role" (Rhoda, Meeting 1, p. 13).

In both of these examples, the vision for the visitor experience is not a unified one within the organisation, resulting in interpreters and docents receiving mixed messages. Another set of tensions that affected participants was tensions related to different beliefs about teaching held within their organisations.

Differing understandings about the nature of teaching: The need to quickly prepare new interpreters and docents for facilitating experiences is a driving force and a source of tension for most participants. This need results in relatively short training programs and suggests an organisational view of teaching as a technical endeavour (Hoban, 2005) in which teaching is viewed as applying the proper techniques and discrete pieces of knowledge at the appropriate times. This is epitomised in Rhoda's description of their initial training and is a source of tension for her because it contradicts her view that learning to teach is more than applying the proper technique at the right time. She also believes that learning to teach requires learning to "recognize, confront and learn from problems encountered in practice" (Berry, 2007a, p. 15).

Nadean voiced concerns about the lecture-like approach used by some of her docents. She described their teaching as telling the students information that was of interest to them, but not necessarily relevant to the students or reflective of changes that had been made to the

program. The docents' script-based approach to delivering the program, combined with the lack of a culture of evaluation within the organisation, was a source of tension for Nadean.

Susan shared an example of her supervisor's mechanistic view of teaching when she described a conversation about the possibility of bringing in an external 'trainer' to just train the volunteers, "Almost like it was a logistical thing without taking in the educational aspects into it...without taking into account all of the different things we think about as educators... It isn't just about scheduling and logistics...[and] information" (Susan, Meeting 3, p. 7). Susan's approach, a mentor program for new volunteers with its emphasis on reflection on practice with others and augmented with weekly training sessions, opens the possibility to think of teaching as more than technical. It suggests a view of teaching as art where teaching is viewed more as a dynamic relationship that changes with changing context and learners and reflecting on one's decisions are a critical part of teaching (Hoban, 2005). This view of teaching requires new teachers to learn more than a repertoire of techniques and rules to apply them effectively. It requires new teachers to make informed judgements with a theoretical basis and to constantly read changes in the context and would support a more individualized visitor experience.

The examples above illustrate the organisation's (or those within the organisation) view of teaching as primarily technical and contrast participant's belief that learning to teach is more than a set of technical skills or a body of content knowledge. During the course of the research, most of Rhoda's questions to the group seemed to originate in the discrepancies between the organisational view of learning to teach and her own. Comments from other participants reflect similar discrepancies between beliefs about teaching and learning within organisations.

Discrepancies about the interpreter position: Another area of tensions in practice relate to participants' beliefs about the interpreter position within their organisation. Castle (2001) advocates for a "more thoughtful and reasoned approach and commitment to the definition and creation of teacher in the museum setting" (p. 330). There appears to be a lack of consensus within the participants' organisations about the definition of interpreter and the scope of its position. Participants provided examples of how the structure of the interpreter position caused tensions with respect to their practice as museum-based teacher educators and seemed to be counter to the participants' belief about teaching and learning. The issue of structure manifested in a number of ways. For Azy, the on-call nature of the position and its associated inconsistent work hours resulted in high staff turnover for her younger interpreters, as she could not guarantee how many hours they would work. Participants considered it important for interpreters to develop experience as an important element of their development as teachers. This high staff turnover resulted in interpreters with limited experience teaching. Susan's requirement of a two-year commitment from her new volunteers reflects her belief in the importance of experience.

Jarrid and Rhoda described a number of issues resulting from both the scope of the interpretive position and the limited time for staff to reflect on their practice. The relationship between the museum educator and interpretive position in their organisation was unique within the participant group. Rhoda and Jarrid had no direct responsibilities for interpretive staff, had little daily contact outside of initial training and did not prepare the interpreters' schedule. Although they were not denied access in order to spend time working with interpreters, they needed to schedule time through the customer service manager. This structure seemed to limit opportunities for Rhoda and Jarrid to work on an individual basis with interpreters as they continued to learn about teaching in museums. It may also suggest to interpreters that their ongoing growth as interpreters learning to teach is of limited priority. The structure of the interpreter position was inconsistent with Rhoda and Jarrid's view of teaching and their vision for the visitor experience. However, it may have been consistent with the view others in their organisation such as those in customer services.

5.5.2 Participants' reconciliation of tensions in their practice

During the course of the research participants identified sources of tension in their practice. Through discussions of the issues of others, participants examined their tensions from new perspectives. These discussions provided indications of how they reconcile tensions, generally by either accepting status quo or changing aspects of their practice.

Some participants seemed to view changing their organisation's beliefs about teaching and the visitor experience as insurmountable. Although Jarrid expressed that within their organisation "there is also a will ... to consider different ways of doing interpretation" (Jarrid, Meeting 2, p. 11), both he and Rhoda kept referring to the structure of the interpretive position as an impediment, "We'll never be able to get away from having our staff sweep up popcorn and look for lost children" (Rhoda, Meeting 2, p. 11), which may indicate that others within the organisation have not understood or seen a need to change. Azy faced similar organisational issues with respect to the structure of the interpretive position.

For Nadean, one source of tension related to the beliefs about teaching she thought her docents held as well as her organisation's beliefs about managing and evaluating docents. She viewed these beliefs as in conflict her own. Through the course of the research, and in particular through recognising how Susan navigated similar tensions, Nadean instituted change to her practice as a way of resolving her tensions. This is further elaborated in Section 6.2.2.

5.5.3 Summary of tensions

Tensions are useful as they can be catalysts to think differently about practice. Identifying tensions and reflecting on their relationships to personal teaching practices, as well

as organisational practices and beliefs, has the potential to broadening perspectives of teaching in museums and stimulate museum educators to look for alternative approaches to practice. Generally, participants' beliefs about teaching others to teach were consistently reflected in their discussions about practice. Instances where inconsistency between belief and action occurred were related to external forces influencing their practice. These forces, described as operational issues, were often perceived as immutable practices in their organisation. Closer examination of the tensions revealed a disparity between beliefs of the organisation and beliefs of the museum educators with respect to significant concepts associated with teaching others to teach and learning in museums.

In the course of describing participants' practice of teaching others to teach, this chapter has addressed the first two research questions. As participants discussed their practice a number of beliefs about their practice became evident, including beliefs about the roles of museum education, the interpreters and docents they work with, and their beliefs about teaching and learning. Specific to participants' belief about teaching were competing beliefs, teaching as craft and teaching as art (Hoban, 2005). Issues participants raised during the course of the research were primarily associated with helping interpreters enact teaching as an art, but their descriptions about the types of training they provide largely reflected a view of teaching as craft. These discrepancies between beliefs about teaching exist within a larger group of tensions about beliefs within their organisation and include beliefs about the purpose of museums as well as the structure of the interpretive positions.

Collaborating and discussing practice with colleagues provided an opportunity for participants to more thoroughly articulate beliefs and the tensions that exist in their practice, the focus of the second research question. Participants generally recognized sources of tensions as discrepancies between the beliefs they personally held about teaching and the beliefs held by others within their organisation. In addition to articulating their understandings of the tensions held, participants, in some cases, seemed resigned to living with the tensions, and in others, began to institute changes to their practice in an effort to resolve tensions. Their efforts to resolve tensions were supported and inspired by the collaborations with colleagues, the focus of the following chapter.

Chapter 6 Participating in a Collaborative Self-study

here I feel my job has been more transformed. I've been able to be vulnerable ... knowing your backgrounds and that you're going to give me feedback. Not first judging me... we're past that (Nadean, Meeting 8, p. 10).

Nadean's comment above about meeting regularly with colleagues and examining her practices as a teacher educator in museums speaks to the value of the experience. Teacher educators in museums often work in isolation with limited access to other perspectives of practice and they have limited expertise in training or learning theory (Grenier, 2005). This chapter addresses my third research question, How does the opportunity to engage in conversations with colleagues about their practice, framed within collaborative self-study, contribute to museum educators' practice? Procedures describe in Section 4.3.3 were used to analyse the data. Findings suggest that participants valued their involvement in the research project because it provided a sense of belonging to a professional community, increased their confidence as educators, and changed their practice in teaching others to teach. Their practice was affected was by being exposed to alternative perspectives and practices and by examining the experiences of others and adapting them to their own context.

The first two sections of this chapter address the value of participating in the research. Section 6.3 analyzes participants' comments specifically about their participation and the following section analyzes two examples of 'borrowed experience' as a catalyst for reflecting on and changing practice. Section 6.5 addresses the group's development from individuals to community of practice and finally towards collaborative self-study, and the chapter ends with my reflections on the process.

6.1 How participants described the value of meeting

Participants were very generous with sharing their time and expertise during the six months of the research project. One of my concerns from the beginning of this research was whether participants would find the meetings useful. It was apparent that they valued the meetings by their comments in our discussions, a strong 'attendance record' (83%), and by the clearly articulated statements made during our last meeting. Much of the discussion during the last meeting (meeting eight) focused on their experience as participants in the research group. From this discussion participants acknowledged that their participation in the research contributed to practice as teacher educators in museums. The analysis of the contributions to their practice related to three main themes, 1) community – about the benefits of working as part

of a group, 2) self – about personal insights voiced through the discussion, and 3) practice – about insights and changes to their practice.

6.1.1 Finding community

Participants talked about how the research group provided a sense of community and how this community was important to them as it combated feelings of professional isolation. During the six months, participants commented on feeling isolated from the broader museum education community, a feeling that was heightened for participants such as Azy, as she was the only museum educator in her organisation:

One thing that most of us have in common is we are all at a certain level that we don't have anyone alongside us at that level. Coming together it is people who have the same problems, the same concerns, the same challenges...I would not go to my supervisor and say can you teach me this. I don't have anyone [at work] that I could go to. (Azy, Meeting 8, p. 14)

For Nadean the participation in the research group not only limited her feelings of isolation through the collegiality and purposeful discussions of the group, but she also suggested that participation in “this type of group would retain me longer in my current position where I may have left museum education earlier” (Nadean, Meeting 8, p. 11).

In addition to combating professional isolation, participants suggested it was also a source of personal support. For some, this support was simply the comfort of knowing that there are others who face similar challenges. As Azy described “... so many of our challenges are similar which is nice to know” (Meeting 8, p. 7). Even though participants work in different contexts they recognized commonalities in problems discussed during meetings, “I'm really grateful I've been coming here... It is good to know that there are more people like us out there and they have the same problem. Different aspects of it but generally it is all the same thing” (Amn, Meeting 8, p. 14).

Nadean's participation in the group went beyond just a feeling of being part of a larger community. She compared the experience to other forms of professional community. Nadean regularly attended the local museum educators meetings (Lower Mainland Museum Educators), but felt the value of those meetings was primarily social. She also compared our research group meetings to attending a conference. While both the conference and the research group meetings provide a sense of community and insights into changing one's practice, she recognized the important role of the other participants in the research group in keeping her accountable and encouraging her to think more deeply about her practice:

Not only do I try it but I think about it – I wonder how it really works because I'm going to have to talk about it. It is a follow up for me. I mean accountable in a good way. ... I

have this group of colleagues that will support me and keep me accountable. (Nadean, Meeting 8, p. 18)

Nadean's comment about being supported by colleagues was an important element for participants and meetings were "like a little oasis of calm in the middle (Jarrod, Meeting 8, p. 11). Nadean later echoed Jarrod's comment when she described coming to the meetings as a proactive action she took as a professional and that coming together with a community helped her manage feelings of burning out, "For me it feels like those days when I'm ready to burn out there is a meeting" (Nadean, Meeting 8, p. 18).

This sense of working with a community, during the research period at least seemed to be restricted to our meetings. During meeting eight I asked whether any of them had talked with each other outside the research group. At that point no one had, but as Nadean described, she knew whom to go to with questions, "I feel more grounded. I know who to phone. I knew Azy from Lower Mainland Museum Educators (LMME), but I might not have phoned her if I had questions" (Nadean, Meeting 8, p. 11).

6.1.2 Understanding self

The second theme that emerged during discussions about the value they perceived in the meetings focused on personal insights related to their identity as museum educators. These realizations were wide ranging including reflections on their identity as professionals and perceptions of their own credibility.

Both Susan and Nadean commented on the experience as one that challenged their own thinking about themselves as educators. This seemed to be particularly powerful for Nadean in that it helped her make sense of her reactions to issues in her practice:

I didn't realize that I was such a social reformer ... I didn't particularly like the First Nation's program and the way it was presented. Didn't think it was respectful so I just cancelled it until I had time to review it. I didn't realize that was actually my social reformer in me.... In that way it helped solidify this isn't just my crazy undergrad historian in me saying no way. There was reasoning behind what I thought was best for my museum to be presenting and kids to be learning. (Nadean, Meeting 8, p. 12).

