Designing Exhibits for the Experience

By Robert L. Russell

(published in the Jan./Feb. issue of ASTC Dimensions)

I believe that a key reason people visit museums and science centers is to see and experience the "real thing" not easily experienced in everyday life. People want to see the "plastinated" bodies in *Body Worlds*, play with light and magnetism at the Exploratorium, and watch sharks at an aquarium.

Surveys show that aesthetic, educational, social, and affective motivations bring people to museums (Smithsonian, 2007). These motivations all derive from visitors' anticipated experiences. While funders like the National Science Foundation and the Institute of Museum and Library Services are interested in the impacts or outcomes of the exhibits they fund, visitors must have experiences for there to be outcomes.

With the great emphasis on outcomes, we may shortchange the attention given to the exhibit experience itself. Science centers must design for visitors to "see and do." Based on the rich research findings about how we learn, think, and behave in museums, I have identified ten guidelines for developing well-designed, experience-based exhibits.

1. Provide advance organizers

Visitors may have little experience with the exhibit content, so it should begin with something familiar. An obvious starting point allows visitors to begin easily and confidently in a "low-risk" environment. A title, introduction, or thematic areas – identifying the "big ideas" or major themes -- may help visitors make connections.

2. Design attractive, inviting environments.

Design exhibit environments and elements that visitors find attractive, comfortable, welcoming, and easy to get involved with. Minimize distractions.

3. Design accessible and easy-to-use exhibits

For many, an interactive exhibit is like a new and unfamiliar product. Some exhibits are easy to use, but others are confusing. For a productive and fulfilling visitor experience, design for simplicity and visibility. Design so visitors can easily see how to use the controls, understand the relation between actions and results, and observe the effects. Design for error so visitors can easily restart. Also, standardized exhibit graphics and interfaces help visitors generalize some functional knowledge from one exhibit to the next.

4. Present real objects and phenomena

Since visitors want the "real thing," present real objects and phenomena. Use them to design emotionally and intellectually involving experiences, which can include the "Wow!" factor.

5. Meet visitor expectations

Use designs that pique curiosity, surprise, and intrigue to meet visitors' expectations for learning. Design so visitors can have some fun.

6. Provide entry points to meet individual needs

Prior knowledge, life experiences and interests guide our museum experiences. Visitors often find an effective starting point in an exhibit with something familiar or a problem or question they find challenging. These starting points, some of which might be called "hooks," can often be identified through front-end evaluation.

7. Offer choices, control, feedback, and success

Visitors can personalize their visit if they have choices, exert some control over their experiences, and get feedback on the consequences of their choices. Visitors' actions should produce rapid, clear results, and they should be able to try different actions and observe different results. Exhibits should allow for success, which means visitors reach a satisfying point along the inquiry path.

8. Support experiences with text or audio

Exhibit text or audio can directly support a visitor's experience by identifying what's there, pointing things out, suggesting things to do, raising questions, and connecting an exhibit to other exhibits.

9. Encourage social experiences

Since visitors often come to museums with friends and family, encourage social interactions through text or audio. Allow enough space for more than one person to view or (if practical) use an exhibit. Exhibit explainers can also enrich experiences through informal interactions, often facilitated by "discovery" carts.

10. Evaluate

Like any new product, an untested exhibit can have serious flaws. Front-end and formative evaluation—finding out about what visitors know, what kinds of exhibit experiences they prefer, and how well prototype exhibits work—can help improve the relevance, functionality, and effectiveness of exhibits. Summative evaluation—done after an exhibit goes on display—can help assess the overall effectiveness and outcomes of exhibit experiences, as well as identify any aspects of exhibits that be remediated or revised to make them even more effective.

If you design exhibits with these qualities in mind, your visitors will demonstrate "outcomes" like awareness, interest, and understanding, they will have rich experiences, and they will come back!

Robert L. Russell, Ph.D., (eldrbob@gmail.com), based in Washington, DC, is senior education associate at the National Center for Interactive Learning/Space Science Institute, and a consultant to informal learning organizations.

Reference

Smithsonian Institution. "Museum Visitation as a Leisure Time Choice: A Background Report to the Smithsonian Board of Regents." Smithsonian Institution Office of Policy and Analysis, October 2007.

Resources For Designing Experience Based Exhibits

McLean, K. and W. Pollock. "The Convivial Museum." ASTC, 2011.

Serrell, B. "Exhibit Labels: An Interpretive Approach." Alta Mira Press, 1996.

Humphrey, T., J. P. Gutwill, and the Exploratorium APE Team. "Fostering Active Prolonged Engagement: The Art of Creating APE Exhibits." Exploratorium Museum Professional Series, 2005.

Gutwill, J. and S. Allen. "Group Inquiry at Science Museum Exhibits: Getting Visitors to Ask Juicy Questions." Exploratorium Museum Professional Series, 2011.

Falk, J. and L. Dierking. "The Museum Experience." Republished by Left Coast Press, 1992.

McLean, K. "Planning for People in Museum Exhibitions." ASTC, 1993.

Taylor, S., ed. and B. Serrell, assist. ed. "Try It! Improving Exhibits Through Formative Evaluation." ASTC, 1992.