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Introduction and Acknowledgements

Mary Collier, Professional Development Program Manager, Ontario Museum Association

The papers in this publication were presented at the Ontario Museum Association's Tenth Colloquium on Learning in Museums, held at the St. Catharines Museum and Welland Canals Centre on October 17, 2012.

The theme of the colloquium was accessibility. This theme was chosen to draw on the work being done in museums in response to the Accessibility for Ontarians with Disabilities Act (AODA). However, as you will see, the presentations took a much broader look at accessibility and inclusion in museums than that related to disability, encompassing ideas of physical, geographical, and representational access as well.

The Colloquium on Learning in Museums brings together museum educators and other museum professionals for presentations and discussion among colleagues. The colloquium offers busy museum educators, normally preoccupied with the daily work of program planning and delivery, the opportunity to get together, share their projects, and find inspiration in the work of their colleagues in the field.

Publication of the colloquium proceedings allows the opportunity for broader sharing and recognition of the excellent work being undertaken in museum education.

The colloquium and this publication were made possible with the help of many organizations and individuals. We acknowledge the financial support of the Government of Canada through the Department of Canadian Heritage's Museums Assistance Program. Thanks to the St. Catharines Museum and Welland Canals Centre for hosting the colloquium. We are grateful for the guidance and assistance of the Colloquium Committee of Diane Gallinger, Christine Lockett, Wendy Rowney, Angela Wallace, and Meredith Leonard, as well as OMA intern Elizabeth Morningstar. Finally, our thanks to the presenters who came to the colloquium from far and near to share experiences, projects, and possibilities for museums with honesty and enthusiasm.

Thinking About Accessibility

Diane Gallinger, M.A., Jordan Heritage Resources

Abstract:

This paper combines the morning introductory address and afternoon closing comments from the Ontario Museum Association's 2012 Museum Education Colloquium on Accessibility. The paper begins with a discussion of the various ways in which the term "access" is understood in museums, then shows that the basic concept that ties them together is removing barriers between museums and their communities. The paper then focuses on the field of disability access, using brief examples of cutting-edge practice from Canada and abroad to show how the approach to making museum programs accessible for people with disabilities has begun to mature over a pioneering phase of the last twenty years. The paper concludes with a general discussion of some advantages and caveats related to access work and emphasizes the powerful role that Ontario's frontline community museum educators can play in developing leading, creative access programs that meet the diverse needs of their communities.

The theme of this year's OMA Education Colloquium was accessibility, and my role as the opening presenter was to start us thinking about the topic. As a member of the planning committee, I got a first-hand wake-up call that other people do not share my assumptions about accessibility. I am a specialist in disability access to museums and art galleries in a province with major disability access legislation, the Accessibility for Ontarians with Disabilities Act, 2005 (AODA). In Ontario, the terms "disability" and "accessibility" are frequently linked. So, a colloquium on accessibility! Fantastic! Then I found that many of the proposals for the colloquium had nothing to do with disability issues. As you will see, we have many varied and interesting papers that will give us a sense of what "access" can mean in a wide sense in the hands of creative museum educators.

A few years back I came upon a definition of "access" in what was then a draft of Canada's National Heritage Policy:

All Canadians should enjoy equal access to their local and national heritage regardless of location, age or economic status. A heritage policy will ensure that content is as representative as possible of Canadian diversity: French and English, Native and immigrant, young and old, professional and amateur, scholarly and popular.

Geographical distance, language, economic means, cultural background, demographic diversity, educational level, differing approaches to learning, and the use of information are all different facets of access. It is fundamentally about equality and cultural belonging and identity. It is about the issue of representation and owning your own voice in a community's or country's story. Even if, to my astonishment, the list completely forgets to include disability in a detailed definition of access, it still asserts the impact of changing demographic trends and the needs and interests of different generations.

What do these things have in common? As in the field of disability, "access" in all of its manifestations means, at the most basic level, removing barriers. For us, that can mean barriers between museums with the tangible or intangible things they offer and an expanding range of audiences motivated

by a wide range of needs, be it lifelong learning, education, leisure, cultural expression, skills acquisition, or therapeutic programs, for example. Into this mix, we must add the impact of new technologies that are opening whole new avenues for access and bringing with them their own implications for how different generations communicate and form social relationships, as well as think about and share information.

I hope that this collection of papers will broaden our concept of access and shed light on areas where different approaches to access can mesh together in new ways. On behalf of the planning committee, I would like to thank the presenters who gave so generously of their time to share their experiences with us. Because disability is my field, I was asked to write about how disability access programming in museums has changed over the last few years from a museum educator's perspective.

Accessibility 1.0: A Brief Overview

I became passionate about disability access over a decade ago when I worked as a museum educator in Jordan, Ontario. I saw children with various disabilities come into my first-person one-room schoolhouse program at a small community museum with a staff of two and a limited budget. I saw first-hand the real human need for respect, equality, affirmation, dignity, inclusion, compassion, and joy and believed I could make a difference in my visitors' quality of life through such a wonderful community resource. I had great success meeting many needs simply by having a welcoming attitude and believing in the smorgasbord of tools I had readily at hand as a museum educator. Money had nothing to do with applying an understanding of learning styles, interpretive methods, and communication techniques, or maximizing the learning opportunities that a multisensory living history environment afforded. While I never lost sight of who I was as an educator delivering a curriculum-based program, in a sense I also saw myself as something of a museum social worker.

By 2000, I had become committed to researching and advocating for disability access in museums. At that time, awareness of the topic was in its infancy in Canadian museums, and apathy, and sometimes even outright fear of

interacting with people with disabilities, were common at all levels of the sector. I had to go outside of Canada to leading museums and government agencies in Europe and the United States to get hands-on training and find out what constituted good practice, because very little of that existed here at the time. In my subsequent research abroad, one thing stood out clearly: museum educators played a critical role in the advancement of the issue because they were on the front lines with the public and consistently led the charge as passionate advocates within their museums on behalf of a disenfranchised audience.

For museums that pioneered this field, what I, for want of a better term, call Accessibility 1.0 was about trying to establish a basic framework for a largely unexplored field of practice. Wherever I went to conduct research, I saw the need to implement several key changes: a strategy to confront negative stereotypes about disability held by museum professionals, the development of pilot projects to advocate for accessibility in museums, accessibility awareness training programs and new interpretation techniques for all levels of staff, and the building of partnerships with disability support agencies. The two brief examples that follow are very typical of Accessibility 1.0.

In 2005, I was hired to curate and design a nineteenth-century costume exhibit from my private collection for Upper Canada Village of the St. Lawrence Parks Commission. One of my conditions for accepting the job was that the exhibit be used as an accessibility pilot project. My goals for the project were straightforward: to advocate for disability work in Ontario's museums by showing that museums with limited budgets and physically inaccessible buildings could be made more accessible. There is always something of quality that you can do to increase accessibility for an audience that is very diverse. If you cannot do *everything*, you can certainly do *something* meaningful that will enhance the quality of life for people with various types of disabilities. In this case, we could make the exhibit accessible for people with vision loss.

Why was this important? At this time, many museums stereotypically equated accessibility with ramps and what the British call "lifts and loos." It was assumed that any attempt to become accessible involved expensive capital projects and was therefore limited to big museums. As a group,



FIGURE 1 Crysler Hall, Upper Canada Village. The exhibit was located on the top floor of a heritage building without a ramp or elevator. Credit: Diane Gallinger



FIGURE 2 The period dressmaker's shop provided a rich multisensory environment and excellent reproductions that could be touched without gloves by people with vision loss. Credit: Diane Gallinger



FIGURE 3 In the modern costume workroom, participants gained a comprehensive understanding through touch and trying on reproduction garments of how fashion was worn historically and how it is used today in a living history site. Credit: Diane Gallinger

we thought the component of our audience with accessibility concerns was comprised mostly of wheelchair users whose supposedly small numbers did not justify such a big budgetary commitment. Besides, the reasoning went, people with disabilities never came to museums. In reality, if they never came it was because they felt museums were unwelcoming, inaccessible, had nothing for them, especially if they had vision loss, and represented none of their history or contributions to society.

Moreover, practical demonstration projects could help everyone overcome fears that accessibility is, by its very nature, contrary to some basic principles of museum work. If educators sought to promote greater access for people with disabilities, opposition typically arose from curators, security guards, exhibit designers, and even directors, for whom “don’t touch,” “don’t limit my artistic freedom” and “don’t put a ramp on a historic building” were professional mantras. Hopefully, by doing demonstration projects, we could get the issue on our sector’s radar by showing what we could accomplish, thereby cultivating institutional pride and a sense of professional ownership in successful, cutting-edge work.

The project at Upper Canada Village was typical of many pilot projects of its time. Although the exhibit was situated behind glass in an enclosed gallery on the second floor of a historic building that lacked a ramp and an elevator [Figure 1], we would make it

accessible in other ways for people with disabilities whose needs we could meet successfully. Moreover, we would showcase the strengths of a living history site as an accessibility-friendly, multisensory environment. The pilot project would include a curator-led touch tour, using gloves from the costume exhibit to teach



FIGURE 4 Upper Canada Village interpreters practicing sighted guide technique. Credit: Diane Gallinger



FIGURE 5 We used verbal description of a tactile diagram to orient participants to Crysler Hall. Verbal description is the art of using language to enable a person with vision loss to create a picture in their mind's eye of an environment, object or work of art. Credit: Margot Dixon

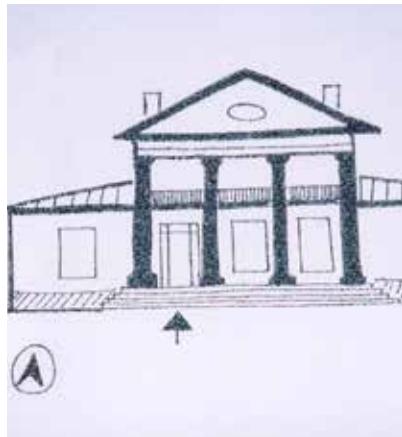


FIGURE 6 Tactile diagram close up. Tactile diagrams feature raised lines and high contrast images. Verbal description must also be used to enable someone with total vision loss to acquire a mental image of the tactile diagram. Credit: Diane Gallinger

about fashion history; a visit to the 1866 dressmaker's shop where visitors could touch reproduction fashions without gloves to learn how fashions were produced [Figure 2]; and a behind-the-scenes visit to the modern costume studio for a handling session to learn how modern interpretation staff make and use reproduction costumes [Figure 3]. Time for refreshments and interactive talk between tour participants and Village staff would enhance the social experience of the tour for our visitors.

To meet these goals, we had to establish a foundation of proper training. In partnership with Debbie Warren, a representative with vision loss from the local CNIB, we developed and delivered blind or low-vision sensitivity awareness training, including a focus on sighted guide technique [Figure 4], for the Village's frontline interpreters and their manager. In addition, we gave specialized training in accessible museum interpretation techniques, such as verbal description [Figure 5]; leading touch tours using real artefacts and reproductions; and incorporating assistive devices, such as tactile diagrams, into tours. Tactile Vision, Inc., of Mississauga, Ontario, partnered with us to produce the raised-line tactile drawings [Figure 6]. An emphasis was placed on learning how to adapt existing interpretation techniques and communication tools specifically for the target audience.

Although each of the pilot tours lasted three hours, the success of the project far exceeded the expectations not only of the participants but also of

the Village's staff. Managers and frontline interpreters alike gained confidence in working with a new and receptive audience as well as renewed professional enthusiasm and pride of knowledge of accessibility issues. For participants, the project provided a rich and empowering learning and social experience that left them wanting to make repeat visits to the Village.

The outstanding achievements of the Colchester and Ipswich Museums Service in England provides another example of early accessibility programming and how to build it sustainably into a museum's organizational practices [Figure 7]. Colchester's pioneering accomplishments in the 1990s demonstrated just how powerful and influential community museums could be in the development of world-class disability access work. As I discovered time and again over the course of my research, the work of small- to medium-size museums frequently equalled or even outshone that of national museums because success with accessibility is not all about size or budget. It is about what a community-based organization can do when committed people, backed by a supportive director, have the right attitude and learn to see the possibilities at hand.¹

One of Colchester's earliest forays into accessible programming involved the local deaf community. In spite of the fact that a national support agency for people with hearing loss had its headquarters in Colchester, museum staff discovered that deaf people considered the museum to be irrelevant to them because it reflected none of their culture or history. "Twinkle, Twinkle Little Star" became the subject of a pilot program. The poem was written in Colchester at the start of the nineteenth century by two sisters who learned to value written expression because their mother was deaf. The museum took an inventive cross-disciplinary approach, using theatre and television production techniques to reach out to alienated members of the local deaf community. Working with local families, Colchester produced a professional-quality video showing the full poem performed in British Sign Language. The "Twinkle, Twinkle Little Star" video now forms part of a permanent mainstream exhibit that successfully brings community deaf history into the museum.

Colchester Museums Service also excelled in another aspect of Accessibility 1.0: pioneering ways to incorporate sustainable access work into

1 Some other outstanding examples of dynamic community museums I visited that pioneered cutting-edge accessibility work included Sunderland Museum and Winter Garden (part of Tyne and Wear Museums), under the direction of Neil Sinclair (now retired), and Nottingham Castle Museum.



FIGURE 7 Colchester's Norman castle has been converted for use as an exhibit gallery. Credit: Diane Gallinger



FIGURE 8 One of PORTAL's regular meetings. Museum staff attend only by invitation to ensure that members can speak freely about their ideas and concerns. Colchester has since hired a former PORTAL member, Sophie Weaver, as the museum service's Access Officer. Credit: Diane Gallinger



FIGURE 9 A typical curator-led behind the scenes touch tour in London of the Victoria & Albert Museum's medieval stained glass conservation lab. Credit: Diane Gallinger

a museum's organizational practices. The museum established PORTAL, an accessibility advisory group [Figure 8], as a means of ensuring regular consultation with local people with a variety of disabilities. PORTAL's recommendations feed directly back into Colchester's management structure to ensure that the needs of people with disabilities are heard and acted upon.

Accessibility 1.0 was really about establishing some basic principles of good practice: developing sensitivity awareness training for museum staff and volunteers; ensuring someone on staff or a committee of staff members was responsible for accessibility issues; experimenting with interpretive tools and assistive devices like verbal description, tactile diagrams, and objects or learning how to work with sign language interpreters; establishing regular consultation with people with disabilities; and beginning to explore approaches to representation.