Personal and professional credibility was a reoccurring theme participants raised during the meetings. It was often expressed as feeling like an imposter, and even prompted a discussion in our third meeting about Brookfield's (1995) imposter syndrome. In his book *The Skillful Teacher*, Brookfield describes a commonly reported feeling amongst learners and professionals in many areas of education, that they are "undeserving imposters who will sooner or later have their real, pathetically inadequate identities revealed" (p. 44). During our discussion in the final meeting some of the participants recognized how their participation with the group

increased their feelings of self-confidence, personal credibility and credibility of their education department. This was particularly evident for Nadean as she was coping with a recent change in the reporting structure for her museum within the civic government. The recent change meant that Nadean was involved in meetings with staff from the municipality's parks and recreation department staff, who had a limited understanding of museums and museum education. Nadean used her participation in the research group to provide credibility for museum education:

It is giving me ammunition... It gives you that added credibility and oomph and confidence. I'm just really grateful for this confidence for this group as I'm not getting as bashed around by parks and rec. I could have read it myself but it is not the same as saying I was at a PhD study of museum educators (Nadean, Meeting 8, p. 13).

The concept of the 'Imposter Syndrome' seems to resonate strongly with Azy. A number of comments Azy made during the research meetings indicated a level of discomfort and even disbelief that she was working as a museum educator, "being an educator I find very intimidating as a whole" (Azy, Meeting 3, p. 9). In the final meeting, Azy spoke about how she would develop their training program based on her experiences and what she learned during the research group meetings. She felt it important to share what she learned with her staff as well as where she learned it (in the research group) so her staff would, "feel that is coming from a good, professional area. There are studies behind all of this stuff. I would feel more confident in creating something like that having gone through this workshop [the research group]" (Azy, Meeting 8, p. 7).

6.1.3 Investigating practice

The third theme focussed on the contributions to their practices associated with teaching others to teach. We met together for a relatively brief time (six months) during a time of year that is traditionally busy for educators, the beginning of the school programming year, when new staff and volunteers join their organisations. I did not expect participants to implement large-scale changes during the research, but during our last meeting participants did hypothesize about ways they could change their practice both within their own organisations and with the wider museum education community. Jarrid suggested that groups such as Interpretation Canada could bring museum educators together for similar levels of discussion about practice and these discussions would be influenced by questions and readings similar to the types used by the research group. For Azy, the experience inspired her to think more about how she trains staff, "I think I would develop a training program. ... It [the new training] would be a bit more structured. I'd probably have a training manual that would use all of the information that you'd shared" (Azy, Meeting 8, p. 7). Similarly, Susan shared how her thinking had changed,

broadening her focus on training from just her docents to reconsidering the way she trains her paid staff, “I’ve been applying this mostly to docents, but it has also made me think about the staff [and] ...the training that we go through together... I wonder if that is the best way. Is there another way?” (Susan, Meeting 8, p. 15).

While participants’ comments in meeting eight did not refer directly to change in their own practice, they did recognize it in each other. As Jarrid commented:

something I’ve enjoyed hearing about is how you are taking these things and trying to implement them right away... The idea of group mentorship and the support for you to try new things. It is backed up by research and it’s backed by peers in the field” (Jarrid, Meeting 8, p. 17).

Participants also commented on how discussing practice with colleagues helped them to think beyond their own organisations and think about teaching in a broader perspective:

It is the big picture... It helps you to get out of [the] daily grind ... I think it helps us get to thinking about education on a higher level, our job on a higher level, our job in relation to overall goals of the organisation. For me, I’m starting to think about what is it that we’re doing that helps the goals of our organisation. (Jarrid, Meeting 8, p. 18).

In addition to thinking about their practice at higher levels, participants also felt their participation was important as a form of professional development. Professional development for museum educators is critical and in short supply (Bevan & Xanthoudaki, 2008). Participants talked about the different ways in which they viewed this opportunity as a form of professional development and how the experience contributed to their practice. Susan described the experience as “refreshing” and as professional development it “kind of fills me up...not only to talk about questions and problems, but to feel like you’re moving forward as a professional...to talk about some bigger issues...bigger questions about how to make us better professionals” (Susan, Meeting 8, p. 17). Both Nadean and Amn expressed similar ideas about their participation in the research group. Nadean felt that through her participation, “my job has been more transformed” (Nadean, meeting 8, p. 10). Amn considered the meetings his “professional development days” and found them useful because he had more ideas. For Jarrid, participation in the research group reminded him of the importance of taking time to think about his practice:

recognizing that you deserve or need that time and you really should be thinking about your position as a reflective practitioner. You are trying to strive to be a better practitioner...To reflect on what you’ve done, reflect on what you’re going to do...That is one of the things that has crystallized out of this process...It has really helped me to have the time to think about my practice (Jarrid, Meeting 8, p. 8).

Jarrid’s comment about the importance of taking time to reflect on his practice during the research group meetings resonated with two of the participants who commented that they were not being very open about their participation in the project with their supervisors. Although their

supervisors knew they were attending the meetings, the participants seemed to be concerned whether their supervisors would understand the importance of taking the time to participate and the value to them as professionals:

I've spoken to my supervisor about it very briefly... It doesn't come up too much and I don't want there to be too many questions about it either because I find it really valuable and [my supervisor] always worries if it will affect the budget and it doesn't really (Meeting 8, p. 12).

All participants did not voice this concern, but it is worth noting as professional development is not usually readily available for museum educators, particularly professional development focused on teaching practices.

In our final official meeting as a research group, participants shared a number of examples of how they believed meeting together had helped them as museum educators. Benefits they described were associated with participation within a broader community, increased confidence, and time to reflect on their practice. In many ways, the greatest indicators of success from this community of practice for me are the participants' interest in continuing to work together beyond the scope of the research and the accountability they expressed towards each other as colleagues.

6.2 Learning from 'borrowed experiences'

One characteristic most participants had in common was their relatively limited experience with working as museum educators in settings other than the museum they were employed in at the time of the research. With the exception of Jarrod, they had, for the most part, only worked as museum educators in their current organization (although they may have had interpretive positions in other organizations). Additionally, participants' access to professional development related to museum education was limited to participation in bi-monthly museum educator meetings and the occasional conference. Very few opportunities to participate in professional development specific to teaching others to teach in museum settings exist. One-way participation in this research project contributed to their practice was by providing additional perspectives on what constitutes the practice of museum educators and different examples of practice. The meetings became a source of learning about teaching others to teach through the experience of others. The following two examples were selected to illustrate participants' using the experiences of others to reflect on and change their own practice.

6.2.1 Analogies and young children: Not every magnet has a friend

Before we addressed the first item on our agenda at the fifth meeting Rhoda asked if it was possible to talk about an experience with one of her new interpreters, "I had one experience

[that] really triggered me to be reflective about my training. I'm not sure how it will fit in to [the agenda], but its something I'd like to talk through" (Rhoda, Meeting 5, p. 2), so that is where we started our discussion.

Rhoda related her experience watching a new interpreter deliver a program about magnets to a grade one class. This program took place at the beginning of the school year and was the interpreter's first program. At Rhoda's workplace, an interpreter's first program is always evaluated by one of the educators. Rhoda described the context and articulated some of her concerns that arose as she reflected on both the interaction between interpreter and students and her evaluation with the interpreter after the program. The discussion within the research group as we examined the issues Rhoda presented is a good example of museum educators learning from the experiences and knowledge of others to develop alternative understandings of issues related to their practice. It is also an example of the groups' interactions moving beyond basic exchanging of ideas and resources to deconstructing and problem solving.

During the workshop, the interpreter used an analogy in an attempt to help the grade one students understand one of the characteristics of magnets. She explained to the children that things that stick to magnets are the magnets' 'friends' and conversely materials that do not stick to magnets are not its friends. For most of the children in the workshop, the analogy did not seem to cause any concern, but Rhoda noticed a few children that repeatedly asked whether another magnet would befriend the object that 'didn't stick'. The interpreter repeatedly answered that the object would not find a friend. Rhoda discussed with the research group what she perceived as the interpreter's inability to recognize why the children repeatedly asked the question about the object without a 'friend':

how do I teach her to recognize where these questions are coming from?... In the kid's mind everyone has to have a friend and the language they use is they aren't classmates they are friends... The kids were very hung up on this analogy. They immersed themselves in the imaginative part of the analogy in which some other metal will be its friend, which is dangerous to the science concept [that] certain metals will never stick to magnets... How do I train that person, how do I in the evaluation try and get them to understand and read those questions on the fly? ... How to be alert to the fact when an analogy goes too far in their mind? How to present different analogies to this person? (Rhoda, Meeting 5, p. 2).

Rhoda identified two areas of concern, the interpreter's ability to understand why visitors are asking questions ('reading' questions) and the use of analogies with young children. As the group further discussed Rhoda's example, Nadean shared some of her experience working with children. Nadean had spent four years as a primary school teacher, and as such had a wider range of experiences working with children of this age than any in the group. Nadean suggested

that the children might be taking the analogy literally and added the context of the primary school classroom where it is emphasized that children take turn being each other's friends:

They are taking it literally...Who knows what happened the day before about friends...the majority of the kids were probably fine with that analogy it is the one who was upset wants someone to stick to them tomorrow...And with things like bullying and similar concepts it is emphasized that we take turns being friends with people and it is ok (Nadean, Meeting 5, p. 3).

Nadean's experiences and perspectives of working with younger children and understanding of facilitating museum-based programs helped Rhoda broaden her thinking about the context of the learners (young children). As Rhoda further reflected on her experience with the magnet analogy she raised another possible issue of interpreters, "not open to reading how the class is perceiving" analogies (Rhoda, Meeting 5, p. 4), a skill that they had not specifically covered in training. Her comment opened up another avenue of discussion for the group in which we focused more on the new interpreter, their journey in learning to teach, and whether what Rhoda describes as an unwillingness to reading an audience was an issue for initial training or whether it was a skill that interpreters needed to develop as they gained more experience.

The sharing of expertise from the other group members, particularly Nadean's experience working with young children, provided alternative perspectives into Rhoda's story about her interpreter's use of an analogy. Our questions also helped Rhoda to reflect differently about the interactions she observed as well as connections to the initial training she provided the interpreter. In subsequent meetings the 'magnet story' became code for discussions related to new interpreters learning the nuances of teaching such as interpreting audience reactions. The magnet story also became part of our shared history as a community of practice.

6.2.2 Creating a culture for evaluation

Collaborative self-study is undertaken to change and improve practice. I did not expect large changes in their practice over the relatively short time we spent together. My capacity to see change in participants' practice also relied on participants talking about how their practice is changing. While participants did discuss hypothetical or future changes they would like to make (see Section 6.1.3), very few tangible examples were shared during our discussions. One notable exception to this is Nadean's implementation of evaluation with her docents.

Nadean had not worked as a museum educator at other museums, and her experience and knowledge about approaches to managing and training docents was limited to the museum she was currently working in and her experiences as a classroom teacher. Her museum had a long-established docent program with many of the docents having volunteered for the museum

for many years. Nadean discussed with the group a number of areas that required improvement with respect to the ways in which docents facilitated programs, but felt unable to make changes.

During Susan's description of her docent training program she talked about her system of docent evaluation and some of the challenges she faced with its initial implementation, "It was very difficult to make the transition to evaluating docents... There was a lot of animosity. Now I would say there is no animosity at all. ... We're all on the same side working to the betterment of the program (Susan, Meeting 4, p.7).

Susan's experience provided Nadean with an alternative perspective and practice regarding docent evaluation. Nadean's museum did not have a strong culture of evaluation and the idea of docents meeting a standard was not part of their traditional practice, "I had no idea that docents would be tested. The tradition of my institution is to train and take anyone who walks through the door" (Nadean, Meeting 7, p. 15). In Nadean's organisation the ideas of being evaluated or even of experienced docents watching each other facilitate a program were not well received and she felt that some docents were resistant to learning a more facilitated approach, "they only want to tell they don't want to listen and learn anymore. I'm trying not to say all of them ... I never considered that my learners [docents] might be resistant to learning" (Nadean, Meeting 7, p. 19). Nadean wanted to provide her docents with evaluation, but recognized a number of issues, including the time required to evaluate sixty docents and the docents' reticence to the idea of being evaluated or any type of peer feedback.

Over the course of three months, Nadean reported to the research group the steps she took to develop a culture of evaluation with her docents and transform this area of her practice. She began with arranging opportunities for experienced docents to work with each other to see how they facilitate programs. The intent with this step was not to have them evaluate each other, but just to "learn what each other does. They aren't going to evaluate each other, because they've had thirty-five years of no evaluation. I'm going to ease that into the culture" (Nadean, Meeting 5, p. 20). She followed this with introducing self-evaluation to her lead docents. She developed a handout for the docents, created from the various evaluation handouts shared by participants in the research group and offered prizes to those who turned in a self-evaluation. She provided each docent who turned in an evaluation with written feedback on their reflections. Nadean viewed this as less threatening to a group that had little feedback about their teaching. The docents who participated in the evaluation were positive about the experience and by introducing evaluation through her lead docents Nadean used them as change agents to begin to establish a culture in which evaluation was accepted. This is an example of learning from the experiences of others. Part of the success of Nadean's efforts to

develop a culture of evaluation was due to her careful adaptation of Susan's experiences evaluating docents to best meet the needs of her docents.

