

The professionalization of explainers: profile, competences and training schemes

Patricia Aguilera-Jiménez

Author's institution (Institute for Philosophical Research-UNAM.
General Directorate for Dissemination of Science-UNAM)
mulaluz@yahoo.com.mx

Abstract

The goal of this study is to observe the behavior of scientific explainers in the Museum of Light in Mexico City, this science museum is part of the network of academic museums at the National Autonomous University of Mexico. In this space the “light” is showed like a physical phenomenon, its objective is to expose and explain how the scientific community thinks and make scientific knowledge. This explaining is done by a group of students with university profile. They are prepared during six months with a “Training Program Scholarship Holder” (consisting of theoretical and practical topics about optics and other issues). Despite of knowing how important they are in Mexico, their role and exactly what they do with the public with their behaviours have not been observed firmly. The results founded during this PhD research along four years, show continuous and predictable behaviours, structures and sequences when the explainers make scientific demonstrations. All of them show the evolution of explainers throughout their participation in the museum (for two years), during this time they can practice and could be a sound basis to develop a specific formation program.

Introduction

The educational institutions and society as a whole have made all kinds of efforts to attend to young people as a population in general, because we have a big goal: to build an educated society. This is one way that museums can directly influence people.

In Mexico most of the museum had been created to cover gaps in the education system, it had happen a long the time, like the museums created by the **National**

Autonomous University of Mexico- UNAM- which examine the particular ways of Mexican society. In order to participate with them there are university science museums, *Universum* and *Museum of Light*, were created by the bigger research establishment. After 22 years we have worked to observe the process between guides and visitors.

Why are we interested in studying the guides in science museums?

The objective of this study was to recognize their behaviors and how they become mediators of the scientific knowledge. The guides' *Museum of Light* always have been interested in sharing their knowledge, that loves science.

The Participants Profile: The guides must be officially in the process of earning a degree; they are maximum of 25 years old; must have average school grades of 8.5; strong communication skills; to like the science and its contemporary themes. They must be interested in Science Popularization with an emphasis on Science Museums.

How are they trained? in 3 Steps: 1). They must take a seminar about Science Museum and the Public. Take two workshops, one is a theoretical seminar about each museum and their scientific themes, and other is practical about body language and voice quality. 2) They learned to be guides by following others guides with experience. 3) Permanently they have to listen professionals which are experts in all kind of themes that the museums exposed within rooms.

We started to observe them carefully since 2004. First we did exploratory and descriptive research. Afterwards we focused on two activities: Guided visits and scientific demonstrations, and now we working in these. We are observing and analyzing behavior settings in order to know what can make the mediation process with the visitor easier.

How have we approached them, we have observed in situ the Guides' behavior to using the Observational Methodology and the Observational Design (Anguera, 1997). from which was created *The System Categories for Guide behavior*. The Observation and register of the behaviors from ten guides with three sessions of each one. At the end, there were analyzed more of 360 minutes of video recording of guides behaviours. Register Analysis was obtained by sequential analysis (Bakeman & Gottman, 1989)

Results

The results obtained: 1. The scientific demonstration suggests a logic structure of speech as a dynamic sequence done by the guides. 2. The scientific demonstration is based in one script to get the social interaction and perspective of the museum about how the scientific phenomena must be presented to the visitors. 3. Behavioral Patterns: The most important behaviors executed by the guides was “show” with a 29.2%; in second “inform” 16.6% and the third “explain” 7.8%. 4. The Sequence Structures have been characterized: I) Simple interaction. II) Complex interaction: Interaction of one-way; Interaction of a way with attachment behavior; Interaction of a way with variant theme. III. Two-way interaction with variant theme and behavioral accessory. IV. Active interaction: 4-way and attachment behavior.

Conclusions

It is possible recognizing continuous and predictable behaviors, structures and sequences when the guides make scientific demonstrations. These shows the evolution of explainers and could be a sound basis to develop a specific formation program.

Guide behavioral patterns are composed of a number of characteristics that define their behavior and reactions to visitors; identifying and analyzing them can help us to recognize the "innate" skills and those acquired during development as a mediator through training and experience to interact with the public.

References

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