Visitor Studies 101: Understanding Audiences

Notes, Resources and References

Visitor studies provide an invaluable tool for museums during periods of change and growth, yet many small and even large museums cannot afford to hire professional evaluators. In this context, a museum must know its visitors — their preferences, preconceptions, interests, and needs.

The session at the 2006 AAM Annual Meeting sponsored by CARE, AAM’s Standing Professional Committee on Audience Research introduced museum professionals at all levels to the philosophy of visitor studies in an effort to promote evaluative thinking. Evaluative thinking is thinking analytically about your organization, ideas, programs, and actions, which will naturally lead to studying visitors’ museum experiences.

This handout is based on a Smithsonian workshop taught by Zahava D. Doering (doeringz@si.edu) and Andrew J. Pekarik, previous CARE presentations at AAM made by Zahava D. Doering, Ellen Giusti and Ross Loomis, and on comments from AAM attendees. Please send your comments and/or questions to any of the panelists.

Thursday April 27, 2006
Single Session: 2:15 PM-3:30 PM
Visitor Studies 101: Understanding Audiences
Chair:
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Panel:
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Randi Korn, Principal, Randi Korn & Associates, Inc. (korn@randikorn.com)
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A. BEFORE YOU BEGIN EVALUATIONS

1. **What do I need to know?**
   - Can I state my question in a sentence or two?
   - Why am I asking it?
   - Is my question answerable?
   - Is this the right question? Is there another question that matters more?

2. **Who is the information for and how will they use the findings?**
   - When do they need the information?
   - Would the answer lead to action or change?
   - Is change possible and who would instigate change if needed?
   - How will they access study findings?
   - Have those who will use the results reached consensus on questions they want answered? What methods do they respect?

3. **What resources are available to conduct the evaluation?**
   - Is funding available?
   - Who will conduct the study?
   - Are staff or volunteers available within the research period?
   - Is the information worth the cost of resources?
   - How much time is there to conduct the study?

4. **Where and how can I get the data?**

   **A. What do we already know?**
   - Have previous studies from other institutions, or your own institution, already answered the questions?
   - Are previous studies truly applicable to the current problem?
   - Can someone tell me the most likely answers?
     - Are there experts I can contact to discuss the problem?
     - What do different staff members know through everyday work?

   **B. Which methods will provide me with the information I need?**
   1. Consider **quantitative** methods when
      - variables to be measured are clear and well-defined
      - the central concern is "how many" or "how few," "how much" or "how little"
      - an hypothesis can be tested more efficiently with quantitative information
      - you want evidence for a plausible, intuitive answer
      - when quantitative methods, combined with rigorous sampling, will have the greatest credibility in acceptance

      **Principal quantitative methods**: Each respondent is treated in the same way
      - Surveys (scripted, structured questions; controlled data collection)
        - open-ended questions
        - closed-ended questions
      - Systematic Tracking of visitors
      - Systematic Observation of visitors
2. Consider **qualitative** methods when
   - the questions you need the study to answer are more general than specific
   - the issues are too complex, subtle or personal to be conveyed in a few words or numbers
   - the central concern is "what are we missing here," "what is going on," "why is this happening," or "what does this mean"
   - there is no hypothesis to be tested
   - you are looking for a new understanding, a fresh way of seeing
   - when rich, complex, personal statements will have the greatest credibility

   **Principal qualitative methods:**
   - Qualitative interview (interview guide, tactical plan, open-ended)
   - Focus group (semi-structured questions, group interview)
   - Open observation (introspection, note-taking, synthesis)

3. Consider **mixed** methods when
   - you need to answer both “what” and “why”
   - different perspectives on the question are needed
   - you want to use qualitative methods to identify issues and then quantify responses
   - you want to use quantitative methods to systematically measure something and then use qualitative methods to gain a deeper understanding
   - different users of the data will find responses from different perspectives more credible

C. WHOM SHALL I TALK TO?

1. Selecting a population to study: who can provide the best information to answer your question?
   - visitors in the museum
   - potential visitors
   - school children
   - participants in a program or event
   - visitors with disabilities
   - non-visitors

2. Sample selection: why select a sample?
   - Determining number of potential respondents [population size]
   - Determining size of sample that is needed
   - Defining rules for sample selection -- Role of data collector
   - Suitability of sample for statistical analysis
   - Suitability of sample for generalizations

   The selection or sample depends on the question and the method of study
   Usually, for quantitative studies in museums...
     - at the door or in an exhibition: systematic, based on an interval
     - in an adult program: census [everyone!]
     - in a school program: classrooms
     - in the mail, by phone or web survey: random or systematic from a list

   Usually, for qualitative studies in museums ...
     - depends on the criterion!
The size of the sample depends on the question and the level of accuracy required.