6.3 From community of practice to collaborative self-study

One of the objectives of this study was to understand how the opportunity to participate in a collaborative self-study contributes to museum educators' practice. Loughran and Northfield's (1998) description of self-study places an emphasis on expanding reflection beyond a personal enterprise to the generation of new understandings accessible to a wider audience and reflection in collaboration with others supports change in teaching practice, promotes professional development, as well as contributes to the broader knowledge of a field such as teaching. Although both community of practice and collaborative self-study use reflection with peers to improve practice, the key differences between the two are that collaborative self-study employs a systematic approach and disseminates findings to the broader community, "making the world [of museum educators] more visible" (Denizen & Lincoln, 2003, p.4). With this view of collaborative self-study, it invites the question, is this research collaborative self-study or is it just an example of educators forming a community of practice to inform their own work? The following section describes our development into a community of practice and the relationship between community of practice and collaborative self-study.

6.3.1 Developing a community of practice

One issue raised by Bodone, et al. (2007) about participating in collaborative self-study is the vulnerability teachers might feel as they explore their practice within a collaborative setting. Vulnerability was an issue I considered in formulating this research and looked to Wenger's (1998) work on community of practice to frame my thinking about the development of the research group, in particular to addressing issues related to participants' openness with reflecting with peers. Wenger (1998) describes communities of practice as a group of people with a common focus working to improve practice through collaboration. Participation in a community of practice offers insights to participants as they share and learn together and over time their role within the community changes as they transition from a novice to a core member. In communities of practice, practice as a source of community coherence is defined by mutual engagement, joint enterprise and shared repertoire, elements that must be negotiated and sustained through participation. Wenger (1998) also describes a number of elements that are signs that a community of practice has formed. These signs include:

- shared ways of engaging in doing things together
- rapid flow of information and propagation of innovation
- substantial overlap in participants; descriptions of who belongs

- knowing what others know, what they can do and how they contribute to an enterprise
- mutually defining identities
- ability to assess the appropriateness of actions and products
- specific tools, representations and other artifacts
- local, lore, shared stories, inside jokes, knowing laughter
- jargon and shortcuts to communication as well as the ease of producing new ones
- share discourse reflecting a certain perspective on the world (p. 125).

For this research study, seven museum educators, including me as a museum educator and researcher (see Table 4.1 for an overview of participants), met over a period of six months to explore our practice of teaching other people to teach in museums. We came together at the beginning of the research as individuals and our first challenge was to coalesce as a group so that we were comfortable with questioning and challenging each other about our practice and able to speak candidly about our own practices. The threads of conversations that weave through our meetings illustrate the maturation of a group and the development a community of practice.

Two discussions in particular, participants' descriptions of their initial interpreter and docent training and results from the Teaching Perspective Inventory, fortified by an important element, food, contributed to the group forming into a community of practice. From these discussions, two themes emerged that were instrumental to the development of a community of practice, recognizing the commonalities and differences in each other's practice and developing a common language to talk about our practice.

Discussion of initial training: Training is the term commonly used to describe the development of new interpreters and docents. Chapter 5 (Section 5.3.2) provides an overview of each participant's training for interpreters and docents. The formal training museum educators provide for interpreters and docents is perhaps the most tangible expression of their practice as teacher educators in museums, and this is where the group began to explore their practice as teachers teaching others to teach. Although they all had experiences teaching in museum environments, with the exception of Jarrod, participants in the group had relatively limited experiences working in other museums. As a result, their familiarity with other ways of facilitating educational programs and training staff and volunteers was based primarily in the practices at their own organisations. This initial discussion served to establish common language and understandings within the group about elements such as staffing structures, program delivery methods, audiences, as well as theoretical influences and goals influencing them as museum educators. The discussions about training also highlighted tensions in an individual's practice and provided examples of how training issues were addressed. The ways in which the discussion about initial training helped participants develop an understanding of

commonalities and differences between their practice and the practice of other museum educators, and establish a common language will be further discussed later in this chapter.

The Teaching Perspectives Inventory: The second discussion that contributed to the development of the group was our conversation around the Teaching Perspectives Inventory (TPI). In preparation for our third meeting I was concerned that we were not addressing concepts related to their practices as museum-based teacher educators. I wanted to introduce a more concrete and systematic way to help participants reflect on and talk about their practice as museum-based teacher educators. The TPI is an online instrument (www.teachingperspectives.com) developed from Pratt's (2005) research into perspectives of teaching. Pratt, Arseneau and Collins (2001) describe a teaching perspective as "an interrelated set of beliefs and intentions that gives direction and justification to our actions" (p. 2). Pratt describes five different perspectives on teaching, transmission, apprenticeship, developmental, nurturing, and social reform (Figure 4.1). The inventory was reviewed and tested by adult educators to ensure consistency with its conceptual framework (Pratt, Collins & Jarvis-Selinger, 2001). I thought a tangible activity such as the TPI would also help participants in the research group set aside the time to think more deeply about and articulate their beliefs about their practice.

In an email sent in preparation for the meeting I asked the participants to take the inventory, and while responding to the inventory's questions to think specifically about their work in preparing interpreters and docents to teach. All participants took the TPI before the meeting and brought their results to the meeting. Discussion around the TPI addressed many topics including the mechanics of taking the inventory, our personal results, our preferred way of learning compared to how we teach, roles of museum educators, credibility, theoretical constructs such as constructivism, other possible uses for the inventory, and the meaning of concepts such as expertise, social reform and nurturing. Through this discussion participants continued to uncover elements of commonalities and differences, reflect more deeply on their practice and develop a common language to discuss practice, particularly language associated with theoretical perspectives.

Food: An element that contributed to our development as a community of practice that should not be discounted is food. Wenger (1998) describes the sharing of food as an important part of establishing and maintaining community coherence. I brought food and drinks to the meetings, as I believe a social element is an important part of helping people become comfortable in a setting, and from my experiences museum educators always enjoy eating. I initially brought baked goods (cinnamon buns and chocolate croissants) from a number of my favourite bakeries. At one point after the first couple of meetings a participant requested a

change in menu and suggested bagels and cream cheese. This may seem a minor point, but I viewed it as an important milestone in the development of a community of practice as it marked a shift in ownership within the group, with participants taking on a more prominent role.

The two activities introduced above helped the group develop into a community of practice. It is not necessarily the specific activities that are important, but that the activities became a catalyst through which participants discovered the commonalities and differences in their practice and began to develop a common language to discuss practice.

Commonalities and differences: Wenger's (1998) signs that a community of practice has developed include, "shared ways of engaging in doing things together, substantial overlap in participants; descriptions of who belongs" and "knowing what others know, what they can do and how they contribute to an enterprise" (p. 125) and relate to commonalities between individuals in a community of practice. Finding commonalities was a strong theme through the discussions in the research group, particularly in the initial stages of the group development.

Participants represented a range of types of museums (art gallery, community museum, historic site, wildlife refuge and science centre) and had varied backgrounds in terms of their educational backgrounds and length of experience as educators. In my past experiences working with museum educators from a variety of types of museums, particularly bringing educators who work in natural settings such as parks with educators who work in museums together, I found that museum educators often believe their practice is vastly different from that of their peers. Rhoda made a comment reinforcing this when describing their interpreter training in the second meeting, "We are a unique site. What we ask people to do is a little bit different than if they've worked at a museum before" (Rhoda, Meeting 2, p.7). As participants described their initial training and the context in which their interpreters and docents work, elements of commonality in their practice became apparent.

Our initial discussion about training helped to establish a community of practice by clarifying the common enterprise of the group, to explore our practice of teaching others to teach in museums. It also helped participants identify commonalities, recognize opportunities for shared learning and develop interpersonal relationships. Commonalities in their initial training included the qualities of good interpreters and docents, the dominance of shadowing as a method for new interpreters and docents to learn to teach, and the perception that it is important for interpreters and docents to "make programs their own" even though this is sometimes fraught with difficulties.

Our discussion about the Teaching Perspectives Inventory touched on some of the commonalities related to initial training and extended the conversation to include aspects of their identity (of self and by others) and commonalities in their perspectives to teaching. In addition to

elements that constitute their practice, participants quickly realized that there were common elements related to their own identity as museum educators, as well as how they are perceived within their organisation. The search for commonalities on an individual level was apparent with Nadean's discussion of her TPI results:

I was really surprised by how high my developmental concern for teaching was. I was wondering if everyone else had the same. Because I tried to analyze where did that come from and in teacher education they indoctrinate you with Jean Piaget and it is all about when a child is developmentally ready and accessing prior knowledge. I was kind of like 'is this the teacher training in me?'...I was wondering if that was a high score for everyone? (Nadean, Meeting 3, p. 2)

During the discussion about the TPI results another point of commonality that was raised was the perception and value of the museum educator position within organisations. This was described by Nadean as the challenge of being perceived as a generalist as an educator and working in environments that value specialized knowledge, usually held by curatorial staff. Susan described this attitude as endemic in museums, "it is practiced that the curator is god and we are the underlings. It is a big thing in museum practice. Let's try to balance this out. Educators have as much value as curators" (Meeting 3, p. 7).

Commonalities were important to help participants develop a sense of community. As the group met over the course of the research participants continued to develop an understanding of what experiences and knowledge each brought to the group and develop credibility, 'belonging' with the group and reassurance that they are doing things 'right'. In contrast to Rhoda's initial statement that their site is unique, participants at the end of the research agreed with Jarrid's realization that their positions as museum educators are similar making learning from each other's experiences possible, "Some of the points you're bringing up, if I have something similar happening it is easy to think about. If I don't I imagine myself in that position, imagine how I might deal with that on site" (Jarrid, Meeting 8, p 8).

Understanding commonalities also opens up an important area for participants to explore about their practice in comparison to the practice of others, difference. Differences in practice are important as it provides participants with insights into alternative perspectives and experiences. Recognizing these differences and how they might adopt them into their practice began during discussions of training with the potential of sharing different resources such as Nadean asking for a copy of the training manual Azy was working on and of Azy learning about Susan's training, "... I do not have a manual [about] how to train volunteers or even my education staff. Do you have that listed anywhere? I know you went through the steps. Do you follow a certain protocol that you've outlined yourself? (Azy, Meeting 4, p.6).

This initial collaboration extended beyond sharing resources to providing alternative perspectives to practice as museum educators. During Susan's description of her docent training program she described the implementation of docent evaluation:

It was very difficult to make the transition to evaluating docents...It was a really challenging time because they felt really put on the spot. They've never been evaluated before...It was a long process...There was a lot of animosity. Now I would say there is no animosity at all... We are all on the same side working to the betterment of the program (Susan, Meeting 4, p. 7).

The concept that docents could be evaluated was something that Nadean had not considered possible, as it was her organisation's practice to accept anyone as a docent. Nadean recognized the potential to move out of the operational quagmire she felt she was in with regards to managing docents and a way to improve programs when she learned about Susan's implementation of docent evaluation:

Nadean: Do you feel personally you can develop yourself more as a trainer now that you aren't dealing with the hard feelings? You sound very, almost joyful, coming full circle. Do you feel as a professional now you can see the bigger picture instead of being in the mud?

Susan: absolutely – I can look down at the bigger picture more easily rather than being stuck in the minutia (Meeting 4, p. 7).

Susan provided Nadean with an alternative practice to help her address an issue of docent management as well as a way to improve program facilitation. Over the following three months (Meetings 5 – 8). Nadean provided the group with updates on her efforts to cultivate a culture in which evaluation was an accepted and sought after practice for her docents (discussed further in Section 6.2.2).

Participants also revealed differences in areas such as organisational structure and how their position of museum educator differs between the organisations. For example, Amn's position incorporated both direct supervisory responsibilities for interpretive staff as well as a component where he was actively interpreting to visitors. This differed from the position that Rhoda and Jarrod were in. Both Rhoda and Jarrod were involved in training new interpretive staff, but did not have any direct supervisory responsibilities and had little daily contact with interpreters as the customer services department supervised them.

Recognizing commonalities and understanding the differences between the ways in which participants carried out their roles as museum educators and the context they worked in is important in helping develop another criteria for a community of practice, "the ability to assess the appropriateness of actions and products" (Wenger, 1998, p.125). This understanding is important if participants are going to adopt approaches used by others into their own practice.

Common language: The development of a common understanding of terms and concepts used to discuss practice, or a 'common language', was an important part of the development of the group and expedited discussions about practice. The development of a common language supports Wenger's (1998) criteria for the development of a community of practice, in particular the, "rapid flow of information and propagation of innovation, specific tools, representations and other artifacts, mutually defining identities, [and] share discourse reflecting a certain perspective on the world" (p. 125).

Some of this language development began during the discussion about initial training as participants described the types of activities interpreters and docents facilitated, the scope of both their role as museum educators and their interpretive staff, as well as concepts such as shadowing. The TPI acted as a catalyst for discussion and further supported the development of a common language, particularly language related to theoretical perspectives of teaching. Discussions about the meanings associated with the five teaching perspectives outlined in the TPI helped the participants reflect on their beliefs about teaching as well as the purpose of museums and museum education.

One such discussion focused on the challenges with the labels attached to the five perspectives and that as individuals we made judgements about the value of the perspectives, largely based on our perception of the labels. This was particularly evident in Amn's case. Amn was initially surprised by his TPI results, as it suggested his dominant teaching perspective was nurturing. Amn had trouble reconciling his perception of nurturing with the way he interacts with his interpreters. We discussed how his training approach is consistent with a nurturing perspective, specifically with his team-based approach and his desire to help each individual work from their strengths. We also talked about some of the misconceptions about nurturing as a teaching perspective. As Pratt (2001) describes, "Its very name has feminine connotations and to some, suggests lower standards" (p. 8). Although Amn recognized that his beliefs and actions were consistent with the nurturing perspective it seemed that the connotations attached to the term 'nurturing' overwhelmed the meaning of the word, with Amn admitting he would prefer the term "team-builder" (Amn, Meeting 3, p. 17).