As museums gradually gained a basic comfort level working with this new audience, what did programming for people with disabilities typically come to look like? For the most part, accessible programs were typically segregated and rather formulaic in nature. Although museums made an effort to work consultatively, programs were largely developed by museum educators *for* people with disabilities, and they were even segregated *by* disability. Big national museums would typically offer docent-led gallery tours or special behind-the-scenes curator-led visits for people with vision or hearing loss or intellectual disabilities once a month, sometimes serving wine afterwards to enhance the social nature of the event [Figure 9]. While



FIGURE 10 One of several tactile object stations in the Victoria & Albert Museum's British Gallery. In this case, modern tactile wood samples near a furniture exhibit are displayed on a wheelchair accessible stand that incorporates high contrast print and braille labels. Binders contain large print copies of exhibit labels. These stations can be used by people with disabilities during group programs or during independent visits with a support person to the museum. Tactile objects in the galleries are also very popular with able-bodied visitors. Credit: Diane Gallinger

museums experimented with various ways to maximize independent visitation [Figure 10], it was normal for a person with vision or hearing loss, for example, to have to book three weeks in advance to make sure a specially trained interpreter would be available to take them on a gallery visit.

From Accessibility 1.0 to 2.0

In recent years, I have noticed a maturing or increased sophistication starting to take place. What is Accessibility 2.0 starting to look like?

Academics from a wide variety of disciplines are now regularly involved, which has led to a better understanding of how and why approaches to disability access in museums work, as well as the emergence of innovative practices. For example, Art Beyond Sight,

a New York-based organization dedicated to making art accessible for people with vision loss, holds a conference at the Metropolitan Museum of Art every two years. Conference presenters now come from wide variety of academic disciplines, such as art history, disability studies, cognitive psychology, neuroscience, cultural science, human behaviour, and neurobiology.

As another example, Colchester and Ipswich Museums has built upon its earlier work by taking part in a groundbreaking nationwide study of disability representation in museums conducted by the University of Leicester's Research Centre for Museums and Galleries.² In 2008, as part of the project, members of the museum's consultation group PORTAL curated "Life Beyond the Label" [Figure 11], an exhibit about local people, past and present, and their experiences of disability. PORTAL's members also selected and interpreted objects from Colchester's collection related to local disability history, giving a voice to people and stories that had previously been ignored, misunderstood, subjected to stereotypes, or avoided as being too controversial.

2 "Rethinking Disability Representation in Museums and Galleries," conducted between 2006 and 2008 at nine British museums.



FIGURE 11 "Life Beyond the Label" invited visitors to perceive real people obscured by stereotypes associated with disability. Credit: Diane Gallinger



FIGURE 12 A tactile model of a rat in the Galerie des Enfants at the Muséum National d'Histoire Naturelle in Paris shows recent advances in accessible exhibit design. Developed in consultation with students from a local school for children with vision loss, it was discovered that a completely realistic model made it hard for people to perceive some elements by touch. Certain features, such as the eyes and the hair, have been exaggerated to make them more identifiable. Credit: Diane Gallinger

Another indication that museum disability practice is maturing is that we are steadily gaining a better understanding of how and when to use appropriate interpretation tools and techniques. For example, a combination of frontline experience and the input of academic specialists has enabled us to become much more critical about what does and does not make a good tactile picture or object [Figure 12]. A recent display of tactile diagrams of contemporary paintings at a national museum in France provided a valuable learning experience about the design of tactile diagrams. Although the diagrams were beautiful and contained some excellent features, there was too much content included in the diagrams for most people with vision loss to be able to decipher what was being represented. We are also now able to ask ourselves when or even if tactile diagrams should be used in different museum tours. Sometimes, verbal description on its own, communicated by a skilled docent, can provide a more focused way of communicating intelligible information about an object to particular individuals with vision loss. We are learning to become more selective and skilled in how we use some interpretive assistive devices.

Accessible exhibit design has also matured in many ways. As designers have learned how to both work collaboratively with people with disabilities during the exhibit-development stage and incorporate principles of universal design and new technologies such as smart phones and QR codes, the accessibility features in galleries are not only becoming more beautiful and effective, they also benefit an integrated audience of *all* visitors. Exquisite galleries, such as those at Monkwearmouth Station Museum in



FIGURE 13 An accessible gallery in Monkwearmouth Station Museum. Beautiful high contrast shades of rose, grey and cream combine with attractive, easy to read labels at wheelchair accessible height designed according to accessible graphics standards. The clear associations made between objects in the case and related text labels make it easier for all visitors to understand and enjoy this attractive exhibit.

Credit: Diane Gallinger

Sunderland, England [Figure 13], and the Galerie des Enfants at the Muséum National d'Histoire Naturelle in Paris [Figures 14, 15, 16], no longer convey an almost medical appearance that shouts “I am for people with disabilities.” Rather, they combine vivid yet pleasing combinations of contrasting colours, graphics and text labels that are easy to comprehend, and enticing multisensory features and new technologies in a way that seamlessly asserts that people with disabilities are welcomed on equal terms with others in the museum’s audience, and thus by extension, in mainstream society as a whole. Both galleries are excellent examples of the benefits that come with applying universal design principles to exhibit design.

Another distinguishing feature of Accessibility 2.0 is a growing understanding of who visitors with disabilities actually are and what they really want when they come to museums. When we see statistics about disability rates in Ontario, those numbers in fact represent a wide range of ways different people experience disability in their lives. We are now realizing that one-size, segregated programming does not fit all. In countries that have gone through the initial phases of making museums accessible, such as Britain and the United States, the audience itself is becoming more sophisticated. People with disabilities are starting to become experienced, enfranchised museum users; they expect to be able to visit museums how and when they wish and to enjoy a quality experience while they are there. Like any other segment in society, people with disabilities desire to visit museums in a variety of ways, whether as part of a formal tour or on a casual basis with as much independence as possible. They also desire to visit in desegregated groups of family or friends where maybe only one person in a group has a disability.

Changing demographics are also changing our prospective audience. Aging boomers are starting to experience later-onset disabilities, such as hearing or vision loss or decreased mobility. Nevertheless, boomers who have



FIGURE 14 Accessibility features are integrated so well into the beautiful Galerie des Enfants that unless one specifically recognizes them, they do not immediately stand out. However, the presence of braille beside tactile models consciously asserts the museum's commitment to the inclusion of people with disabilities into mainstream French culture. Credit: Diane Gallinger



FIGURE 15 Designing gallery labels to meet accessible graphics standards renders them no less beautiful. Credit: Diane Gallinger



FIGURE 16 A charming tactile model of a colourful purple cat on a wheelchair accessible base integrates sound into its innovative design. When its back is stroked, the cat talks. While the model is designed with accessibility in mind, clearly it would appeal to any child visiting the museum. Credit: Diane Gallinger

typically been well-educated, culturally-empowered, and financially prosperous throughout their lives have come to expect to be able to make their own choices and may not even self-identify as having a disability. This growing segment within the accessibility audience has the economic means and expects to be able to travel independently for learning or leisure, whether individually, as part of a multi-generational family group, or for romantic getaways. A visit to an accessible museum could mean attendance at the monthly curator's touch tour for people with vision loss, but it could just as easily include luxury accessible travel and cultural tourism. A new type of visitation might combine a Las Vegas getaway or a visit to a weekend heritage festival with fine dining, visits to a show as well as a museum, and a stay at a bed and breakfast. Our potential partners are no longer just representatives from disability support groups; they are also professionals in the travel and hospitality industries, the retail sector, and the performing arts.

Disability activists have also found their voice. They have a greater sense of identity and are not always willing to wait for us to offer them something, especially if it does not really meet their needs. The days when people with disabilities consider a formulaic museum program good, purely on the basis that having *something* is an improvement over having nothing, are numbered. I hope that sharing these proceedings will give us an expanded sense of what accessibility can mean and how different types of access can work together. On one hand, it is tempting to want to define accessibility as a list of types, like disability, economic, geographical,

cultural, physical, or technological, but taking a silo approach quickly becomes inadequate. What if a potential visitor is someone like a female South Asian senior with ESL issues, who comes from an economically disadvantaged neighbourhood and has age-related hearing loss, and what if she is brought to the museum one day as part of a family outing instigated by her technologically savvy and more culturally integrated grandchild? I am sure you can think of any number of permutations of this scenario based on your own experiences with visitors. The thing about access is that you cannot rest on your laurels or adopt a “tick the box” attitude to it. We should be open to seeing potential areas of overlap between different concepts of access, such as the use of new communication technologies or universal design that can enhance accessibility for all kinds of people with all kinds of needs at one time, whether inside the museum or across long distances. Experience should not be a bed to rest on; it should be a springboard to ongoing change and growth because audiences and the ways we interact with them keep changing.

Access can be a fluid concept at times, but sometimes boundaries are necessary. On the positive side, I see museums as gatekeepers or maybe conduits that enable things to flow in different directions. We act as meeting places in communities where people of all types and needs or abilities can enter in, own their voice and identity, or gain access to the collections, information, therapeutic programs, or learning or leisure opportunities we have to offer. However, we are not limited by four walls. We enable people to reach into what we have and do, and we in turn find creative ways to reach outside of our institutions, whether in a real or virtual sense.

The Hoover Dam is also a boundary. A whole lot of water without a barrier is called a flood, an indiscriminate inundation, and that is not a healthy place to be standing if you find yourself caught in it. Access is about working with others in healthy and respectful partnerships. That requires knowing who you are and where your boundaries need to be. We are, at the end of the day, museums, and we need to stay true to what we are, yet maintain an open mind and creative attitude.

Sometimes it is entirely appropriate to say “no,” or even “not that, but this.” That has been very true of disability and museums. In countries

like Britain or the USA with advanced practice, museum professionals have sometimes had to learn how to work with militant disability activists with high expectations of museums. For example, one of these activists might ask, if one person gets access by looking and the equivalent for a person with vision loss is touching, why can't people with vision loss touch original museum artefacts without having to wear gloves? That is like expecting a sighted person to see an exhibit with the lights turned off. Where is the genuine equality of access in that? The feeling among activists is that, in regards to sensory issues, we have not created a level playing field. Nevertheless, care of collections is important, so we have to be true to that part of our mandate. We do what we reasonably can and hope others will do likewise.

To get back to that metaphor of the gate that swings both ways: sometimes we also have to swing a door open to let bad things out. What professional practices and attitudes or internal organizational hang-ups do we need to let go of because they are putting up the wrong kind of barriers to access? Curators, security guards, building planners, and exhibit designers have often been inclined to fight the whole concept of disability access because it might mean allowing greater access to collections or forcing a change in how text panels are designed.

What is it about our sector that is impeding progress to greater achievement in the field of disability access? The use of tactile diagrams and verbal description in museums is not new. These tools have been around for over twenty years, so why do so many museums here in Ontario still not know about them or have the training they need to use them? Moreover, why are there still so few specialists with dedicated accessibility coordinator jobs working in Canadian museums? While I have seen world-class work and a growing interest in accessibility issues within the Ontario museum sector, most notably among young professionals in our college and university museum training programs, I haven't seen the specialized jobs for them when they graduate. Will they need to leave Canada to get work in their field? How can we overcome these problems? What kind of model are we following for disseminating knowledge and good practice



FIGURE 17 Inexpensive kitchen gadgets stored in plastic bins formed the basis of Artscope's art making programs for adults with severe intellectual disabilities.

Credit: Diane Gallinger

within our profession, and is it working? We certainly have come a long, long way from where we were even ten years ago, but there is room for improvement.

In spite of these challenges, there is still so much that we as community museum educators can do. While museum directors in Ontario's community museums sometimes become discouraged and think they lack the resources, time, staff, money, or knowledge to deal with disability access issues, the truth is that access, in all of its many different forms, really is about attitude and seeing possibilities. That is where we on the front lines in small institutions can actually excel. I have been deeply impressed by the innovative accessibility work being done by committed people in some of Ontario's community museums. The power of the community museum and the museum educator is amazing!

I saw this principle in action on one of the most inspiring days I have ever spent in a museum, in London at Tate Britain in 2003. Even at a world-class institution, effective accessibility programs do not necessarily need to be expensive or complicated. A local support group, Artscope, from a disadvantaged neighbourhood in London, ran a regular program for adults with severe intellectual disabilities. The program cost a pittance to run—just some money to cover the cost of the participants' bus fare, a few sandwiches, and some simple kitchen gadgets for participants to make art with to express their reaction to works of art in the gallery [Figure 17]. The program was run by artscope. It really only cost Tate Britain some facility use and an open mind.

In summation, permit me to come back full circle to where I started this discussion, at the little one-room schoolhouse museum in Jordan. Let me tell you about one of the happiest and most fulfilling days I ever experienced as a museum educator. A local high school had a special education class for teens with a variety of severe intellectual and developmental disabilities. Working in close consultation with the teacher, I developed a program for them by adapting my interpretation methods and modifying my approach to the multi-sensory tools I had readily at hand in my living history site. Over the course of the visit as the group adjusted to such a different environment, one young man in a front row

desk gradually started to ask questions and join in. By the end of the visit, his classmates were also involved and clearly enjoying themselves. As the school bus pulled away from the museum, I felt a real sense of joy that the program had been so successful. The next day, I received a call from the teacher. Imagine how I felt when she told me that the young man in the front row had spoken for the first time in class during that fieldtrip. I knew I had the ability to make a genuine difference in the quality of somebody's life right on the front lines of a community museum.

Access is really about being sensitive to needs and being really committed to people. It is as much about attitude as about a budget or set of skills or tools. It can bring out the best in us as educators and institutions because it is all about looking for opportunities to help, to contribute to society, to build bridges, to promote change, to empower, to see the value in people, and to think outside the box, with a maximum emphasis on creativity and cooperation. Even if you cannot do everything, you can certainly do something of great value. It is very much about being in touch with grassroots needs, and that is a great strength of the community museum educator.

The Mobile Museum: A New Educational Dimension with the Potential for Improved Accessibility

Dave Barr

Abstract:

Mobile devices, especially smartphones, are in wide use today, even in museums. Every smartphone is a sophisticated and powerful computer, capable of adding to the visitor experience in many ways. Museums have leveraged the capacity of visitors' smartphones to offer enhanced visitor services. Smartphones can also become a new avenue of accessibility to museum learning for all museum visitors. Challenging situations are endemic to museums because universal design, optimal for all visitors, has seemed a virtually unattainable standard. Used appropriately, smartphones can change all of this and contribute a new strategy for achieving the goal of universal accessibility. These devices can convert a normal exhibit label into one that can be enlarged or replace the label altogether with a short podcast or video. Inexpensive QR codes are often used to direct the visitor's smartphone to a mobile-friendly web page carrying multimedia content and created with responsive design.

