

themes with the neighborhood. The next stage were workshops at CaixaForum where they experimented with the possibilities offered by the spoken and written word, with the help of adults. In its last edition participants learned how to create and edit videos, and the final results were exhibited at CaixaForum.

*Miradas Cruzadas* goes beyond geographic boundaries and age, inviting audiences to observe how different generations look at each other in an effort to improve mutual understanding. Portraits of teenagers by the Dutch photographer Reinike Dijkstra started the discussion process that ended with an exhibition of portraits of adults by local youngsters and a Web site where older and younger participants shared their visions of youth and adulthood, discovering that their contemporary visions of life are not so different.

The Arts Lab is a successful example of how learning at museums can go beyond museum boundaries and traditional forms of art to become a source of inspiration for ordinary people who break stereotypes and intellectual barriers to enjoy the arts and experiment with creativity.

UCSB:

Barry Lord (ed.), The Manual of  
Museum Learning (Arts Mgmt, 2007),  
13-28, 107-115, 210-220

## What is Museum-Based Learning?

BARRY LORD

On at least one occasion, probably more, during the first decade of the twentieth century, Pablo Picasso went into the basement of what was then the Musée de Trocadero in Paris. What he learned there about the art of Africa changed the course of art history.

What did Picasso learn, and how did he learn it? We can probably never say definitively, since much of his experience was necessarily subjective, but certainly we know enough to be able to identify his learning in objective art historical terms. Picasso saw how the bold forms of carved wood in the African statues and masks represented the structure of the figure or face more expressively and more tellingly than the academic principles of representation that he had learned as a student but had already surpassed. He also liked the African artists' forthright use of mixed materials. He perceived that the power of these forms realized something he had been reaching for in his own art. He was able to integrate this insight with his own practice of art to develop what we now recognize as the founding principles of Cubism, from which sprang so many subsequent forms of modern art history.

These principles included a structural revelation of the subject through interlocking planes comparable to the African artists' bold forms, and a direct use of collage to achieve a two- or three-dimensional image with an inspired mix of materials, similar to the African artists' combinations. Nevertheless, what Picasso did with these ideas was indisputably his own, because he was able to integrate these influences with the direction that his own work was already taking. He might have arrived at the threshold of Cubism without this experience, but probably not with the same clarity, freshness, power, and insight as we can observe in *Les Femmes d'Alger* and subsequent works.

Picasso's learning was made possible and was conditioned by two factors:

1. The museum's display of African carvings, which were actually presented as ethnographic artifacts.
2. Picasso's own interests arising from his work at that time.

So we are reminded that we can only learn from museums what we are ready to learn. Friedrich Wilhelm Nietzsche observed that one learns from books only what one already knows. This is not quite true of learning in museums, because there is always the spark of something new—yet it is true in the sense that we can only recognize and respond to that spark if we are ready for it because of the ideas, interests, attitudes, and concerns that we take to the museum.

And we may be impressed by the fact that the museum's interpretation of its collections—in this case as ethnographic artifacts—need not limit the learning that visitors take from them. Even when curators establish a highly structured context for the interpretation of the collections on display, visitors remain stubbornly free to take from the exhibit what they choose. This degree of freedom is one of the attractive features of museum learning for many visitors, making museum learning a creative and rewarding experience.

The art history of the past few centuries abounds in examples of learning from museums: students went to museums to learn artistic technique, composition, and the like by copying the works of the masters. In the early seventeenth century, Peter-Paul Rubens had to go to Italian churches or be admitted to the Vatican chambers in order to study and sketch the work of the masters of the Renaissance. But by the eighteenth century the Royal Academy in France expected artists like Jacques-Louis David to begin their careers by copying great paintings in the Louvre. This tradition of learning by copying has continued to the present day at the Louvre, the Prado, and many other great museums with masterworks permanently displayed on their walls.

In the twentieth century the Futurists were among the first of many artists who have learned from museums in the opposite sense, striving to develop art forms that went beyond, or even repudiated, the art they saw in museums. Dada was the most absolute expression of that desire—which of course has not prevented the formation of major museum collections of Dada and shows, such as the definitive Dada exhibition at the Centre Pompidou in Paris in 2005. Learning in museums can sometimes be—perhaps often must be—learning to reject or surpass what they have to offer. Yet if this apparently negative learning is deep and subtle enough, it can lead to substantial advances in the life's work of the learners.

The late Stephen Jay Gould has written evocatively of the influence that early visits to the American Museum of Natural History had on his development as a scientist. As artists may learn positively or negatively from art museums, so young scientists may be inspired or challenged by what they see in natural history museums, zoos, botanical gardens, or science centers, with future ethnographers, archaeologists, or anthropologists being similarly stimulated by what they find in ethnographic, archaeological, or anthropological museums. Aspiring historians or even politicians may be inspired by what they

see in history museums. But the question of learning in museums extends also to those of us whose life's work is not related to what is on display: What is museum learning for the rest of us? How do we learn in museums?

An important group of potential learners at many museums or exhibitions is any community directly related to the objects on display—a group whom we may refer to as the *community of origin*, in the sense that they or their ancestors originated either the objects themselves, or at least the context in which these objects have or had meaning. Native Americans in the United States, First Nations people in Canada, or Aborigines in Australia, for instance, may learn from exhibitions of their respective cultures much that has been lost from their oral or performed traditions. Often hostile to the museum as an agency that has removed ritual or other objects from their original living functions, they may nevertheless seize the opportunity presented by a museum exhibition or collection to study and learn more about their cultures than was previously available to them. Many Canadian Northwest Coast artists, for example, have begun their own work after a careful study of the totems and other carvings and textiles preserved in museums. Museum learning in these instances consists of learning more about one's own ethnic or cultural identity. In Washington, D.C., the Smithsonian Institution's National Museum of the American Indian has devoted its entire collection storage building, the Cultural Resource Center, to this kind of learning.

In a broader sense, every group of museum objects of human material culture has a community of origin, the people who have been involved in the initial creation of those objects or the meanings that make them significant. This may be an individual artist, a group of collectors or dealers, an international community of scientists, or the people who have lived in and built the nation, state, or city whose story a history museum is telling. For all such people, museum learning is a matter of reinforcing their own cultural identity, looking in a mirror and learning from the accuracy—or lack of it—in the reflection.

Yet for all of us who are neither occupationally related nor members of the community of origin of the objects on display, museum learning is still possible, and can be a powerful experience. What is this kind of learning, and how does it happen?

In attempting to define what museum learning is, it is helpful first to identify what it is not. It is not the kind of learning that takes place in schools or universities. At such formal places of learning, one is required—or one chooses—to take a collection of classes or lectures in which teachers more or less successfully explicate the subject in context, so that after having supplemented the courses by reading a textbook and/or working through set problems, exercises, or experiments, one may attain a certain mastery of the subject matter. Although some museums are part of universities, and may form part

of the students' educational experience, museum learning as such is not formal or academic in this sense.

Nor is museum learning the kind of learning one undertakes when enrolling in a class to learn a trade, to lose weight, or to acquire a new dance step. Here one follows the example and advice of a trainer until attaining the ability to replicate the process or the movements with comparable results. Although some museums may offer courses of this kind, it is *not* the type of learning experience that is on offer in their exhibition galleries.

Closer to museum learning, but still very different, is the kind of learning that takes place in a library. This is somewhat similar because it is usually voluntary and relatively informal, as the student looks up data or interpretations of data in print material. Here the learning is the cognitive assimilation of what has been recorded or observed about the subject. The library reader comes away better informed about what people past or present have written about the subject.

Of course today the visitor to a library may not even see a printed page, but may be engaged entirely in a search for intelligence about a subject through a study of databases or surfing on the Web. Learning from information technology is comparable to museum learning in its informal, self-motivated character—but like learning from print material it ultimately consists in learning what others are saying or have said about the subject.

From these brief contrasts we may begin to see what museum learning is:

- Museum learning is *informal*, as distinguished from formal academic courses.
- Museum learning is *voluntary*, selected by the learner (or perhaps by the leader of a school or tour group of which he or she is a member).
- Although museum learning is always partially cognitive, it is primarily *affective* learning, distinguishing it from the type of learning that takes place by studying print sources in a library or searching on the Internet.

Learning is primarily *affective* when it is focused on our *feelings* about things—when it affects our attitudes, interests, appreciation, beliefs, or values. Of course, cognition of data accompanies this affective experience—even the transformative experience of an original contemporary work of art in a museum context usually drives us immediately to want to find out who the artist is, the title of the work, its date and medium, and the circumstances of its creation. However, the essential museum learning experience is the change in our feelings, interests, attitudes, or appreciation of the subject matter due to the museum display. Because this involves a change in these attitudes or interests, it is correct to refer to a successful museum learning experience as a transformative one.

*Museum learning is a transformative, affective experience in which we develop new attitudes, interests, appreciation, beliefs, or values in an informal, voluntary context.*

This statement has important implications for our evaluation of museum learning. The exiting visitor's retention of any specific data or even of the curatorial interpretation of the subject is not the critical factor to be evaluated. What matters is whether the exiting visitor takes away a new interest in or attitude toward the subject. A successful museum exhibition is one that offers a transformative learning experience, sparking a new interest or appreciation that was not there before.

Yet there is something more. *Collections* are at the heart of museums. As books are to libraries, as plays are to theaters, so objects are to museums. Although text is obviously important, and interactive experiences aided by information technology may be helpful, the affective learning experience that takes place in most museums must be stimulated by museum objects—archival documents, artifacts, specimens, or works of art. Science centers, children's museums, or visitors' centers that are noncollecting institutions are interesting exceptions, but the learning experience at most museums, zoos, and botanical gardens consists in learning from what's on display.

What and how can we learn from objects? In the nineteenth century, museum professionals put their confidence in the organized presentation of specimens—and by extension of works of art or artifacts—hoping that the visitor would learn by associating those objects placed together in sequence. In the first half of the twentieth century, art museums especially put far more emphasis on the display of individual works of art, confident that they could communicate directly on their own—or if not, they were simply not effective as works of art. Later in the last century museum educators taught the truism that objects cannot speak for themselves, so museum “interpretation” and departments of communication became important.

When the exhibition galleries of the National Museum of the American Indian opened in Washington, D.C., early in the twenty-first century, one wall of over a hundred artifacts was presented as evidence of the cultures that existed prior to the arrival of Columbus in the western hemisphere. These powerful objects evinced not just the existence of these cultures, but also their sophistication, their complexity, and their contribution to the human story. So one important way in which we learn from objects is that they constitute *evidence* of the story the museum is telling. We believe the story because we see the evidence, and so we learn to transform our opinions, our attitudes, and our appreciation around the evidence we have seen.