Social reform was another label that prompted discussion within the group. There was some general confusion about what the term meant. As we further discussed the concept participants raised both their views of the term, as well as how concepts related to social reform may be integrated into museum education. Initially both Azy and Susan expressed concerns about social reform as they perceived it to have negative connotations associated with "changing people's societal views" (Azy, Meeting 3, p. 3) or a "moralistic kind of teaching. We should keep our personal perspectives aside" (Susan, Meeting 3, p. 4). Nadean and Rhoda had

a more positive view of social reform and framed it as part of their agenda as museum educators with Nadean describing it as helping visitors think critically about issues such as authority or racism. Rhoda's emphasis was on engaging learners in critical thinking, "I know in my teaching I particularly have that personal agenda to challenge the norm way of thinking" (Rhoda, Meeting 3, p. 5).

As we continued the discussions about social reform, the group seemed to struggle with two views of the concept: social reform advocating for a set of beliefs or ideals (Nadean) and social reform as questioning norms (critical thinking), but not advocating particular views (Rhoda and Susan). Pratt's use of the concept is more consistent with how Nadean described social reform. Pratt (2010) included the following elements in his description of social reform: teachers are seen as leaders or rebels; they believe others should adopt their firmly held ideals; and, they are proponents for change for a better society.

Our discussions about the TPI also provided an opportunity to discuss some theoretical concepts and develop a common understanding of the terms. For some of the group this may have been the first exposure to some of the theories used in museum education. Nadean spoke about the differences between Piaget's theory of learning and Vygotsky's theory as well as her desire to move from her Piaget-based perspective that was dominant in her teacher education program to a more Vygotskian perspective.

These two discussions, about initial training and the TPI results, are illustrative of the participants' interactions as we explored what it means to teach others to teach in museums. These discussions illustrate our group coming to terms with concepts and developing common language and understanding about concepts.

It took more than just time for our group to develop into a community of practice. It required that participants became involved in our common purpose beyond the scope of participating in my research to a place where we were mutually engaged in articulating and reflecting on our practice as teacher educators in museums. This common purpose was the focal point for us to develop shared histories and mutual ways of working as a group and the trust in each other to begin to explore and challenge the boundaries of teaching in museums and our practice as museum-based teacher educators. This is the beginning of contributing to the development of educational theories related specifically to museum education and to improving practice.

6.3.2 Collaborative self-study

One of the ethical considerations with research that involves participants in a collaborative nature such as this study is what to do at the end of the research with participants

who may have come to rely on the group. This was an issue I considered going into the research and was something participants themselves raised at the end of our final 'official' meeting. We ended the eighth meeting with a commitment to continue working together on a regular basis to discuss our practice as museum-based teacher educators.

At our next meeting one participant raised the question about how we share our experience and benefits of working together with the wider museum education community. We discussed ways to make our work public such as submitting articles to publications of interest to museum educators as well as opportunities that we could implement more immediately. The group decided to host a symposium for museum educators focused specifically on teaching others to teach. The symposium would be a forum for the research group to talk about their experiences of working together as a group and share our new understandings.

We had about thirty local museum educators, interpreters and docents attend the daylong symposium. The focus of the day was to talk about their practice as a 'trainer' of other educators and interpreters (paid staff and volunteers) and included a combination of networking, reflecting on practice, and talking about issues related to training museum educators. We also had a presentation from an interpreter who spoke about training from the perspective of someone who had been recently 'trained'. In preparation for the day, we asked each person to take the Teaching Perspectives Inventory. Dr. Pratt joined us for our discussion about ways of using the inventory to both explore practice as museum-based teacher educators as well as ways of using it with those we were teaching. Much like our research group meetings, the symposium was fuelled by a supply of food and beverage.

The symposium marks our transition from a community of practice to collaborative self-study, with the group becoming the 'self' of the study. This transition moves our reflections beyond the immediate circle of the research group to the larger museum education community. At the time of the symposium, our focus of sharing centred primarily on reflecting on practice with others, but as the research group continues to work together and further reflects on the new understandings about our practice as museum-based teacher educators developed from this initial phase of research we will make these understandings accessible to a wider audience.

6.4 My reflections as researcher

Through out this research project I struggled with my identity within the group: could I be both researcher and equal participant? As a museum educator I was searching for a community to discuss teaching others to teach in museums and for ways to improve my practice. As a (new) researcher I was looking for answers to my research questions and further developing my

understanding of self-study research. One of Nadean's comments provided insights into how the group perceived me:

You feel like the principal. You're the facilitator. I know it sounds awful but this is the staff room table...I don't have that sort of professional discussion anymore so it is really nice to have the semi-staff room table...You're bringing in either great research or great questions and sometimes you'll ask something and I'll get something from you and sometimes at my museum table I'll say I wonder about this...You've been following up with us. You look after us (Nadean, Meeting 8, p. 11).

Her description of principal seems to indicate a level of authority over the group, but also a responsibility to nurture their professional development as educators.

As a researcher I found it challenging to balance my desire, albeit an unrealistic expectation, to have participants "answer" my research questions with my interest in watching the group conversation unfold within each meeting and across the eight meetings. Although I had specific topics I wanted to explore with the group I tried to take cues from the participants as well as the outcomes of each meeting to influence the topic of subsequent meetings. As the weeks went on I became more interested in how the conversation unfolded beyond the meeting agenda. Often participants would apologize for talking about something that was unrelated to the agenda, but allowing the group to address issues and ideas they felt were important was a better reflection of their practice as educators.

One exception I made to topics that we should not address was operational issues. At the end of the fourth meeting I noticed that we had spent time talking about operational issues. In an email sent to the group after the meeting I commented on this, "In listening to the previous meetings I realized how much time we spend talking about operational issues, some of our time talking about tools and techniques and relatively little time talking about our theories and beliefs about what we're doing" (email sent October 12, 2009). Although I suggested that we avoid talking about operational issues, they continued to surface in our discussion.

As I reviewed the data and began writing about the research, I began to think about and understand the conversations and the interconnections between them on another level. One example is my reframing of what I perceived as topics limiting our discussions about practice, such as the operational barriers raised by participants. Initially, I had placed these barriers in a metaphorical trash heap, but when I began to think of this trash heap more like an archaeological midden, its excavation helped to frame thinking about barriers as tensions in the participants' practice and a lens through which to better understand their practice.

Writing about the research has also deepened my understanding of collaborative self-study, its relationship to Wenger's (1998) concept of community of practice as well as this research as a collaborative self-study and its potential for use by museum educators. One way I

began to think about this collaborative self-study is as a self-study about the community of practice that formed from the individual participants. In this way the 'self' in this study is actually the community of practice and not the individuals that constitute it. In this perspective my role identity within the community of practice is of facilitator (as identified by Nadean's comment above) and 'scribe'. My documentation and reflection on the community of practice is what in part, elevates the community of practice to self-study. The ramifications of this will be further explored in the discussion (Chapter 7).

This chapter addressed the third research question, How does the opportunity to engage in conversations with colleagues about their practice, framed within collaborative self-study, contribute to museum educators' practice? Working collaboratively with colleagues was a worthwhile endeavour for participants as it supported them personally, providing a community of others who could empathise with their issues related to their practice. Participation in the collaborative self-study also served to challenge participants' thinking about themselves as educators as well as areas of their practice. One way in which their practice was affected was by being exposed to alternative perspectives and practices and by examining the experiences of others and adapting them to their own context. Additionally the experience of working collaboratively in this manner suggests that the interwoven relationship between community of practice and collaborative self-study supports thinking about practice beyond mere technical competency.

Chapter 7 Discussion

In self-studies, conclusions are hard won, elusive, are generally more tentative than not. The aim of self-study research is to provoke, challenge, and illuminate rather than confirm and settle (Bullough & Pinnegar, 2001, p. 20).

This research study examined museum educators' perspectives of their practices of teaching others to teach with the intent of gaining insights into their beliefs and issues regarding their practice and generating new understandings about teaching others to teach in museums.

The questions posed in the research were:

- 1) What beliefs are evident in the way museum educators discuss their practice as museum-based teacher educators?
- 2) How do museum educators understand and reconcile the tensions that emerge from their beliefs about practice?
- 3) How does the opportunity to engage in conversations with colleagues about their practice, framed within collaborative self-study, contribute to museum educators' practice?

This chapter reviews and discusses the findings of the research. Section 7.1 specifically address the research questions though discussion of the implications of the research to practice. Section 7.2 discusses the use of collaborative self-study methodology and its relationship with community of practice. Section 7.3 extends insights from this research to further consider theoretical conceptions related to teaching others to teaching in museums.

7.1 Insights into practice

The following section explores insights into participants' practice as museum-based teacher educators, including their beliefs, tensions they expressed about their work and benefits they received from participating in a collaborative self-study.

7.1.1 Beliefs about their practice as museum-based teacher educators

Three beliefs used to summarise participants' discussions about teaching other to teach are teaching is a craft, teaching is an art, and experience is a good teacher. While these three beliefs are commonly associated with teaching, their use to examine participants' practice provides a portal into understanding practice, with the hope that these insights will resonate with the broader museum education community and provoke further discussion of practice.

Belief that teaching is a craft: preparing for program delivery

Participants described the purpose of their practice as two fold: to prepare interpreters to deliver programs, and to help them learn to 'read' the nuances of teaching situations. These two purposes are set within a greater context, which includes participants' beliefs about the purpose of museum education. A museum's mandate and vision for the visitor experience provide museum educators with an ideal to work towards in their practice of teaching others to teach. Participants' beliefs about the purpose of museums and visitor experience aligned with concepts of stewardship, values acquisition and support of an active citizenry. Their views are consistent with discussion in the museum literature about repositioning museums as socially responsible organisations (Gurian, 2006; Janes & Conaty, 2005; Worts, 2006a) that serve as hubs for thoughtful debate.

Much of the discussion about initial training framed teaching as craft, a more mechanistic view of learning to teach. It seemed to address participants' first purpose by supporting the development of technical and content knowledge deemed necessary to deliver specific programs. Superficially, this could suggest participants believe that learning to teach is simply a matter of acquiring the appropriate content knowledge and teaching strategies to deliver it. This approach presents teaching in a familiar light to many, as it may be reminiscent of their experiences of teaching (from the classroom). It is an approach that is relatively easy to deploy, as it can be (presumably) readily transmitted from teacher to learner. Although teaching as craft was well represented in their descriptions of interpreter training, references to teaching as craft were largely absent in the issues and questions participants sought help with from the group. Issues brought to the group were more reflective of teaching as an art. With participants' discussions seemingly representative of two distinct and contradictory beliefs, is it possible that an individual's practice can accommodate both sets of beliefs about teaching? Parajes (1992) suggests that it is not uncommon to be influenced by incompatible beliefs. The predominance of teaching as craft in their descriptions of training may be a result of external forces such as the need to quickly prepare interpreters to deliver programs; historical or traditional approaches used by their organisation; or beliefs of others within their organisation that teaching is a matter of developing a repertoire of skills, techniques and content knowledge. Although there may be compelling practical reasons for framing teaching as craft with respect to initial training, the implication of holding this belief is that it would be an impediment to advancing participants' beliefs about the broader purpose of museum education.

Belief that teaching is an art: supporting judgement

Participants described the second purpose of their role as museum-based teacher educators as helping interpreters learn to 'read' a situation. This speaks to a belief that teaching is an art, transforming teaching beyond merely a technical perspective and acknowledging the importance of judgement. This conception of teaching is viewed more as a dynamic relationship that changes with changing context and learners and requires teachers to constantly read changes in the context (Hoban, 2005).

Many of the questions and issues participants brought to the group reflected their efforts to help interpreters develop judgement and a belief that teaching is an art. The ways in which participants discussed how to support interpreters in the development of judgement was through the other areas of their practice, primarily a combination of mentoring and reflection, which are discussed in relation to the third belief participants' held about their practice, experience is a good teacher.

Belief that experience is a good teacher

Russell (2005) suggests that the role of experience in learning to teach is under researched and poorly understood, despite its potential for improving practice. The belief that interpreters learn to teach through experience resonated through participants' discussions over the course of the research. This is not a surprising statement to make about learning to teach. What is of value is to look more deeply at how museum educators use experience as part of their practice in light of the teaching as craft/art dichotomy, and with a view to extending and improving practice.

Participants acknowledged that experience was an important part of learning to teach, but they also recognized that experience is not necessarily a "good" teacher and should not be blindly accepted as instructive. Britzman (1992) discusses experience as part of teacher education and suggests, "...when experience is perceived as a map, experience seems to organize perception. Absent from this version is the social activity that confounds our meanings and shapes our views of the world" (p. 29). Participants suggested that experience could be a better teacher when combined with social activities, such as collaborative reflection (peer feedback) and mentoring. Examining experience within a social frame is consistent with a sociocultural theory of learning, where learning is mediated through interactions with others. Facilitating a community of practice is one way this may be supported by museum educators. The implications of using a community of practice to actively examine experience in a more purposeful manner, while being conscious of the potential for experience to narrow perceptions,

would extend to supporting experienced interpreters becoming more than just technically competent.

