

Beyond Cognition and Affect: The Anatomy of a Museum Visit

Deborah L. Perry
Museum Consultant
Chicago, Illinois

Museum exhibits around the world delight, intrigue, and entertain visitors from all walks of life. As the museum field strives to understand what makes for a successful visit, people continue to pour through our hallways, pushing buttons, asking questions, puzzling over phenomena. The task of studying and analyzing these visitor behaviors falls on the shoulders of museum professionals as we rigorously and systematically observe, interview, tally, and chart visitors and their interactions, all in an attempt to better understand the museum experience.

A research study investigating the museum experience, conducted a few years ago, identified and described the important components of a successful museum exhibit (Perry, 1989; 1993). A basic assumption underlying the study was that for an exhibit to be successful, two criteria had to be met: first visitors had to enjoy themselves, and second, they had to learn something. But what is it that makes learning in a museum fun? What are the ingredients of an enjoyable, yet educational museum experience? How can we understand what happens after cognition and affect?

The study began with an extensive review of the literature in educational psychology, cognitive science, motivation theory, and instructional design, to identify the likely components of popular informal educational experiences. Based to a large extent on a set of heuristics developed by Malone and Lepper (1987), a preliminary model was developed.

The components of the model were incorporated into an existing exhibit about mixing colored lights at the Children's Museum of Indianapolis. This exhibit was selected because it was very popular with visitors, but not particularly effective educationally.

The goal of the study was two-fold. One purpose was to determine if, by incorporating the components of the model into the design of the exhibit, the resulting exhibit would be more successful educationally—while maintaining its high level of popularity. The second goal of the study was to use the exhibit as a way of testing and further developing the model in a museum setting. It was important to the study that the model that was produced be useful for developing real exhibits in real museums.

At the completion of the study, results indicated that when the model was used to revise the exhibit, learning increased, while enjoyment of the exhibit remained constant. The final model is described in detail elsewhere (Perry, 1989).

The development of this initial design model led to the further development of a preliminary theory of informal learning for museums. This theory attempts to answer some important questions, such as, "What makes for a successful museum visit?" "What types of experiences enable visitors to learn in an informal setting?" "What are the components of a museum experience that visitors feel is successful?" "What types of experiences do visitors expect and desire when they come to a museum?"

For the purpose of this paper, a successful museum visit is defined as one in which the visitor's agenda is met (i.e. to have a good time) and one in which the exhibit developer's agenda is met (i.e. the visitor should learn something new, or least become more aware of, or interested in, something.) Can we do both? The remainder of this paper will briefly describe the important components of this preliminary theory.

Simply put, the theory states that visitors have three basic expectations when visiting a museum or museum exhibit, and that in order for a visit—or museum experience—to be successful, it must address all three (see Figure 1).

Participation

When visitors come to the museum, they expect to do things, to participate in their visit. They do not expect to be passive, but to be actively engaged in some manner. The most obvious type of participation is physical interaction. Visitors push buttons, they walk into galleries, they stand and read labels. This type of participation is a physical engagement with the environment and with the objects housed within it. All visitors engage physically, even if it is relatively passive interaction, such as walking through galleries and observing what is going on.

Another type of participation is social interaction. Social interaction is often the primary motivation for coming to a museum in the first place—to do something with friends, family, or out of town guests. Social participation usually includes a certain amount of explaining or teaching behavior, or at least discussing some observed phenomenon. Sometimes this does not occur until people reconvene over lunch or on the way home in the car. Almost always, however, there is some type of sharing of the experience, of thoughts about the objects which were observed, or of new knowledge which was gained.

Finally, visitors to museums expect and seek some level of intellectual engagement during their visit. They will look for opportunities to figure out something, or mentally process new information. This may happen more consciously or deliberately in adults, although, again, it occurs to

some extent in almost all visitors. This type of engagement with the museum and its exhibits is commonly referred to as “minds on” as opposed to “hands on.”

Psychological Needs

People participate in activities of their own free will when those activities make them feel good. Perry (1992) has identified six psychological needs of museum visitors. Following is a brief overview of these needs.