Mobile devices, smartphones, and tablets seem to be proliferating everywhere these days. Nowhere is this more apparent than in museums. Each time I visit



FIGURE 1 A visitor uses a smartphone to photograph an artifact in the Hockey Hall of Fame, both a museum and a hall of fame. Credit: Dave Barr

a favourite exhibition, I see school children and adults photographing everything in sight with smartphones. Many people now adopt the attitude that the best camera is the one you always have with you. [Figure 1]

Smartphones, of course, are much more than just phones, or even cameras. Each is a sophisticated and powerful computer, running an operating system and capable of executing thousands of different programs, or apps. Any smartphone can access the vast resources of the internet.

Although not every museum visitor has a smartphone yet, the increase in usage has been meteoric in the last couple of years. Mobile devices are quickly replacing personal computers as the must-have communication technology.

Museums have been quick to capitalize on the potential for enhanced visitor experiences offered by these mobile devices. In contrast to an earlier service model where the museum would supply an audio wand to visitors requesting a self-guided tour, many institutions have now been able to adopt a bring-your-own-device (BYOD) model. They have leveraged the capacity of visitors' smartphones to offer self-guided tours, scavenger hunts, and new rich-media extensions to artifact information. Employing mobile technologies, they have created augmented reality for the visitor, bringing history to life in the museum gallery.

Educators, as well, have embraced all that mobile devices can bring to personalizing the learning experience for students of every age. New teaching practices are turning the education model upside down, with content delivery happening at home, and discussion and sharing happening in the classroom.

There is an aspect of smartphone use that has not yet been much developed, either in the museum or the classroom. The smartphone, it turns out, when used with appropriate apps, can become a new avenue of accessibility to museum learning for persons with disabilities.

Don't leap to the conclusion that this potential for accessibility is appropriate only for a limited audience. Often when visiting a museum or gallery, I am painfully aware of my own disabilities. I am quite limited, it seems, when object



FIGURE 2 A QR code included with the label of a museum artifact directs the visitor's smartphone to an enlargeable version of the label text. Credit: Lisa Darcele Huff

labels are posted under low light conditions or offered in an eight-point font. I have equal difficulty when labels are too low or posted awkwardly on the side of a plinth that only comes up to my waist.

These challenging situations are endemic to museums, and for good reason. Our organizational

cultures are characterized by a variety of professional standards, standards that are sometimes in conflict. Exhibition designers are trained to produce clean, elegant designs and avoid clutter. Curators are trained to generate extensive label information, which produces large, dense clumps of text. Conservators recommend low light levels for many artifacts, especially those with fugitive colours. Each of these groups is doing the job that the museum asks them to do, but the results are not always optimal for the museum visitor.

Most museum exhibitions are perfectly well-designed, given the constraints under which they are produced. We need something more, however. We need universal solutions to the problem of exhibit design. Universal design is a theoretical target of excellence that would take into account all of the professional standards at work in the museum, as well as the learning needs of each and every member of our diverse visiting public. So far, universal design has seemed a virtually unattainable standard.

All of this can change when a museum takes the initiative to harness BYOD models to improve accessibility, and improve it for all of us. The mobile device can actually remove some of the constraints of conventional exhibit design. It is possible, for instance, to provide an alternative, smartphone label that can be enlarged on the hand-held screen until it is as readable as the visitor desires. It is equally possible to provide an audio version of the label via the visitor's smartphone. The mobile device can contribute a new tool for achieving the goal of universal design. [Figure 2]

Some of these options are so simple that they are already built into every smartphone. A short visitor, or a visitor in a wheelchair, for instance, can simply reach the phone up to photograph an artifact that is too high for him or her to see clearly. The visitor can then enlarge the resulting photo on the device screen

to reveal detail that even taller visitors may have difficulty seeing. Challenged visitors merely need to be made aware of possibilities like this in order for the museum to reap accessibility benefits that have been impossible heretofore.

Some mobile accessibility solutions depend on newer technologies now available for the World Wide Web, because most of the power of the smartphone can be released with mobile-friendly web pages. Web developers will be able to create these pages, using advances such as HTML5, CSS3, and jQuery, as easily as creating any new page on a museum's website. Museums using blog software probably won't even need to know anything about advances in web technology, because there are now advanced themes available to convert entire websites into mobile-friendly pages. Such themes are created using responsive design. That means they will detect what kind of device is accessing them and will change a web page's layout so that it looks best no matter what size screen is being used to display it.

There are many other mobile device solutions to the problem of more nearly approaching universal design. Most can be found in the app stores of the major smartphone manufacturers. Look for those that can enable the phone to convert text to sound or even to sign language. Others can amplify sound for visitors with hearing impairment.

At some point, any museum that wants to develop a mobile accessibility program will have to decide whether to go the route of special-purpose apps or mobile-friendly web pages. Museum-specific, proprietary apps seem to carry a lot of prestige these days. They are expensive to produce, however, and rather inflexible when changes to content are needed. Mobile-friendly web pages, on the other hand, are inexpensive, quickly produced, and easily modified when necessary.

Again, no matter what route a museum chooses to produce a smartphone aid to accessibility, they will need something to trigger this capacity. So far, no smartphone comes with a built-in ability to determine when the user requires one of its extended functions. To activate the new capacity, like enlargeable labels or an audio recording of label text, one of the most universal on switches is a QR code.

As I explain in a recent article in *Muse* (2012),

A QR code is just a small graphic image. Each one looks like a random array of black and white squares, a sort of warped checkerboard, grouped in a small frame. Much like the linear bar codes that we are more familiar with, QR codes contain information, text or numbers that have been made into a graphic. Similar to the bar code, each QR code can be scanned and decoded. Today this decoding process can be done by any individual owning a smartphone with a reader application, often referred to as an app.

If the QR graphic encodes a web address, the smartphone app decodes the message quickly, activating the phone's browser and retrieving the web page within moments. The user has immediate access to any electronic media that has been encoded.

QR codes are easily handled by graphic designers and can be easily incorporated into exhibit labels. Posting a QR code beside the gallery label text provides the perfect route for transporting a smartphone user with a disability to a mobile-friendly web page offering expanded label text or an audio recording. QR codes can even be made aesthetically pleasing by displaying them in colour or embedding them in a graphic logo of your choice. [Figure 3]

Yes, the visitor needs an app to use QR codes, and that app needs to be downloaded and installed. Unlike a museum-specific, proprietary app, however, a QR code scanner has wide general use outside your institution. Once it is installed on the mobile device, the scanner can be used to access QR coded information available in other museums, as well as in magazines, newspapers, and on the street.

Not every museum that has launched a BYOD program has been satisfied with the results. The problem is that whenever you offer something new, it takes a while for people to learn about it. The same is true, of course, for new exhibits, school programs, or any other first-time offering. Your institution has to publicize and promote the new program. Even before visitors arrive at the museum, they should be aware that there is something new and exciting inside.



FIGURE 3 A coloured QR code embedded in a stained-glass logo. Credit: Dave Barr

Once they arrive, they should be able to easily find information about the new program and how to take advantage of it.

Fortunately, the social media now used by most museums are an ideal way to publicize new technology offerings. Be sure your followers hear about new opportunities and hear about them often.

It's also important when offering new BYOD accessibility in your institution that all staff, from the director through to the all-important frontline staff who greet visitors and answer their questions, support the initiative. All staff and volunteers can play an important role in ensuring the highest quality visitor experience.

The best way to keep up with new technologies for accessibility is online. Try websites such as Museumforallblog.wordpress.com and several others that you can find by searching for Leadership Exchange in Arts & Disability (LEAD). You can search for Twitter posts that include the hashtag #ally for some of the most current topics. Browsing the Special Education section of your favourite app store will often yield interesting new finds.

If there is one message to take away from this paper, it is that opportunities for enriching the experience of museum visitors are expanding rapidly. We are quickly moving out of the personal computer era and into the mobile device era. If your institution has been contemplating a digital strategy, I would encourage you to begin thinking of it now as a mobile strategy.

It's worth exploring new technologies right away, using inexpensive initiatives, and staying flexible. Yes, available hardware and software will continue to change. The experience you gain in getting started now, however, is sure to better prepare you for taking advantage of the next wave of innovation.

In the museum world, one might do well to adopt this guideline: "Go mobile or go home."

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Increase Accessible Learning for Varied Audiences: Case Studies from the Museum of Inuit Art

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Brittany Holliss, Educational Assistant, Museum of Inuit Art

Abstract:

The Museum of Inuit Art (MIA) defines access broadly: in order to be accessible, the museum not only has to meet legal accessibility requirements but must also be useful to the communities it serves. That community consists of the museum's physical visitors, off-site virtual visitors, and Inuit, who live primarily in the Arctic and have limited, if any, access to the physical museum. MIA, then, faces two primary challenges to the accessibility of our collection: how do we create a physical space that is welcoming, educational, and responsive to our physical visitors while also serving Inuit in their home communities? While exploring a number of educational projects that MIA has implemented over the last year in order to increase universal access to the museum, this paper will examine the way in which MIA implemented agile methodology to streamline its processes and make the museum more responsive.

The Museum of Inuit Art (MIA) is southern Canada's only museum dedicated exclusively to art made by Inuit. MIA opened in 2007 and is located in downtown Toronto, adjacent to the Harbourfront Centre, which means that the

museum receives a large number of international as well as local visitors; in 2011, over 75,000 people visited the museum, and that number will likely be exceeded in 2012. The museum's visitors are tremendously varied, but across the board many have little, if any, incoming knowledge of Inuit or their art. MIA's visitors also largely do not include the artists themselves: Toronto has a very small Inuit population,¹ and since travel to and from the Arctic is expensive, most artists and their families and community members are unlikely to visit.

MIA is committed to making its collection and programming accessible to the museum's various audiences. Staff members at the museum define access broadly, recognizing access barriers that include language, ethnicity, and learning style in addition to those barriers recognized by accessibility legislation. With the introduction of the Accessibility for Ontarians with Disabilities Act Customer Service Standard in January 2012, the museum decided to take the opportunity to holistically rethink how staff members make the museum accessible and what, exactly, that means. MIA faces two primary challenges to ensuring its collection is as accessible as possible: the first is the challenge of creating a physical space that is welcoming, educational, and responsive to all of our physical visitors, while the second is serving Inuit and other members of the museum's audiences in their home communities.

In the end, there is no one solution to these related challenges. Instead, we have conceived of a number of initiatives that launched over the past year to help increase access in multiple ways. Despite the different audiences and delivery systems of these initiatives, the museum has identified several core principles that underpin all of these programs and help guide the implementation of any program. While reassessing how to make MIA's collection accessible, it became clear that the museum's processes needed to be re-evaluated as well.

Overhauling the museum's method of conceiving of and executing projects to increase accessibility meant that staff members needed to redefine exactly what makes a museum and its individual components accessible. These are the guiding principles all staff members at MIA are now committed to following:

- Meet and attempt to exceed the legal requirements of any relevant accessibility legislation and follow best practices

¹ 2006 census data indicated that 13,605 Aboriginal people lived in the City of Toronto and of that number, 1.6% were Inuit. That means in a city with a population of over 2,500,000, only 218 were Inuit.

to achieve these standards. This mandate has resulted in a number of new internal guidelines to help staff facilitate access in everything from exhibition design to frontline visitor interactions. These elements are now embedded in every element of our work.

- Make it personal. People do not connect with a perfect, authoritative, faceless institution. In addition to its collection, MIA is also its human staff members and volunteers, who all have personalities and particular interests. This also means that programs have to be tailored to visitors' needs and interests. There is no "one size fits all" approach to any of the museum's programs or visitor interactions.
- Make it responsive. This refers to interactives in exhibitions, but also to staff's ability and license to quickly change the implementation or direction of a project to respond to the changing needs of both our museum and our visitors.
- Make it mission-specific. Even if a project sounds exciting and flashy, if it doesn't fit the museum's mission and mandate, we will not pursue it.
- Take risks. While tried and true methods and programming can be effective, we should also explore new and creative solutions.

Like most if not all museums, MIA faces real constraints when trying to implement new programming, including human resources and budget considerations. In order to accomplish the creation and implementation of the museum's new initiatives, staff members switched to a new method of working that has helped streamline all aspects of the museum's operations and make staff members' work more efficient.

To do this, staff have imported agile work practices from software development and adapted them to the museum. Agile project management practices were originally developed as an iterative method of working with customers to develop requirements for information technology or engineering projects where different components of an overall project are finished in stages

rather than at the completion of the project. The overall philosophy behind agile practices shares many of the same values MIA identified for itself in its guiding principles; for example, the Manifesto for Agile Software Development states:

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:
Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan
That is, while there is value in the items on the right, we value the items on the left more. (Beck et al., 2001)

There are many different kinds of agile methodologies, such as Scrum, Crystal Clear, or Agile Modeling, that have been developed specifically for software development and that, consequently, cannot be directly adapted to museum practices; instead, MIA has adopted broad agile practices to most every aspect of its operations. MIA is not the only museum that has adapted agile project management into its repertoire, but the museum has embraced it beyond its usual application to technology-driven projects. As with the museum's focus on accessibility, MIA incorporates these practices into all departments (Mitroff Silvers & Hendee, 2012). This means that most every project the museum produces is deliberately iteratively designed, living in a kind of "perpetual beta test." Projects, whether they involve technology or not, are broken into their smallest components, and those components are worked on in a priority sequence until completion before any staff member switches to another task. Also, many projects will find their way onto the museum floor at an early stage so that they can be user-tested and tweaked. This way, staff members are focused and can rapidly change direction if need be before a project is too far along to change. Another consequence of this project management style is that projects that are ostensibly completed can be quickly reworked to be more responsive to visitor needs and feedback. This has



FIGURE 1 Screen caption of a Skype Chat Conversation Series interview between Associate Curator Alysa Procida and Inuit artist Jaco Ishulutaq.

or operations. Each is tailored to meet a specific need for a specific audience and continue to evolve based on feedback gained from users.

The first project MIA created with the specific focus of increasing access is the museum's Conversation Series, also known informally by staff members as "Skype Chats." The Conversation Series consists of recorded interviews Associate Curator Alysa Procida conducts via Skype with artists in their home communities, primarily in the Arctic, that are put on YouTube and shown inside the museum [Figure 1]. This project was conceived to meet several needs: to incorporate Inuit voice into the museum's exhibitions, to engage artists with the museum, to document information about their work, and to personally connect viewers to Inuit artists and their art.