Experience becomes a better teacher with collaborative reflection: Reflection, often described as a way to help teachers better understand practice (Loughran, 2002) and to make meaning of their practice (Rodgers, 2002), is a term frequently used to describe part of a museum educator's practice (Grenier, 2005, Lemelin, 2002; Castle, 2001; Tran, 2005). Participants in this study acknowledged they valued reflection in their own practice and believed that their interpreters and docents should also reflect on practice, preferably in collaboration with others, either through peer feedback or with a mentor. There are implications to their practice as museum-based teacher educators if they are to better support the use of collaborative reflection in an effort to support their interpreters in the development of judgement, including how they frame the use of reflection on experience.

Collaborative reflection alone will not necessarily help interpreters develop judgement in their teaching. It needs to be considered within beliefs about teaching. Rodgers (2002) suggests that reflection needs to happen in interaction with others and can broaden individual's reflections by providing alternative insights and perspectives. Conversely, the absence of collaboration in reflection can have negative consequences, including isolation and a focus on issues that individuals interpret as the result of their own inadequacies (Zeichner & Liu, 2010).

Reflection, even in collaboration with others, could result in what Zeichner and Liu (2010) described as the "technical rationality of reflection" (p. 72), which examines only technical skills related to teaching without considering issues related to why certain content is addressed or specific approaches are used. This approach to reflection is consistent with a belief that teaching is a craft and is reflected in the technical focus of the evaluation forms shared by participants (Figures 5.5 – 5.7).

Participants acknowledge that interpreters required additional assistance to make better use of reflection. Russell (2005) suggests that simply telling people to reflect will not suffice. In his work with preservice teachers, he provides a framework to help them reflect on their learning, which becomes the basis for a written conversation between preservice teacher and university-based teacher educator. Through collaborative reflection and discussion with others, experience becomes less of a map, but a point around which to discuss teaching and a better teacher. This supports interpreters in refining and exploring their own perceptions of their teaching.

Experience becomes a better teacher when examined with a mentor: In addition to classroom-oriented training sessions where interpreters and docents learn about techniques, content and their museum, all participants made use of a field experience of some kind, either

shadowing or working with a mentor. Participants recognised the usefulness of shadowing and mentoring, but also acknowledge many challenges associated with these approaches to learning to teach. These challenges have implications to their practice as museum-based teacher educators, particularly with reference to their work with experienced interpreters.

Shadowing was commonly used by participants, as it is in the wider museum education community (Castle, 2001; Grenier, 2005). With shadowing, participants believed that new interpreters gained experience with the context, content, teaching techniques and timing of programs. Most participants reported that they tried to arrange opportunities for new interpreters to shadow a number of experienced interpreters to broaden their base of experience. The use of shadowing as a way for new interpreters and docents to learn to teach or deliver programs seems to come from a tradition of teaching as craft, in which the steps to teaching can be clearly demonstrated by an experienced interpreter and then copied by the new interpreter. Within this perspective, the experience of shadowing provides the new interpreter with the 'map' to follow and as such they merely replicate what they observe others do, regardless of the particularities of a situation or the interests of their audiences. This type of approach narrows the possibilities of the types of experiences, an outcome contrary to participants' interest in providing experiences more responsive to visitors' diverse interests.

That a new interpreter or docent attempts to replicate what they observe during shadowing is not surprising or uncommon. Participants suggested this was the result of the experienced interpreter not being able to articulate the reasons for their actions when teaching. With shadowing, Castle (2001) argues, an observer is not cognizant of the intentions and thought process of the person (the 'expert') being shadowed. Castle also found that the success of shadowing is determined in part by the conceptions of learning held by the new interpreter. She suggests that those who held an objectivist view of learning were more passive when shadowing, and once required to lead a group attempted to replicate the experience they shadowed. Loughran and Russell (2007) describe a similar experience for student teachers observing teachers in a classroom. They suggest that to student teachers who don't have access to the teacher's pedagogical reasoning, skilful teaching may be confused with a fun activity or good performance.

If the outcome of museum educators' practice is to only prepare interpreters to deliver a set program, then shadowing, as described by the participants, is consistent with this and an adequate use of field experience. However, the examples participants brought forward for discussions with the group focused not on interpreter's or docent's challenge with replicating programs, but their challenges with learning how to see the significance of visitor reaction during teaching and the possibilities that arise from them. This suggests that participants perceive their

practice as helping interpreters develop judgement, and as such, shadowing may not be an approach that supports this outcome.

Participants acknowledged that mentoring had potential to help experienced interpreters and docents become better interpreters. Not all participants had a formal mentoring program, although they did discuss it as an approach worthy of further investigation. Mentoring suggests a deeper and more sustained level of interaction between an experienced and new interpreter than shadowing. There is also an implication that the mentor brings a certain level of expertise with regards to teaching in their setting and a level of awareness about their actions as a teacher. This relationship would also present opportunities for mentors to learn more about their practice. In addition to supporting the new interpreter's learning, the mentor would also help them integrate into the community of practice through legitimate peripheral participation (Lave & Wenger, 1991).

One of the mentors' roles is to model ways of interacting with learners for new interpreters. Lunenberg et al. (2007) described four approaches used by university-based teacher educators to model their practice to pre-service teachers, two of which are consistent with mentoring: explicit modelling (describing the intent behind their actions while teaching) with the addition of helping preservice teachers incorporate it into their own practice; and connecting their actions to theory, through which the university-based teacher educator helps the preservice teacher make tangible links between theory and practice. The last approach is of particular interest as it moves beyond "making useful 'tricks' explicit to student teachers" (Lunenberg et al., 2007, p. 592). Adopting this as an approach to mentoring would help museum educators make better use of field experience.

Participants' recognised challenges in their use of shadowing and mentoring and the role experienced interpreters played in each. Another challenge with mentoring and shadowing is the expectation that the experienced interpreter or docent is an effective role model. In an analogous example with university-based teacher educators modelling for preservice teachers, Lunenberg et al. (2007) contend that modelling may be ineffectual, in part, because those who model teaching lack the skills and knowledge to be effective role models and have difficulty making their own teaching explicit. Findings from this research suggest that participants recognised these challenges in their interpreters' experiences with shadowing.

Lunenberg et al. (2007) note that university-based teacher educators required to 'model' teaching for their students seldom receive formal training to support this, and as a result they doubt the effectiveness of modelling. Participants raised similar issues with regards to shadowing. They suggested that experienced interpreters had difficulty making their choices explicit because of a lack of skills and knowledge to use modelling effectively. This corresponds

with Lunenberg's et al. (2007) description of "implicit" modelling (p. 590), when university-based teacher educators do not draw student teachers' attention to their "pedagogical choices", and as a result is probably ineffectual, particularly for preservice teachers to change their perceptions about teaching and learning.

One of the tensions participants raised with mentoring was helping mentors become better mentors. Like their counterparts in the formal education system, participants recognized that good interpreters and docents do not necessarily make good teacher educators or mentors (Korthagan, Loughran & Lunenberg, 2005) and that those chosen for this role should be provided additional support to help them establish a successful mentor relationship with their trainee. This is an area of museum educators' practice that would be worth pursuing further.

One difference between working as a teacher educator in a museum compared to a university setting is that the interactions between museum-based teacher educator and interpreter do not stop once the interpreter has 'graduated' from their position of new interpreter. The opportunity to develop a long-term professional relationship with interpreters, and in particular to examine how museum educators work with experienced interpreters, opens up the possibilities to expand what it means to teach in museums.

Using experience in a more thoughtful way will have greater impact on experienced interpreters and help them further grow as a teacher and better able to read and respond to changing situations and embrace the challenge of facilitating experiences with visitors that are supportive of museums as hubs of thoughtful conversation.

7.1.2 Understanding tensions in practice

The practice of museum educators does not exist in a vacuum. Institutional practices, policies and beliefs of those within the organisation are one set of external forces that influence practice. The presence of these external forces may result in tensions in museum educators' practice. Examining issues participants brought forward to the group for discussion provides insights into how museum educators understand and reconcile tensions that emerge from their practice and addresses the second research question. Analysis of the findings suggests that many of the tensions described by participants related to the purpose of visitor experience, the nature of teaching, and the structure of the interpreter position within their organisation. The value of discussing tensions is that tensions can act as a catalyst to think differently about practice as a way to reconcile tensions, as was evident in examples from this research.

During discussions, participants described what they perceived to be discrepant beliefs within their organisation. Participants described their organisation or groups within their organisation as holding a consistent set of beliefs about teaching and teaching others to teach. I

presume that the entire organisation does not hold one set of beliefs, but the issues participants raised reflect either the dominant view within the organisation, or the beliefs of individuals with whom participants interact.

Tensions related to the purpose of visitor experience

One set of tensions participants described relate to the purpose of visitor experience and the nature of learning in museums. Participants described how those within their organisations held beliefs about the purpose of visitor experience as an opportunity for visitors to accumulate facts and concepts associated with the subject matter addressed by the museum. This contrasted with the beliefs of participants who described the visitor experience in ways that were consistent with recommendations that visitor experience should acknowledge the importance of the social construction of meaning, social interaction, visitor choice and motivation, and the influences of social, personal and historical contexts (U.S. National Research Council, 2009). Participants' beliefs about the visitors' experience transforms the perspective of learning from the acquisition of information, a conception still prevalent in museums today, to a sociocultural perspective of learning as participation that "changes who we are by changing our ability to participate, to belong, to negotiate meaning" (Wenger, 1998, p. 226). These ideals guide museum educators in the facilitation of visitor experience and the training of interpreters and docents, and, as a result, provoke thinking about the nature of learning and teaching in museums.

Tensions related to the nature of teaching

Griffin (2004) suggests that one of the major impediments to learning on school field trips to museums are the teaching strategies used, primarily strategies appropriated from classrooms which inhibit social interaction and meaning-making amongst the students and between students and teachers as co-learners. Bevan and Xanthoudaki's (2008) claim that teaching in museums is still informed by a transmission approach suggest a similar barrier to learning exists. The insights provided by Griffin, Bevan and Xanthoudaki are consistent with how participants describe the beliefs of others in their organisation regarding the nature of teaching, and are in contrast to how they view teaching. This establishes a second set of tensions, teaching as craft versus teaching as art. With a view of teaching as craft, learning to teach is little more than the transference of pedagogical tips, tricks and techniques" (Berry, 2004, p. 1297). This sentiment is evocative of how one docent in Grenier's (2005) study described what she learned through shadowing, "tricks of the trade" (p. 112). These descriptions correspond closely to the descriptions of much of participants' initial training, as well as their perceptions of their organisation's belief about what interpreter training should entail.

Their descriptions of training suggest that the important knowledge for new interpreters includes skills and techniques related to content delivery and group management, with the intended result being interpreters who can deliver programs to visitors 'safely'. In most cases, participants' descriptions of their initial training more closely aligned with teaching as craft. This may be a case of acquiescing to an organisation's tradition of teaching as craft, as many of their comments about tensions made reference to organizational traditions, practices and structures that participants perceived as immutable.

Beliefs that emerged from discussions about initial training, and other areas of practice seemed contradictory and these contradictions surfaced in tensions. Their beliefs about teaching others to teach are more closely aligned with teaching as an art, with the intent of teaching to help interpreters and docents develop judgement about how to respond to the particulars of specific teaching experiences. This conception of teaching is probably unrecognizable as training to those in an organisation who view teaching as the sound use of skills and techniques to deliver content, and may be seen as unnecessary. Exploring these tensions helps to recognize inconsistencies in actions and what may be influencing them.

Tensions related to the interpreter position

A third set of tensions related to the structure of the interpreter and docent position. In some cases, participants described issues regarding the structure of the interpreter position inferring that they felt the educative role of the position was minimized (both in time and priority) because of other non-educative duties. In other cases, the on-call nature of the position resulted in interpreters having limited time to develop experience. In these examples, the structure of the interpreter position is consistent with a teaching as craft perspective and its reliance on procedures and transmitting information.

By the end of the research, participants seemed to be reconciling their tensions in one of two ways, either accepting tensions as immutable problems that must be endured, or taking steps to change their practice in an effort to find a resolution to the tensions. The implications of recognising and analysing tensions in practice are that museum educators can move away from just labelling tensions as organisational problems towards an opportunity to develop insights about one's own practice and the context within which museum educators teach others to teach. Self-study is a useful approach to help educators frame and re-frame problems as well as to help them check consistency between their beliefs and actions, and contribute to practice (Berry, 2007a).

7.1.3 Participating in a collaborative self-study

The final research question addressed how the opportunity to engage in conversations with colleagues about their practice, framed within collaborative self-study, contribute to museum educators' practice. This question was addressed in the context of immediate or short-term contributions to their practice. All participants in this study indicated that a desire to improve their own practice was part of their reasons for participating. Findings from the research suggest participants found the opportunity to engage in conversation with colleagues a valuable form of professional development that contributed to their practice as museum-based teacher educators in the following ways: 1) Participation contributed to changing practice by presenting alternative perspectives of practice, and ensuring time and a degree of accountability to reflect on practice; 2) Participation positively affected their identity as a museum educator by engaging with others who share similar challenges.