The same may be said of natural history specimens. Natural history museums present the evidence for evolution, for instance, in their displays of fossil specimens or casts. A health museum may transform the beliefs of a smoker with a display of a lifelong smoker's lung alongside one of a nonsmoker. In the Jardin des Plantes in Paris, Le Muséum National d'histoire naturelle presents the evidence for biodiversity with its dazzling *troupeau* (a fanciful herd never found in nature) of the great variety of taxidermic specimens in its collection, arranged as if trekking across the floor of the main central gallery of the building.

History museums are obsessed with evidence. The U.S. Holocaust Memorial Museum in Washington, D.C., is an outstanding example, where the objects are so powerfully moving, even for visitors who have read many history books and articles about the subject. A comparably revelatory object at what began as the National D-Day Museum in New Orleans (now called the National Museum of World War II) is the archival fragment on which General Eisenhower had drafted his alternative communication to the world if the Normandy invasion had been repulsed: it is all the evidence one needs of the drama of the historical moment, when despite the extensive preparation and training all depended on the unknown outcome.

Social history museums present the objects of everyday life as evidence of the economic, political, and social conditions of the time and place represented. Industrial museums and historic sites present the evidence of how tasks were performed, or how certain social classes lived. Archaeological and ethnographic museums present the evidence for their and our imaginative reconstruction of the past.

Even science centers without object collections present evidence such as DNA analyses, weather maps, and star charts. Those children's museums that operate without collections use replicas as objects for the role-playing learning activities of their young visitors. What these institutions have in common is an emphasis on learning by doing, which requires touching and therefore generates a need for replicas or models rather than original objects.

In recent years we have seen the emergence of "idea museums" aimed at communicating a thesis or a lesson about history or humankind. The Museum of Tolerance in Los Angeles, Mémorial: le Musée pour le Paix at Caen, and the planned Canadian Museum of Human Rights in Winnipeg are examples. These institutions are much more consciously didactic, focused on our learning of their subjects more than on preservation of a heritage or culture. Nevertheless, they are keen to acquire and display evidence wherever it is available—such as the exciting archival film footage of the Normandy landings taken from film archives of both sides in the Musée pour le Paix, or a cabin used in the slave trade at the National Underground Railroad Freedom Center in Cincinnati.

Art museums may be seen as presenting the evidence for art history. This is a valid description of part of their function, especially for those with art historical collections and exhibitions. Yet for them, especially for contemporary art museums, the main purpose is not evidential, but in order to provide a direct experience and appreciation of the work of art in and of itself. Unlike artifacts or specimens, an object that is intended as a work of art should be able to communicate directly to the visitor, whose response is one of appreciation rather than merely recognition of the object as evidence.

A fine art museum may therefore combine exhibits of both kinds—not only in different galleries, but also in each and every gallery. We can approach art history galleries as evidence of the values, technology, and accomplishments of various cultures and periods, yet at the same time we can appreciate the works in and of themselves. In Berlin, for example, crowds understand the bust of Nefertiti as evidence of the sophisticated culture of the Egypt of her time—yet they also appreciate the statue directly as a profoundly moving masterpiece that speaks to us directly about women, beauty, mortality, and power.

In a contemporary art museum there may be little or no evidentiary role for the latest installation by a local artist, but it is available for direct appreciation (or not) by visitors who share the current culture from which it comes. Remembering the example of Picasso, of course, visitors can only respond to what their life and work pattern allows them to appreciate. If not much museum learning takes place, it may be a deficiency of the piece, or it may simply be the case that most of its viewers are not yet consciously sharing the affective space of the artist, so that very little affective learning can occur. Over time, if the artist is in touch with emerging new realities, this may change.

In summary therefore, we may conclude:

*Museum learning is a transformative experience in which we develop new attitudes, interests, appreciation, beliefs, or values in an informal, voluntary context focused on museum objects. Museum learning may be aided by interpretative text, hands-on activities, and interactive information technology, but for all collecting institutions learning will be focused on the objects in the museum's collection that are presented either for appreciation in themselves and/or as evidence of a larger subject.*

# The Potential of Museum Learning

## The Essential Museum

ELAINE HEUMANN GURIAN

“Ethnologists, anthropologists, folklorists, economists, engineers, consumers and users never see objects. They see only plans, actions, behaviours, arrangements, habits, heuristics, abilities, collections of practices of which certain portions seem a little more durable and others a little more transient, though one can never say which one, steel or memory, things or words, stones or laws, guarantees the longer duration.”<sup>1</sup>

What if our profession created a museum in which visitors could comfortably search for answers to their own questions regardless of the importance placed on such questions by others? This chapter explores the philosophy behind and the ingredients and procedures necessary to produce such a museum. This new type of museum I wish to characterize as “essential.” (This may be wishful thinking. We may, in the end, have to settle for “useful.”)

I contend that most museums are “important” but not “essential” establishments. I acknowledge that the customary museum continues to be valuable for some, beloved by its adherents, and defended against transformation by those who understand and celebrate its value. Nevertheless, I propose that there is room for another kind of museum, one that arises not from organized presentations by those in control, but one that puts control into the hands of the user.

“People are somewhat exhausted after 25 years of blockbuster exhibits being served up with these heavy tomes and yammering ‘acoustiguides’ and all the learned labels. These days, they want the opportunity to escape that kind of directed discovery.”<sup>2</sup>

I suggest that while some useful experimenting with such control shifts within museums is already afoot, most especially in resource centers and study storage embedded within galleries, there is no current category of museum in which the visitor is intended to be the prime assembler of content, based on his or her own need.

I am interested in transforming how users think of museum visits—from an “occasional day out” to a “drop-in service.” I believe small, local museums are the best candidates for enabling this transformation because they can program more nimbly and with less fuss than can highly visited, larger establishments. If and when these small neighborhood museums come to be regarded as a useful stop in the ordinary day of the local citizen, I believe that, like the library in that very same community, the museum will have become essential.

In this new museum, the staff’s role will be changed. Their current responsibility as the controlling authority determining the choice of displayed objects, interpretation, and expressed viewpoint will be diminished and their role as facilitator will be expanded. We know that many potential visitors have not felt interested, welcome, or included by traditional museums, and have demonstrated their indifference by not attending. I believe there is a correlation between the intellectual control by staff and the lack of relevance seen by many of our citizens.

The essential museum would begin with four assumptions:

1. All people have questions, curiosity, and insights about a variety of matters large and small.
2. Satisfaction of internalized questions is linked to more than fact acquisition and can include aesthetic pleasure, social interaction, and personal validation (recognition and memory).
3. A museum could be a useful place to explore these.
4. Visitors can turn their interest into satisfied discovery if the appropriate tools are present and easy to use.

Unfettered browsing of objects will be the main organizing motif in this museum, and to facilitate such visual access, the majority of the museum’s objects will be on view. The technique of visible storage installation will be expanded and take on renewed importance.

Attendant information, broadly collected, will be considered almost as important as the objects themselves, and thus a database with a branching program of multiple topics will be available within easy reach. To access the database, a technological finding aid will be on hand so that the visitor can successfully sort through the multiplicity of available data. Visitors in this new museum, once satisfied with their own search, can offer the results of their investigation or their queries to subsequent users. Everyone who enters has the possibility of becoming both investigator and facilitator.

Once the mission of such a museum is established, the staff will concentrate on acquiring and researching relevant objects, locating, collecting and collating associated information from a broad and unexpected array of sources,

and facilitating the public’s access to same. While this sounds like the standard curatorial job, the basic mediating role of the curator will have changed. The curator will not limit the objects for view, nor determine the only topics available. Instead almost all information and objects will be made available and the user will mentally combine them as he or she sees fit. The museum will become a visual nonjudgmental repository in which many intellectual directions are possible. Within reason, no topic will be off limits and no idea will be rejected by the staff as unworthy. The museum will grow with the input of its users.

Before the reader finds this model too radical, consider that this is not dissimilar from the way shopping malls, the Internet, or public libraries currently operate. I wish to align the essential museum with these models.

Why create a new kind of museum? In part because surveys have continued to show that museum visitors remain a narrow segment of our society. Try as we do to broaden the user group through many different strategies, we have, by and large, failed to make an appreciable dent. Museum visitors remain predominantly well educated and relatively affluent, while the majority of our citizens remain outside our doors. So I began to consider how else museums might operate if they really wanted to broaden their audiences; that is, if they wanted the profile of visitors to include more people from the lower, middle, and working class, and more users who fit in minority, immigrant, adolescent, high school-credentialed, and dropout groups than is currently the case. If the rhetoric about museums continues to suggest that museums are inherently important civic spaces, then we must propose new strategies that would involve more of the citizenry.

In the last half century, curators, who are generally steeped in museum traditions, have seen their role criticized, and in response they have generally changed their voice and intention from that of a benevolent but authoritarian leader into that of a benign and helpful teacher. They have incorporated new strategies of exhibition technique and given credence to the theories involving various learning modalities.<sup>3</sup>

Overall, the traditional museum has generally become less “stuffy” with added visitor amenities that encourage sitting, eating, researching, shopping, and socializing. These changes have helped most museums evolve from being formal “temples” of contemplation into more inviting gathering places. The iconic museum has begun to look different from its turn-of-the-century forbear.

To enlarge the audience from the continuing relatively static profile, many have previously encouraged additional approaches:

- Expanding collections to include works created by underrepresented peoples.

- Adding exhibition subject matter to appeal to specific disenfranchised audiences.
- Utilizing exhibition techniques that appeal to many ages, interests, and learning styles.
- Fostering mixed-use spaces in response to theories of city planners (especially those of Jane Jacobs).<sup>4</sup>

I have suggested that museums should combine these steps with continued thoroughgoing community liaison work. Most recently I have advocated free admission as an important audience building strategy.<sup>5</sup>

Reluctantly, I now concede that these measures, while good, will not permanently expand the audience very much. I am newly convinced that the potential for broadening the profile of the attendees visiting the traditional museum is limited. Instead, museums of inclusion may be possible only if the object-focused mission is separated from the equally traditional but less well understood intellectual control by staff, and a new mission is substituted that satisfies a range of personal motivation by facilitating individual inquiry. In short, while I am not advocating that all museums need to change in this way, I am saying that the role, potential relevance, and impact of the traditional museum, while useful, is more limited than I had formerly believed.