3. Response rates and bias
   • for accuracy, the percentage of responses (response rate) is more important than the number of responses
   • if response rates are low, check for bias (differences between those that answered and those that did not)


**D. WHAT ARE THE ETHICAL CONSIDERATIONS?**

Several issues:
- Being honest with visitors, without compromising the studies;
- Being honest with your institution, i.e., in the reporting of results;
- Being honest with yourself; and
- Understanding legal considerations.

1. Information that we should be willing to supply respondents:
   - Who? is sponsoring the study? who is the "client" for the study?
   - How? are the data going to be used?
   - What? is the subject of the study?
   - Where? will data be collected?
   - When? will the study take place?
   - Why? was the visitor selected/observed?

2. Confidentiality and anonymity issues. What is the difference??
   - Tape-recording: ONLY with permission
   - Photography and video: ONLY with explicit written permission.
   - Permission for kids: in all situations, from accompanying adult or schools
   - Use must be spelled out (e.g., names of interviewees will not be used for post-visit promotions)

3. Information that we should supply our institution in reporting results:
   - Who? responded. How many we tried and how many we got (response rates).
   - What? we asked them. Questionnaires, discussion guides, etc.
   - Where? we conducted the studies.
   - When? the study took place.
   - Why? we conducted the study in a specific way - admit shortcoming to design.
   - How? valid are the results?; i.e., issues of confidence intervals, representativeness, and generalizability.
SOME DEFINITIONS ... AND ASSUMPTIONS

In the end, we all want the same thing: an exhibition [or program] that speaks to the public.

Preparing and Involving Exhibit and Program Planners
- Understand, do not assume the perspective of colleagues and team members.
- Get exhibit and/or program planners ready for audience study.
- Include exhibit/program planners in the audience study process.
- Reach consensus on the focus of your studies.
- Share information with team members both informally and formally.

TYPES OF STUDIES:

Front-end evaluation, Background
- This type of study uncovers general baseline knowledge, attitudes and misconceptions held by visitors about a topic.
- It is used in the beginning of the exhibition and program development process.
- It can test exhibit or program themes, titles, and script ideas.
- It can be conducted using any qualitative or quantitative methods.

Formative or Try-out
- This type of study tests exhibit components, text, and interactives during exhibit development.
- Can expose potential for visitors misunderstanding your intentions.
- Can aid in solving disagreements between exhibit team members.
- Should be an iterative process (where time permits).
- It can be conducted using qualitative methods (in-depth individual interviewing, group interviewing, focus groups, and informal observations).

Remedial Evaluation
- This type of study helps identify things to modify after opening, if necessary.
- It can be conducted using any qualitative or quantitative methods.

Summative or Post-Opening
- Tells you what visitors are learning and experiencing, what they think the exhibition is about, level of satisfaction.
- Can suggest things to do or not do in future exhibitions.
- Tests effectiveness of exhibit components (sometimes defined as attracting and holding power) and the full experience against goals and objectives.

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1 From presentations made by Zahava Doering, Ross Loomis and Ellen Giusti at AAM Annual Meetings.
MODES OF INTERACTION WITH VISITORS
(From Remote to Intimate) And Suggestions for Each Type

1. Collection of written comments

Advantage: Demonstrates to all visitors that the museum cares what they think. Lets you know if there is a big problem that you didn’t realize existed.

Disadvantage: Most comments will be from the very satisfied and the very disgruntled, and will not represent the audience as a whole.

COMMENT SHEETS (deposited in a box, no comments visible)
• Ask a specific question that you think is relevant (e.g., “What aspect of this exhibition interested you the most? The least? Please elaborate.”) Also ask for a few demographic or background characteristics that will help you understand responses (e.g., gender, age, how many times have you been here before, etc.) Sheets can be preprinted with the key question on top and the demographic information on the bottom.

