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**RESEARCH INFORMING THE PRACTICE OF MUSEUM EDUCATORS
BACKGROUNDING THE KEY ISSUE FOR PRAXIS**

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**Η ΕΡΕΥΝΑ ΩΣ ΒΟΗΘΟΣ ΣΤΗΝ ΠΡΑΚΤΙΚΗ ΤΗΣ ΜΟΥΣΕΙΑΚΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
ΔΙΑΜΟΡΦΩΝΟΝΤΑΣ ΤΟ ΥΠΟΒΑΘΡΟ ΒΑΣΙΚΩΝ ΖΗΤΗΜΑΤΩΝ ΤΗΣ ΠΡΑΞΗΣ****Lisa McIntosh, Alex de Cosson & David Anderson***

Περίληψη

Τα μουσεία είναι θεσμοί εκπαίδευσης και μάθησης στην υπηρεσία της κοινωνίας, δηλαδή, είναι χώροι όπου σχεδιάζονται και επιδιώκονται εκπαιδευτικές εμπειρίες καθώς και χώροι όπου οι επισκέπτες μαθαίνουν με ευρείς και διαφορετικούς τρόπους. Ως τέτοιος, ο ρόλος της δημόσιας εκπαίδευσης στα μουσεία σήμερα είναι πολύ σημαντικός, εάν δεν τοποθετείται στο κέντρο της μουσειακής δραστηριότητας (G. Hein 2005, 2006). Καθώς τα μουσεία επεξεργάζονται την αυξανόμενη σημασία των εκπαιδευτικών ρόλων τους και τους προσαρμόζουν εντός των εξελισσόμενων κοινωνιών, χρειάζονται περισσότερες πληροφορίες για τις διαφορετικές ομάδες του κοινού τους και για την επαγγελματική πρακτική τους καθώς αποσκοπούν να φέρουν σε πέρας την εκπαιδευτική αποστολή τους σε σχέση με τις κοινότητες στις οποίες εντάσσονται. Οι 14

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ανεξάρτητες ερευνητικές μελέτες που δημοσιεύθηκαν στον συλλογικό τόμο *Research Informing the Practice of Museum Educators: Diverse Audiences, Challenging Topics and Reflective Praxis* διερεύνησαν ποικίλα ζητήματα που επηρεάζουν τη μουσειακή εκπαιδευτική πρακτική όπως αυτή πραγματοποιείται σε διαφορετικά ιδρύματα, όπως αίθουσες τέχνης, μουσεία φυσικής ιστορίας και κοινωνικής ιστορίας, ανθρωπολογικά μουσεία, επιστημονικά κέντρα και κήπους. Οι μελέτες αυτές προτείνουν εναλλακτικές μεθόδους για τη διερεύνηση εκπαιδευτικών πρακτικών και αφορούν πολλά διαφορετικά σύγχρονα ζητήματα που συνδέονται με τον τομέα της μουσειακής εκπαίδευσης, όπως τη μελέτη διαφορετικών ομάδων κοινού και των διαφορετικών αναγκών τους, τη διευκόλυνση της ενασχόλησης με προκλητικά ζητήματα και την ενίσχυση αναστοχαστικών πρακτικών και δράσεων. Η σημασία αυτών των μελετών είναι καίρια γιατί υπερβαίνει τα άμεσα αποτελέσματα και τις επιπτώσεις τους για τη μουσειακή εκπαιδευτική πρακτική, καθώς παρέχει σε αυτούς που θα σχεδιάζουν στο μέλλον τη μουσειακή εκπαίδευση άμεση εμπειρία της διενέργειας έρευνας με στόχο την καλύτερη πληροφόρηση των αντίστοιχων πρακτικών.

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ABSTRACT

Museums are institutions of both education and learning in service of society, that is, they are sites where educational experiences are designed and facilitated, and also places where visitors learn in broad and diverse ways. As such, the role of public education in museums today is highly important, if not at the centre of museum activity (G. Hein 2005, 2006). As museums contemplate the growing significance of their educational roles and mandate within a changing society, so too they are increasingly in need of information about the audiences they serve and their own professional practice as they strive to achieve their educational missions in service to the communities in which they are embedded. The 14 independent research studies compiled in *Research Informing the Practice of Museum Educators: Diverse Audiences, Challenging Topics and Reflective Praxis* report on a variety of issues affecting museum education practice, contextualized across a range of institutions, including art galleries, natural and social history museums, anthropology museums, science centres, and gardens. The studies profile a range of methods to interrogate practice and address

a cross-section of contemporary issues confronting the field of museum education including studies of diverse audience and their needs, the mediation of challenging topics and reflective practice and praxis. The significance of these studies goes far beyond the more immediate outcomes and their effect on practice; it is also significant in that it provides the future leaders of the museum education community with first-hand experience with conducting research to better inform practice.