In recent years, much has been made of including Inuit voice in exhibitions of art made by Inuit as well as in published material. Locating Inuit voice for the purposes of museum exhibitions, however, can be difficult. Where, geographically or temporally, do you find it? What do scholars mean when they invoke it? These questions are ones that we wrestle with, and that are complicated by theoretical and cultural considerations. Post-colonial theory suggests that we should privilege the sensibilities and concerns of the culture from which the works on display are produced, but this is not as easy as it seems. For one, Inuit culture is widely varied, and so one regional viewpoint will not be sufficient to represent the cultural and artistic diversity of the museum's collection. For another, indigenous concepts placing importance on the goal of working together for a common purpose, privileging the group over an individual, make individual voices problematic.

Most exhibitions and scholarly texts mitigate these issues and seek to incorporate Inuit voice by publishing quotations by artists or even edited

resulted in more efficient work and, consequently, higher quality and higher volume output.

By using agile practices and refocusing on what access means to the museum, MIA has produced a number of visitor-centred projects created to increase access to different aspects of the museum's collections

transcripts with artists, often in the form of an essay from which the interviewer disappears. However, there is still a problematic element to this: abstracted quotations and interviews edited into essays can distort important elements of the context for an artist's words and responses.

In looking to incorporate the voices of artists into the museum, several factors shaped the final outcome of the Conversation Series. A key consideration was making the presentation of the artists' voices as dynamic as possible. This meant that instead of relying on printed information, we would need audio and visual representations. These have the added benefit of providing much-needed context with the content. It was also critical that the content we created could be easily shared both inside and outside of the museum in order to reach more of our audiences, and specifically the artist. One of the goals of the project was to better connect artists with the museum, so the finished product needed to be accountable and easily accessible to the artist, as well as to interested visitors and others interested in art. Finally, the presentation of the artists' voices needed to demystify both the museum's and the artist's processes. With the Conversation Series, the context of a quotation is clear because the listener knows exactly how it was elicited.

In the end, the Conversation Series was created in order to adequately address these considerations and the needs of the museum's audience, and there have been a number of benefits from this approach. On a pragmatic level, the series is very inexpensive to produce and, due to the nature of YouTube videos, very personal; it requires very little editing and is easily shareable. It also makes it easy to build rapport with the artist, since a face-to-face interaction is still occurring. The Conversation Series allows the museum to conduct more interviews and to more thoroughly integrate the voices of these artists into its physical and virtual environments. It also allows for critical discussion to take place with contemporary artists about the nature of art and representation.

The museum gave up some curatorial control to the artists themselves by incorporating these interviews into its exhibition space. This can sound frightening to a museum that stakes its claim on being an authority, but



FIGURE 2 Screen caption of a Skype Chat Conversation Series interview between Associate Curator Alysa Procida and Laakkuluk Williamson Bathory of Qaggiavut!

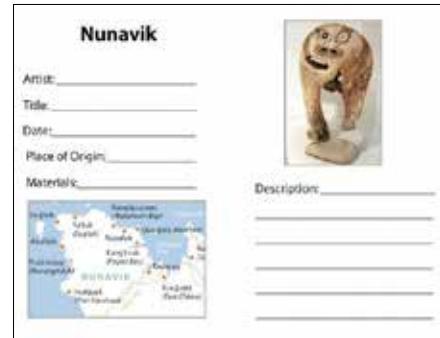


FIGURE 4 A sample page from the MIA Family Passports which is issued to families upon entering the museum and asks families to work together to complete a series of different activities and questions.



FIGURE 3 The cover page from the MIA Family Passport.



FIGURE 5 An MIA Kids label encourages visitors to touch a sculpture by Inuit artist Lucy Tasseor Tutsweetok in order to experience how hard the stones surface would be to carve.

ultimately it has led to a much more enriching experience and an arguably stronger position. This approach has also led to much more meaningful relationships with participating artists and much better understanding of their work. These relationships are important, not only because they provide insight into an artist's work but because they clearly hold the museum accountable: when designing an exhibition, everyone at MIA knows that an artist's words will be right next to the object on display and whatever didactic material is provided.

The Conversation Series has also helped the museum expand outside of the visual arts and begin to engage with other art forms, such as the performing arts. MIA does not have the facilities to accommodate performance in the museum, but now we can include performing artists into our space onscreen, providing a more holistic picture of art-making by Inuit [Figure 2]. In this way, the Conversation Series has had its greatest impact: it has allowed the museum



FIGURE 6 An MIA Kids label asks visitors to find different locations using the globe.

to reposition contemporary art made by Inuit and place the control over its forms, meanings, and styles firmly in the hands of the artists. It also provides the tools to empower the public to engage with the art on the artist's own terms—MIA simply provides the platform, not a didactic direction.

Collectively, the museum's Family Passports, hands-on activities, and MIA Kids labels represent three interrelated but independent programs specifically tailored for on-site families, both to empower facilitating adults and to excite and educate visiting children. Family Passports are small booklets issued to families upon entering the museum that ask families to work together to find, identify, and draw objects made from different materials, at different times, and by different regions, as well as participate in activities such as "Dance like a dancing bear" [Figures 3 & 4]. Upon completion, families are awarded a "formal" certificate. While filling out the passport, they also encounter hands-on activities throughout the museum that are paired with "fun facts." Both the passport and the hands-on activities are meant to encourage close inspection of the exhibitions and the objects themselves, which prompts families to find and use our family labels [Figure 5]. Distinguished by the MIA Kids logo, these labels are placed conspicuously at heights appropriate for children and standing or seated adults and ask questions, tell the main themes of the exhibition in different ways, and encourage game-playing, like "I spy" [Figure 6].

We created this three-pronged approach because each facet addresses a different barrier to access—for example, the passport may seem like a high barrier to some, so the labels exist independently—and also to engage different kinds of learners. Families use these systems, but so do many other visitors, and so MIA is in the process of retooling and expanding the system to be more inclusive and represent these other audiences' needs.

This year, MIA also incorporated QR codes into the museum in three distinct ways: as a way to connect to the museum's digital platforms, such as Facebook or the e-newsletter, in order to extend the visitor's engagement; to



FIGURE 7 Bart Hanna's "Drum Dancer" (2011) is one of the many pieces in the MIA collection which offers additional information to visitors who scan the associated QR code.



FIGURE 8 Screen capture of a QR code for Bart Hanna's "Drum Dancer" (2011) being scanned by an Android Nexus S smartphone QR reader.

comment on specific pieces on exhibition; and as part of a self-guided virtual tour of the museum.

QR Codes have been the subject of extensive debate among museum and other technological professionals. The drawbacks are perhaps best summed up by Shelley Bernstein at the Brooklyn Museum (2011), who said, "I've long been a critic of QR Codes. When I look around, I see low adoption rates, technical hurdles for end users and some really annoying uses in the marketing sector—who wants that?" We were very aware that QR codes have their drawbacks when we began investigating how we could augment the didactic and interpretive information inside the museum. We were also very aware that one of the major hallmarks of museums is their status as places of free-choice learning (Falk, 2009). QR codes seemed like an excellent way to facilitate free-choice learning within the museum while still offering a broad range of content: visitors do not have to scan every code, only those that they find interesting.

The two major concerns that the museum had when considering adopting QR codes were whether visitors would use them and how to ensure better access to the technology needed to use them. At the outset, we wagered that some of



FIGURE 9 Sample of video content available when the Bart Hanna QR code is scanned.

the barriers to the adoption of QR codes by visitors could be mitigated by thoughtful placement, readily available printed instructions, and rigorous training of our front-facing staff and volunteers [Figures 7 & 8]. The issue of access was also significant: the use of smartphones has

been increasing almost exponentially (Gartner, 2010) but we wanted to ensure that no one who wanted to experience the additional content would be unable to do so because they did not have access to a smartphone or tablet. In addition, many of the museum's visitors are from outside of Canada and do not want to incur roaming rates for data to access the online information.

Originally, the codes were conceived for "tech-savvy" visitors between the ages of eighteen and thirty, though through testing it has turned out that the actual users of the codes are normally either above the age of thirty or below the age of eighteen—so older adults and middle school children, who are difficult audiences to reach.

The implementation of the QR codes throughout the museum's physical space required careful planning to maximize their effectiveness and make the best use of the museum's available resources. Several considerations guided the decision-making process: determining if compelling information about an artwork, piece, artist, or community was available; ensuring that the presentation of the information was interesting; ensuring the presentation of the codes was visually appealing and inviting; ensuring cross-platform compatibility; enabling the information to be easily shared; and ensuring the longevity of the project.

Dealing with the first issue was relatively straightforward: by examining our archives, our pre-existing audio tour tracks, videos with artists, and other material to which we had access, it quickly became clear which works were good candidates for a code. The second issue was more challenging. Using lessons we learned from blogging, we resolved to use media such as images, videos, and audio tracks on every page, rather than relying on text alone [Figure 9]. Instead of relying on our regular museum map, we made the decision to incorporate Google Maps satellite views when possible in order to give visitors a better

sense of the changing environmental terrain across the Arctic, as well as making the information more interactive. The Google Maps embed was also of significant importance specifically to Inuit art, since the collective works from a specific region tend to reflect environmental conditions and cultural difference among Inuit groups. Allowing people to discover where a piece was produced with the aid of an interactive satellite map courtesy of Google truly allows the visitor to get a greater sense of this connection and learn more about the environment that influenced the artist, directly or indirectly.

We made sure that underneath each code was a description of what content was available, should a user scan it. This allows users to truly tailor their experience and not get discouraged by codes whose content is not in line with their interests. We also realized that the codes would be of little use to anyone if they were incompatible with visitors' mobile devices, and so to ensure compatibility across platforms we chose a universal and open-source QR code generator that creates two-dimensional QR codes. Once the codes were created, we tested them with each major type of mobile device: an iPhone, an Android, a BlackBerry, a Windows Phone, and a webOS phone. Ensuring cross-platform compatibility also meant that we needed the websites to which the codes would direct visitors, and all the content they contained, to be compatible with mobile phones. The popular blogging framework WordPress automatically creates a full-screen, mobile-compatible and tablet-optimized version of a single web page, so we elected to create WordPress pages for each code. Using WordPress pages also neatly allows users to easily share the content, since sharing tools for a variety of Web 2.0 platforms are built into the site.

This also dovetailed into our strategy to keep the project easy to update: our staff was already familiar with WordPress because we host our blog on the site (museumofinuitartblog.wordpress.com), so creating new pages or updating the content of existing pages continues to be easy to accomplish. Also, using these freely available social web or Web 2.0 platforms means that our content is guaranteed to be accessible on any type of mobile phone device, whether a BlackBerry or an iPhone; these popular cloud-based content hosts, such as YouTube, Google Maps, and API, have themselves ensured cross-platform



FIGURE 10 The Aboriginal Voices Gallery.

compatibility with most mobile devices. For us, this means that any audio, video, map, or image will be accessible on any device. This is a serious issue when offering this variety of media in a mobile format: interoperability as well

as hosting costs can be significant stumbling blocks. These Web 2.0 sites allowed us, as a small museum, to create and host multimedia content on the web freely and to ensure visitors are able to access all of it, regardless of their device, and embed and share it on their own social media sites. This in turn allows more people to view the content and experience the museum's collection.

The implementation of QR codes also necessitated a strategy for helping our visitors feel comfortable using them inside the museum. This meant that the codes had to be visible enough that people would notice them. We also had to decide on appropriate places to display printed instructions on how to use the codes. Our instructional signs are now behind our front desk and inside the museum's first display cases. Training staff and volunteers on how to use the codes and a QR scanner app and on how to assist visitors with the technology was more difficult, but we accomplished it through focused meetings and one-on-one training. We also offer smartphone devices for visitors to borrow who do not have their own. Altogether, this means that on-site visitors can tailor their own experience, share that content, and return to it after their visit, while off-site visitors can access the same information without ever visiting the museum.

MIA's most recent development concerning the continual expansion and delivery of digital museum content built on previous successes seen with the QR code initiative is the inauguration of augmented reality (AR) . Over the summer of 2012, MIA staff began to explore the potential that AR could provide visitors. By incorporating AR, the museum is able not only to offer additional contextual information about Inuit artists and the works they create, but also to allow visitors to virtually place additional objects in the physical museum space and digitally expand the collection they saw during their visit.

The first AR project MIA developed was not for its permanent collection but rather for a new exhibition held in the recently constructed Aboriginal Voices Gallery [Figure 10]. This new space is an opportunity to feature First Nations



FIGURE 11 An instructional label that can be found throughout the *Christian Morrisseau: New Directions 2010–2012* exhibition which aids visitors in accessing additional content presented through augmented reality.

and Metis art in direct conversation with art made by Inuit. To illustrate one of the many connections art made by Inuit has with other Aboriginal groups, the first exhibition in the space, entitled *Christian Morrisseau: New Directions 2010–2012*, revolved around works by Ahnisnabae artist Christian Morrisseau, whose first painting sold to Indian and Northern Affairs Canada and

was presented as a gift at a treaty signing between Inuit and the Government of Canada. As the son of renowned artist Norval Morrisseau, Christian was trained by his father but over time developed his own stylistic identity, distinguishable from his father's through formal considerations about use of colour. This move away from his father's well-known style became very apparent during a three-year span, from 2010 to 2012, during which Christian produced the ninety-six paintings that comprise the New Directions collection. Due to the physical limitations the Aboriginal Voice Gallery presents, it was impossible to make the entire scope of Christian's work accessible to visitors who came into the museum; efforts to present as many paintings as possible led to a desire to present Christian's work digitally.

In partnership with Metaio, an AR development company who offered to host the museum's AR channel for free, MIA staff designed numerous scenarios where visitors could activate an assortment of additional digitized information, such as images, audio, and video, by scanning specific physical objects on display in the gallery. Using the free Wi-Fi the museum offers, visitors can simply download the free junalio app on their smartphone and open the unique MIA channel by scanning a single QR code with their mobile device's QR code reader [Figure 11]. Once the AR channel is launched, visitors only need to hold their phone up to one of the many paintings or additional didactic material on display in the gallery. The app instantly displays additional paintings, photographs of the series at different stages of development, and audio and video clips of interviews between the artist and Associate Curator Alysa Procida [Figure 12]. Because a single channel holds all of this content, visitors do not need to continuously look for tiny codes; instead, they can wave their phone across any surface to discover additional content.