I concede that the public wants, and may even need, these time-honored, often iconic, museums. I remain a member of that public. However, the history of these museums is intertwined with the history of social and economic power. Described by Carol Duncan and Alan Wallach as the “Universal Survey Museum,” (one which operates as a ritual experience intended to transmit the notions of cultural excellence), they state:

The museum’s primary function is ideological. It is meant to impress upon those who use or pass through it society’s most revered beliefs and values. . . . Even in their smallest details . . . museums reveal their real function, which is to reinforce among some people the feeling of belonging and among others, the feeling of exclusion.<sup>6</sup>

Even if this view by Duncan and Wallach is only partially correct, then it is not just object choice or intimidating architecture that is keeping the majority of the public from feeling welcomed in museums, it is the nexus between those objects, what is said about them, and by whom.

## .1 COMPARE LIBRARIES

Have you ever wondered why some contemporary collecting institutions, such as public libraries, serve an audience both larger and more diverse than muse-

ums, while others—for example archives—do not? I believe that the library’s easy access and intention to provide nonprescriptive service for its users are differences that deserve to be explored and emulated. I suggest that the perception of the library as a helping rather than teaching institution interests a broader array of users. I propose that there is a link between the public’s greater use and appreciation of libraries and the fact that they are funded as a matter of course (rather than exception) by politicians. As a side benefit, changing museums so that they too serve a broader audience may result in enhanced funding opportunities.

The process for acquiring library materials uses a system equivalent to museums—but unlike museums, each item once accessioned is treated and presented in much the same way one to another. Except for occasional holdings of rare books, there is no value-laden hierarchy imposed on the collection or access thereto. Most important for purposes of this chapter, within a broad array of possibilities *the determination of the topic for research is in the mind of the user rather than preselected by the librarian.*

Most library filing and access systems are ubiquitous. When visiting a new library, most patrons having made use of another library can easily find their way and for those not completely acclimated, there is the help desk where a librarian is available if needed, but unobtrusive if not.

In order to facilitate queries, libraries use knowledge locator systems—that is, catalogs—that, once understood, allow users to find information they seek, in a manner and time that fits within their ordinary day. Additionally, there are helping aids embedded in the catalog (such as key words) that allow the inexperienced user to succeed in his or her search. So, unlike museum visits where the unfamiliar attendee tries to see everything, library patrons can, if they wish, drop in casually, focused on an errand that can be completed quickly. And because the library is free and is usually close by, this pattern can be repeated often.

In their past histories, both libraries and museums were seen as august, quiet, imposing places. Why has the library democratized more than the museum, and why do both the citizen user and the politician funder feel that the library is more essential and worthy of more sustained support than the museum?

“A central feature of public librarianship in the United States is that librarians have worked to develop a climate of openness by defining library policies to create an institution where all are welcome. In 1990 the American Library Association adopted the policy, ‘Library Services for the Poor,’ in which it is stated, ‘it is crucial that libraries recognize their role in enabling poor people to participate fully in a democratic society, by utilizing a wide variety of available resources and strategies.’ (*ALA Handbook of Organization*, 1999–2000, policy 61). This policy was adopted because there had been a shifting level of

emphasis in the interpretation of 'openness' since the establishment of the public library. Open doors are very different from proactive service."<sup>7</sup>

While museum and library rhetoric relating to public access written post-World War II might have sounded the same, libraries took on the process of transforming themselves much more seriously and continuously. Libraries "examined how the set of techniques developed and promoted by the Public Library Association allowed public librarians to engage in user-oriented planning, community-specific role setting, and self-evaluation."<sup>8</sup> Perhaps museum personnel are also ready to turn the museum writings of the past into a set of actions that will produce the same inclusive outcomes.

## **.2 COMPARE SHOPPING MALLS**

Moving on to another example, shopping malls display materials chosen by others and placed in a visually pleasing and stimulating environment. Like the contemporary museum, the mall incorporates additional amenities that facilitate browsing, strolling, and eating, and offers ancillary activities such as performances and social and civic events. The mall and the museum are both mixed-use spaces. Yet in the aggregate, mall users are of a much broader demographic than even the patrons of libraries.

While specific marketplace ambiances differ worldwide, almost all people, no matter what class or culture, are experienced shoppers and browsers. It is a skill almost everyone has learned from infancy. By extension, early training in museum use, as espoused by many, may continue to have relevance in audience development. However, except for an occasional school class visit, most young museum visitors are the children of the current users. Aligning museum going with known elements of shopping practice might expand that.

Two avenues to explore more fully may be the study of shoppers' behavior (motivational theory) and scrutinizing the mall's systems created to satisfy that need. In reviewing papers on consumer motivation, there appears to be a predictable sequence. The shopper decides that he or she needs something and determines the possible location to fulfill that need. That need leads to intention—the planning to go to that location—and then action. Once the shopper arrives, he or she begins a search, which involves locating, browsing, and comparing. The material is laid out to be visually inspected, and often touched; shoppers process their experience, combining and recombining what they are seeing until they make a self-directed decision: to buy or not to buy.

The system is codified and relatively easy to learn. The grouping of merchandise is often repeated shop to shop (for example by size, by types, or by price.) The purchase system is well marked, easy to find, and often separated from the inspection of merchandise. The wayfinding system is replicated in

many locations. And there are browsing aids and amenities to be found in convenient places.

One can argue that the placement of articles in shops is as carefully controlled as the exhibitions presented in museums. I would not contest that claim, given many marketing studies that substantiate that position. Yet I would point out that people comfortable in their role as experienced shoppers feel empowered to bypass the shop-initiated preferred outcome and operate instead on their own. Those shops that wish to have more restricted clientele intentionally impose barriers to free exploration, much like traditional museums.

As unrelated as we might wish these activities to be, I am suggesting that the shopping and library experience have some important elements in common with each other and that these might usefully become embedded in the new type of museum I am proposing—that is, ubiquitous systems, free exploration, and a large volume of visual material on view. Most important, the decision to frequent a library or a mall originates from an internalized impulse, question, or need (a quest, if you will) that is sufficient to lead to action.

I understand that associating museums with shopping may offend some, and that there are important differences as well. Nevertheless, I expect that when consumer motivation theory is better understood and the physical facility of the museum adjusted to satisfy the individual's broader needs, the public will change the way they think about the usefulness of museums.

## **3.3 THE ROLE OF COLLECTIONS: THE POTENTIAL OF VISIBLE STORAGE**

After this encomium to other venues, what is the special reason one would go to a museum at all, you might ask. The museum's comparative advantage remains the visual, and sometimes tactile, access to special physical things (some of them natural, some unique and original, some examples of a class of objects, and some purpose-built environments). The museum remains one of the few places where one can come face-to-face with hard-to-find, sometimes beautiful, and potentially intriguing stuff. It is the physicality of realia that makes museums special.

While current technology makes it possible to see almost any item on a computer screen, the computer cannot accurately reproduce the nuances, especially of scale and texture, that individuals absorb in the actual presence of the objects. It is the evidence in its tangible form that the public values.

If the public wants access to things, then it stands to reason that museums should provide access to lots of things. In fact, why not set up visual investigation of all, or almost all, of what the museum holds? The exhibition method currently in use that attempts to do that is a technique called study, open, or visible storage, and there are contemporary examples in many places.



However, the scale of these vis-à-vis the square footage allocated to prepared or curated exhibitions is small. In this model, I am suggesting that the amount of visible storage will be substantial.

I understand that when browsing amidst organized displays in today's typical museum, the visitor is already participating in a limited "free choice learning" space.<sup>9</sup> Most exhibitions are currently organized to allow visitors to wander at their own speed, and in their own pattern. I am also aware that some organizing structure is a comfort for the novice user, so I am not suggesting random placement of objects. In the essential museum there would be "light arrangement"—a framework—which might generally mimic the museum's own collections storage strategy, that is, by topic, by material, by culture, or by artist. Further, I am suggesting that in current installations containing a substantial amount of collections material on view we begin the process of enriching these exhibitions with an overlay of substantial and diverse information.

Some portion of the collection and display square footage could be reserved for changing installations responsive to a timely idea. As an analogy, we have all visited libraries that shelve detective novels together alphabetically by author, yet some books from that section are removed to appear, for example, in a shelf of new acquisitions, in the librarians choice of "good reads," or picks related to a current movie or holiday.

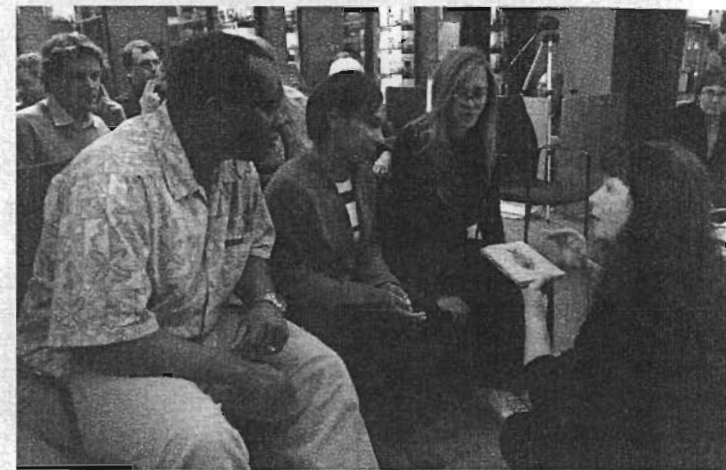
The Museum of Anthropology (MoA) at the University of British Columbia in Vancouver, which piloted open storage in the 1970s, currently has 13,000 objects on view. The MoA works with students to produce small occasional exhibitions within this visible storage. This experiment started a trend. Among large institutions, the Darwin Centre at the Natural History Museum in London and the Hermitage in Leningrad have relatively new installations. Martin Lawrence's case study in this chapter describes the Darwin Centre in more detail.

Augmenting visible storage with ancillary information was the logical next step. As an example, in 2001, the New York Historical Society opened a whole floor devoted to open storage, with additional information available on computers embedded in the space and downloadable onto handheld personal digital assistants (PDAs).

## DARWIN CENTRE—A CASE STUDY

Martin Lawrence

**Figure 3.1.** Scientists and Visitors Meet in the Daily Program Nature Live



COURTESY OF THE NATURAL HISTORY MUSEUM, LONDON.

The Natural History Museum, London, is the United Kingdom's national museum of life and earth sciences. It holds collections of over 70 million natural history objects, which it uses as the basis for scientific research and extensive public engagement programs. It is one of those rare institutions with the capacity both to do science and to communicate with the public about science.

The opening of the Darwin Centre in 2002 was a dramatic change for the public engagement program at the museum. The success of the Darwin Centre depends upon a new kind of partnership between science and public engagement staff. In a significant change to their job descriptions, the museum's 300-plus science staff made a commitment to support a daily program of "meet-the-scientist" sessions: *Darwin Centre Live* (or *Nature Live* as it is now called).