Collaborative self-study contributes to changing practice

Museum educators charged with the responsibility to train other educators have little expertise in training or learning theory (Grenier, 2005). This could contribute to what Russell (2005) describes as one challenge to changing teacher education, the unfamiliarity with possible alternatives to existing practice. This challenge may also exist with participants in this study as most had worked in relatively few museums during their career, and as such had limited opportunity to develop broader experience with alternative practices related to training. The sharing of experiences and knowledge with others during the meetings provoked participants to change their practice by providing alternative perspectives, including actions, beliefs and theoretical conceptions, for them to consider.

Participation in this study helped participants change their practice through the use of "borrowed experiences". The ways in which participants seemed to access these "borrowed experiences" was through presentation of a problem to the group for further discussion. Participants borrowed concepts related to the practice of teaching, learners and learning, and techniques. More significantly, it provided a broader range of theoretical thinking and additional insights into the possibilities of practice. It is important to note that even though advice was often presented in a prescriptive manner ("this is the way I evaluate, you could use the same approach"), participants seemed to go through a reflective process to modify others' experiences for their own needs, illustrating an awareness that the nature of teaching is not prescriptive and cannot be implemented in a formulaic approach. To accomplish this, it was important for participants to have time to reflect. This time to reflect on practice, theirs and others, is the second way participation in this collaborative self-study contributed to practice.

University-based teacher educators who develop their knowledge of practice in isolation may simply reproduce the practices they experienced as a learner or preservice teacher (Berry, 2007a; Ritter, 2007). This is very likely the case with museum educators, as they primarily work in isolation from other educators. Bevan and Xanthoudaki (2008) suggest that approaches to teaching in museums will not change unless museum educators have the opportunity to re-examine their beliefs. This collaborative self-study provided participants with such an opportunity.

One outcome of participating in a collaborative self-study is the opportunity to step outside of one's daily work and to reflect on practice, and more significantly, to reflect in collaboration with others. Reflecting in collaboration enriches the reflective process by providing alternative perspectives on one's actions and ultimately reconsidering practice (Loughran, 2010). This was evident in the collaborative reflections that occurred within the group. The questions raised during the meetings, the topics put forward in the agenda, as well as specific activities such as the Teaching Perspectives Inventory were catalysts for their reflections. These activities provided participants with a framework to reflect on their practice in relation to the perspectives of others, and in some cases helped participants better understand elements of their own practice and areas for change. Findings indicate that participants' reflections were not isolated to any one meeting, but were woven between meetings and into their actions. With this iterative process, participants seemed to be reflecting on the groups' collective wisdom to bring alternative perspectives into their practice.

In addition to supporting reflection, the group meetings seemed to create a feeling of accountability for participants to further reflect on discussions and to keep the group apprised of new insights. Rodgers (2002) identifies accountability to a group as an important element to sustain the self-discipline necessary to reflect on practice. This accountability also seemed to support reflection on a different level, resulting in what Louie et al. (2003) report as a "higher-level discourse and critique" (p. 156) that occurs in collaborative self-study.

Because of their participation in the collaborative self-study, participants secured time in their workday to reflect on their practice. These reflections were enhanced by additional perspectives on issues related to practice from other participants, which resulted in deeper reflection and the generation of alternative perspectives. This opportunity to step outside their daily work to examine their practice in relation to the experiences of others, in an atmosphere that was supportive and collegial, was an impetus to begin changing aspects of their practice and provided what Bevan and Xanthoudaki (2008) advocate for, ongoing professional development that provides opportunities to reflect on and analyze their beliefs as part of an effort to align teaching practices with more contemporary theoretical perspectives.

Participation in collaborative self-study positively affects identity

Bodone et al. (2007) suggests that collaborative self-study in higher education settings provides educators with a safe environment in which to reconsider practice and to become energized. Participants' comments supported this statement as they described their experience as beneficial and seem to indicate that their participation in the collaborative self-study resulted in a more positive sense of identity as a professional. The experience of being an active member of a community of practice shapes one's identity and continues to shape identity as roles within the community change over time (Lave & Wenger, 1991). Within the group, they recognized others who had similar challenges, interests and backgrounds. It also afforded the opportunity to explore their differences with respect to their professional identity, such as perspectives of teaching.

Similar to the lower status of teacher educators within post-secondary institutions (Berry, 2004), museum educators often have a lower status within museums. For some participants, their perceived status combined with their lack of formal training in teaching resulted in a feeling of being an imposter. The imposter syndrome (Brookfield, 1995) is not an uncommon phenomenon within educational fields. Participants expressed how they used their participation in the study to add credibility both within their organization and with groups external to their museums. Self-study serves to add dignity to work often undervalued (Zeichner, 2007), a statement participants concurred with as a result of their involvement in this study.

Many museum educators, including participants in this study, work in relative professional isolation and may be the only educator at their level within an organization. Participants commented on the importance of the collegiality and support they garnered from the group to counter their feelings of professional isolation as well as enhancing their feeling that they belonged to a 'profession'. They recognized issues related to their work in the work of their colleagues and found reassurance in that they were not the only museum educators challenged with certain problems. In addition to limiting isolation, recognizing that others face similar challenges in their practice could serve to provide an understanding of the larger context of education in museums and identify some of the systemic issues that participants, because of their relative isolation, may have attributed to personal failures. Zeichner and Liu (2010) suggested this is a consequence of teachers not having the opportunity to reflect in collaboration of others such as the opportunities afforded by collaborative self-study.

Participating in a collaborative self-study had positive benefits to individual's practice as teacher educators in museums. It served as a relatively accessible form of professional development, which is often lacking for museum educators. It also has potential benefit to the

broader museum education community as this study examined an area that is under research in the museum education literature.

7.2 Methodological insights

This research used one of many possible approaches to study the practice of teaching others to teach. In addition to better understanding museum educators practice, the intent of this research was to look at collaborative self-study as a form of professional development for museum educators. My reflections on the research, as well as comments from participants, generated the following insights about the potential use of collaborative self-study with museum educators.

7.2.1 The relationship between community of practice and collaborative self-study

One of my initial questions about this research was what was the relationship between community of practice and collaborative self-study. I used concepts inherent in community of practice to help frame my thinking about how a group achieves a level of comfort where participants could be vulnerable and open to exploring practice. By the end of the six months, our collaboration was beginning to move beyond encouragement and affirmation to a space where participants more actively questioned each other's practice in ways that supported adapting alternative perspectives.

Use of community of practice as a concept to frame our interactions seemed to help participants examine specific issues within their own practice, to the extent that, on a number of occasions, participants expressed concern that the focus of our discussions did not seem to 'address my research questions'. Our community of practice became a space for learning, where learning was occurring across the group, regardless of the depth of experience. This is an indication that more actively facilitating a community of practice within a museum may be a worthwhile approach to support the ongoing learning of experienced interpreters and docents.

Limiting our collaboration to a community of practice would probably continue to meet participants' current needs, providing them with a space to discuss practice and a sense of belonging, but it would limit contributions to just within the group, and would do little to support the further development of educational knowledge about teaching others to teach in museums. It is the interwoven relationship between community of practice and collaborative self-study in this research that supports the broadening of our discussions about teaching and to generate new understandings for both theory and practice of teaching others to teach in museums.

Coming to the end of this phase of this study I am left with a number of questions about my choice of methodology and the interrelationship between community of practice and collaborative self-study. The following questions would be worthy of further study:

- What is the nature of the self/individual within the group? How does their role within the group change during the research?
- How important are the levels and types of professional experiences in participants? Do collaborators need similar experiences? What would the process have been like if some participants had no experience with teaching others to teach?
- What is the relationship between participants' experiences and their identity in the group?
- Does the use of community of practice help address issues of power between collaborators?
- What would increased interactions between participants outside of the meetings do to the dynamics in the meeting and the contributions to individual's practice?
- Did the fact that the study was conducted to gather data for my dissertation affect the group's participation and commitment to the study? Does the "label" of research or self-study change the level of discourse within the group?

7.2.2 Use of the Teaching Perspectives Inventory

I had a number of concerns about using the Teaching Perspectives Inventory (TPI) as part of this study. My first concern arose when contemplating its use as a tool to focus discussion. I chose to use the inventory acknowledging that while it would serve to focus and provoke discussion, it would also limit our discussion by its nature and structure. An additional concern related to the potential for participants to feel labelled by their results. Although participants raised questions about the labels, their comments did not seem to indicate any undue concerns about the labels. The inventory generated interesting discussions about what each of the five perspectives meant and as well as the ways in which participants perceived the concepts associated with them.

My other question about the TPI surfaced as I was analyzing and writing about the results. I was conflicted with whether to include participants' TPI scores as part of the analysis¹¹. This conflict is based on my questions about the 'accuracy' of the tool in generating dominant perspectives. One limitation with surveys such as, as noted by Clarke and Jarvis-

¹¹ I have included the participants TPI scores in Appendix D solely to satisfy a reader's curiosity. The benefit of the TPI to this study was the time participants took to complete it and the ensuing discussions about the structure of the inventory and individual's results.

Selinger (2005), is that it does not document teachers' "perspectives-in-action", but their "espoused perspectives" (p. 68). Comments from the research participants support this in that a number of participants had commented about looking for the "right answer" in the TPI statements, with the implication that the "right answer" was not necessarily reflecting their personal perspectives, but the perspectives of an idealized museum educator. The other reason I was concerned about including the TPI results in the findings is related to what I perceive as the value in taking the inventory. Participants all commented on the value of the TPI in terms of the personal reflections on practice that happened while taking the inventory and the richness of the conversation that followed. The inventory seemed to prompt this in two ways, time to reflect and a structure around which to reflect.

My concerns with using the TPI were reduced as I saw it as a way to provoke discussion about participants' beliefs. The discussions about their results and about taking the inventory provided richness to this study in terms of both how collaborative self-study can contribute to museum educators' practice and helping participants articulate their beliefs about teaching.

7.2.3 My role as researcher and insider

I found it challenging to negotiate what I came to see as three identities within the group, as researcher, as insider, and as aspiring participant. As researcher, I felt a need to 'find the answers' I was looking for (my research questions) as well as play host to the six people who were generously giving of their time and ideas. My concern that they find the meetings of professional use may have, at times, overshadowed my quest to address specific topics that might have better addressed the research questions.

As insider, a museum educator with similar experiences, challenges and needs to the rest of the group, I found it difficult to not become involved in the conversation to the extent that I lost track of the agenda and intended outcome of the meeting. I also found it challenging when the group spoke about concepts common to museum educators such as shadowing, inquiry and reflection. In reviewing the transcripts, I found that my assumptions sometimes prevented me from further probing participants' use of these concepts. On occasion, the important question of the significance of the concept was unasked, with my assumptions filling in what was left unsaid. Although I found this identity as 'insider' challenging, I think it was a position that allowed me greater access to participants' very open and honest thinking.

My third identity, aspiring participant, was one that I desired to fill, but was reluctant to act on. As a museum educator whose focus, other than administrative duties, is teaching others to teach, I am eager for the types of discussions about my own practice. I was cognizant of how my long-standing position in the museum education community and status, as PhD

candidate/researcher, may be perceived. I was reluctant to engage in the discussions as a full participant because of concerns about distorting the flow of discussions and not creating space for a range of perspectives to be shared. Instead of sharing problems and solutions I tried to be more of a provocateur.

7.3 Theoretical Insights

Wenger (1998) suggests that, “our institutions are designs and that our designs are hostage to our understanding, perspectives and theories” (p. 10). It is this exploration of the ‘design’ of the development of interpreters and docents in museums that Castle (2001) recommends museums pay greater consideration to. Theory is one important element to furthering the practice of teaching others to teach in museum settings, but consideration of theory should serve to help to interrogate one’s practice. As H. Hein (2007) suggests, basing one’s actions from a specific theoretical perspective, “opens lines of pursuit for fresh exploration, while signaling inconsistent ideas that challenge complacency” (p. 30). The three contributions to theoretical perspectives of teaching others to teach in a museum setting that this research brings are related to the use of sociocultural theory, Wenger’s (1998) social theory of learning, and a re-conceptualization of reflection as a collaborative endeavour.

As participants explored and articulated their beliefs about teaching and learning, their understanding of how theory guides their actions, and how actions guide development of their theories about teaching others to teach were enhanced. This cycle of articulation, reflection and rearticulation within a collaborative self-study has the potential to “develop educational theory with some potential for generalisability” (Whitehead, 2004, p. 62).

Findings from this research present insights from a small group of museum educators about their understandings and perspectives about their practice as museum-based teacher educators. Although the intent of self-study research is often more focused on improvement of teacher education practice it should, as Zeichner (2007) argues, also contribute to a “broader knowledge about particular questions of significance to teacher educators and policy makers” (p.43). The interwoven nature of community of practice and collaborative self-study provides the opportunity to extend the findings of this research to contribute to a small, but growing body of research exploring teaching in museum settings and more specifically to further educational knowledge about teaching others to teach in museums.