FIGURE 12 Using the Junaio smart phone application a virtual version of a Christian Morrisseau painting overlays the physical marker found in the Aboriginal Voice Gallery.



FIGURE 13 Screen capture showing a virtual walk through of *The Unique World of Jessie Kenalogak* exhibition.

We chose augmented reality as the method to present this content because of its potential to contribute to our educational mandate by allowing visitors to freely choose their augmented experience. Though AR technology may sound intimidating to introduce, the creation of the channel was actually very straightforward, thanks to Metaio's Creator software, which does not require any coding. This meant greater flexibility for the museum to explore new avenues for access while also giving our visitors the option of experiencing this additional content. Incorporating AR alongside other methods of display was also an opportunity to clearly distinguish Morrisseau's art from the museum's permanent collection. Because the Aboriginal Voices Gallery is the only place within the museum where First Nations art is currently displayed, this additional interpretive material is very useful in giving visitors a more comprehensive understanding of its context.

The museum's virtual walk-through was inspired by Google Art Project, which transposes Google Maps' Street View function into several large institutions around the world [Figure 13]. The website will officially launch in December 2012 and was originally conceived for one special exhibition, *The Unique World of Jessie Kenalogak*. This was the artist's first exhibition, and despite repeated attempts, she was unable to visit the museum. We wanted her and her community to see the exhibition, so we created the walk-through to let them tour virtually. The museum is now planning to extend the walk-through to the rest of the museum so that off-site visitors, including Inuit in remote communities, can virtually visit us whenever they would like.



FIGURE 14 Virtual museum visitors can zoom in on a particular wall and select individual paintings for a detailed view.



FIGURE 15 A high resolution image opens when virtual museum visitors click on individual objects.



FIGURE 16 A screen capture from the Playing Favourites Wordpress blog entry featuring MIA volunteer Brian.

We made the walk-through as simple and as compatible as possible, meaning that it was coded in HTML, not HTML5, in order to be accessible with older browsers, and created using jQuery rather than Flash. The website also conforms to the museum's internal guidelines regarding web accessibility features. The instructions are simple—click and explore—and the site allows people to access our exhibitions at any time, from any place [Figures 14 & 15].

Finally, Playing Favourites is a running project in which visitors get their picture taken with their favourite piece inside the museum and tell us why it is their favourite [Figure 16]. Then, staff put the photo and answers on the project's dedicated blog (playingfavouritesatmia.wordpress.com), as well as Facebook, Flickr, and Pinterest pages, so that visitors can easily share them and others can see who visits the museum.

The project was originally intended to help extend museum visits for visitors, which it often does—many people will share their photo on different sites, and it is consistently one of our highest-rated projects. However, it was also created to provide a platform to bring together many different people by treating our objects as social

objects. Artist's family members have commented on several posts, adding additional information and wanting to engage in a dialogue with us and the visitor; visitors can also see how their favourites “stack up” against other people's choices. In many ways, this has been our most successful engagement technique because it neatly takes advantage of how people already use photos on the web.

Together, these projects provide varied points of entry for many different visitors, both on-site and off, by presenting information in different ways in order to be meaningful to different audiences. These educational projects have resulted

in much higher levels of visitor engagement across demographic categories and have provided means for many visitors to develop relationships with MIA.

In the end, all of our successful projects boil down to the following simple elements: creativity to work within our very real limits; adherence to our guiding principles; use of agile methodologies to identify areas of improvement early; and a commitment to our visitors.

All of these programs and projects have been created in-house by our education team and with the help of dedicated volunteers, and they take a high level of commitment to generate and maintain. Using agile methodologies, we are constantly retooling our programming and striving for more responsiveness. We hope that these examples and the ways in which we tackle these issues of access can help other small museums do the same.

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Hot Science, Cool Programs: Case Study of How Learning Works with McGill Science Outreach

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Abstract:

Science Outreach and educational initiatives address the gap between the university's science professionals, the expert researchers, the museum's science exhibits, and the general public. The newly created Science Outreach Division and its program operate out of the Redpath Museum, Canada's oldest Museum, and sustain a vital link between the university and the surrounding community. This paper will describe the framework and practice of the museum's most popular Science Outreach programs, developed specifically for the teen and young adult audience.

Since 2005 the science education and communication initiative known as McGill Science Outreach has taken bold steps toward changing conventional museum outreach programming, teaching, and learning in the Montreal area.

How did it start?

The kernel of McGill's Science Outreach was first planted at the Redpath Museum in 1993 with the creation of the bilingual Family Discovery Workshops / Les Ateliers-découverte. In 2005 the Dean of Science, Martin Grant, asked me to expand and develop the interactive public science programming coming out of the

museum, and to join it to the personnel and resources of the Faculty of Science at McGill University. He insisted that the Science Outreach be located in the museum and linked formally to the museum's successful public program, which included the Sunday Family Discovery Workshops and the school group visits. Although the museum is over 130 years old and the first public museum created in the country, it is far from outdated and stale. It remains a university museum of international status and quality, incorporates an active research program with a dozen full-time academic professors (about half of whom were appointed in the last five years), and seamlessly blends university research and teaching with outreach, hence making it a unique platform for enriched public science communication and dissemination, far beyond what a typical museum or science centre does. Dean Grant's seedling took a few years to germinate but has now grown into a wide canopy of outreach (and inreach) activities, events, lectures, workshops, and a weekly documentary film series that annually serves about 50,000 people.

What is the structure of McGill Science Outreach?

The McGill Science Outreach now integrates all aspects of the science faculty's interactions with the wider public into the following exciting programs:

- **Family Discovery Workshops / Les ateliers-découverte at the Redpath Museum** for young families who want to learn about science in a friendly, interactive setting
- **Hands-on Science in the Classroom**, where McGill educators provide curriculum-based science at local primary and middle schools
- **Hot Science, Cool Talks** by McGill scientists and professors for Montreal-area high school and CEGEP students
- **Mini-Science** presentations for lifelong learners keen on the latest science breakthroughs and developments
- **Super Science Docs**, which showcases critically acclaimed documentary films with scientific themes
- **Freaky Fridays**, where McGill scientists debunk myths and clarify misconceptions about science for the wider community

- **Cutting Edge** lectures in science that foster communication between scientists and the general public
- **Teachers' Resources** in the form of online, dynamic and downloadable science activities for classroom use
- **STARS**, a series of special lunch-hour talks for Faculty of Science support staff to bridge the gap between scientists and the people who work behind the scenes to support them.

How does McGill Science Outreach work?

Perhaps the one single defining initiative that shows the most “boldness” in terms of science outreach is the Freaky Fridays program where McGill scientists bust myths and clarify science on a monthly basis. Since 2006 this series of public discussions has confronted and debunked scientific misconceptions behind phenomena such as sea monsters, super volcanoes, UFOs, hallucinogens, genetic engineering, GMOs, and astrology. The goal of Freaky Fridays is to educate the public about the realities and limitations of science in an exciting discursive atmosphere with a scientific expert. Each Freaky Friday includes a popular science fiction, action, or horror film related to the given topic and almost all the Freaky Friday lectures are available for free download on the McGill podcast website (<http://podcasts.mcgill.ca/>), as well as on Apple’s educational portal, iTunes U. The most popular download to date is the Freaky Friday given by Dr. Amir Raz in March 2010 entitled “Magic, Hypnosis and the Brain.”

The initiative with the most sustained impact is the Family Discovery Workshops. Held on Sunday afternoons during the fall and winter and serving thousands of young families since 1993, these family-friendly science exploration opportunities retain the hallmark for discovery-based learning. As one parent from 2008 exclaimed:

The workshops are the best in town! The whole family participates and the crafts make us remember what we learned. I never realized that cephalopods could be so interesting and important.

In 2011 the bilingual Family Discovery Workshops attracted over 3,000 children, who attended with family members, such as parents, grandparents, and infant siblings, tripling the attendance to about 9,000 participants.

The other audience responsive outreach initiative, Hot Science, Cool Talks, sends McGill scientists to local high schools and colleges where students and teachers feel its impact. Here are a few appreciative comments Dawson College students made after listening to Dr. Ehab Abouheif's Cool Talk on bioengineering last year: "No Miss, no one would ever text during that presentation, it was too interesting!"; "He gave the audience choices of what we wanted to hear about!"; "His movies and visuals kept our interest, it wasn't just boring numbers."

There are over 200 Cool Talks titles available from McGill scientists in five different languages: English, French, Spanish, Russian, and German. Internal collaboration between the Science Outreach administrator and McGill scientists has led to a roster of ninety-two McGill scientists eager to give a Cool Talk about their scientific pursuits. The list of hot scientists who give these talks covers a span of prize-winning and well-respected astrophysicists, psychologists, earth system scientists, ecologists, and even a forensic trace element expert.

Cool Talks by these same McGill scientists are also available internally at McGill to inspire and enlighten science support staff at monthly "inreach" sessions called STARS (Science Talks about Research for Staff) talks. STARS helps to bridge the gap between scientists and people who work behind the scenes at the university. The monthly audience of between thirty and forty support staff includes lab technicians, database managers, administrative assistants, and advisors. A light lunch is served during the talk, courtesy of the Dean of Science.

The external audience for Cool Talks in 2011 numbered 2,225 high school and college students. They heard razor-sharp and enlightening presentations by twenty-four different McGill scientists from fifteen different departments in venues such as Marianopolis College, Vanier College CEGEP, Dawson College CEGEP, Pearson Adult Education Centre in LaSalle, and Lower Canada College in the suburb of Notre-Dame-de-Grâce (NDG). Hot Science, Cool Talks is managed by the Science Outreach administrator, who connects McGill scientists and experts with an audience that some consider underserved by the traditional museum.

How does Science Outreach collaborate and make cross-cultural connections?

Since 2010 the McGill Science Outreach educators have partnered with the Open Air Science and Technology Fair organized by the Lester B. Pearson School Board at St. Lazare Airport and provided hands-on demonstrations and activities for about 700 local school children on a hot day in late May. On the provincial level, and with funding support from the Ministère de la Culture et des Communications, the educators along with the museum's Exhibit Committee have produced new permanent exhibits at the Redpath Museum (with a grant in 2002) and in 2013 will develop video conferences for learners in the thirty-seven remote Community Learning Centres (CLC) spread across the province. On the federal level and with funding support from Heritage Canada, the Natural Science and Engineering Research Council (NSERC)'s PromoScience Program, and the Canadian Museums Association, they have produced three bilingual travelling exhibits which have circulated to hundreds of museums and nature centres across the country since 1992: High Diversity / haute diversité, Nine Frogs and a Toad / Neuf Grenouilles et un Crapaud (which is now permanently installed at the Ball's Falls Nature Centre in southwestern Ontario), and Wanted Alive: The St. Lawrence River Valley (which is now permanently installed at the EcoMuseum in Ste. Anne-de-Bellevue, Québec). At the municipal level the most delightful collaboration has been with Nuit blanche à Montréal, where the science outreach team along with the Redpath Museum Club student guides annually provide flashlight tours of the museum exhibits for over 3,000 visitors during a cold Saturday night in February. Now in their ninth year, Nuit Blanche flashlight tours still manifest a sense of wonder and awe for both the visitor and the guide as they explore the galleries and exhibits in the dark.

How does McGill Science Outreach demonstrate innovation in museum education and accessibility?

Most of McGill Science Outreach's innovation revolves around the guiding principles of constructivist and discovery-based learning. Today social constructivist learning theory foregrounds the domain of museum education (Falk & Dierking, 2002; Hein, 2000). According to this model, learning in the

museum is an active and interactive process that helps visitors understand the world by participating and questioning while scaffolding new ideas onto previous learning. In contrast, the early models of museum education relied on cognitive psychology and instructional technology (Miles, 1988) where learning was considered a product rather than a process. The McGill Science Outreach program follows the visitor-centred approach to learning in the museum and makes sure that every individual has a personal entry point (or points) to the museum setting and that each visitor scaffolds his or her social, cognitive, and emotional experiences at the museum to move from the individual stage to the collective or collaborative stage of learning. In the past, learning in a general sense was considered only a function of the final acquisition of knowledge. At the museum, the model for learning is constructivist in nature, occurs in the social context, and involves the learners' active participation (Falk, 2008; Hooper-Greenhill, 1995, 2004, 2006; McManus, 1989, 1993, 2000; Ravelli, 2006; Screven, 1976, 1986a, b, 1993, 1995; Serrell, 1996, 1997; Simon, 2010). It is not just another way of knowing, but a way of thinking about knowing. In this theory of learning, each listener or reader will potentially use the content and process of the teaching in different ways. There are many constructivist perspectives, and the common theme that unites these views stresses that learning is an active process, unique to the individual, and consists of building conceptual relationships and meaning from information and experiences already in the learner's repertoire (DeZure, 2000; Falk & Dierking, 2000; Hein, 2006).

At McGill Science Outreach we put these principles into practice by developing our teaching scripts and our teacher's resource kits to fit personal and social learning paradigms. We verify and authenticate the content with McGill scientists and educators, and then we prototype the teaching materials (Diamond, 1991) and the narrative scripts with small formative testing situations at local schools and libraries and within the museum. For instance, in 2010 we held prototype science demonstrations for about 200 professional scientists at the meetings of the Canadian Society for Evolution and Ecology in Quebec City. In 2008 the Let's Talk Science group asked us to present a panel

at their 2008 annual meeting about interactive science teaching techniques. As the Science Outreach administrator, I have given demonstrations and prototyped presentations for the teachers-in-training enrolled in the McGill Faculty of Education's Elementary School Science core course as well as the students in the popular elective course "Museums and Science."

How is Science Outreach responsive to the public's learning needs?

In the last two years the Hands-on Science in the Classroom presentations have introduced over 8,000 primary and middle school students to dinosaur bones, fossils, volcanism, earthquakes, rocks and minerals, shelly creatures, and skeletons. In 2011 the Science Outreach educators provided dynamic science learning in both official languages to over forty different schools on the island of Montreal and in the outlying suburbs of Dollard-des-Ormeaux, Bois-des-Filion, St. Leonard, Pointe-aux-Trembles, St. Lazare, Pincourt, Beaconsfield, LaSalle, Kirkland, Montreal West, Ormstown, Longueuil, Mascouche, and Lachine. They also served hundreds of families with the "hands-on science" approach via local libraries in the communities of Brossard, Beaconsfield, Pointe Claire, Dorval, and Côte St. Luc. For the last two years there has been a marked interest in Hands-on sessions about evolution and mineralogy because these topics have been introduced as part of the new reformed Quebec high school curriculum, so we developed a geological handling and identification kit entitled Minerals Rock! / Les minéraux? Rochants! Available free for classroom use, this kit features a selection of eighteen rock samples, a Guide to Mineral Identification, identification cards, and tools such as magnets, hand lenses, and scratch plates that have been prototyped since the summer of 2011 in local schools and at the Montreal Gem and Mineral Show. The introductory bilingual slide show for Minerals Rock! is available for free download on our Science Outreach website. The aim of this kit was to explore ways in which teachers and students together could be encouraged to make greater use of mineral and rock samples from McGill to enhance learning about geology and mineralogy. It was developed over a one year time period with funding support from NSERC's PromoScience program.