COMMENT BOOK/"TALK BACK BOARD" (many comments visible at once)
• Try seeding the book/board with provocative remarks, copied or extracted from comments by earlier visitors, especially those comments that generated a lot of conflicting responses from other visitors when they read them. You can also make up a few comments to anchor extreme positions.

2. Observation

Advantage: Can give you new ideas about how people are using the galleries and allows you to test hypotheses about behavior.

Disadvantage: Limited to the time when you are able to observe for extended periods. If attendance is low or busy times cannot be covered, it will be hard to observe enough visitors to be sure about what is happening.

Stationary (OBSERVER STANDS STILL, VISITORS COME AND GO)
• Watch the same exhibit from different positions can show how visitors use a specific space or how they interact within their visit group when presented with particular exhibition elements. You can find out how many people stop to watch a video and how many do not. However, your presence might be having an impact on what is happening, especially if you are observing in a narrow area.

FOLLOWING (observer tracks one visitor/group at a time, move as they do)
• In addition to recording the time visitors spend at specific locations and in the exhibition as a whole, note which types of social/physical interactions occur (e.g., pointing, touching, calling over others, sending others away, waiting to see something, taking photo, talking to others, etc.). See which places seem to generate which types of activity.
3. Interview

**Advantage:** Obtains the clearest and richest responses, and can offer insight into unexpected areas. Also gives interviewers a direct sense of visitors and their thoughts and feelings.

**Disadvantage:** Requires skill in formulating questions, in asking them, and in analyzing responses. People can easily misunderstand your questions and you can easily misunderstand their replies without skilled questionnaire development, data collection and analysis.

**Structured** (asking the exact same questions in the same order and tabulating responses)

**Questions**

- Asking structured questions of visitors does not have to mean conducting a full-scale survey. Start by asking visitors just one or two questions that interest you. If you charge admission, for example, that is a good time to ask every visitor a simple question. Change the question periodically.

  Cued interviews: Solicit visitors when they enter an exhibit to spend a few minutes talking to you when they finish. Tell them to spend as long or as short a time as they like. Cued visitors are more likely to pay attention to exhibits because they expect to be questioned afterward.

  Un-cued interviews: Ask visitors as they exit an exhibition to spend a few minutes telling you their reactions. These responses are more likely to represent what truly stands out for visitors immediately after leaving.

**Tasks** (i.e., using an activity as the basis for a response)

- Try asking the visitor to perform a task, such as taking photos with a camera you supply, or sorting images or concepts on cards, or reading proposed text. Ask them specific questions about their thinking as they do the activity.

**Unstructured** (questions are not precisely worded in advance, and discussion is more spontaneous and free-form)

**Group Interviews**

- Rather than convening formal focus groups, (which requires special skills), try asking groups of committed members/volunteers, etc. to meet with you for tea to discuss how the museum could improve. Although the viewpoints of these visitors are relatively limited, it is important because it reflects the experience of the museum's best customers. They can help you to see the museum as it is.

**Individual**

- Choose a visitor who seems really interested in some aspect of the museum and tape-record an interview centered on what the person finds satisfying and why it is interesting. (Visitors who are actively engaged in some part of the museum will be much more likely to provide insights into what is going on than visitors who are not fully attentive.) Listen to the recordings of these interviews repeatedly and make lists about their contents in categories such as: a) reactions you've heard from visitors before, b) reactions you always thought were true, but never had evidence of before now, c) reactions you didn’t expect to hear, d) reactions that seem odd or that you don't fully understand, e) reactions that you want to investigate further.
General Hints.

• Different staff members may have preferences for certain types of interaction with visitors. Try a combination of methods to get more of the staff out on the floor.
• Collecting data at the same place or using the same question at different times of the day, on different days and at different times of the year may yield different results.
• Develop rules for selecting visitors to be talked to or observed. Follow the rules!
• Contact your local college and getting faculty and students involved in understanding your visitors. Education, psychology, sociology and marketing departments are very interested in “off campus” study sites. It’s a win-win situation.

MAKING SENSE OF YOUR DATA

Open-ended, qualitative data
• Familiarize yourself with a book or article on qualitative analysis.
• Make a copy of your notes or transcripts; use the copy for your analysis
• Read all the responses several times to begin the analysis process.
• Group like responses together and apply a category name to each unique group.
• Identify each comment (or response) with the ID of the respondent or a group of respondents and at least one characteristic of the respondents (e.g., gender, age, geography).
• Cut them apart so you can sort them, or sort them on a computer.
• Sort the responses across individuals or groups or characteristics.
• Summarize the data in a format that can be easily understood by exhibit planners.