It is evident from previous research about teaching in museums (Tal & Morag, 2007; Cox-Petersen, et al., 2003; Bevan & Xanthoudaki, 2008) that there is great potential for museum educators to more thoroughly integrate sociocultural perspectives into their practice and to ensure that approaches used to teach others to teach reinforce what has been learned

about visitor learning in museums. Within the findings from this research it is evident that participants' beliefs about teaching are consistent with the ways in which sociocultural theory about learning have been integrated into museum education. Adopting a sociocultural perspective to explore how interpreters and docents learn to teach raised tensions in participants' practice. It may be productive for other museum-based teacher educators to consider their practice from a sociocultural perspective of learning as a means to better understand their own practice.

Wenger's (1998) uses to support his social theory of learning that is integral to his concept of community of practice, provides an alternate theoretical framework to thinking about the practice of teaching others to teach in museums. His social theory of learning reflects the role of social participation in learning and he emphasises the following four components: learning as making meaning, practice, belonging to community, and shaping identity in the process of becoming a member of a community of practice. Adopting Wenger's social theory of learning to teaching others to teach in museums shifts the perspective museum-based teacher educators hold about their practice from acts of teaching or training to thinking of practice as an on-going lifelong process in which community, identity, and experience are integral. It moves museum-based teacher educator's practice from a 'training' model with the goal of creating an interpreter or docent who can deliver programs to learning to become an interpreter or docent as an on-going, lifelong process in which they belong to part of a community.

The other contribution this research makes to developing theoretical perspectives of teaching others to teach in museums is related to concepts inherent in reflection, primarily reflection not as a solitary endeavour but as a collaborative one. Although conceptualizing reflection through a collaborative lens is not new (Loughran, 2010), it was not generally considered by participants in this research to be a collaborative endeavour. Expanding reflection beyond an individual, self-reflective stance towards social practice is consistent with sociocultural theory, Wenger's theory of social practice and supports a perspective of teaching others to teach as a process of becoming and belonging.

This research extends the work of others who have studied learning in museums and in particular the influences of sociocultural theory of learning in environments such as museums. The further development of knowledge about teaching others to teach in museums will ultimately improve the quality of museum visitors' learning experiences. The implications of the insights to theory, methodology and practice will be further elaborated on in the following chapter.

Chapter 8 Recommendations

In fact, what is frequently learnt from self-studies of teacher educators' practice is the importance of acknowledging, living within, and even embracing the ambiguity in one's work (Berry, 2004, p. 1327).

Berry's advice to university-based teacher educators to embrace the ambiguity inherent in their practice is worthwhile advice for museum educators, particularly as they consider ways to further understand and enhance their practice. This section synthesizes results from this study in the form of recommendations to extend the practice of teacher educators in museums. These recommendations, particularly to those involved in teacher education in universities, may seem self-evident, but from the perspective of museum education where there is limited research focused on museum educators and their practice as teacher educators in museums, the recommendations provide a starting point for those within the museum community to further understand and improve teaching in museums.

Recommendation: Articulate practice as a museum-based teacher educator

Castle (2001) recommends that a greater commitment be made regarding the development of interpreters in museums. This can be accomplished, in part, by teacher educators in museums articulating their practice. As a result of discussions during the research, a framework consisting of five action areas was generated. These action areas are set within the context of participants' beliefs about teaching and learning, their vision for educational experiences in their museum and the interpreters and docents they work with. Significant in this is a broader view of practice that extends focus from preparing new interpreters for program delivery to beginning to thinking about teaching others to teach as an ongoing endeavour involving both new and experienced interpreters. These findings, while not generalizable to museum educators beyond this group, do suggest possible considerations for other museum educators who are contemplating their practice as museum-based teacher educators.

Table 8.1 lists a series of questions to assist museum educators in articulating their practice as teacher educators in museums. These questions reflect the discussions within the research group as we addressed each of the five areas that encompassed their practice. They are posed as a way to provoke thought about practice, guide reflection and extend the conversation about teaching beyond the research group. Ideally, museum educators will articulate their practice as part of a conversation with others in their organisation, both educators and non-educators, as well as collaborating with colleagues outside of their

organisation, in an effort to broaden the conversation and expose tensions, assumptions and alternative perspectives about teaching in museums. Wenger's (1998) social theory of learning may provide a useful theoretical lens through which to further contemplate the responses to the questions in Table 8.1.

Recommendation: Facilitate an examination of teaching and learning within your organisation

Individuals have approximately 15,000 hours of familiarity with the setting and processes of teaching, and preservice teachers tend to teach as they have seen others teach (Russell & Korthagen, 1995; Guojonsson, 2007). These two assertions, extended to museums, suggest that those who work in museums, regardless of their position, have a familiarity with teaching, and presumably a range of associated beliefs. Because of this familiarity, it is important that those within museums articulate what they mean by teaching and learning. Commonly used terms such as “engaging”, “hands-on” or “critical thinking” often used in association with teaching, are poorly described, resulting in discrepancies about teaching and learning within an organisation. This can lead to problems and tensions that affect museum educators’ practice, as shown in this research. Facilitating a discussion about teaching and learning is an opportunity to elucidate conceptions and beliefs, as well as the reasons why such approaches are used by museums. The initial intent of this discussion would be to open up and broaden views of teaching and learning, not necessarily to create alignment with an organisation’s view.

Facilitating such a discussion with those in an organisation may be challenging as a number of forces including group dynamics, trust, and confidence will affect discussions. Insights developed from this research suggest that adopting a community of practice framework would be beneficial, in particular the development of a common language to discuss the commonalities and differences in their views about teaching and learning. One way this may be facilitated is through discussions about the Teaching Perspectives Inventory (TPI). To provide a more meaningful focus for taking the inventory and the ensuing discussion, participants could take the TPI from the perspective of how they envision an ideal educator in their museum.

Table 8.1 Framework for articulating practice

Action area	Questions for reflection
<i>How do the following five action areas reflect your practice?</i>	
Selecting interpreters and docents <i>Why have you developed initial training in this way?</i>	What makes a “good” interpreter or docent in your organisation? Why do you believe this? How do the characteristics of a good interpreter or docent relate to your organisation’s beliefs about the purpose of education programs?
Developing initial training <i>Why have you developed initial training in this way?</i>	How does training support the ideal visitor experience in your museums? Why do you believe this? How is reflection, as an integral part of teaching practice, introduced and modelled? What approaches do you use in training and why? How are they supportive of your beliefs about learning to teach?
Creating space for reflection and peer feedback <i>Why are you encouraging reflection and peer feedback?</i>	How are you supporting the use of reflection and peer feedback? Are interpreters and docents reflecting effectively? What does that mean? How are you fostering an atmosphere conducive to sharing learning about teaching? How are you selecting which interpreters provide feedback to others? How are you supporting them in this? How can you support interpreters to provide feedback beyond technical issues and competencies?
Being a mentor and being mentored <i>Why do you believe mentoring is a good approach to learning to teach?</i>	What are your intentions for both new and experienced interpreters during shadowing or mentoring? How are you preparing the new and experienced interpreters for shadowing or mentoring? Do interpreters have an adequate amount of time to debrief about their experience? How can you support interpreters providing feedback beyond technical issues and competencies?
Designing professional development <i>Why do you think ongoing professional development is important?</i>	Are professional development opportunities addressing different aspects of practice and diverse perspectives? How are you helping interpreters connect what they learn in professional development with their practice?

To stimulate discussion specific to their organisation, the questions outlined in Table 8.2 could be posed. These questions were developed as a result of discussions with research participants about their practice and reflection on the findings of the research.

Table 8.2 Questions to guide discussions about teaching and learning in museums

Questions for reflection	
About museums and learning	Why does your museum offer facilitated educational experiences? How might these experiences relate to other types of learning experiences in your surrounding community?
About the visitor experience and learning	How is learning described in your organisation? Why is it defined this way? What are the potential areas of tensions between different perspectives on learning? What is the organisation's vision (purpose) for the visitor experience? Why? How does this vision differ across the organisation? What are the potential areas of tensions between different perspectives on the visitor experience? How does the purpose of museum education and the vision for visitor experience correspond with your specific education programs?

Recommendation: Commit to professional development as a museum-based teacher educator

If museum education is to move forward then what do museum-based teacher educators need to know, be able to do and have the opportunity to wonder about? Professional development for museum educators is rare, particularly opportunities to explore teaching others to teach. Improvement to their practice as museum-based teacher educators will serve to enhance understanding of teaching in museums more widely. The following suggestions may assist museum educators with their own professional development as museum-based teacher educators:

1) Examine practice in collaboration with others: The benefits of working collaboratively are many, as are the challenges. One challenge could be finding educators to work with. Not all museum educators work within an active museum education community, but every community has educators. Potential collaborators may come from schools, local colleges, or other educators in the community such as those involved in arts or recreation. To further professional

development the following recommendations could be used to establish a community of practice or begin a collaborative self-study.

Develop a community of practice: The opportunity for museum educators to work collaboratively with peers is valuable professional development. Wenger (1998) suggests that community coherence, defined by mutual engagement, joint enterprise and shared repertoire, are elements that must be negotiated and sustained through participation and as such must be kept in mind when developing a group. Findings from this research suggest that the following attributes contribute to the development of our community of practice:

- Small group size: A smaller group size contributed to mutual engagement as participants could develop a relationship with other group members more quickly.
- Well defined focus: A museum educator's position covers many facets. A well-defined focus, such as training, provided the starting point for our joint enterprise of exploring practice and supported more in depth discussions.
- Diversity: Diversity amongst the participants in terms of length of experience, types of museums they had worked in, educational background and discipline area provided access to different perspectives and experiences and contributed to the development of a shared repertoire.
- Environment for collaboration and critique: A group needs to develop to a point where participants feel safe to collaborate and critically question. Findings from this study suggest that a number of elements helped contribute to reach this point. Discussions around tangible concepts such as initial training helped participants develop an understanding of commonalities and differences between each other's practice and context. Discussions about the Teaching Perspectives Inventory provided opportunities to talk about teaching from different theoretical perspectives, to begin to develop a common language to discuss practice, as well as to provide a framework for participants to reflect on their own beliefs. Through these discussions, trust amongst the group was developed, opening up opportunities for participants to be vulnerable with their colleagues and open to more critical questioning of their own and the practice of others, an important place for the group to reach in order to begin generating understandings of greater consequence.

Begin a collaborative self-study: Museum education is a relatively small field with limited research into how museum educators learn to teach and limited professional development for museum educators to reflect on, analyze and change their practice (Bevan & Xanthoudaki, 2008). It is important to the future of museum education that museum educators, in addition to scholars, actively engage in further understanding the practice of teaching others to teach in

museum settings. Collaborative self-study is one approach for this work and is well-suited to the museum environment as it contributes to professional development, adds dignity to work of those often undervalued such as museum educators (Zeichner, 2007) and increases the meaningfulness of their work (Louie et al., 2003).

Participating in research, even research framed in a familiar approach such as group conversations that occur during collaborative self-study, could be daunting for museum educators. It is important to note that embedding conversations within a self-study results in conversation moving from just talk to dialogue rich in critique and reflection (Guilfoyle et al., 2007). The following facilitated the development of our research group:

- Frame group development within a community of practice (see above).
- Broaden perspectives: Even with a diverse group of participants, it is important to bring in other perspectives to continue to broaden thinking. This may be accomplished by inviting guests to address specific topics (becoming peripheral members of the community of practice) or by focusing discussions on relevant articles.
- Structure the meetings like a seminar and invite participants to lead a meeting about a specific topic.
- Conduct a regular 'check in' so participants can update each other regarding changes they have made to practice or new challenges they are experiencing.
- Record and document: Meeting transcripts were useful, but time consuming to generate. Alternatives to transcriptions such as asking each participant to summarize the meeting would serve to record the ideas individuals found thought provoking as well as the development of the group.
- Share findings: Communicate your findings to other educators to extend the discussion to the larger community of educators.

Active facilitation of a community of practice and collaborative self-study is required, at least during the beginning as the group develops. Important roles of the facilitator include operational issues such as organising and communicating information about meetings, as well as focusing and provoking discussions during the meetings.

2) Participate in graduate level programs with a focus on museum education: Although rare, there are an increasing number of graduate level programs that address learning and teaching in museums. One such program at the University of British Columbia is unique in that it brings two distinct groups of educators together, classroom-based teachers and museum educators, into a cohort with the intent on strengthening the connections between learning and teaching in the classroom and the surrounding community.

3) Develop a partnership between museums and local university teacher education programs: A rich body of research about the practice of university-based teacher educators exists and as this research has attempted to illustrate, this work has significance and relevance to the work of museum-based teacher educators. Developing a partnership between museum educators and university-based teacher educators could provide valuable learning experiences for both. Such a partnership could be developed from pre-existing collaborations such as the collaboration between the University of British Columbia's Teacher Education program and a number of museums in the Vancouver area. This collaboration provides preservice teachers with a three-week practicum in a museum. Pre-service teachers in the program experienced profound changes in their views of teaching and learning (Anderson, Lawson & Mayer-Smith, 2006). This program could be extended to provide opportunities for university-based teacher educators, faculty associates and museum educators to collaborate on aspects of their practice as teacher educators in different contexts.