Various sources, including the House of Lords,<sup>1</sup> have called for a different approach to public science communication, centered more firmly on dialog, discussion, and debate between scientists and public audiences. The

# Involving the Community

## The Museum as Forum for Dialogue and Learning

SPENCER R. CREW

Throughout the years one key issue with which museums have wrestled is their role as educational institutions and their relationship to their audiences. This conversation is critical as it gets to a core question concerning how museums provide value as community institutions. While education is one of their most important tasks, the form it should take has not always been as clear. The choices have ranged from employing a Socratic approach to using a more authoritarian technique. With the former their task was to understand and respond to the interests of visitors, while with the latter they sought to expose visitors to artifacts and ideas in which they may not have an initial interest but that the staff believed visitors needed to understand better. To accomplish this goal museums saw themselves as knowledgeable tutors who led their students down the road to enlightenment even when the students resisted. Museum staff knew visitors eventually would realize how much the experience benefited them.

### 6.1 VISITORS AND THE MUSEUM

A museum's final decision about which relationship to its audience it would embrace depended on where the institution believed its best chances of success lay. Some of the early nineteenth-century museums focused on visitors as customers and as critical revenue sources. They believed that education could be entertaining and engaging as well as profitable. These institutions sought to create experiences that attracted people who came because they believed what was offered at these institutions was worth the price of admission. Places like the Peale Museum in Philadelphia and the American Museum in New York followed this strategy. Charles Peale and P. T. Barnum were entrepreneurs committed to finding ways to attract visitors to their institutions because of the power of the objects and the environments they created around them. They considered the preferences of visitors first as they crafted the presentations in their museums and marketed them to the public.

They believed that education did not have to be grueling or boring, but could be both enjoyable and effective.<sup>1</sup>

Other institutions did not follow this path. As their primary support shifted from the general public to the wealthy movers and shakers of society, their emphasis changed as well. More museums saw themselves as the preservers and reinforcers of prevailing cultural values. Consequently, their goal was to highlight the quality of the artifacts they held in their collections as well as to generate awe and reverence for the cultures that created them. Museum staff in the United States wanted to reinforce the idea of the progressive improvement of American society and technology. For these institutions their responsibility to their visitors was to expose them to the values and cultural norms intertwined in these objects. This meant their most important role was to collect and preserve these significant cultural icons. Their key audience was not the general public, but the patrons who supported the acquisition and preservation of the artifacts. Museum staff focused in this manner worked hard on improving professional standards for the field. In the process they sought to prove that they could properly care for and study these objects, and that they were worthy of the trust placed in them by donors. The educational goal in this case was to increase staff knowledge of the objects and to illustrate the importance of the artifacts as cultural icons.<sup>2</sup> How the general public felt about these while on view was less important than making the objects available to illustrate important cultural concepts visitors should know about the world in which they lived. If the public was wise enough to take advantage of what the museums offered that was good. If they did not make use of the opportunity it was their misfortune and poor judgment.

While not every museum followed this pattern precisely, this mode of increasing professionalization characterized the trajectory of the museum field for much of the twentieth century. The objects, the exhibitions, and the programs produced were directed toward reinforcing traditional history, culture, and knowledge while ignoring nontraditional perspectives. The lives and the material culture of the successful, the movers and shakers, and the wealthy dominated the narratives presented in these institutions. There were exceptions like the Newark Museum, directed by John Cotton Dana, who believed museums needed to be more responsive to the general public. But this perspective was in the minority.

## .2 THE LATE-TWENTIETH-CENTURY MUSEUM

The manner in which museums viewed their relationship with the general public did not begin to shift again until the latter part of the twentieth century. Then a number of factors came into play to cause the change. Sources of funding support for these institutions began to broaden as local and national gov-

ernmental funding increased in importance. These agencies were interested in how the cultural institutions that they supported served their local communities, and asked them to demonstrate their impact. National foundations followed a similar pattern as they sought to maximize the impact of the dollars they provided cultural organizations. In addition, more visitors demanded that museums broaden the topics and the artifacts they highlighted in their presentations. Civil rights activists across the nation raised important questions about whose culture, whose history, whose narrative was included in these institutions. These potential customers were not content with only traditional interpretations. They wanted the discussion broadened, made more diverse and more inclusive. At the same time, new scholarship in the academy offered information about the contributions many different people had made to the United States. The history of African Americans, Latinos, Asian-Pacific Americans, women, American Indians, and numerous other groups experienced a renaissance as their stories and contributions became more readily available.<sup>3</sup> Representatives of those groups wanted this information included in the narratives featured in museums. They felt that excluding these stories created a biased and unacceptable image of a rich and diverse American culture.

As the pressure mounted, museums began to adjust and think more about the rich variety of stories they could access and include in their presentations. They began to recognize that maintaining their relevancy as institutions in a rapidly evolving world meant that they must embrace new ideas and new perspectives. One of the first illustrations of this new thinking was the publication in 1984 of *Museums for a New Century* by the American Association of Museums. The core message it highlighted was the importance of pluralism in American society and the responsibility of museums to recognize and help translate its meaning to its visitors. They acknowledged that this is not a simple task as it sometimes means mediating competing points of view. However, they saw it as an essential role that museums could not ignore.

Another publication by AAM in 1992 reinforced the ideas set forth in *Museums for a New Century* and carried them further. *Excellence and Equity: Education and the Public Dimensions of Museums* encouraged museums to shift the paradigm of how they saw their relationship with their audiences. It emphasized the educational role of museums in the broadest sense and promoted more and deeper collaboration between museums and their visitors. The authors strongly believed that museums could no longer position themselves as omniscient sources of authority who best understood what their visitors should learn and need not ask their opinions. Instead, they argued that partnerships made more sense—partnerships that respect the knowledge brought to the conversation by all of the participants, and which incorporate that collective perspective into the exhibitions and programs created by the museums.

The good news is that rather than stubbornly resisting the idea many institutions began to take the concerns and opinions of their visitors more seriously. They recognized that the changing demographics of the communities where they were located demanded more flexibility if they were to remain viable. The leisure-time options available for potential visitors were expanding rapidly. Sporting events, concerts, theater, and numerous other activities gave visitors many more choices. The challenge for museums was insuring that they remained high in value as people made choices. Asking visitors what interested them and including them in the decision-making process in creating new activities helped. If visitors saw their history, their culture, their stories in the museums, they were much more likely to visit and to find value in the work of these institutions.

As it turned out, this argument for a different relationship with audiences had merit, as the popularity of museums, many of whom began to embrace this new mindset, climbed upward in the years that followed. A conference at the White House in 1995 on travel and tourism illustrated the growing importance of cultural institutions in the eyes of the public. In a report on how people spent their time while on vacation some interesting facts surfaced. There were certain key activities that consistently topped the list for vacation travelers. Number one on the list of activities was shopping. In many ways this is not at all surprising. But second on the list was visiting cultural institutions such as museums, science centers, zoos, or cultural festivals. The report pointed out that people liked to go to these institutions because they offered experiences that vacationers felt enriched the quality of their visit and deepened their understanding of the history and culture of the area. In response to this statistic tourism bureaus indicated that they would more actively feature museums as one of the highlights of their states.

The popularity of museums continued to rise in the years that followed, as another study published by the AAM in 2001 illustrated. The report found that visits to museums of all types had reached about 865 million per year. This meant that about one-third of Americans said they had visited a museum, aquarium, science or technology center, or a zoo within the past six months. Nearly a quarter of Americans had gone to one of these places in the past year, and one in five had been there more than a year ago. This data was notable as it indicated that at the time of the report attending museums was one of the most popular things people did. It had not reached the level of attendance at sporting events, like auto racing for example, but it was rising in importance. This was great news for museums and reason for them to feel excited about the future and their place as significant institutions in the eyes of the public.

### 3 THE POST-9/11 MUSEUM

In the light of these studies someone looking at the state of the field in early 2001 could have predicted a very bright future. But circumstances change

quickly, and so did the environment for museums. Most significantly the events of September 11, 2001 shook the nation as well as our institutions. This catastrophe paired with a weakening economy had a dramatic impact upon attendance at cultural institutions and their viability. Sites like Colonial Williamsburg (Virginia), Sturbridge Village (Massachusetts), and the Smithsonian Institution (Washington, D.C.) witnessed significant slumps in their visitorship, sales, and, consequently, income. Other museums across the United States witnessed similar reductions in visitorship and income. The recovery from these setbacks has been slow. It has created a reason for us to look again at our relationship to our visitors and to consider very seriously the challenges of operating a museum in the twenty-first century. In fact, as we contemplate the present state of the field, how we position ourselves as relevant social entities in a world that has changed significantly in just the last few years is a critical core issue.

Wrestling with this question brings up once again the issue of the role of museums as educational institutions and the nature of the relationship they need to forge with visitors. The ideas put forth in *Museums for a New Century* and *Excellence and Equity* are still important cornerstones in this conversation about engaging audiences. What increases the complexity of the discussion is the necessity of expanding the definition of diversity and how we think about this concept in the broadest possible way. In the twenty-first century, discussions on diversity must cover more than race, gender, and ethnicity, which were the most often discussed focal points of the last quarter of the twentieth century. A new array of characteristics such as age, learning styles, and computer literacy are all variables that need inclusion under expanded discussions of diversity.

At core, the challenge is how our institutions engage new ideas, new ways of operating, and new modes of communication. In earlier discussions discomfort often sprang from moving away from traditional ways and opening oneself up to new possibilities. It is critical that our institutions are not bound by tradition. This is not to argue that traditional ways of operating and presentation do not have value. But they are not the only way to see and connect to the world and our audiences. The challenge is how to seek out and use the best of the old and the new. It is also to make the effort to explore which approaches are most effective in consolidating the relationship between our institutions and our audiences. We need to find ways to provide experiences for our visitors that offer meaning to their lives, and position our organizations as places that have an important societal role to play.

Often the hardest step is to allow oneself to move into uncomfortable territory. A good example is a project recently undertaken by the Chicago Historical Society titled "Teen Chicago." It began as an effort to capture what it meant to be a teenager in Chicago from 1900 to the present. The initial approach was pretty straightforward. The society used students from across

the city to conduct about a hundred oral histories with older residents about their experiences as teenagers in Chicago. The students were to explore what teenagers thought about, wore, listened to, and how they lived in the past. The Chicago Historical Society saw this as a great way to study the history of the city through a unique perspective. The society also thought it was a great way to make history come alive for the students doing the interviews.