Introduction

The research studies profiled in the new book *Research Informing the Practice of Museum Educators: Diverse Audiences, Challenging Topics and Reflective Praxis* represent the work of graduate students from the University of British Columbia (UBC) in Vancouver, Canada, working under the umbrella of museum education. The majority of these independent research studies are coming out of a relatively new program, the Master of Museum Education (MMEd), a unique program that brings together museum educators, classroom educators and community-based educators to look specifically at the potential of teaching and learning in informal environments. This graduate program is contributing to a deeper understanding of issues affecting museum education and museum pedagogy, in part through the research conducted by its graduate students. As a part-time primarily on-line graduate program, students have the opportunity to more deeply reflect on their practice as they engage in coursework and their research project. The main questions asked by students are rooted in their practice and inspired by current research and theoretical perspectives related to teaching and learning in informal settings. The themes addressed in the collection of 14 research articles encompass three main concepts relevant to museum education; working with diverse audiences, addressing challenging topics, and reflective praxis.

Why research museum education and museum pedagogy?

Museums have always been viewed as places for enjoyable, social learning (Kelly 2007). Museums today are responding to changing times and as a result are exploring deeper social purposes to their mandates (Gurian 2006; Janes 2008) and are attempting to actively engage more diverse sectors of their communities, embracing visitors of all ages (Kotler & Kotler 2000) and cultural groups. As museums reflect on these changes and their broader purpose in their communities it is an opportune time to question current museum education and pedagogy: How can museums better serve their increasingly diverse audiences and better support those audiences that are underserved by traditional museum programming?

This question spurs the next level of museum research into exploring theories of teaching and learning in an informal context and the relationships between researchers, practitioners and developing theories. The role of research in a museum educator's daily practice can be a challenge: for some research outcomes may be seen as inconsequential or even obvious while other outcomes may be based on unfamiliar theoretical perspectives and be challenging for practitioners to see the value to their daily practice. Nonetheless, if museum education is to meet the changing needs of

society it is imperative that any division between researchers, practitioners, and theories be erased. The opportunity to look more deeply at emergent theories will, as museum scholar and philosopher Hilde Hein (2007) reminds us, act 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 (H. Hein 2007: 30).

This collection of independent research studies is one step to furthering this important work. These studies reflect the professional interests of the researchers and of the organisations they worked with. The research addresses a cross-section of contemporary issues confronting the field of museum education and are grouped into three themes; diverse audience and their needs, the mediation of challenging topics, and reflective practice and praxis. The following sections places these themes into a wider context and profiles select studies from the collection.

Research theme: Diverse audiences

Museum educators have a long tradition of studying our various audiences and are familiar with many of the qualities and needs of groups such as young children, school groups, and families. While much is known about some of our museum audiences through decades of visitor studies research (c.f., Ellenbogen, Luke, & Dierking 2007; Hooper-Greenhill 2013), we live in a rapidly changing world with new technology, transforming societal norms, and influences of an increasingly globalized landscape. These new influences bring new questions and challenges related to learning experiences in museums. Practices that have been effective in the past may not best serve contemporary audiences, thus, it is important to re-examine the experiences of audiences, even those audiences we think we know so well.

The studies in this section look at family experiences in museums as well as two audiences that are not well understood or well served by their museum experience; home educators and teenagers. Each of the studies in this theme seeks to provide new insights into how these diverse audiences use museums, what they are learning and how museum educators can better support their learning.

Home educators

Chong's (2015) research, "Home Educators' Views of Museums: Challenges and Opportunities of Supporting Non-Traditional Learning", looks at an audience that has often been on the periphery of museum education - parents involved in home schooling of their children. The relationship between home educators (parents who school their children) and museums is one that has received little attention, despite the growth of home learning in regions such as British Columbia, Canada (Chong 2015). As Chong

describes, this audience is often a challenging one for museum educators as their interests and needs do not fit into either a school program or public audience. To better understand how home educators use museums and museum programming, Chong conducted an on-line survey of 112 home educators. The richness of this study comes through the insights provided by home educators on how museum educators can better serve them. Many of the home educators' responses suggest that museums don't structure programs specifically for the needs of home learners but try to fit them into the museums' standard school programming. Home educators surveyed by Chong suggested that museums do not acknowledge the diversity, unique interests, and educational philosophy of home learners and this is exacerbated by the added challenges of trying to fit into the logistics of a regular school program and a feeling that museums don't welcome their children. Chong highlights a need for further study into this very unique and growing audience so that museums can better understand their motivations and develop programs that better meet their needs.

