

## Impediments to Learning from Labels

Several factors can impede or compete with learning from exhibit labels: novelty of surroundings, object satiation, competing sights and sounds, lack of orientation, too much time and effort to get the message. Label developers should be aware of these problems.

### Novelty of Surroundings

Balling, J. D., & Falk, J. H. (1981). A perspective on field trips: Environmental effects on learning. *Curator*, 23(4), 229-240.

Falk and his colleagues in a series of studies found that students learned less in terms of educational goals if the setting was novel, apparently because much of their effort involved learning about the setting. In this article, Balling and Falk (1981) studied school children on field trips to the Smithsonian Institution's Chesapeake Bay Center for Environmental Studies.

In one study urban students, unfamiliar with wooded settings, learned less than students who lived in a suburban housing project similar to the field trip setting. In a second setting students were exposed to educational programs in a familiar setting (school yard) and a novel setting (natural setting outside the community). Student showed more concept learning in the familiar setting than in the novel setting.

In a third study students from urban, suburban, and rural communities were taken to one of three settings: a small park in a large city, a park in a residential neighborhood, or a forest. Place of residence was a predictor of knowledge gain. Suburban students learned less in the forest than the other two groups, but learned most in the suburban setting.

If these findings can be generalized, we might assume that first-time visitors to exhibition centers acquire less exhibit knowledge since they are involved in learning about the setting.

### Object Satiation

Robinson, E. (1928). *The behavior of the museum visitor*. Monograph New Series No. 5, Washington, DC: American Association of Museums.

In a series of studies Robinson demonstrated that object satiation (loss of interest as you see repetitions of similar objects) is distinct from physical fatigue. Visitors looked at successive photographs of art work while sitting at a table. Visitors tended to spend less time per picture over successive pictures viewed. After systematic replications of this initial findings, Robinson tested a pamphlet which appeared to be effective in reducing object satiation since visitors increased their viewing for objects viewed later in the visit.

### Competing Sights and Sounds

There are a number of types of competing sights and sounds in exhibition centers that interfere with reading labels. Some of the more important sources include: interruptions from other group members; stimulation from surrounding exhibit objects; sounds from outside the exhibition; and exhibits placed on opposite sides of a visitor pathway.

Melton, A. (1935). *Problems of installation in museums of art*. Monograph New Series No. 14. Washington, DC: American Association of Museums.

Every sensory experience (sights and sounds) competes with all other stimuli in an environment. One way that Melton demonstrated this phenomenon was by systematically increasing the number of art works in a gallery and measuring viewing time to each piece of art. As the number of paintings were increased, the viewing time of each painting was decreased.

Melton, A. (1972). Visitor behavior in museums: Some early research in environmental design. *Human Factors*, 14(5), 96-106.

This was one of several studies conducted in a museum of science and industry in the 1930s and later published in *Human Factors*. Melton showed that movement in one exhibit decreased attention to exhibits on the other side of the gallery while it increased attention to exhibits surrounding the movement.

### Amount of Time and Effort to Deliver the Message

A visit to a museum/zoo/science center/etc. involves a major physical effort. To endure an entire visit, visitors must pace themselves in terms of expending energy. Reading long labels while standing and exploring remote corners of a large facility are tiring activities, and often avoided. Consequently, the following observations are common:

- Visitors tend to spend longer times viewing exhibits in smaller museums than in larger ones.
- Visitors avoid reading long labels.
- Visitors are reluctant to spend a long time trying to get the message at any one exhibit display.

### Lack of Orientation

Orientation includes two components: conceptual and physical (wayfinding). If visitors understand the big picture, they are more likely to get the message from labels. Thus, conceptual orientation to the museum and to individual exhibits is important. Also, if too much effort is taken to find your way, less attention can be given to label reading.