What the staff at the Historical Society did a bit differently was to make the teenagers they recruited partners in the project from the very start. This "Teen Council" helped fashion the questions, selected whom they would interview, and offered ideas on how to share the information they acquired with the public. The results were much different than the staff originally imagined. The students became very enthusiastic about the project and infused it with their own ideas and views. In particular, they wanted a say in how the exhibition resulting from their interviews would look. The issue for the staff was the degree to which they were willing to share their control over the exhibition and the programs accompanying it. To their credit they chose to give the students an opportunity to have a major influence on the design and execution of the project. The students' input impacted the colors used, the musical styles, and the presentation techniques. The resulting exhibition had an aesthetic much more recognizable and inviting to a younger generation. It was not what the typical visitor might expect at a place like the Chicago Historical Society. The show was very much in a style familiar to the MTV generation. The colors were bright, the music often livelier, and the modes of presentation innovative. For example, they presented some of their interviews on screens set in lockers like the ones used by students in high school.

The programming around the exhibition also followed a different direction because the activities were heavily teen oriented. They had poetry slams, rap performers, as well as break-dancers and skateboarders outside the building on different occasions. The goal was to make the exhibition, and more importantly the building, feel user-friendly and inviting to teenage visitors. For example, at events like the poetry slam extra uniformed guards were not put in place, despite concerns about possible violence. The staff felt it more important to let students attending the events see that the historical society was treating them like any other guests coming to an event in the building.<sup>4</sup>

The results were gratifying for the institution. Teens flocked to the museum to see the work of their colleagues as well as to experience this exhibition that talked about issues of interest to them. They began to see the museum as a teen-friendly place. It no longer was the staid, threatening building they once pictured. Their increased attendance helped lead to a dramatic increase in visitorship to the Chicago Historical Society.

Thus, despite the worry of some of the more traditional supporters of the historical society and some staff, the experiment paid dividends. The exhibi-

tion and related programming illustrated the importance of listening seriously to and responding to the interests of specific audiences. It also illustrated how to target and engage specific audiences as well as the success that can follow when they feel included and welcomed. This is neither an easy process nor a comfortable one. To achieve success an institution must be prepared to explore new directions and commit to truly sharing the process of creating new and unique experiences within the building. If we are to remain relevant and engaging entities this is one of the commitments we will have to make as the twenty-first century stretches before us.

## 6.4 TECHNOLOGY IN THE MUSEUM

Museums also need to work harder at better integrating technology and innovation into the visitor experience. This issue is still an area of debate for the field. An example is a recent discussion among AAM colleagues about an award for which several museums had been nominated. The awards sponsored by the Themed Attraction Association recognized innovative presentations in these institutions. A very lively discussion ensued concerning how people felt about the issue of receiving recognition from the "theme park" world. The debate revolved around the question of the differences between museums and places like Disney World. Some people were not at all bothered by the connection and embraced the concept that there was much we could gain from emulating some of the things done at these parks. Others firmly believed that the association was not good. They felt museums would suffer in the comparison and lose their unique identity. In their view museums could not compete on the "gee whiz" level with for-profit theme parks. The resources the parks could put into their experiences far surpass the monies and people museums have available. Also, by not staying focused on our special characteristics we place ourselves in jeopardy. Among the special aspects of museums are the artifacts, the scholarship, and the context they provide visitors. Most theme parks could not match this expertise, and museums should play to their strengths rather than trying to emulate the things theme parks did best, said these participants.

This is a debate that has stretched over many years. But in the twenty-first century choices around this issue are taking on a new urgency. In an age of sophisticated technology and information-rich environments museums cannot afford to sit on the sidelines. Computers, technology, touch screens, film, and interactives are the norm in today's world. They impact nearly every aspect of our lives. This is even truer when we consider younger visitors to our institutions. They have been raised on this technology and are extremely comfortable with it. Because technology is second nature to them they expect to have access to information in a variety of forms and platforms. They are used to

working with large bytes of information and using technology to receive it and to manipulate it. They are not alone in this mindset, as more and more retired visitors are using and becoming comfortable with technology as well. They use it to buy airplane tickets, to preplan vacations, and to send e-mails to children and—more importantly—grandchildren. More and more, for them, technology is just another tool they expect to have available.

This reality does not leave many options for museums. Technology has to be among the choices available to our visitors. And, we need to use that technology in creative ways. It is not enough to have it serve as an alternative way to present labels or information in greater depth. This application is no more exciting than reading a long label attached to the wall. In fact, reading it on a computer screen can be even more annoying and is not the best use of the medium. The wonderful aspect of technology is that it has tremendous flexibility and opportunities for creativity. At its best, technology has the ability to draw visitors into ideas and topics they might not have investigated otherwise. It can reveal the awe and wonder many of us find in the material we work with and use, but which may not have the same innate appeal to others. It is important to examine closely how to leverage technology to its best advantage.

Effective education and engagement does not come in one prescribed format. Effective educators are flexible. Traditional approaches can intersect with less traditional techniques in very valuable and appealing ways. This can in the end persuade visitors to spend more time in our institutions, and to return. Science centers and children's museums have been very smart about this issue. By using technology and hands-on learning environments they have created new ways to connect to visitors. The Exploratorium in San Francisco and the Indianapolis Children's Museum are two good examples. More traditional institutions need to look at these places and find ways to apply their successes in their own settings—even when it feels a little like we are getting close to resembling “theme parks.”

An example is the environmental theater that is part of the experience at the National Underground Railroad Freedom Center in Cincinnati. Instead of creating a traditional film experience or an IMAX theater the Freedom Center constructed an environment that allows visitors to join a young enslaved woman running from Kentucky through Ohio to Canada on the Underground Railroad. The setting is a wooded area along the banks of the Ohio River in Kentucky across the river from the state of Ohio sometime prior to 1860. Visitors enter as trees, stars, chirping crickets, owls, fog from the river, and fireflies surround them while they take their seats. Once settled, the drama begins as they join the fleeing woman who is hotly pursued by slave catchers and baying dogs. In the process of her adventure shots are fired that seem to whiz by visitors, she plunges into the river, and eventually makes contact with black and white participants in the Underground Railroad. During

the escape there are a number of tense moments that help visitors understand how truly dangerous it was to participate in this endeavor, and that a successful outcome was not guaranteed.

The television presenter Oprah Winfrey is the narrator of this very powerful and moving experience. It brings to life the realities of the Underground Railroad in a very forceful way. Visitor reaction to the presentation has been uniformly positive. In surveys it is one of the highest rated activities in the Freedom Center. Teachers, students, and other visitors comment on how real the experience feels and how it allows them to connect to the Underground Railroad experience in a very unexpected but powerful way. In short, they learn something new and touching as a result of the experience. In this instance technology is a useful and powerful tool that enhances the visitor experience and has not caused it to suffer because of its similarity to theme park experiences.

Technology is not an evil in itself, and neither is the use of immersive environments, high-end technology, or creative media applications. They are simply tools available to help create better connections with visitors. Museums should not retreat from or avoid experimentation in these areas. Rather they need to seek imaginative ways to integrate these tools to add to the power of the information they provide visitors. It is important to remain open to looking at techniques used by entities other than museums. There are lessons worth learning there that can be successfully applied or modified in our places. This can be done while still maintaining the special attributes of our institutions. Tried and true techniques of presentation still have their usefulness, but they also have their limitations. Today's visitors are much more sophisticated in their expectations, and if museums fail to rise to the challenge they risk losing their value and importance. Potential visitors have numerous options concerning how and where they will spend their limited leisure funds. The factors that influence those choices in one direction versus another are often intangible and subtle. Museums must take advantage of every opportunity to make their offerings difficult for potential visitors to bypass.

## 9.1 ONLINE EDUCATION: THE CHALLENGES OF DEFINITION

In order to plan and deploy a category of services, it is useful to have an accurate and brief idea of what those services are. This may be an obvious notion, but in the case of online education, there are some challenges to arriving at shared and clearly understood definitions.

In the early twenty-first century, the realm of “being digital” (as Nicholas Negroponte expressed it) influences almost every aspect of our lives. This includes museums and art galleries as well as institutions where we might expect a greater technological presence such as science centers, children’s museums, and world’s fair pavilions. Furthermore, just as being digital affects almost every aspect of society, digital services and technologies are also relevant to all of the key functions of museums and cultural institutions.

One way of looking at this effect is to think of museums as “cultural engines” that research, collect, preserve, and interpret their collections and/or subject areas in order to generate collective memories and social meanings that drive communities into the future. Digital technologies and applications “supercharge” the cultural engine of the museum by making every function of the institution more effective and efficient. Digital services and technologies are relevant to:

- Collections documentation and management
- Research
- Building functions and environmental controls
- Marketing techniques
- Exhibition and interpretation media and approaches
- Education and Public Programs

It’s important to stress that the appropriate forms of being digital are useful to museums, because there are attitudes among museum professionals that in some cases impede the best use of these technologies and services. These attitudes range from utopianism to pessimism, and may be balanced by a duly considered pluralism:

*Utopianism:* Technological utopianism—an overriding faith in the transformative and profoundly positive impact of technology—has been a long-standing cultural and political tradition throughout the industrialized world, at least since the late nineteenth century. In the case of digital and online technologies this has taken forms such as the promise of paperless offices, the Dotcom boom and bust, as well as the supposed political impact of new virtual communities. Even a brief consideration of the fate of some of these grand notions suggests that there have been some bumps along the Information Superhighway.

The danger presented by utopian thought is that it often leads to unrealistic expectations, which can in turn (like any utopian enterprise) result in the waste of resources and, ultimately, disappointment. In turn, this means that the true potentials of digital services are not realized.

*Pessimism:* There is a considerable body of opinion that is highly critical of the online and digital world. Some, like the late Neil Postman, viewed the Internet and multimedia as yet one more socially corrosive manifestation of mass media while Clifford Stoll’s study *Silicon Snake Oil* takes the position that much of what digital technology offers is essentially trivial and unnecessary.

Unrestrained pessimism has the same effect as utopianism: If people do not believe that something can be done, then in all likelihood it will not be done.

*Pluralism:* This is the most complex and dynamic attitude, and presents both the greatest risks and richest potential for online museum learning. Digital and online cultures have a prevailing grassroots character—both in their development and in the range of their applications. The genesis of the Internet itself is an example of this pluralist and grassroots character, as the original system of telephonically linked computers was initially intended as a defense resource to allow cities and military installations to stay in communication in the event of nuclear attack or natural disaster. The ARPANET system would have remained largely dormant if it had not been for the continued use of enthusiast groups who began to post nonmilitary and nonscientific information to larger and larger groups of users. The innovative use of digital technologies by enthusiasts and trendmakers continues to be a factor—even in the area of museum learning.