Are McGill Science Outreach's programs replicable?

Since the spring of 2011, the Discovery Workshops developed at the Redpath Museum have been replicated in the municipality of Westmount, Quebec, via thirty-six Saturday Science Workshops held during the fall, winter, and spring seasons. This informal science program serves about seventy young families every Saturday morning and has been in turn replicated as an enrichment activity at a school in the suburb of Montreal West. With the assistance of one of the museum's Science Outreach educators, a suite of eight lunch hour Hands-on Science presentations were provided for the students at Edinburgh School. This became an exciting part of their enrichment education and will be repeated in winter 2013. Teachers themselves can replicate the interactive science teaching methods and approaches by using the online Teachers' Resources. They can access virtual exhibits about Canadian biodiversity, amphibians, insects, minerals, and Quebec fauna (www.mcgill.ca/redpath/exhibits/web/) which were developed in consultation with McGill biologists, geologists, and ecologists to address the need for more accurate and relevant educational resources about minerals, rocks, evolution, ecosystems, paleontology, and endangered spaces and species. Teachers can download the abbreviated versions of two booklets about Montreal's fossils and building stones (www.mcgill.ca/redpath/ressources/buildingstones/about_geological_structures) or use a math activity sheet based on tree measuring (www.mcgill.ca/files/redpath/Trees.And.Math.pdf). Over 700 hits are recorded daily at the Teachers' Resources page, and educators from as far away as Philadelphia, New York, British Columbia, and England contact us for advice and consultation about utilizing these materials in the classroom.

What has McGill Science Outreach accomplished?

The broad scope of McGill Science Outreach has increased awareness of the museum and helped visitors to change their understanding of science, rather than simply teaching them specific facts and information. McGill scientists who give the Cool Talks for Science Outreach are well-received and enjoy this opportunity to extend their promotion of scientific concerns beyond the university. According to Dr. Bill Minarik, the Director of McGill's Geochemistry

and Laser Ablation Mass Spectrometry program, “these presentations generate lots and lots of questions! ... I think they are invaluable for stimulating interest in the Earth Sciences.” In turn educators at the college level are impressed with the strength and appeal of McGill science. After Dr. Andrew Hendry’s presentation at Dawson CEGEP an appreciative teacher wrote, “I have seen my fair share of seminars as a graduate student, and as an organizer.... I can honestly say that few (if any) have matched yours for giving a clear and comprehensible presentation on the subject.... I think that I have finally been given a glimmer of understanding of how evolution, as a process, manifests.”

Since 2007 there has been a marked interest for Cool Talks which address pressing concerns such as global warming, ecological sustainability, and alternative energy, and teachers have expressed their appreciation for the understanding that McGill Science Outreach provides. As one teacher exclaimed, “Dr. Mysak was exactly what we needed to clear out the cobwebs about global warming. He was here yesterday and the students are still talking about it.”

At the museum tour guides and other educational staff introduce visitors to the exhibit contents, interpret material that they love, hate, or have a personal connection with, and motivate dialogue and relationship building. The entire museum experience has become a participatory exchange for both learner and educator, and Canada’s oldest museum is a social place, full of interesting, challenging, enriching encounters with other people, sounds, sights, objects, and words. The learning that happens at the Redpath Museum is driven by curiosity, discovery, free choice, and the sharing of experiences between learners. The overall summation of what we have learned from McGill Science Outreach echoes Tunnicliffe’s definition of the educational process:

Information is one of the necessary tools for education but the manner in which the new learning of information is introduced, how the learner is aided in constructing meaning from the new information, and how the learner conducts a dialogue with the self are at the core of educational process. (2001, p. 28)

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A Mini-Museum Outreach Program Tailored to a Unique Audience

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Abstract:

This paper describes the development and implementation of a volunteer-based mini-museum outreach program which the Royal Ontario Museum (ROM) has been operating this past year in partnership with Ronald McDonald House (RMH) Toronto, the largest of these facilities. Although the ROM's situation is unique, the information and ideas presented here will be applicable to outreach ventures that any museum is likely to undertake.

Introduction

The need for outreach programs at the Royal Ontario Museum (ROM) grew, in part, from the realization that not all of our audience are able to attend the facility itself. This includes children undergoing medical investigation and treatment and their families, who are attending to their care.

This paper describes the development and implementation of a volunteer-based mini-museum outreach program, which has been operating this past year in partnership with Ronald McDonald House (RMH) Toronto.

Since 1981 Ronald McDonald House Charities Canada has grown to operate thirteen “homes away from home” across the nation for families of

children who must temporarily relocate to receive health care. Recently, the Royal Ontario Museum's Community Access Network (ROMCAN) has partnered with Ronald McDonald House Toronto.

The new Toronto facility accommodates eighty-one families per night, with families staying an average stay of forty-three days.

Special Requirements for Working with Vulnerable Populations

In order to participate in museum-based programming with these families, our outreach volunteers had to meet certain requirements. They had to

- submit a police check—the cost of which is reimbursed through the ROM's Department of Museum Volunteers (DMV).
- become RMH volunteers.
- attend free workshops on themes such as “The Psychosocial Impact of Illness on Families” and “Setting Limits and Boundaries with Families” in order to improve skills in dealing with this vulnerable population
- come to events only if healthy to avoid transmission of disease.
- adhere to infection control guidelines by keeping hands clean before and during working with the children and their families.
- avoid the use of any recycled material, while doing craft activities, that might be infectious, such as toilet paper rolls, egg shells, and egg cartons, as participants may have impaired immune systems.

Who are the Families?

Residents of the Ronald McDonald Houses across Canada come from all social and economic backgrounds and all cultures and nationalities. They include children eighteen years of age or younger who are battling a life-threatening disease or serious illness, their parents or legal guardians, and their siblings.

Many participants are young families who are new to major life crises and who find themselves living in a community defined by illness. These families are like “fish out of water” who may not connect well with each other.



In November, 2011 the largest Ronald McDonald House in the world opened in Toronto on McCaul Street near the city's major hospitals. Credit : Barb Magee

With regard to the vulnerable situation of these families, the mini-museum program volunteers need to be aware of issues of sensitivity and privacy and abide by these rules:

- do not take photographs during the event
- do not ask about the child's situation or offer advice
- use gender neutral language
- avoid the topic of death and burial (e.g., mummies)
- treat the families as any other group

The Mini-Museum Program in Action

Themed programs are delivered six times per year by six volunteers per session. The themes, such as Ancient Egypt and Awesome Animals, are based on the Museum's permanent and blockbuster exhibits. A minimal budget of \$25.00 per event is supplemented with free loan of ROM Edukits and the sharing of resources with other outreach programs. Tables, chairs, some craft supplies, and internal publicity are provided by RMH.

The program is located in the Family Lounge, near the front door of RMH, where the traffic flow is the greatest and easily seen by families who may not have heard of the event beforehand. Lasting ninety minutes, the mini-museum takes place on a Sunday afternoon to avoid conflicts with medical and school activities.

Program development involves identifying six activity areas based on the given theme, connecting with curatorial staff regarding content, reserving

touchable artifacts and Edukits, developing signage, assembling the volunteer team, and scheduling a meeting to prepare activities in advance. Monitoring attendance and evaluating the program after delivery are integral to the continued development of each mini-museum.

Challenges the program has encountered include programming for all age groups (toddlers to seniors), ensuring quality museum content, dealing with fluctuating attendance (events have varied from thirteen to fifty-seven participants), completing paperwork for removal of museum artifacts for displaying on touch tables, and striking a balance between entertaining and educating.

Summary

Museums are encouraged to look for outreach opportunities in their own community. Determine who cannot come to your facility. Can you go to them?

Take what others have done, including resources for programming on museum websites, and adapt it to suit the needs of your participants. Be aware of any special requirements your museum and its community might have, and try to offer something for everyone. Remember that programming is a process that requires review. Revise your program as you develop a better understanding of the needs and situations of the community you are trying to reach.

Community “InReach”: Adapting Principles from the Ecomuseum Model to Deliver Accessible Programming in a Rural Community

Meredith Leonard, Visitor Services Coordinator, St. Catharines Museum and Welland Canals Centre

Abstract:

To improve public access to its collection and its associated educational activities across a largely rural area, Fort Erie Museum Services has embraced principles from the ecomuseum model as institutional goals. First and foremost among such principles are operating a “fragmented site,” using a network of museum and exhibition spaces throughout the town, and forming strong and lasting community partnerships to foster and expand exhibition and education programs, both in the museum buildings themselves and as “outreach” initiatives in the community. Additionally, incorporating significant volunteer contributions with a strong desire to reflect the identities of the local populace, Fort Erie Museum Services has found many opportunities, inspired by ecomuseum philosophy, to provide increased public access to museum offerings in a rural community.

Small community museums, especially those serving rural populations, face special challenges in making their programming—inclusive of exhibitions and educational activities—accessible to the communities they serve. Where populations are spread over a wide area and have limited transportation

options, museum events and exhibits can prove difficult for some visitors to access. Added to this challenge is the setting of the museum itself; frequently, community museums are housed in small, historic buildings, which can compromise accessibility and which often leave museums with little space in which to stage exhibitions.

To meet these challenges, Fort Erie Museum Services has progressively employed principles from the ecomuseum model, in both its Heritage Master Plan and its everyday activities, to create a more accessible, dynamic museum experience for residents of Greater Fort Erie.

Emerging in the 1970s, the concept of the ecomuseum—or ecomusée—was put forward by Georges Henri Rivière and Hugues de Varine. The so-called “Rivière definition,” as noted in de Varine (2005), linked the concept of the ecomuseum to a specific territory as well as to the strong involvement of the local community in such a venture (p. 53). Elucidating this definition at a 1972 ICOM seminar, Rivière emphasized connections between the ecomuseum, its local population, and visitors to the site:

An ecomuseum is an instrument conceived, fashioned and operated jointly by a public (for example, local) authority, and its local population...It is a mirror in which the local population views itself to discover its own image, in which it seeks an explanation of the territory to which it is attached and of the populations that have preceded it...It is a mirror that the local population holds up to visitors. (Rivière, 1985, quoted in Maure, 2005, p. 70)

Further to this definition, de Varine stressed that “a true eco-museum, like a true community museum, is essentially and at its best a museum which contains and reflects a double input, an input from the community itself and an input from outside advisers.” ([http://www.assembly.coe.int/Museum/ForumEuroMusee/ Conferences/tomorrow.htm](http://www.assembly.coe.int/Museum/ForumEuroMusee/Conferences/tomorrow.htm)) While de Varine acknowledges that ecomuseums can, and do, exist in many countries, he notes that in many cases, a connection exists between the creation of ecomuseums

and economic development, especially from socially and environmentally responsible tourism. The pioneers of the ecomuseum philosophy were well aware that ecomuseums, responding to local circumstances as they do, could be neither uniform nor static; as de Varine notes, “the whole point of a community museum is that it does what the local situation demands. The situation is constantly changing and the community museum should possess sufficient flexibility to respond to these changes.” (<http://www.assembly.coe.int/Museum/ForumEuroMusee/Conferences/tomorrow.htm>)

Thus, many definitions have emerged to attempt to describe the work and philosophy of ecomuseums, and while one universal definition can prove elusive, for the purposes of this paper, I will use the one put forward by the European Network of Ecomuseums in Corsane et al (2009): “An ecomuseum is a dynamic way in which communities preserve, interpret, and manage their heritage for sustainable development. An ecomuseum is based on a community agreement.”

While definitions and methods of their application do vary, key tenets of this school of thought remain fairly consistent. Scholar Peter Davis enumerates the core elements of the ecomuseum: a “sense and spirit of place, through a holistic approach to heritage resources in their environments, community involvement and public participation [and that the] ecomuseum ideal should be responsive to unique contexts.” Additional generally accepted characteristics of the ecomuseum model include a fragmented network of museum sites, an interdisciplinary approach, attention to both tangible and intangible aspects of local history, local community involvement, the development of partnerships, and sustainable development (Davis, 2011).

A wholesale application of the ecomuseum model is uncommon in a North American setting, and indeed, it is not wholly compatible with established, accepted standards for Canadian museums. However, concepts and lessons from this model can be incorporated in order to create accessible, educative opportunities, especially in rural communities.

In an effort to be responsive to local needs, while still working within the limited means of a small rural community museum structure, Fort Erie

Museum Services incorporated elements of the ecomuseum model into its organization. Chief among these ecomuseum principles are a fragmented network of museum sites, collaborative efforts and partnerships, substantial volunteer involvement, and contribution to both a sense of place and cultural identity for local residents; these principles frequently resulted in museum work moving outside the physical walls of museum sites and directly into the community.

Fort Erie's Cultural Heritage Millennium Plan, a document compiled with the aid of public input, surveys, and focus groups, changed the focus of Museum Services delivery toward an ecomuseum model. The Cultural Heritage Plan emphasized the participation of all of Fort Erie's citizens, community creativity, and the pursuit of growth and prosperity through culture and heritage initiatives, while raising public awareness and expanding the confidence of the community. Greater access was another goal of this service delivery model, as was increasing cooperation from varied segments of the community (Jane Davies, personal communication, October 2012).

A Sense of Place

Greater Fort Erie is set on the shores of the Niagara River and Lake Erie, directly bordering the United States. The town is an amalgamation of a number of different communities, including Crystal Beach, Ridgeway, and Stevensville, and encompasses a wide area—166.24 square km. According to the 2011 Census, 29,960 people call Fort Erie home, a number that does not account for seasonal residents—a largely American population that resides along the lakeshore during the summer months. Like many Ontario towns, Fort Erie has faced periods of economic downturn, with the closure of the local horseracing track and slots being the most recent cause of economic difficulties. While the town encompasses a large area, many sections are classified as rural and sparsely populated. There exists no comprehensive public transportation system in Greater Fort Erie, and, as is common in many towns, student enrollment in schools is declining while the senior population continues to increase. The demographic makeup of the Town of Fort Erie

has some definite challenges; many other small communities in Ontario face similar circumstances.