Future research

This research serves as the starting point for future studies to expand understanding about the practice of teacher educators in museums. A logical place to start is to continue exploring practice with participants involved in this study. This would provide opportunities to further study issues of practice raised during the study, in addition to examining the effects of participating in a research group.

Each of the five actions areas listed in the framework (Table 8.1) related to participants' practice has potential for further study. Work of particular importance would be to further examine museum educators' conceptions and use of approaches such as shadowing, mentoring, reflection and evaluation as part of their practice of teaching others to teach. It would be beneficial to museum education if the ways in which these pedagogies are used, the benefits to new and experienced interpreters and how museum educators work with interpreters to use these approaches to teaching others to teach more effective.

This study relied on museum educators self-reporting on their actions. An additional avenue to investigate would be to combine other research methodologies such as observation of museum educators during training with self-reporting to develop another layer of understanding of museum educators' practice. Observing the interpreters and docents they train and interviewing them about their understanding of teaching in museums would provide further insights to understanding of practice.

An additional area of interest would be to study the relationship between a museum educator and the organisation they work in to better understand the interplay between different

sets of beliefs about the purpose of museum education and conceptions of teaching and learning and how this affects the practice of museum educators.

This study used collaborative self-study to investigate museum educators practice. It would be worthwhile to further explore the nature of collaborative self-study as a methodology, how participation in collaborative self-study contributes to identity building, and how it contributes to museum educators' professional development (see section 7.4.1 for questions for additional study).

Epilogue

Does collaborative self-study ever end? Not as long as the participants are interested in learning about their practices of teaching others to teach. It is a continuous journey, with much left to explore. Although the formal research meetings have ended, the group continues to work together. As is the nature of many groups, ours has experienced some significant changes. There have been two weddings, two new babies, two Masters' degrees completed, and one participant has returned to school full time. Our meetings are less frequent, but still marked with lively conversation about our practice. I find the meetings a little more challenging because the conversation does not seem to have the same level of focus. In some ways, as a community of practice we have lost a component of our joint enterprise, data collection for my research. I am confident we will readjust to the new rhythms and continue to explore and improve our practice of teaching.

One of the criteria for self-study established by LaBoskey (2007) is that it is made accessible to the professional community. We made a start of this at the end of the research with the symposium organised by participants from the research group for the local education community. The event was successful in that those who attended felt engaged, stimulated and challenge by the opportunity to discuss their practice as museum-based teacher educators. I'm not sure how the opportunity has affected the practice of the thirty participants who attended the symposium, but I do know that some of them have taken the ideas and are trying to integrate them into their practice. One participant has integrated regular reflection into her work with both her art educators and her docents. She also used the TPI as a tool to help her art educators discuss their own beliefs, the beliefs of their colleagues, and address tensions raised within the group. She is also contemplating using self-study to examine her own practice.

Which brings me to my practice as a museum educator. How is my practice changing as a result of my participation in self-study? I have alluded to some of the changes in earlier chapters, but I am still left with many questions about my own practice as a museum educator and about the possibilities of educative experiences that interpreters and docents facilitate with visitors. The current approach works – visitors return, they enjoy the experience, they leave with 'something' and interpreters are generally satisfied. Although there are many exceptional museum educators and interpreters working in museums, I believe that, as museum educators, we are responsible for and capable of extending the ways in which museum education is enacted to help position museums as hubs for thoughtful debate.

Some museums are beginning to incorporate this into their identity, although more frequently through exhibitions than through facilitated programming. For this transition to be successful, helping interpreters and docents further develop their practice should be a priority for museum educators. For this to occur difficult actions on the part of museums are required, including systemic and structural changes with the ways museums conceive of teachers, teaching, learning and more significantly the ways in which we think about teaching others to teach. I find the future possibilities of teaching in museums exciting if not a little daunting as we contemplate different ways to help educators and interpreters facilitate thoughtful debate.

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Appendix A: Initial Questionnaire

Initial questionnaire for potential participants – Museum educators teaching other museum educators to teach

Thank you for your interest in participating in a research project *Museum educators teaching other museum educators to teach* which will be submitted as partial fulfilment of the requirements of the degree of Doctor of Philosophy at the University of British Columbia. The project will examine the practices of museum educators teaching other educators to teach. I am looking for six museum educators who are engaged in teaching other museum educators to teach for this collaborative study. The study will take place in the Lower Mainland between May and December 2009 and will include two individual interviews and ten, two hour group meetings, for which participants will be asked to do some preparation and follow up. The meetings will provide an opportunity for the group to engage in dialogue about their practice teaching other educators to teach.

Please answer the following questions to help me select participants for this study. If you have any questions please contact me at lisa.mcintosh@telus.net.

Thank you

Lisa McIntosh

Name:

Phone number:

Email:

Current employer:

1. How long have you worked as a museum education? (circle or highlight one)
 - a. less than 2 years
 - a. 2 – 5 years
 - b. 5 – 10 years
 - c. 10 – 15 years
 - d. more than 15 years
2. How long have you been involved in trained other museum educators (staff or volunteers)? (circle or highlight one)
 - a. less than 2 years
 - b. 2 – 5 years
 - c. 5 – 10 years
 - d. 10 – 15 years
 - e. more than 15 years
3. Please list your previous work history as an educator (museum or classroom-based).
4. What is your highest level (completed) of formal education (circle or highlight one)
 - a. High school
 - b. Undergraduate degree, area of specialization: _____
 - c. Diploma or certificate, describe: _____
 - d. Masters degree, area of specialization: _____
 - e. PhD, area of specialization: _____
 - f. Other: _____
5. Do you hold a teaching degree, diploma, or certificate? Yes No
6. How would you describe your current position? (circle or highlight one)

- a. Interpreter (front line staff or volunteer - primary role is to deliver programs)
 - b. Museum educator (primary role is program development, training and coordinating interpretive volunteers and junior staff)
 - c. Education Coordinator/Manager (primary role is program development, training and coordinating interpretive volunteers and staff; also contributes to broader museum operations such as budgeting, hiring, exhibit development, grant writing, etc)
 - d. Curator/Director of Education (primary role is planning, staff management, grant writing, budgeting, program development, exhibit development, project management; you rarely interact directly with visitors in your organisation)
 - e. I'm not an educator (fill in job title): _____
7. How large is your organisation? (FTE – full time equivalent – include all **paid** staff)
- a. No paid staff (all volunteer run)
 - b. Under 10 FTE paid staff
 - c. 11 – 20 FTE paid staff
 - d. 21 – 50 FTE paid staff
 - e. more than 50 FTE paid staff
8. How many paid education staff work in your organisation? Number of FTE: _____
9. How many volunteer educators work in your organisation? Number: _____
10. Briefly describe why you are interested in participating in this research project.
11. What are some of the issues or problems you are either currently working on or would like to address regarding your work in training other educators?

Please return this form to lisa_mcintosh@telus.net I will contact you to follow up.

Thank you
Lisa McIntosh

Appendix B: Initial Interview

Interview Script: Museum educators teach other museum educators to teach

The purpose of the interview is to find out about your professional development to help you better 'train' your staff/volunteers (how to make you a better trainer). I'm using the word 'museum' in the broad sense of the word (including parks, science centres, etc).

I'd like you to share only as much as you are comfortable with, and feel free to tell me if you'd prefer not to answer at any point. The interview will be used as part of the research. I will give you a copy of the transcript which we can further discuss if you want to add or clarify anything discussed. [don't worry about having 'the answer' – your ideas may change...] Do you have any questions before we begin?

A little bit about your experiences as a museum educator

[note: I will have some general information about each individual from the questionnaire they fill out prior to project]:

- 1) How did you start working as a museum educator?
- 2) What was it about teaching in a museum that interested you?
- 3) What types of experiences have helped you develop as an educator?
- 4) What do you see as the purpose of museums and specifically museum education in contemporary society?

In your job as an educator you have a wide range of responsibilities and tasks. I'd like to talk specifically about your role in teaching others to teach in museums:

- 5) Thinking about the staff/volunteer educators you work with, how do you think people learn to teach?
- 6) Can you describe your own practice/role helping staff/volunteers to become educators. Can you describe briefly the types of 'training' or experiences you provide?
 - a. Do you deliver the training or do others?
 - b. Probe regarding views of training an ongoing process or annual event [what types of support do you provide for educators to do an ongoing investigation of their practice]
- 7) How do you see this contributing to your staff/volunteers developing as 'good educators'?

About how you learned to teach others to teach;

- 8) What contributed to your knowledge/skills/attitudes about teaching others to teach?

About participation in the collaborative self-study

- 9) What is motivating you to participate in this research project?
- 10) Do you have any questions or concerns about the project?
- 11) How would you describe a 'good' educator in a museum?

Appendix C: Overview of Meeting Topics and Resources

Meeting date	Proposed topics for discussion (sent in email)	Additional resources provided prior to meeting
July 2, 2009	Introductions; framework for working together; purpose of museum education	Munley, M. & Roberts, R. (2006). Are museum educators still necessary? <i>Journal of Museum Education</i> , 31(1), 29 – 40. Gurian, E. (2006) Along the continuum, museums and possibilities. <i>Open Museum Journal</i> 8, pp. 12.
July 22, 2009	Description of the types of training each does and why they use specific approaches	Questions to think about regarding training Grenier, R. & Sheckley, B. (2008). Out on the floor: Experiential learning and the implications for the preparation of docents. <i>Journal of Museum Education</i> , 33(1), 79 – 94. Richhart, R. (2007). Cultivating a culture of thinking in museums. <i>Journal of Museum Education</i> , 32(2), 37 - 154.
September 17, 2009	Preparing staff/volunteers to interact with visitors	Teaching Perspectives inventory (www.teachingperspectives.com); My reflections on my development as a 'trainer'
September 30, 2009	Description of training (SR); social reform; apparent disconnect between how we learn and how we teach; bring together conversations about TPI and the training we provide	Pratt, D.D. (2008). <i>Good teaching: one size fits all? In An Up-date on Teaching Theory</i> . Jovita Ross-Gordon (Ed.), San Francisco: Jossey-Bass, Publishers.
October 19, 2009	Evaluation forms and resources; asking questions; possible TPI re-write for museum educators	Handouts I use for evaluation and asking questions
November 9, 2009	Evaluation; Nadean's thesis proposal; controversial issues	Cameron, F. (2005). Contentiousness and shifting knowledge paradigms: The roles of history and science museums in contemporary societies. <i>Museum Management and Curatorship</i> , 20(3), 213 – 233. Nadean's draft research questions
December 2, 2009	What do you find is the most challenging aspect of this role as 'trainer' of other educators (staff/volunteers)? How would you describe the 'learning' that happens between you as a 'trainer' and your staff/volunteers when they are learning to teach?	Phelan, A. (2005). A fall from (someone else's) certainty: Recovering practical wisdom in teacher education. <i>Canadian Journal of Education</i> , 28(3), 339 – 358.

Meeting date	Proposed topics for discussion (sent in email)	Additional resources provided prior to meeting
December 17, 2009	Discussion about the research process and our group meetings (last official meeting)	Nolan, T.R. (2009). From the margins to the center. Recommendations for current and aspiring educational leaders. <i>Journal of Museum Education</i> 34 (2), 163 -174.
Official end of research cycle		
January 27, 2010	Q: How would you describe the 'learning' that happens between you as a 'trainer' and your staff/volunteers when they are learning to teach?	Phelan, A. (2005). A fall from (someone else's) certainty: Recovering practical wisdom in teacher education. <i>Canadian Journal of Education</i> , 28(3), 339 – 358.
	How to continuing as a research group	
February 16, 2010; March 24, 2010	Planning for the symposium	
April 12, 2010	Museum Educator Symposium: Teaching others to teach	
Meetings continue		

Appendix D: Teaching Perspectives Inventory Results

TPI results	Azy	Jarrid	Amn
Transmission	34 - B;11, I:10, A:13	19 - B;5, I:5, A:9	24 - B;9, I:7, A:8
Apprenticeship	39 - B;12, I:13, A:14	29 - B;8, I:11, A:10	33 - B;11, I:10, A:12
Developmental	29 - B;9, I:11, A:9	32 - B;10, I:12, A:10	32 - B;9, I:12, A:11
Nurturing	33 - B;12, I:10, A:11	30 - B;11, I:11, A:8	34 - B;14, I:10, A:10
Social Reform	27 - B;9, I:9, A:9	25 - B;9, I:7, A:9	26 - B;8, I:9, A:9
dominant / recessive	37/28	32/22	34/26

TPI results	Rhoda	Susan	Nadean
Transmission	25 - B=10; I=6; A=9	31 - B;10, I:9, A:12	30 - B;12, I:7, A:11
Apprenticeship	32 - B=9; I=11; A=12	39 - B;13, I:13, A:13	33 - B;11, I:10, A:12
Developmental	30 - B=8; I=12; A=10	34 - B;11, I:1, A:12	37 - B;12, I:13, A:12
Nurturing	35 - B=13; I=11; A=11	36 - B;12, I:12, A:12	26 - B;11, I:8, A:7
Social Reform	26 - B=7; I=10; A=9	26 - B;10, I:9, A:12	33 - B;9, I:11, A:13
dominant / recessive	33/26	38/29	35/28

Dominant perspective

Recessive perspective