Another pluralist aspect of digital technology is that while its impacts and influences can be widespread it is relatively cheap and accessible to many different communities. *Today it is much cheaper, faster, and requires fewer personnel for an institution to create and operate its own Web site and multimedia programs than to set up a planetarium or large-format cinema with an accompanying destination film.*

This lower capital and creative cost means that smaller institutions or communities with less money are capable of producing sometimes very sophisticated digital products and services. There are some immediate advantages resulting from this relatively democratic access:

- There is a regular supply of fresh approaches and potential for educational programming, as long as cultural trendmakers stay engaged with this technology.
- Participation in the digital realm is open to a wide range of institutions and communities.

However, there are also difficulties in functioning in an electronic grassroots world—particularly in determining how well an institution's level of digital standards meet appropriate standards of quality and accuracy. Also, continually changing technologies and applications may place a museum at risk of having its earlier installations made obsolete—sometimes sooner than expected.

## 1.2 ONLINE MUSEUM EDUCATION APPLICATIONS

The main uses of online services for learning by museums and related cultural institutions as of the early twenty-first century are:

- Web sites
- Web casts and other download programs
- Virtual museums

### Museum Web Sites

By the mid-1990s many museums had developed some form of Web site service. One of the earlier versions was pioneered by the National Library of Canada in Ottawa, which in 1993 opened a Web site to provide supplementary educational materials to accompany its temporary exhibition program.

The Web site produced for the library's *Out of This World* exhibition on science fiction was a typical example of the Web sites offered by cultural institutions at this time. It was considered quite advanced because it was able to provide still graphics for exhibition art and selections from the collections, but it was still a passive text-based site where users were able to call up written descriptions of exhibition content. The online educational service took the form of an exhibition reading list and a schedule of authors' readings and public events.

As production technology has improved and become more accessible, the carrying capacity of the Internet has also grown. Web sites—including museum Web sites—are able to provide more complex, dynamic, and interactive experiences. By 2006, even smaller and regional museums are able to operate Web sites that rival broadcast media for the delivery of their content.

As the example from the Sir Alexander Galt Museum in Lethbridge, Alberta—a medium-sized regional institution—indicates, most museum and cultural institution Web sites include:

- History, mission, and mandate statements—so that visitors to the site get a clear sense of what the institution is about, the different roles it plays and how it came to be. This is often the initial “sell” point where the online user decides if this is the place he or she wants to be.

- User information—with location maps, opening hours, floor plans, program times, and admission rates (if applicable). Once users have decided that they are interested in the museum, this is the information that allows them to plan actual in-person visits.
- Highlights of the public experience at the museum—which can take the form of a virtual tour with images from the galleries, building and grounds, summaries of exhibitions and gallery topics, and an outline of the types of educational and public programming offered at the institution. Sometimes the museum combines images and content as digital experiences that can only be accessed via the Web site.
- Highlights from the museum's collections and archives. In some cases the Web site will offer tools for online inquiries and research. The presence of links to other collections, institutions, and resources is also an important research tool that museum Web sites offer.
- Information about the museum's retail store—which may include the ability to purchase items online. To a greater or lesser extent, these Web sites include information on other amenities such as cafes, playgrounds, cinemas, or party rooms.
- Electronic versions of the institution's newsletters and publications.
- Mechanisms for establishing a dialogue and relationship between the public and the institution. These connections may take the forms of:
  - Membership information
  - Donor contacts and procedures
  - Contact information for the Web site itself, the institution, and sometimes an online staff directory
  - Links—as well as aiding research, these links to other sites establish the role of the museum as a gateway and helper in the user's quest for knowledge and entertainment

### Museum Web Sites and Museum Learning

From the very outset, the provision of educational services has been a priority for many museum Web sites. Overall, these services can be grouped into the following categories:

*Museum Learning Programs and Events:* On earlier Web sites these consisted simply of posting information to promote and provide better access to programs offered at the site of the institution or somewhere within its community. However, as the online capacity of museums has improved, their Web sites have increasingly become the vehicle for delivering the actual programs. These programs can take the form of interactive study guides, games and quizzes based on museum collections and exhibits, Web casts and remote views of natural heritage sites or deep space, and even virtual exhibitions.



*Collection Study and Research Tools:* Again, the earliest versions of these were often text-based programs in which users could call up written descriptions of objects. Over time these tools have evolved to better defined graphic images of objects and works of art, along with multimedia descriptions using text, sound, and insert video to show objects in use, in various contexts, or in various stages of production. Collections data online may also include links to relevant objects and disciplines either at the institution or another institution's collections.

Interactive controls allow users to manipulate an object from a variety of different perspectives, in effect picking up an object and turning it around in your virtual hand.

These types of research and learning tools—where digital manipulation of artifact images is applied—require us to establish museological standards for interpretation and information design. *While new software and electronic photography techniques allow us to study the context, means of use and production, and materials of composition, in unique and insightful ways, the degree of interactivity and animation should not change or compromise the authentic meaning of the artifact or work of art.* The growing field of museum digital photography is still determining appropriate standards and specifications to govern formats, documentation methods, and presentation criteria for high-definition and three-dimensional collection photographs.

### Forums, Chat Rooms, and Web Casts

All three of these online capacities can be viewed as museum learning services, in that they create the ability for the public to contact the museum, and in turn the museum can use these means to reach out to the public. Unlike many outreach programs, these services can connect to people and institutions around the world.

Electronic bulletin boards and forums were the original basis for the growth of the Internet as a public and cultural entity. In the late 1970s and early 1980s, fans and enthusiast groups of various types—from genre literature and sports to film and even TV trivia and nostalgia enthusiasts—started posting electronic messages to each other. They exchanged information and opinions and experiences in online venues such as “The Well” where they formed what Howard Rheingold refers to as “virtual communities,” that is, communities of interest, and to some extent intentional communities that do not occupy any physical space but congregate only in the machines and minds of their members.

Subject and enthusiast-based forums continue today, and museums and other cultural institutions use and sometimes even host them. These forums can range from bird watching and “ask a gardener” forums to the electronic

newsletters distributed by nature centers and botanical gardens to moderated postings and specialized links to other organizations and interest groups. The American Museum of Natural History, for instance, provides regularly refreshed programs on new developments in the various science disciplines.

Some science museums and science centers have pioneered the electronic delivery of interactive electronic programming via their Web sites. Again, these online educational program services have had a relatively long history, in terms of the digital world. The 1980s marked the first continuous offering of online courses. Although these were initially developed by formal educational institutions, museums and other informal learning institutions are now increasingly able to provide them.

Like most online services at the time, programs such as Connected Education were text-based, and employed a simple but effective educational model:

- Computers with modems and telephone connections were the means for delivering near-instantaneous lectures and educational support resources.
- The Internet was also a high-speed means of submitting questions and answers as well as written assignments.
- Once the instructor had collected the assignments, the evaluations could in turn be electronically delivered to students around the world.

Museums and science centers have offered similar educational programs in the form of “ask a curator” forums or institutionally hosted chat rooms. With forums, users can e-mail in questions and ideas, so that experts can send back their answers. These questions and answers can be either e-mailed directly or posted publicly on the museum's Web site. An institution can also use its Web site as a gateway for setting up an online chat room where participants can ask questions and receive real-time answers.

Digital services are usually not sufficiently advanced that audio and video can also be downloaded via a museum's Web site. *EMPLive*—operated by the Experience Music Project in Seattle—has been a pioneer in this field, with music education programs featuring downloadable lectures and interactive music lessons.

Digital online services can also be used for research and development of new exhibitions and other learning programs. *Humanitas*, a cultural institution that is currently under development in Toronto, is using this technology to gather life history accounts and other information from the public to shape the eventual content of its public programs and gallery exhibitions.

The Exploratorium Web site, originating from San Francisco, provides access to many educational resources. One of the most advanced and enjoyable is *Iron Science Teacher*. The content of this program is videotaped on the floor

of the Exploratorium's main gallery and the format is something of a parody of the popular TV cooking show, *Iron Chef*. Science teachers from the Bay Area are invited in to create insightful (and usually entertaining) science demonstrations competitively, using randomly selected materials. As with all game shows, an enthusiastic audience watches and the contestants are graded—but unlike many game shows scientific principles are explained as well.

*Iron Science Teacher* is a program that you can download off the Exploratorium Web site, which also offers an extensive archive of past programs. And these programs are suitable not just as on-screen entertainment on personal computers, but are resources that students in a classroom environment can use. *Iron Science Teacher* is also remarkable because it establishes the Exploratorium as an important authority and resource for science education, and simultaneously serves to market the facility as an attraction around the world.

### Dedicated Downloads and Podcasts

Much of what online museum learning can do and the directions it is developing are the outcomes of technological convergence and “Negroponte Shifts” in which different technologies and systems are bundled together, and where capacities and content developed for one medium find new and sometimes unexpected uses in a different context.

The process of downloading files from Web sites—often associated with enterprises such as music distributors and film studios—has converged into new methods of text, graphic, audio, and video interpretation for museums and related cultural institutions. In this case, traditional acoustic guides, printed guides, and docent guided tours have transferred much of their content to mobile devices that visitors already own and can bring with them to the museum:

- iPods and other MP3 players
- Palm Pilots and other personal data assistant units (PDAs)
- cell phones
- digital cameras

Some visitors take technological convergence even further and carry hand-held units that combine the features of all of the systems listed above.

Again, the Experience Music Project was a pioneer in this area. MEG units were originally conceived as an advanced form of acoustic guide—appropriate in a museum dedicated to popular music where visitors would want to hear some of the music represented in the exhibitions and collections. However, MEGs also had a wireless capacity that allowed visitors to down-

load text, graphics, and audio files from exhibits and transfer them to their home e-mail addresses. In this manner visitors could create their own personalized multimedia record of their museum visit—a personally authored digital catalogue. MEG hardware is similar in size and operation to an acoustic guide—units are about the size of an older portable CD player and are rented out to visitors as they enter the galleries.

Since EMP opened in 2000, mobile communications technology has evolved to the point where institutions do not have to distribute special hardware from their institutions—or the hardware that is distributed is even smaller and offers online access to graphics and the institution's Web site while the visitor is in the galleries. The Canadian Museum of Civilization is currently introducing smaller PDA interpretative systems that use inset LED screens to provide animated interpretation of exhibits and collections on display.

Cell phone-based interpretation is also possible in the museum environment—although to date these applications have been used mostly at historic and architectural heritage sites. Here visitors can enter codes on their cell phones to call up audio descriptions of what they are looking at.