Quantitative data
• Familiarize yourself with a book or article on quantitative analysis.
• Use a spreadsheet or a software application
• Remember to use one line (row) for one respondent
• Remember to use one column for each category or variable
• Decide if you are using single or multiple responses per question (check one only vs. check all that apply)

RESOURCES

Places for seeking help...
• Bibliography – read...Internet – see attached... College Testing Center... Students [for class projects or paid] ....Consultant assistance... Professional institutes

Several Computer Tools
Qualitative
Ethnograph v5.0
Text based qualitative data analysis software
http://www.qualisresearch.com/

HyperResearch
Qualitative analysis program which guides you through a project from the initial states of coding and retrieval to the final phases of theory building and hypothesis testing
http://www.researchware.com/

* Web sites current as of 3/28/05.
QSR NVivo 7  www.qsrinternational.com
This is a toolkit for interpretation, through exploration and rigorous management, and analysis of qualitative data.

Quantitative
SPSS [see www.spss.com]

ASP (A statistical package) is lower cost and user friendly: www.dmcsoftware.com
See Software Listing at www.sagepub.com [Sage Publications].

Selected On-line Resources

A. Sites with information related to studying audiences:

American Association of Botanical Gardens and Arboreta Developing Visitor-Centered Programs
http://www.aabga.org/aabga/pgmPlan/

AMARC Australian Audience Research Centre
http://www.amonline.net.au/amarc/

Institute for Museum and Library Services
Knowing What Audiences Learn – Outcomes and Program Planning
www.imls.gov/grants/current/ACM-03-fnl.pps

Informal Science (Site features front end and summative evaluation case studies)
http://www.informalscience.org/


B. Sites with general information related to audiences:

Association of Science and Technology Centers
http://www.astc.org/index.htm

The Education Committee of the American Association of Museums (EdCom)
http://www.edcom.org/

Group for Education in Museums (GEM)
http://www.gem.org.uk/

GEM-listserv
http://www.jiscmail.ac.uk/lists/gem.html

Learning in Museums Network
http://www.ala.asn.au/

Museum-Ed Listserv archives
http://www.museum-ed.org/
Museum Education Roundtable
http://www.mer-online.org/

Museum Learning Collaborative (Project ended in 2003, but reports/abstracts still available)
http://www.museumlearning.com/

Museums, Libraries and Archives Council (UK)
http://www.mla.gov.uk/

Office of Policy & Analysis/Smithsonian Institution
http://www.si.edu/opanda/current.html

Smithsonian Institution Research Information System (SIRIS)
Museum Studies Bibliography:
http://siris-bibliographies.si.edu

The Visitor Studies Association (VSA)
http://www.visitorstudies.org/

EVALUATION BIBLIOGRAPHY

This eclectic bibliography contains the basic references related to studying visitors in museums and participants in museum programs. It also includes some references which describe museum populations, as well as more philosophical pieces. Publications prior to 1990 are not included.

Introduction to Evaluation and Audience Research

Diamond, J. (1999). *Practical Evaluation Guide: Tools for Museums and Other Informal Educational Settings*. Walnut Creek, CA: AltaMira Press. This guide provides a concrete guide to tools and approaches for understanding how well programs and exhibits communicate the intended messages to museum audiences. It includes samples of numerous strategies for collecting information on museum learning, and describes how to construct and use them.


*Journal of Museum Education*. Determining Museum Effectiveness: Visitor Studies Today. 1997, V. 21(3). An overview of the field of visitor studies, this issue incorporates both the historical and current status of visitor studies. It includes articles by Stephen Bitgood,
Zahava Doering and Andrew Pekarik, Randi Korn, Paulette McManus, Deborah Perry, Beverly Serrell and others.

Journal of Museum Education. Understanding the Visitor Experience: Theory and Practice. 1997, V. 22(2 & 3). This issue features articles written by experts with experience in studying learning in diverse settings. The articles represent different approaches to studying learning in museums, specifically discussing cognitive, social, aesthetic, and motivational dimensions.