Teen audiences

Mehai's (2015) research, "Sparks of Learning: Insights from an After-School Science Museum Program for Teenagers", is a qualitative interpretive case study of a challenging audience and their experience in a special after-school program which integrated a variety of learning activities facilitated by a science expert over a period of weeks. Mehai uses six indices of learning to analyze the teens' experiences in the program. Her analysis suggests that participants' learning is spanning the social, affective, metacognitive and cognitive learning. As Mehai describes, "What was exciting and unexpected was the variety of learning experiences observed and uncovered from the participants' own words" (p. 71). More importantly she highlights how the different types of learning activities presented, including the use of science experts, can be used to support different types of learning.

Families

The other studies in this section look more deeply at the experiences of family audiences. Wong's (2015) study, "Family Experiences in Art Museums Outside of Facilitated Programming", investigates one of the most common of visitor experiences, a family visiting on their own. Wong used a survey to better understand parents' experiences as facilitators of their children's learning experiences as well as their needs and perceptions of their facilitator role. Through her research Wong aimed to determine how her study site, the Vancouver Art Gallery, could better support family visitors. Her study identified important gaps between families' needs and how the gallery was supporting family learning. Her recommendations include a discussion of

ideal educational resources to better support parents in facilitating their family's learning.

Hall's (2015) study, "Parents' Perspectives of Exhibit Label Content in a Science Museum", also looks at parents' roles as facilitators of their family's learning. She examines parents' perspectives on exhibit label text and how label text could be revised to better support collaborative learning between parent and child at science exhibits. As Hall asserts, little is known about what label content is important to parents and why. The first phase of the study asked parents' perceptions on four different label text formats. In phase two parent-child groups were observed using an exhibit with a label that integrated the elements identified by parents as most helpful in facilitating a learning experience with their child. Her findings describe ways parents appear to use specific types of label content to extend conversations with their children.

Collectively, these four studies provide new insights and additional questions into how museum educators might support the learning and educational needs of parents, teenagers, and family groups in a diversity of museum settings. Museum educators know much about our diverse audiences, yet there is still a great deal more to know and understand.

Research theme: Challenging topics

As museums more actively reflect contemporary society and interpret societal issues such as human rights, complex scientific questions such as genetically modified organisms, and even sometimes a taboo subject, like death, museum educators need to integrate new approaches to incorporating these ideas into their practice. It is imperative that practitioners and researchers come together to better understand the nuances of how museum educators navigate conversations about challenging topics. Greater understanding of this will better support educators in developing the skills and knowledge to successfully facilitate these conversations as well as expand our understanding of teaching and learning in museums through reflective praxis. The five studies that focus on challenging topics include universal concepts such as death, working with experts to communicate complex scientific concepts, and a difficult topic for practitioners, working with a new and demanding audience. Although a diverse selection of research, each study demonstrates the benefits and new understandings that emerge from examining the experience more deeply than an educator may have the time to do in the normal course of a workday.

Challenging conversations about death

Museum educators are faced by many challenging topics in their daily practice. One which may be the most challenging is conversations about death with children. Two

very different studies consider this theme, one from a museum educator's perspective and the other from that of children looking at animal specimens.

Calvert's (2015) interpretive case study, "Navigating Sensitive Topics with Children: An Inquiry of Museum Educators Facilitating Conversations about Death with Children", examines museum educators' experiences of facilitating conversations about sensitive topics. From her interviews with museum educators about their practice when working with children, Calvert explains that conversations with children about sensitive topics such as death are often unexpected and may not be connected to the content of the program the child is participating in. The outcomes of the research include recommendations to support museum educators in having these challenging conversations with children by providing additional training and recommendations of ways to facilitate these conversations.

The second study that looks at death examines children's attitudes towards animal specimens. Zhang's (2015) study, "Children's Attitudes toward Specimens at the Beaty Biodiversity Museum", examines children's reactions towards animal specimens in a natural history museum and explores the potential of specimens to support conservation education. Educators' use of animal specimens to help visitors make connections to live animals and the ecosystems in which they inhabit, in support of conservation education, is an area that is under-researched. Zhang uses a typical museum experience, a touch table with a variety of animal specimens, to facilitate semi-structured interviews with children. In addition to children's attitudes towards different specimens and the connections they make between the specimens and the live animals represented by the specimen, Zhang reveals how different characteristics of animal specimens may influence children's attitudes. It is this element that is the focus of recommendations to museum educators when selecting animal specimens to use with children as well as a focus for future research to further elucidate how physical characteristics of specimens may support conservation education.