Podcasting—which takes its name from the process of distributing audio and video files via downloads to iPods and other MP3 players—also represents a new and potentially important area of museum educational programming. Podcasting is also an example of two major trends in digital culture:

- A lower level of hardware investment—so that institutions can concentrate on content and interpretation, rather than investing in purchasing and maintaining new hardware. Visitors bring their own iPod technology to the institution.
- Grassroots pressure is also evident with podcasting. Some public galleries and museums first became aware of podcasts when they discovered that visitors were creating their own unofficial audio guides to the exhibits and making them available on personal Web sites and blogs (short for “weblogs”). The institutions had to move into this area of educational programming in order to reach their audiences in ways that were already in use and to make sure that their point of view on their own collections was being conveyed.

### Virtual Museums

So-called virtual museums are bodies of information and images that exist only online. As the bandwidth of our computers and the Internet itself increases, so does the sophistication and capacity of virtual museum sites, and therefore so does their educational value. Virtual museums usually take one of the following forms:

*As previews of physical museums that are under development.* In the mid-1990s, the Experience Music Project launched *EMPLive* which functioned as a virtual museum for several years before the actual site opened in Seattle in 2000. As a virtual museum, *EMPLive* provided views of the institution's growing collections and its ongoing research, as well as access to educational programs related to musical forms and the social history of musical expression in America.

*As successors of physical institutions that have closed.* The Museum of Sequential Art in Boston ceased operation in 1999. However, it reappeared as an online museum that features regularly changing and curated virtual exhibitions of this form of popular culture. This virtual museum is actively maintained, provides useful educational services, and cultivates links between artists, critics, and enthusiasts.

*As gateways to virtual and physical sites.* The Virtual Museum of Canada is a long-range collaborative project that combines links to both online and physical cultural resources and collections. The mission and mandate of the VMC is stated on its Web site:

The *Virtual Museum of Canada* celebrates the stories and treasures that have come to define Canada over the centuries. Here you will find innovative multimedia content that educates, inspires, and fascinates!

This groundbreaking gateway is the result of a strong partnership between Canada's vast museum community and the Department of Canadian Heritage.<sup>1</sup> Spearheading the enterprise is the Canadian Heritage Information Network,<sup>2</sup> a special operating agency of the Department of Canadian Heritage, that for thirty years has enabled the heritage community to benefit from cutting-edge information technologies.

The VMC harnesses the power of the Internet to bring Canada's rich and diverse heritage into our homes, schools, and places of work. This revolutionary medium allows for perspectives and interpretations that are both original and revealing.

Thus, at one level, the VMC is a gateway for users to discover existing museums and heritage materials that may relate to specific areas of interest. In this way the VMC is a powerful multidisciplinary research and teaching tool that can combine the collections and research of institutions in new and insightful ways. For example, a teacher may use VMC links and search engine to compile a comprehensive list of ethnographic First Nations materials from the Royal Ontario Museum in Toronto, the Museum of Man and Nature in Winnipeg, or the Museum of Anthropology in British Columbia—and then take her class in to see them!

The VMC also allows for even more balanced and comprehensive searches by providing access to smaller and more remote institutions. An ethnographic search through VMC might also offer materials from different cultural centers in First Nations communities throughout Canada. Users may be in isolated situations, but through the VMC they can access images, data, and interpretation of their own and others' cultures.

Another function of gateway sites such as the VMC is to provide a forum for virtual exhibitions and educational programs that exist only online. Again, if we view the highlight of the VMC as listed on their Web site:

- More than 7 million people visit the VMC each year
- The Image Gallery features over 420,000 images
- There are more than 150 interactive games
- VMC<sup>3</sup> hosts over 500 *Virtual Exhibits* and *Community Memories Exhibits*

In response to the growing use of the Internet by teachers, the VMC launched the AGORA Learning Centre in the spring of 2007. This initiative is intended to provide educators and learners with an interactive online environment that offers a compilation of learning resources (text, images, video, and multimedia) and tangible outcomes, all created by Canadian institutions.

As Negraponte notes, "bytes are easier to manipulate than atoms." Therefore, projects such as virtual exhibits and community memories exhibits allow more groups and institutions to participate in the VMC or similar virtual institutions, because they are less expensive to set up, distribute, and update.

As with all digital media, the greater access and flexibility has the corresponding challenge of ensuring the accuracy and appropriateness of the content. In the case of the VMC, all content and educational programming is reviewed and refined through a wide-ranging and multidisciplinary peer review process. An evaluation of VMC programs is the subject of a case study in the following chapter by Dr. Barbara Soren.

### 9.3 CONCLUSION: THE CULTURAL DYNAMICS OF MUSEUM ONLINE LEARNING

Online capacity offers tremendous potential for access, and creative and comprehensive educational programming for museums. However, as the need for extensive peer review at the VMC and guidelines for the digital photography and manipulation of collections indicates, there are definite challenges in this area.

The online world is a very dynamic and fast-changing place where new technologies and new interests by users can force institutions to make changes.

It is essential that museums appreciate the nature of these pressures and respond to them in ways that support their role as sources of enduring meaning, while at the same time communicating to their communities in the most relevant and accessible means possible. The future of online museum learning is bright.

## NOTES

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# Audience-Based Measures of Success

## Evaluating Museum Learning

BARBARA J. SOREN

The U.S. Institute of Museum and Library Services (IMLS) describes outcome-based evaluation as a systemic way to determine if a program has achieved its goals. In this type of evaluation, museum staff can ask program partners and other stakeholders, “Why are we offering this program, what do we want to accomplish, and who do we want to benefit from it?” If they want to know if their program is successful, “What will the results look like for the people we served?”<sup>1</sup> Knowing the museum’s audiences, their needs and wants, and what programs can do to help them achieve their aims are important.

In a 2001 publication by IMLS, *Perspectives on Outcome-Based Evaluation for Libraries and Museums*, the late Stephen Weil, then Emeritus Senior Scholar for the Center of Education and Museum Studies, Smithsonian Institution, described “two distinct revolutions” in the North American museum. The first revolution during the past fifty years has been a shift in focus from being inwardly oriented on growth, care, study, and display of its collection, to becoming outwardly focused with a range of educational and other services to its visitors and its communities. The second revolution is related to public expectations that a museum experience “will demonstrably enhance the quality of individual lives and/or the well-being of some particular community.”<sup>2</sup> For Weil, measuring outcomes are the benefits or changes for individuals or populations during or after participating in program activities.

Weil wrote more specifically about outcome-based evaluation in 2003 when he elaborated on what a museum can learn from its visitors’ experiences—“both inside and outside its walls.” He explained:

In evaluating a museum’s worthiness, the starting point must be the positive and intended differences that it makes in the lives of the individuals and communities that constitute its target audience. The critical issue is

not how those differences are measured but that such differences must become and remain an institution's central focus. . . . The museum that does not provide an outcome to its community is as socially irresponsible as the business that fails to show a profit. It wastes society's resources.<sup>3</sup>

Weil described the complexity of measuring the impact of museums on their visitors as well as the astonishing diversity of objectives that museums pursue today. This complexity requires "a vast arsenal of richer and more persuasive ways to document and/or demonstrate the myriad and beneficial outcomes"<sup>4</sup> that may occur for individuals and impact communities.

In 2005, Weil took this theme one more step, describing a success/failure matrix to determine the overall performance of a cultural enterprise such as a museum. He outlined four key dimensions for measuring success.

Four key dimensions that define success in museums:<sup>5</sup>

The Matrix	
Purpose	Resources
Effectiveness	Efficiency

Success according to Weil depends on the ability of museum staff to:

1. articulate a clear and significant purpose that is both worthwhile and responsive to an identifiable need of its target audience(s);
2. assemble the resources necessary to achieve that purpose;
3. demonstrate the possession of skills necessary to expend these resources to create and present public programs that achieve the museum's articulated purpose;
4. demonstrate possession of managerial skills necessary to create and present those public programs in as efficient manner as possible.

Weil compared these four key dimensions to a series of hurdles, which must be addressed in sequence. He argued that "care must be taken not to muddle the quantitative measures of efficiency appropriate for evaluating outputs with the qualitative estimates of effectiveness required for evaluating outcomes."<sup>6</sup> Measurement of success must include numbers or quantitative methods, as well as anecdotal or qualitative methods, as noted in the chapters I contributed to Gail Dexter Lord and Barry Lord's *Manual of Museum Planning* (1999) and *Manual of Museum Exhibitions* (2002).

Robert Janes, coeditor of *Looking Reality in the Eye: Museums and Social Responsibility*, was invited to give the 1st Annual Stephen E. Weil Memorial

Lecture at the Mid-Atlantic Association of Museums conference in Baltimore, Maryland, in 2005. In a series of case studies in his book, Janes and G. T. Conaty look at alternatives to current museum practice based on what people visiting museums and their Web sites might want and need.<sup>7</sup> Each case study describes creative and innovative ways to:

- become a socially responsible museum;
- understand that attendance flows from significance, and significance flows from providing meaning and value to one's community;
- create meaning and inspiration in exhibitions, special events, programs, and activities;
- demonstrate a commitment to idealism, intimacy, depth, and interconnectedness as tests of genuineness and quality.

Janes and Conaty define these terms as:

*Idealism*: Thinking about the ways things could be, and not simply accepting the way things are.

*Intimacy*: Providing communication and quality of contact in the physical museum and on its Web site.

*Depth*: Ensuring deep and enduring commitments to the maintenance of human relationships.

*Interconnectedness*: Making connections between families, organizations, the environment, and the whole of humanity.

In one particularly powerful case study,<sup>8</sup> Ruth Abrams explains how the Lower East Side Tenement Museum in New York has become a *mission-driven museum*. The museum's mission has driven:

- the type of objects exhibited, interpreted, and documented;
- the subject matter focus;
- the primary activities;
- the museum's stakeholders' beliefs and values;
- planning for target audiences for whom programming is of special interest;
- expectations for visitor experiences;
- outreach activities such as the museum's Web site.

## 10.1 HOW TO DEVELOP AUDIENCE-BASED MEASURES OF SUCCESS

Indicators that demonstrate the success of exhibitions and programs from an audience or visitor perspective are based on a museum's mission and/or mandate related to individuals visiting exhibitions or participating in programs,

intended objectives for visitor experiences, and the results or outcomes for people who visit a physical museum or browse a museum's Web site. My article on "The Learning Cultural Organization of the Millennium: Performance Measures and Audience Response" in the *International Journal of Arts Management* (2, no. 2 [2000]: 40–49) explored each of these factors as they are examined again here, and in the case studies in this chapter. The following is an example of an Audience-Based Program Evaluation Template that I have found useful.