Curiosity

Visitors expect that they will see things that arouse their curiosity. They expect their curiosity to be piqued and satisfied. They expect to see things that they would not see elsewhere. They expect to be exposed to phenomena and objects that they might not encounter or approach in other settings.

Confidence

Visitors expect and want to feel good about themselves. They expect to be able to succeed and to feel confident about their ability to learn something or master an activity. They expect to have a good time and to feel comfortable in a safe environment.

Challenge

Visitors expect and want to be challenged. They expect to perceive challenges, and they expect to engage in the process of figuring out the solutions. Although they want to be able to succeed, they don't want things to be boring or too easy.

Control

Visitors expect and want to feel that they are in charge. They expect to have choices and to make their own decisions. They want to decide when to do what, and in what order. They want to feel that they can be powerful.

Play

Visitors expect and want to have fun and to engage in playful or sensory experiences. The definition of play and fun varies greatly, depending on the individual visitor. With some visitors, it is experienced more as a sense of awe or reverence or peacefulness.

Communication

Visitors expect and want to participate in the process of communication. Communication is the successful completion of an exchange of ideas. Communication can take place among the members of a

group of visitors. At other times, communication takes place between a visitor and an exhibit. Often, communication is in the form of cooperating with friends and family towards a common goal.

Outcomes

In order for a museum visit to be successful, visitors must be changed in some way. Visitors who feel that their visit was not successful often state, "I didn't learn anything new," or, "It was boring. I knew it all already."

The outcomes we think of most readily include visitors learning some new bit of information, such as, "I found out that a gallon of water weighs eight pounds," or "I found out that snakes aren't slimy at all!" Other outcomes that we strive for are more attitudinal or emotional outcomes. "I'm going to think twice before I throw away a plastic bottle again," or "I never knew how terrible it must be to have AIDS." Sometimes an outcome can be the learning of a new skill—"I learned how to make a kite."

Visitor learning is a very broad concept which encompasses a whole range of outcomes, including cognition, affect, and motor skills. It could include learning a new word or nugget of information. It might be developing a new interest in some topic, or it could be learning a new skill such as how to make a puppet. It may even be just seeing something that a person has never seen before. To museum visitors, learning may often be incidental and personal, and is not necessarily an objective for a visit to an exhibit.

Summary and Conclusion

Much of our debate in the museum community has been on how to determine if we have been successful, how to measure learning, and how to design exhibits that educate while still being attractive and fun. The preliminary theory of museum learning presented here proposes that in order for a museum experience to be successful, all of the above components must be considered. What a person does while at an exhibit is as important to keep in mind as (for example) the ways they interact socially, their feelings of confidence, and what attitudes have been shaped. All of these contribute to their enjoyment of, and ability to learn from, the exhibit.

Historically, we have often tried to assess the effectiveness of museum exhibits by measuring cognitive, and often affective, outcomes. There have also been numerous tracking studies which have examined physical and social participation. While extremely important, these studies have concentrated on but a few of the important components of museum learning. In a museum setting, learning occurs when there is the appropriate combination of all twelve components. The Anatomy of a Museum Visit allows us to put each of these issues in a larger context and into perspective.

References

- Malone, T. W., & Lepper, M. R. (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In R. E. Snow & M. J. Farr (Eds.), *Aptitude, learning, and instruction: Vol. 3. Conative and affective process analyses*. Hillsdale, NJ: Lawrence Erlbaum, pp. 223-253.
- Perry, D. L. (1989). The creation and verification of a development model for the design of a museum exhibit. *Dissertation Abstracts International*, 50, 12A, (University Microfilms No. 90-12186).
- Perry, D. L. (1992). What research says...Designing exhibits that motivate. *ASTC Newsletter*, 20(1), 9-10, 12.
- Perry, D. L. (1993). The creation and verification of a development model for the design of a museum exhibit [Summary]. In *Current Trends in Audience Research and Evaluation, Volume 7*. Washington, D.C.: American Association of Museums, Committee on Audience Research and Evaluation, pp. 52-56

Figure 1
Anatomy of a Museum Visit

ANATOMY OF A MUSEUM VISIT