Challenging conversations about colonization

Gibbons' (2015) study, "Museums and Marginalized Historical Narratives: Learning the Truth about Indian Residential Schools at the University of British Columbia (UBC) Museum of Anthropology", examines a topic of specific interest and relevance to Canadian society but one that resonates with museum educators world-wide as it addresses the impact of colonization on indigenous peoples. Gibbons conducted pre-visit and post-visit interviews of participants to determine the impact of Speaking to Memory: Images and Voices from St. Michael's Residential School, an exhibit about Indian residential schools. Indian residential schools were part of an extensive network of schools established by the Canadian government and administered by churches, in which aboriginal children, removed from their families, were placed, ostensibly to be

educated. The outcomes of Gibbons' study indicate that exhibits such as the one in the study do have an impact on their visitors and that museums are ideal environments to support dialogue around challenging topics. In this case participants indicated a deeper engagement and increased awareness of the complexity of the challenging topic. Gibbons concludes with a reminder and call to action for museums and museum educators to continue to build on their role in addressing difficult histories such as the one profiled in the *Speaking to Memory* exhibition with adult visitors as well as to look for ways to better engage youth in these conversations.

Challenging scientific concepts

Profiling contemporary scientific research in a public gallery to a general audience can be very difficult for museum educators as it often requires a deep level of expertise to communicate the concepts clearly. Wei Hu's (2015) case study, "Training Scientists to Communicate Science to the Public in a Science Museum Setting", looks at one program's approach to empowering scientists, working with museum educators, to become better science communicators. Hu surveyed and interviewed scientists involved in the program and then used Tran and King's (2007) knowledge framework for professional development as a lens to examine the data. This study reveals how different aspects of their training support the scientists' facilitation of challenging conversations related to their research with visitors and makes recommendations on how to further improve their training.

Challenging issues in daily practice

The challenging topic addressed in Masterson's (2015) interpretive case study, "Identification of Potential Methods of Professional Support for Museum Educators Working with Young Children with Cognitive Disabilities in Museums", focuses on museum educators' experiences and needs. While not a challenging topic per se, Masterson's study is representative of the challenging issues practitioners are increasingly faced with in their daily practice. Children with diverse learning needs, including those with cognitive disabilities, are increasingly being integrated into the public school system, and this is reflected in the typical school group visit to museums. From interviews with museum educators Masterson's study reveals a range of experiences museum educators have when working with children with cognitive disabilities, as well as a general feeling of being ill prepared to support their learning. Recommendations from her study suggest ways that practitioners could better support children with cognitive disabilities as well as ways for museum educators to support their own professional development in this area.

As museums become more inclusive and reflective of the diverse communities of which they are a part, the necessity for conversations about challenging ideas will increase.

Woven through each study in this section are ways of thinking about our practice as educators facilitating challenging conversations, along with potential areas for further research to continue the growth of our practice as museum educators.

Research theme: Reflective practice

Museum educators are well served by being reflexive practitioners. The studies in this section use an autobiographical and arts based research such as a/r/tography (Irwin 2013) or autoethnography (Ellis, Adams & Bochner 2010) to grow in self-understanding. Personal reflexive praxis, as de Cosson (2015) describes, is the “art of taking practice into theory and theory into practice in a continual hermeneutic circle (Gadamer 1986)” (p. x) and results in a much deeper understanding that in turn helps educators to better serve a diverse clientele in an environment that is often in a state of constant flux. Studies in this section represent a diverse range of informal learning settings and explore aspects of museum educators’ roles as intermediaries between visitors and their institutions, with the educators often enacting roles that may more traditionally be viewed within a curatorial perspective. Using reflexive research practices opens up the internal workings of museums and helps to explore museum educator’s relationships with the complex workings of their institution.