## **AUDIENCE-BASED PROGRAM EVALUATION TEMPLATE**

**Name of program/event:**

**Date of program/event/exhibition:**

**Date of template completion:**

**Dates of subsequent revisions:**

**Person completing template and contact information:**

**Mission/Mandate:** [museum's mission/mandate]

### **Part A—Preparation**

**Aims/Goals:**

[statement of intent, midway in generality between mission/mandate and objectives that describe the purposes of the program/exhibition; for example, target audience, educational expectations]

**Evaluation:**

[from previous year(s) if a repeat event or refer to past exhibition surveys/evaluations]

**Description of exhibition/special event/education program:** [please underline which]

[a rich description of your program as if you are promoting your museum to potential funders to sponsor it, encouraging people who have not yet visited to attend, or orienting new board members, staff, or volunteers. This is the beginning of creating a brand identity with target audiences related to your museum's offerings and visitor benefits. Include date event established (if an event), general history, and information about event]

**Research materials/Artifact loans:**

**Conservation issues:**

**Security:**

**Technology:**

**Target group(s):**

[who you want to visit the museum, both traditional and nontraditional visitors, for this program, that is, members and current visitors, local communities (ethnic/racial groups, artists/historians, subject matter enthusiasts, novices), tourists, professionals from other communities nationally and internationally, elementary, secondary and postsecondary students and educators, touring and special interest groups, outreach and extension activities to educational and community groups]

**Education and public programs:**

[connections with the curriculum, involvement of education staff in exhibition or program production, hands-on activities to be incorporated into exhibition or program, special events to occur in conjunction with exhibition or program (talks, meetings, special days)]

**Web presence:**

**Timelines:**

[timelines for exhibition or program production]

**Objectives for the visitor experience:**

[Objectives focus on opportunities that will be provided for the visitor experiencing an exhibition or program, or intentions of museum staff designing an exhibition or program. If objectives are clearly articulated in exhibition and program planning, they should provide a basis for assessing the extent to which an exhibition or program is effective, and ways to improve; specific statements of what individuals will be able to do during their experience in an exhibition or program (e.g., behaviors, performance, problems to solve, emotions, hands-on activities). Objectives might be: to present exhibitions or demonstrations of . . . ; to demonstrate . . . for public audiences; to foster confidence in the viewer's own interpretation and reading of . . . ; to present an exhibition or other public program which offers . . . ; to benefit a broad range of age groups by.]

**Outcomes after a visitor experience:**

[Outcomes focus on what a visitor who interacts with objects in an exhibition or participates in a program will know or value as a result of that experience, or the result of the visitor's experience at the museum. If outcomes are clearly articulated in exhibition and program planning they should provide indicators for measuring the success of the museum's exhibition program for visitors (e.g., new appreciation, sensitivity, understanding; a strong feeling; wanting to do something, find out more; valuing an idea, topic, person, object). Outcomes may be, for

## 10.2 OBJECTIVES AND OUTCOMES FOR VISITOR EXPERIENCES

*Objectives* focus on opportunities that will be provided for visitors experiencing an exhibition or program in a physical museum, or browsing the museum's Web site. If objectives are clearly articulated in exhibition and program planning, they should provide a basis for assessing the extent to which an exhibition or program is effective, and ways to improve. *Objectives are specific statements of what individuals will be able to do during their experience in an exhibition or program (e.g., behaviors, performance, problems to solve, emotions, hands-on activities, and/or interactions with live interpretation).*

How can museum staff evaluate if they are achieving the objectives they have articulated for the exhibition or public program to ensure continuous improvement? They might try to evaluate visitor experience through, for example:

- Verbal feedback and written comments in a comment book on the success of the exhibition or program
- A questionnaire to determine:
  - where audiences are coming from
  - individuals' interests, expectations, and previous exposure to subject matter
  - how they heard about the museum or exhibition
  - how many times they have visited
  - what their experience was of the exhibition or program
  - what their needs are in the museum
  - what other services/interpretive aids they would like or would use in conjunction with the exhibitions to enrich their viewing experience
  - what they might do as a result of their experience
- Staff and volunteer observations of visitor response to exhibitions and programs
- An annual meeting with local teachers, educators, and related instructors who have experienced the exhibition or program to discuss outcomes of the educational program, and ways to continue to improve these services
- Meetings with other community group leaders/instructors to develop ways to identify and reach new audiences, and to strive to develop appropriate interpretive activities to meet their needs.

*Outcomes* focus on what a visitor who interacts with objects in an exhibition or participates in a program will know, do, or value as a result of that experience, or the result of the museum visitor's on-site or online experience. If outcomes are clearly articulated in exhibition and program planning they should provide indicators for measuring the success of the museum's exhibition program for visitors.

What are signs or evidence indicating to museum staff that visitors have experienced what was expected during their experience in an exhibition or participation in a program? What indications are there that individuals may use or apply knowledge gained, do something to learn more, or value their experience after they leave the museum? Generally, these indicators can serve as benchmarks to compare the success of a museum's learning programs from year to year. They can help staff working across departments collaborate on how the museum can better reach visitors and program participants.

Some *quantitative indicators* that can measure success include the number of:

- Invitations/handouts printed and distributed for each program (mailed, distributed to schools, on hand at the gallery, archival)
- Visitors attending exhibition openings or program debuts
- People attending auditorium lectures or gallery talks
- Visitors attending exhibitions or participating in programs
- Advanced group bookings for gallery tours annually and actual annual bookings
- Hands-on workshops annually for school groups in conjunction with tours
- Requests to circulate exhibitions originated by the museum
- The extent and quality of the media coverage of museum programming and the audiences reached through these media
- The level of support the museum receives and from whom, acknowledging the merit and value of the museum's activities (e.g., demonstrated by both increases in annual activity grants and comments from peer assessment juries).

However, to effectively evaluate exhibitions and programs and determine how successful they are, qualitative measures are equally as important as quantitative measures. Some of the *qualitative indicators* of success can include:

- A new appreciation, sensitivity, or understanding
- A strong feeling
- A valuing of an idea, topic, person, and object
- A meaningful experience related to specific physical or digital objects, the creators or owners of the objects, or different interpretations of the objects
- New self-learning or learning about others during a visit
- A curiosity to find out more (e.g., by buying a related book or object in the museum's gift store, sharing an experience with friends and family, returning to the museum, visiting the museum's Web site, donating an object to the museum, or visiting a related museum).

In two of my own case studies—one about visitor experiences at four physical museums, the other about user experiences planned for eight museum Web sites—I used some ideas from Weil, Janes, and Conaty to think about how to measure success from an audience perspective. I used a combination of qualitative and quantitative strategies to provide multiple perspectives for understanding the visitor experience. Both strategies are needed to evaluate the effectiveness of exhibitions and programs, and are useful for finding indicators of success for visitor experiences. These case studies are provided here to complete this chapter.

## DEMYSTIFYING AND DESTIGMATIZING PERFORMANCE MEASURES AT FOUR ONTARIO MUSEUMS

*Barbara J. Soren*

During 2002–2003 a partnership of four small- to medium-sized museums representing archives, a history museum, a city collection, a historic site, and a living history site in southern Ontario, Canada, embarked on a project to implement a system of audience-based performance measures. The partners were Wellington County Museum and Archives, the City of Waterloo's Heritage Collection, Doon Heritage Crossroads, and the City of Guelph's museums. The project was financed by the Museums Assistance Program of the Department of Canadian Heritage and municipal employers. Key components of the project were to be collaboration, learning from one another, and professional training. Important outcomes were:

improved tracking of statistical information and reporting,  
the development of descriptive templates for exhibitions and special events,  
more skill at using performance measures in the daily work lives of staff  
and planning cycles,  
demystifying and destigmatizing "performance measures."

During monthly workshops, the partners developed a master audience-based program evaluation template that blended generic performance measures categories and the Program Evaluation Form being used by staff at Guelph Museums that is included in this chapter. Staff at each museum then selected a special event, exhibition, or program and evolved a template specific to that activity. The group also looked at each museum's visitor statistics, visitor surveys, and surveys specific to exhibitions and programs, and took Microsoft Excel training workshops to improve their reporting about visitors. They decided which questions were most important to ask and provided the most meaningful information on the Program Evaluation Forms (e.g., for school, holiday, and summer programs). Finally, the group considered how staff at each partner museum could use their audience-based performance measures work as a benchmark, comparing visitor response and behaviors during 2002–2003 with 2003–2004. The following summary highlights the nature of activities at each of the partner museums and demonstrates the value of the audience-based performance measures project across the four municipal and community museums.



## THE VALUE OF AUDIENCE-BASED MEASURES OF SUCCESS

At the end of the audience-based performance measures project, the group concluded that it is probably fair to assume that most museums, large and small, know that evaluation is a good thing. However, since most museum workers have little experience with evaluation, it becomes one more task to find time for among cataloguing projects, preparing tours, event planning, and writing media releases. If they have not been involved in anything more than counting bodies through the turnstiles, contemplating formal evaluation of exhibitions, programs, events, or general operation can be very intimidating.

Each museum partner articulated the following important lessons learned from the audience-based program evaluation:

- Early “buy in” from core museum staff is essential to institute performance measures at a museum site. Once staff “buy in” and audience-based performance measures templates are in place, measuring performance should be easy.
- While the time commitment required for this performance measurement system can present challenges for smaller museum operations, the effort is well worth it. With limited resources, it is important when embarking on this exercise to identify what is important to measure, attempting to measure “key things, not all things,” and asking two questions: “What would museum staff like to improve?” and “How do we measure up?”
- To reap benefits from the performance measures system, it is crucial to be prepared to report and share the results in a consistent format with stakeholders, such as board, staff, members, volunteers, and funders.
- Museum staff must be prepared to take action toward improvement and to plan for future measurement activities in order for performance measurement to be a worthwhile investment of scarce resources and time.
- Audience-based performance evaluation is an effective planning tool, and is also a crucial communication tool. It enables the entire team to know what is going on in other people’s heads as museum staff prepare for events or programs.

The research into quality in online museum user experiences highlighted a range of audience-based measures of success and best practices that could help to inform the development of other museum Web sites. Users are becoming increasingly sophisticated and expect that Web developers are using and exploiting the latest technologies. Successful sites should be “living, breathing repositories,” as one multimedia developer interviewed for this research com-

mented, because they evolve, changing in content and interpretation over time, giving users a reason to revisit and continue to learn from the exhibit.

The project managers in the Canadian Heritage Information Network who invited me to conduct the research on quality in online experiences for museum users provided their most generous support throughout the project, and produced a high-quality online and print publication. The print copy of the report can be ordered from [http://www.chin.gc.ca/English/Publications/research\\_quality.html](http://www.chin.gc.ca/English/Publications/research_quality.html).

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