Given the local population and its distribution, Fort Erie Museum Services Administrator/Curator Jane Davies established an organizational direction that emphasizes providing community services through ecomuseum principles, including a fragmented network of museum sites, along with partnerships and volunteer efforts designed to enhance access to the museum and extend its presence in the community.

A Fragmented Network of Museum Sites

Fort Erie Museum Services consists of the Fort Erie Historical Museum, the flagship museum site, open year round and housed in the 1874 Bertie Township Hall; the seasonal Fort Erie Railroad Museum; the open-air Battlefield Site; a dedicated storage facility (not usually open to the public); and a permanent exhibition space, the Mewinzha Gallery and Interpretive Centre, located in the lobby of the Buffalo and Fort Erie Public Bridge Authority administration building. Temporary exhibition spaces at Fort Erie Town Hall and branches of the Fort Erie Public Library make more of the museum's collection accessible to the public on a rotating basis. This network of sites is a key way to increase accessibility to the collection and to educative opportunities that accompany museum exhibitions while encouraging community involvement and partnerships (both formal and informal) to create a larger number of satellite sites than would normally be possible.

A prime example of ecomuseum principles in practice is the Mewinzha Gallery and Interpretive Centre, a partnership between Fort Erie Museum Services, the Buffalo and Fort Erie Public Bridge Authority, Archaeological Services, Inc., the Fort Erie Native Friendship Centre, and the Town of Fort Erie. Located in the lobby of the Buffalo and Fort Erie Public Bridge Authority administration building at the Peace Bridge, the small gallery space, which formally opened in 2006, combines archaeological artifacts excavated from the Peace Bridge site with contemporary First Nations art, commissioned especially for the space. Called one of the richest sites in North America

by archaeologists involved with the project, the Peace Bridge became the site of a full-scale excavation in advance of a new building project. The excavation yielded an incredible and unique collection of artifacts, dating largely from the Genesee Period. Cognizant of relationships with the local community, archeologists carried out activities on the site in consultation and cooperation with the local First Nations community. This cooperation enriched the resulting gallery and interpretive spaces for all project participants and ensured cultural sensitivity. The community was involved in the project through special exhibitions at community events, a lecture series incorporating local and expert knowledge, and an emphasis on heritage both tangible (the archaeological artifacts themselves) and intangible (their stories, histories, and connections to spirituality). While Jane Davies and Fort Erie Museum Services were certainly the driving forces behind this initiative, the project had many champions in the community, stirred to action by the opportunities to engage with the project as well as by the benefits it afforded the community. This important history was made accessible to the public in a variety of ways, and both local residents and visitors to the community were exposed to the collection and the learning opportunities and new understandings that it affords.

In addition to the Mewinzha project and other satellite museum spaces, a series of small-scale travelling exhibitions have been designed for and utilized at a variety of local events (including the Friendship Festival and Ridgeway Fest, a community street fair). Programs from a millennium time capsule to an interactive archaeological dig and exhibit about the excavation at the Peace Bridge site have reflected community needs and interests. Most recently, an exhibition entitled *Divided Loyalties*, chronicling border town life and cross-border relationships during the War of 1812, circulated to community festivals as well as Town Hall offices. This program of travelling local-themed exhibitions allows Fort Erie Museum Services to reach out to populations who might not otherwise be inclined or able to visit the physical museum site while providing opportunities, beyond the limited formal exhibition space, to get the collection (or artifact facsimiles) out of storage

and make it available for community consumption. By staging such exhibitions at a variety of locations, the museum creates opportunities for a variety of learners to engage in textual, visual, and interactive experiences in new and even unexpected ways.

Education and the Ecomuseum Model

To expand museum educational activities, Fort Erie Museum Services, with the help of community partners, applied the ecomuseum model detailed above to stage learning events within the larger community. Such events, many undertaken to respond to an expressed community interest, allowed Fort Erie Museums to provide educative access for greater numbers and opportunities to engage a rather widely distributed population. By making these events larger and not necessarily set in formal museum spaces, Fort Erie Museum Services offered non-traditional audiences, who may not normally be inclined to participate in a typical museum experience, a different, enticing opportunity for learning about local history. Moving to a more people-centric model of educational programming offered Fort Erie Museums a host of new opportunities to reach out to its community.

Fort Erie Museum Services offers traditional outreach opportunities to schools and community groups, inclusive of museum-staff-lead presentations and lending of educative materials (such as travelling education kits and historic costume rentals). However, to reach other populations in the community, larger scale undertakings are required—and can be realized with the assistance of community partners and substantial volunteer efforts.

One such undertaking was the Spring 2012 “Fashions of 1812” show, which highlighted historical fashions of the Fort Erie of 200 years ago while providing educational information on how these clothes were made and the history of fashion. This event came about as a response to the community’s expressed interest in learning more about civilian life in their community during the war. This event produced interested and engaged participants and is an example of the kind of democratic grassroots impulse yielded by an ecomuseum approach.

The Fashions of 1812 event found a wonderfully compatible partner in the Bowen Road Women's Institute's ROSE Program. ROSE (Rural Ontario Sharing Education) is a primary function of the Women's Institute and a significant part of its 115-year history. ROSE programs "provide education to help build stronger families and vibrant communities." Driven by membership and community needs and wants, the ROSE program has many characteristics in common with ecomuseum philosophy and thus was an excellent partnership fit for Fort Erie Museums. The Federated Women's Institutes of Ontario note that the ROSE initiative "is driven by WI Members who often work with local community organizations and businesses to increase awareness, provide support and promote community action." (<http://fwio.on.ca/AboutROSE>) ROSE sessions are flexible and responsive to the community, and thus they can address a wide variety of topics—and have throughout Women's Institute history. The organization notes that a ROSE session "is any educational event hosted by a Women's Institute that involves the public". (<http://fwio.on.ca/AboutROSE>)

Many additional community resources and funding sources came together to stage the fashion show event. The Fort Erie 1812 Bicentennial Committee contributed to promotion efforts, while volunteer models, hailing from the Women's Institute, Fort Erie Museums, or the community at large, walked the runway in the People's Memorial United Church hall space. A local musician and teacher contributed period music, while a local catering company generously provided period-correct snacks. The period costumes themselves were reproductions made from historic patterns by a museum volunteer, who also contributed her vast knowledge of the Regency and 1812 period to the research efforts for the show. A good example of ecomuseum principles in action, these contributions represent the incorporation of a variety of sources of knowledge into the event.

This collaborative effort between museum staff and volunteers, the Women's Institute and the local community produced an event that more than 150 ticket holders came out to experience on a spring Saturday, with a sold-out afternoon and evening production. This number may not sound

all that monumental at first glance, but given limited space at the physical museum buildings, had the event been staged at the museum itself, tickets would have been limited to fifty or less—in total—for both an afternoon and an evening show. Furthermore, the number of fashion show participants would have been significantly reduced; all told, more than twenty-five models—men, women, children, and teenagers—had the opportunity to walk in the shoes of residents of their town from 200 years ago.

A core element of the ecomuseum model is community empowerment; members of the Bowen Road Women’s Institute expressed a desire to execute this history-based project in another format—a fashion road show. In cooperation with museum staff and with the guidance of local subject-matter experts, they responded to disappointment expressed by local citizens who missed the show (many seniors were unable to make an evening performance) and put on another, albeit, scaled-down, version of the show at a subsequent Women’s Institute regional meeting in nearby (and decidedly rural) Wainfleet. Encouraged by the enthusiasm and continued contributions of community partners and volunteers, another segment of the community who might not otherwise have been able to experience the Fashions of 1812 event had this unique learning experience come to them. In order to respond to the community’s expressed interest in local history and civilian life during the Regency period, we altered the educative content that accompanied the fashion show to include new details, giving other community members opportunities to interact with the historical clothing and the stories it holds. Our enthusiastic Women’s Institute partners wanted to share this resource and experience with other communities, and with museum support, they once again took the show on the road, this time to the nearby Niagara Historical Society and Museum in Niagara-on-the-Lake. As one of the volunteers noted, the historic costumes certainly took on a life of their own!

Beyond the touring fashion show, expressed interest in Regency clothing yielded a town-full of “fashionable” learning opportunities, expanding exposure to Fort Erie Museums’ collections and learning opportunities. The demand for programming around historical fashions, which resulted in the

realization of the Fashions of 1812 event, grew out of the Museum's special capsule exhibition at the Fort Erie Historical Museum, *Regency Fashion: What Fort Erie Wore in 1812* as well as an outreach display at Fort Erie's Town Hall, *What to Wear in 1812*. With the announcement of the fashion show event, interest in the topic continued to grow, so much so that we temporarily installed four additional outreach exhibitions, based on the fashion and daily life of Fort Erie's early settlers, at branches of the Fort Erie Public Library. From children's clothing to accessories to a small selection of Museum Services' jewelry collection, the Town of Fort Erie saw parts of the collection that the Fort Erie Museum could not normally display, and the community was exposed to learning opportunities in new locations. Following the fashion show and its road show version, the 1812 event script morphed into an informal lecture that museum staff delivered at other sites throughout the community.

Beyond Education and Exhibits: Further Applications of Ecomuseum Philosophy

The body of this paper addresses only a handful of examples of the ways in which Fort Erie Museum Services has employed the ecomuseum philosophy in their delivery of educational and exhibits programs. There are enough examples of the ways in which museum staff have delivered their services outside of the physical walls of the museum and engaged the community to fill many papers. But a few examples are listed here to provide some context of the breadth and depth of the organization's commitment to core ecomuseum principles.

Interpreting the history of the Town of Fort Erie is a core function of the municipal museum services department, and as often as possible, interpretation is located in situ at various historic sites. Two of the most recent examples include the upcoming interpretive signage project at the open-air Battlefield Park (of Fenian Raid notoriety), funded in part by Farm Credit Canada, and the 2011 unveiling of outdoor panels, located alongside park ruins on a local trail, telling the story of Erie Beach Amusement Park. Encouraging different research inputs and gathering community histories through an interdisciplinary approach has taken a number of forms in recent

years; one of the most successful examples is the Fleet Aircraft Committee, who meets weekly at the Museum's collection facility to record their knowledge about Fleet-related artifacts and archives as well as share their memories with this group of past employees. Oral history interviews with this committee (and other Fleet employees) were included in the Museum's 2010–2011 exhibition *Journey of an Artifact*.

An ongoing project designed to include the history of Greater Fort Erie's summer residents, entitled *Life on the Lakeshore*, gathers archival and audio-visual materials for the museum's reference files from community members at local events and gatherings. With many families who have lived on the shores of Fort Erie in Point Abino, Bay Beach, and Crystal Beach for generations now selling properties, Fort Erie Museum Services identified documenting the stories and experiences of this population as an important component of understanding the history of the town over the last century.

In an effort to bring the museum and Fort Erie's history directly into the community, Fort Erie Museums installed small-scale exhibitions in empty storefronts along a main street in Ridgeway over a holiday season. Such installations brought reproductions of many unseen archival photographs into public view, while moving history into a well-travelled and public place, making it more easily accessible.

Fort Erie Museum Services' partnerships and volunteers contribute to a wide variety of museum activities beyond educational programming and exhibitions—everything from cataloguing, collections management, and conservation work, to research, publishing, and collection development. Fort Erie Museums has and continues to cultivate many community partnerships, with everyone from local businesses, such as Fleet Aircraft, the Buffalo and Fort Erie Public Bridge Authority, and Williams Funeral Home, to community groups and committees, including the Women's Institute, the Bertie Historical Society, and Communities in Bloom. Fort Erie Museum Services has worked with the local Native Friendship Centre, elementary and secondary schools, and local business organizations in the community of Ridgeway. Volunteer contributions to the organization have been substantial from the outset.

of the municipal museum network; in fact, 2011 marked forty years of regular volunteer service for two of the museum's cataloguing volunteers. Complementing the work of the small staff, committees of museum volunteers meet weekly to aid in cataloguing and in assisting researchers from the general public, and a volunteer "unpacking" committee aided greatly in the museum's move to a dedicated storage facility. Local authors contributed to the writing of *Many Voices I* and *II*, a comprehensive history of the community. They focused on aspects of Fort Erie's history that they had first-hand or specialized knowledge of, thus contributing to the greater historical consciousness of the town. Museum volunteers regularly conduct informal oral history interviews with notable residents, including harness racing great William "Buddy" Gilmour. The information garnered in such interviews represents a variety of "inputs" into historical research and is a valuable addition to the community's archives.

Employing such ecomuseum principles as a fragmented network of museum sites, collaborative efforts and partnerships, substantial volunteer involvement, and making contributions to both a sense of place and cultural identity for local residents, Fort Erie Museum Services has found ways to respond to local needs, while still working within the limited means of a small rural community museum structure. The Fashions of 1812 event discussed in this paper is but one example of how to make museum educational programming accessible across a rural population; the complementary exhibitions and other programming that came out of this event illustrate how one community event can grow into others, drawing on a grassroots desire and given a wide cast of contributing partners and substantial volunteer efforts. By working with the museum's community to identify an event that held significant public interest, making local and meaningful connections, and packaging the learning experience in an unexpected and easily accessible way, Fort Erie Museums was able to create an event with staying power in the community and provide services to new and previously untapped audiences.

Ecomuseum philosophy can provide community museums with an effective organizing principle for either the entire institution or, at least,

particular departments within said institution. As noted, implementing an ecomuseum model wholesale in the context of the Canadian and Ontario museum community may not be an entirely practical undertaking, but lessons and inspirations from ecomuseums can be effective tools for the creation of accessible educational and exhibition programs in community museums.

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A Teaching Tool for a Tough Topic

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On behalf of the Africville Heritage Trust

Abstract:

At the end of January 2012 the Department of Education signed a Memorandum of Agreement with the Africville Heritage Trust to purchase an Out Home: Africville Education Resource Kit for every elementary school in Nova Scotia, providing all elementary school teachers across the province with the knowledge, practical tools, and the voice to safely navigate the landscape of racial discrimination with their students through a series of activities that foster empathy, cultural understanding, and a sense of empowerment. These activities are based on a real story that happened not that long ago.