Understanding your cultural identity

Fehr’s (2015) “Representing Other: Finding Reflections of Myself from a Space In-Between a Garden and a Museum”, reflects on the process she undertook when curating a small exhibition about the building of a formal Chinese garden in Vancouver, Canada. Fehr uses the rigor of autoethnography and a/r/tography methodologies to analyze the process through two parallel lenses, that of a curator and of a “third culture kid” (TCK). Fehr describes how her cultural identity of a TCK arose from what she describes as her “hybridized” (p. 168), background resulting from a life of living and working in communities around the world including South America and China. Because of her past experiences she tends to adopt the cultural identity of others and by conducting this autoethnographical study she acknowledges the ways in which her “cultural position could be both helpful and harmful in my role as a curator” (p. 179). The study is a reminder to museum professionals of how their life stories influence and motivate them in their careers and influence their practice.

Youth reflecting on experience

Fuchs’ (2015) “Ecologies of Youth Art Apprenticeship: A Case Study of the Burnaby Art Gallery’s Artist Apprenticeship Project”, looks at secondary-level students’ experiences in an artist apprenticeship program in which students work with a professional artist

and museum staff to create art and curate an exhibition. Students' reflections on their experiences reveal an increased awareness and understanding of their artistic process as well as the work of professional artists. The study also highlights the benefits of taking students out of the classroom into a variety of unique settings to help them "connect, share and grow in new and challenging ways" (p. 228). The study's recommendations centre around the role of community art galleries and local artist communities in more deeply engaging youth, empowering them and providing them with skills and experiences that will help strengthen their voice. A key area identified for future growth and research is how such a program could better serve the wider community, with a recommendation to re-frame the program as a service-learning program to increase students' sense of citizenship and ownership and to give more back to the community.

Embodied tensions

Kate Petrusa's (2015) "Embodied Tensions: Digging into Agriculture at the BC Farm Museum", utilizes autoethnography and reflexivity to explore the process of developing an exhibition. Petrusa's goal was to approach the exhibition development from a theoretical perspective and to incorporate the tensions between the local small-scale organic farming with the local large-scale industrial farming into the exhibition, with the hopes of bringing renewed significance to the historical artefacts in the museum's collection. The context of the study is a familiar one to many museums educators as it is based in a small community museum, staffed entirely by volunteers motivated to celebrate the early farming history of the area and maintain the museum's tractors and other farm equipment. Petrusa's study recounts her experience of trying to bring together two divergent views of the exhibits' potential. Her insights into working with volunteers and the processes needed to find points of commonality between the two differing agendas are an example of how museum educators can use reflection to deepen their understanding of their practice.

Increasing meaning-making with young adults

Smedley's (2015) study "Using Informal Learning Spaces to Increase Meaning-Making: Museum Visits with Young Adults", examines how an open-ended art-based approach to a museum visit impacts student learning. Rather than participating in a teacher-led or museum-led experience during their visit, students were allowed to explore the museum and given time to connect personally with the exhibits and artefacts at the University of British Columbia Museum of Anthropology. The concept of travel was used as a theme and each student was given a blank postcard on which to communicate their museum experience. Combining the postcards with pre-visit and post-visit interviews and students' reflections, Smedley's research indicates that students did connect with

the museum's artefacts and its roles in society in a personally meaningful way. Additionally, Smedley states that the study's "results should also remind educators to trust the willingness of young adults to interpret and question information they encounter" (p. 196).

Meaningful engagement

One of Sienkiewicz's (2015) early memories of a visit to an art gallery is of a painting she later understands to be a depiction of the tale of Icarus. This powerful memory is one of the motivations for her study, "Creating Meaningful Experiences in Art Museums: A Study of Museum Educators' Perceptions of Meaningful Engagement with Works of Art". She uses a case study of 10 museum educators to understand their perceptions of their roles when facilitating discussions about works of art with visitors. Sienkiewicz describes the outcomes of her study as helping museum educators to expand our understanding of good teaching practices in museums, with regard to whether sharing information about art-pieces limits possibilities for personal meaning-making or ultimately enriches visitors' encounters with works of art (p. 233).

Collectively, these five studies represent the power of reflecting on practice and serve as a reminder to museum educators to examine their own lived experiences (Aoki 2005) through which they can better support their own learning needs and those of our museum visitors.

Final thoughts

Research studies such as those included in *Research Informing the Practice of Museum Educators: Diverse Audiences, Challenging Topics and Reflective Praxis* provide examples of work relevant to the museum education community. It is an exciting time for museum education as there are more opportunities for researchers and practitioners to come together in an effort to better understand the issues, nuances and ramifications of teaching and learning in informal settings. These studies are important beyond their findings and recommendations. The significance of these studies goes far beyond the more immediate outcomes and their effect on practice; it is also significant in that it provides the future leaders of the museum education community with first-hand experience with conducting research to better inform practice.

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