Popham, W. J. (1992). Educational Evaluation. Needham Heights, MA: Allyn and Bacon. An evaluation text that is actually fun to read! Though based on formal education, it is more than adequate for evaluations in informal environments. It has good information about affective measurement. The last chapter provides a wonderful description of every issue you are likely to encounter and a rich discussion of ethical issues.

Front-end Evaluation/Background Studies


Mager, R. F. (2000). Preparing Instructional Objectives: A Critical Tool in the Development of Effective Instruction. Atlanta, GA: Center for Effective Performance, Inc. The first version of this book was published in 1975 and has been popular ever since.


Formative Evaluation/Try outs


Serrell, B. (1996). Exhibit Labels: An Interpretive Approach. Walnut Creek, CA: Alta Mira. Because of budgetary constraints, even small museums rely heavily on text to communicate ideas and concepts. This book should cover most of what you need to know. It is practical, easy to understand and loaded with examples.

Taylor, S. & B. Serrell, Eds. (1991). Try It! Improving Exhibits through Formative Evaluation, pp. 9-75. Washington, DC: ASTC. The authors offer a variety of helpful ideas, case studies and actual experiences of experts (e.g. Alan Friedman, Chandler Screven etc.). The book is easy to read and the lessons are practical and easy to apply. For the book shelf of evaluators and exhibit designers,

Methodology


Hedrick, T. E., L. Bickman, et al. (1993). Applied Research Design: A Practical Guide. Newberry Park: Sage Press. This short book is a good overall introduction to doing applied research including evaluation studies. The authors are experienced in a wide variety of applied projects and situations. They discuss the nature of applied research and then walk the reader through the major steps of doing a project including estimating resources needed.

Krueger, R. A. (1994). Focus Groups: A Practical Guide for Applied Research. Thousand Oaks: Sage Press. This is a very clear and complete review of the focus group method for either someone who plans to do a study, or an administrator or professional who just wants to know what this method is all about. Evaluation is stressed.


Patton, M. Q. (2001). Qualitative Research & Evaluation Methods, 3rd Edition. Newbury Park, CA: Sage Publications. This book has been a resource and training tool for countless applied researchers, evaluators, and graduate students. The 3rd edition has hundreds of new examples and stories illuminating all aspects of qualitative inquiry. This is the most comprehensive, systematic, and up-to-date review of qualitative methods available.

Rossi, P.H. & Freeman, H. E. (1993). Evaluation — A Systematic Approach (5th Edition). Newbury Park, CA: Sage. This is the latest edition of one of the most comprehensive and widely used texts about evaluation. It provides extensive and sophisticated discussions of all aspects of designing and assessing the implementation and utility of social programs. Many of the projects cited and discussed in this volume deal with educational programs and innovations, although the bulk of the programs with which these authors had first hand experience were in the fields of housing, health services, and criminal justice. Most tasks that evaluators are likely to be asked to perform, and most problems they will have to deal with, technical as well as political, are covered here. The authors adhere to the social science model in their approach to evaluation, with clear preference for randomized and quasi-experimental designs, but they also cover other evaluation methods, including the use of qualitative and judgmental approaches.


Stake, R. (1995). The Art of Case Study Research. Thousand Oaks: Sage Press. More than case studies, this book provides an insight into the thinking of one of the most respected evaluation researchers. It is a good background read. The text leans to the qualitative side, but also respects the role of quantitative or categorical data.


Marketing


Other Books/Articles/Resources


McLean, K. C. (1993). Planning for People in Museum Exhibitions. Washington, DC: ASTC. This is a good overall discussion of exhibit development. It takes museum professionals into the realm of the visitors and has good advice on getting an evaluation program started.

Roberts, L. (1997). From Knowledge to Narrative: Educators and the Changing Museum. Washington, DC: Smithsonian Institution Press. Roberts provides an excellent history of museum education in the US, and describes how the role of educators has changed and expanded) as they have become increasingly involved in developing exhibitions.


Notes

Visitor Studies: Theory, Research, and Practice - From 1992 to Present. Jacksonville, AL: Visitor Studies Association (VSA). These volumes are proceedings from the VSA conferences and include lots of case studies and examples of different evaluation studies for different purposes. For more information and Tables of Contents contact the VSA office at 614 670-7379 or write info@visitorstudies.org

Curator: The Museum Journal –For over 49 years, this peer-reviewed publication has included studies of visitors and methodological articles and commentary. See [see www.altamirapress.com/RLA/Journals/Curator/}