This paper is my story about the creation of the kit, about the research, design, testing, and fabrication that went into it, and about the collaboration that made it all possible: collaboration with a dedicated and generous team of women who shared their stories about the destruction of their community of Africville; with consultants and technology staff at the Department of Education who guided and encouraged me; with teachers and students who tried things out; and with a host of community partners who became ever more committed to the project as they learned the story.



FIGURE 1 Africville c 1965

Credit: National Archives – Ted Grant Collection

Museums inhabit a special place in the field of education. With our primary sources, our research skills, and our commitment to experiential learning, we are in a position to be of great value to teachers, particularly when it comes to teaching difficult or complex material.

In 2006, after a long career as a museum educator in Ontario, I moved to Nova Scotia, where I have been working as a consultant for various museums and heritage organizations. Nova Scotia is a fascinating province with deep roots to a rich and diverse heritage, and the projects I have worked on have been immensely rewarding. Undoubtedly, the most engaging of these has been a project I began in 2009 with the Africville Heritage Trust to create a curriculum-linked teaching resource based on the story of Africville.

The story was new to me and far from my own experience, and I was hesitant at first. But as museum educators, we are familiar with the challenge of finding ways to present an authentic narrative voice, and so I set about my research. I worked with a team of people who had lived (and continue to live) this story, and it completely captured my heart. I came to understand that the issues represented by Africville make it everyone's story. [Figure 1]

A report written in 2003 by Mr. Doudou Diène, the Special Rapporteur for the United Nations Commission on Human Rights Mission to Canada, captures the story concisely.¹

In it he wrote,

Africville was one of a number of settlements of Blacks who came to what is now known as Nova Scotia. [The] community dating back to the 1700s was situated on the shores of Bedford Basin within the City of Halifax. One of the first purchases of property deeds [was] recorded in 1848.

For many years about eighty families lived and worked in a self-reliant community, on their own property.

The period between 1913 [and] 1973 saw industrial growth at the expense of the residents of Africville. A bone-meal plant, a cotton factory, a rolling mill/nail factory, a slaughterhouse, and a port facility

¹ Excerpt from Report by Mr. Doudou Diène, Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance for the UN Commission on Human Rights – Mission to Canada 2003

for handling coal were built within earshot of residential homes.

In the 1950s, the city dump was moved to within 100 meters of the westernmost group of Africville homes.

By 1915, the city had made explicit their intention to use land occupied and owned by the people of Africville for industrial expansion.

By 1960, Halifax had embarked on an urban renewal campaign, which would forcibly displace the residents of Africville in order to make room for that expansion.

After 150 years of collusion between the provincial Government and the business community, including abuse of power, neglect, encroachment and invasion of hazardous industrial materials, in 1970 all of the community was forcefully removed without proper compensation.

I will add that the City tore down all the homes and the church and turned the land into a dog park the City called ‘Seaview’ which had been the name of the Africville Baptist Church.

The report further stated that “the case of Africville is emblematic of the past condition of people of African descent in Nova Scotia.” And recommended that “In consultation with communities of African origin or their descendants, the Government of Nova Scotia should re-examine the conditions of their relocation, particularly from Africville, taking particular account of their situation regarding human rights and economic and social conditions with a view to granting them reparation.”

In 2002 Africville had been declared a National Historic Site, but Diène’s report and recommendations the following year saw no direct response from government. However, throughout the years a group called the Africville Genealogy Society (AGS) had been working hard to keep the story alive with publications, exhibitions, and an annual weekend gathering at Seaview Park, the site of the original community of Africville.

The dream of the AGS was to obtain a public apology, to reconstruct the church that had been the heart and soul of the little community, and to build



FIGURE 2 Opening of Church at Africville September 2011

Credit: Sally Warren

an interpretive centre on the property adjacent to the church. The Africville Heritage Trust was created to oversee the project, and by the time I was engaged in 2009, a strategic plan and feasibility study had been completed, as had been a draft interpretive plan for an exhibition to be installed in the church: a first step toward the larger interpretive centre. No sod had yet been turned.

In February 2010 Mayor Peter Kelly, on behalf of the Halifax Regional Municipality, delivered a formal acknowledgement of loss and apology, along with a negotiated settlement with the people of Africville that included the transfer of land for the building of a church replica and an interpretive centre, financial support for capital construction and endowment, an employment contract for maintenance of Seaview Park, the renaming of Seaview Park to Africville, and the establishment of an African Nova Scotian Affairs function within the municipal government. [Figure 2]

The construction of the church began, and on a gorgeous sunny day in September 2011 the building was officially opened. The exhibition was installed during the following winter and was opened to the public in July 2012.

The more I learned about Africville, the more profoundly aware I became of the potential this story had for engaging students in discussion around issues of social justice. This was a fantastic opportunity for a museum to support the school system in teaching those things that are often viewed by teachers as tough topics.

Knowing that whatever educational product the Africville Heritage Trust developed must put teachers' needs foremost, I met with consultants in Social Studies and African Nova Scotia Studies at the Department of Education to discuss the project and decide at which grade level the story would have the greatest impact on students and be of the most help to teachers in realizing their curriculum goals.

The link to the grade ten African Canadian Studies curriculum was obvious, but we decided that the story would be most valuable at the grade three level, where it could reach all students, not just those taking a high



FIGURE 3 The Africville Team. Left to right - Shannon Grant Barns, Paula Grant Smith, Rose Grant, Linda Carver, Elsie Byers, Bernice Arsenault
Credit: Sally Warren

school elective. The natural focus would be the value of community, and the activities would be designed to foster empathy, cultural understanding, and a sense of empowerment.

I enjoy designing for younger students because they are so easy to engage in active learning. But the other advantage of gearing the program to this level turned out to be something I had rather forgotten: almost nothing is as clear to a nine year old as what is—or is not—*fair*. They really get that!

It would have been hard to give students just the heartbreak story of Africville. So Mayor Kelly's apology, in which he recognized the work of the community in keeping the story and spirit of Africville alive, gave us the positive message we needed to prove that people do have the power to effect change. [Figure 3]

Once I had seen all the film documentation and read everything I could find about the community, I met with an amazing group of women—who I came to think of as “my” Africville team. Our first encounter was over a lunch that I prepared and transported to the home of our hostess, Rose Grant. It was an afternoon of good food, stories, and laughter. Later, many of these women met with me individually. They shared their memories, their photographs, their music, their happiness, and their tears with astonishing trust and generosity. I owe these individuals my deepest gratitude for taking me into their hearts and giving me their story to work with.

The next challenge was to create the means for students to hear and see and engage with what I had learned, and to think about it and (with a little guidance) draw conclusions.

Since the church and interpretive centre still existed only on paper, I designed a program that could be delivered in the classroom, and I field tested it with a group of grade three students at St. Stephen's School in Halifax.

The introductory activities centred on how and why communities form. Using examples from their own experience, students were able to identify a number of different reasons that communities develop: because people live in

close proximity, because they are related to one another, because they face similar circumstances, because they share work and leisure activities, and because they share ethnicity or cultural background. Africville was then given as an example of a community where all these elements were working together. The people who lived in Africville were bound by location, family connection, situation, activity, and ethnicity, and the students concluded that this would have been a very strong community, in which people could depend upon and support each other.

The next part of the program focused on the story of Africville. For the field test, I narrated the story of Africville from the point of view of a woman who grew up there. I explained to the students that when the program was properly launched, an African Nova Scotian interpreter would lead it. As the story unfolded, students played an active role by placing blocks and illustrated card markers on large floor maps of Africville.

Hauling water from the well and heating it on the stove for laundry and bath night was a vivid part of the story, so children knew that hanging the clothes out to dry was an ongoing chore in Africville. For the final activity, students were given clothes pegs and little laundry baskets filled with white cotton rectangles of different sizes. Their task was to hang the clothes on lines strung around the classroom. As they did so, they discovered an archival photograph on each piece of laundry, and they recognized the parts of the story they had heard in the pictures. The program wrapped up with a discussion and questions.

Most of my Africville team were able to attend and participate in the testing, and we were all moved by the children's response to the program. During the follow-up evaluation, the classroom teacher asked how she could have access to this material, as she felt she would like to work with it over a much longer time frame than was afforded by a two-hour, in-class visit.

In response to the testing and evaluation, I made a proposal to the Africville Heritage Trust to develop a teachers' resource kit that would place the material directly into the hands of teachers to use with their students in their own time. The Trust successfully applied for more funding to design the kit and to build thirty kits to be "gifted" to the Nova Scotia Department of Education.



FIGURE 4 ‘Out Home: Africville’ Educational Kit

Credit: Sally Warren

Any books or support materials going into classrooms in Nova Scotia must go through two levels of bias evaluation at the Department of Education, the first with consultants and the second with teachers. I created a prototype of the kit, adapting some of the original activities and adding many new ones that would be appropriate for classroom use. That prototype successfully passed the two levels of rigorous bias evaluation.

During the bias evaluations, an interesting thing happened. The consultants were so impressed with the kit that they decided that thirty would not be nearly enough. They wanted 288 kits, one for every elementary school in the province. This radically changed plans for production. Clearly we could not undertake such a project until we had a solid commitment for purchase.

We discovered that a bureaucracy like the Department of Education has little precedent for buying something that is not already “on a shelf” and negotiations were lengthy between the Africville Heritage Trust and the Department. But eventually a Memorandum of Understanding was drafted for the purchase and signed by both parties, giving us a four-month window in which to complete the job. [Figure 4]

Each kit is comprised of a mailing tube and an archive box. The mailing tube contains three large vinyl floor maps illustrating Africville, and the box contains three sets of map markers in cotton drawstring bags, an audio CD, ten laminated archival photographs, five laminated community cards, and, most importantly, a binder of information for the teacher.

It was vitally important for me to acknowledge all the individuals and organizations that collaborated on the project, so at the very beginning of the binder, everyone is recognized individually for his or her contribution.

Keeping in mind that teachers do not have time to wade through masses of notes, the first section of the binder is tightly crafted to build the teacher’s knowledge of and confidence with the topic. It also lists the specific curriculum outcomes that will be reached if all activities are undertaken. Teachers need this information up front.



FIGURE 5 Paula Grant and her brother Warren by a picnic spot on the Bedford Basin at Africville 1954 Credit: collection of Paula Grant Smith



FIGURE 6 Africville Mapping Activity with Grade 3 students
Credit: Sally Warren

The second section contains step-by-step instruction for each of the eleven sequential activities: introductory activities that explore concepts of community and language, the central mapping activity that tells the story of Africville using the audio CD and maps (there are three sets in each kit so the class can be divided into three groups and all students can actively participate at the same time), and follow-up activities that use archival photos and visual literacy exercises to deepen the students' understanding of the story, plus a final classroom quilting activity to tie it all together.

The third section contains resource material, black line masters, quilt patterns, and suggestions for extensions. [Figure 5]

The mapping activity "tells" the story of Africville. The script is an amalgamation of stories that I had gathered in my research and is written as a personal narrative from the point of view of an Africville woman remembering her childhood in the close-knit community, including the destruction of the community and all that followed. The story subtly reveals a policy of racism that goes back decades as well as the strength and power of a community facing oppression. Giving teachers this story in an authentic voice was a critical part of the kit design. To do it we made a recording in which Paula (one of the Africville team) remembers her life as a child in Africville. [Figure 6]

As Paula tells her story she invites students to "come along that dusty road" with her, and at each landmark she gives them direction for placing the illustrated cards and other map markers on the floor maps. Students essentially build the little community, explore what life was like there, and finally, following Paula's direction, deconstruct it amid sounds of thundering lumber and shattering glass as she describes how the city "took it all away." An archival recording of song from the last service held at the Seaview Baptist Church, as well as selections of Mayor Kelly's formal apology to the people of Africville, are all part of the story, and the CD includes several spirituals for students to



FIGURE 7 Paula Grant Smith in the recording studio

Credit: Sally Warren

sing along with. The CD is a participatory audio drama. For students, the story becomes personal and (though Paula never uses the word) so evidently “not fair.” The mapping activity takes twenty-five minutes, not including the breaks that are built into the narrative. [Figure 7]

One of the most magical aspects of this project turned out to be the way in which everyone involved in the kit’s development and fabrication became so totally committed to the work. The Africville team was generous beyond measure, particularly Paula, who worked for over two months with a professional drama coach to prepare herself for the recording studio. The recording itself was made in the Learning Technology Lab at the Department of Education with their sound engineers, who enthusiastically brought all of their skills, knowledge, and experience to the task. The rest of the participants were equally taken with the project and generous with their time.

The woodworker who had made three miniature wooden churches for the mapping activity in the test program willingly made 900 more. A local seamstress made 900 cotton drawstring bags. A printing company in Halifax was able to scan one of my original hand-painted canvas maps and print 900 of them onto heavy-duty vinyl. They also fabricated the thousands of laminated materials. The Cornwallis Street Baptist Church Revival Choir recorded two spirituals for the CD, and the dear staff and residents of a local sheltered workshop did the bulk of the kit assembly.

The Out Home: Africville Educational Resource Kit was officially launched at the Department of Education’s Grade Three Social Studies Implementation professional development session on March 30, 2012, and over seventy teachers had an opportunity to see all the components of the kit and to actively participate in the entire mapping activity. The finished 288 kits were delivered to the Department in mid-June for distribution to schools.

Reflecting on this experience, I have come to believe that it is with challenging topics that museums may have the most to offer classroom teachers. By understanding the needs and requirements of the education system and working with consultants and teachers from the beginning of a

project, we can provide invaluable services. We have the primary sources, the research skills and the experience with discovery learning models that allow us to create deeply rich and powerfully engaging learning opportunities for students.

In the case of Out Home: Africville, with the support of the Department of Education and the Atlantic Canadian Opportunities Funding Agency, we were able to put resources directly into the hands of teachers across the province. Now every grade three child in Nova Scotia will be exposed to this important story and the lessons it holds. At the end of the mapping activity recording, Paula sums it all up with the following words:

On September 25, 2011, the Africville Church Museum was officially opened with a big celebration, and the sun shone all over Africville Park.

I hope you will go there one day and stand on the steps of the church, look out over the Bedford Basin and remember my story. And you will know that if you are careful, and thoughtful, and wise...you can do your part to make sure that freedom, respect, and equality are protected for all people everywhere, just like it says in the Universal Charter of Human Rights and Freedoms.

And if you remember that, you're going to help the light to shine everywhere. Let's sing one last song together. This is one of my favourites from the old days. Clap and sing and be happy- for there is lots to celebrate now.

And the recording closes with students singing along to "This Little Light of Mine." It has been a very great privilege to assist in telling this story and helping the light to shine.

Notes



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