Involving Audiences: Flights of Inspiration

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Museums are social institutions, and all museums serve particular communities - local, regional or national. Developing museums with, rather than for, their audiences makes sense philosophically, strategically and tactically.

Audiences can be involved in three broad ways:

- As subjects, e.g. for evaluation.
- As consultants, e.g. advising on the production of a specific resource.
- As contributors, e.g. working collaboratively on joint activities.

This paper concentrates on the lessons learned from the 'consultancy' type of involvement, working with teachers to produce the online learning resource 'Flights of Inspiration' http://www.nmsi.ac.uk/flights/. It starts with brief reflections on the other two.

Subjects

Evaluation of resources for public access is vital to ensure that they meet user needs. The Science Museum carried out a substantial evaluation of its website a year ago, and it remains almost, if not completely, unique in that it is published on the web itself http://www.nmsi.ac.uk/education/evalintro.html.

That evaluation has been followed up by specific testing of, for example, subject-based classification systems for public access, as well as formative testing of many ideas with the Museum's standing Teachers Advisory Panel.

This work is currently being extended in an innovative joint project with the Exploratorium in San Francisco, taking place under the auspices of the Science Learning Network, which is supported by Unisys Corporation. The evaluation will focus on online learning resources for formal and informal uses (including the collections-based 'Flights of Inspiration' described below) and will draw together evidence from web server log analysis, online questionnaires and direct observation.

Contributors

Museums should not simply be places that provide information and knowledge to the public. The public also has much to contribute in terms of knowledge, views, cultural perspectives, reminiscences and the recollection of the use of artefacts. Collaborative knowledge creation should be the aim of museums, whether at a national level or for local community development purposes. It is also a fundamentally educational activity.

For two years the Science Museum has been running the STEM project http://www.nmsi.ac.uk/education/stem/ sponsored by Toshiba and designed to encourage teachers and students to publish on the web their perspectives on the educational use of the Science Museum, National Museum of Photography, Film and Television and the National Railway Museum, for all to share. A sister project, the COMO project, supported particularly by British Steel in its pilot phase, has a focus on collaborative creation of resources relating to materials science and the Challenge of Materials Gallery at the Science Museum. All the resources produced are the results of valuable educational experiences for the people involved, encouraging reflection on the museums, and some are of extraordinary quality and of real value to others.

This concept can be extended to the idea of incorporating public knowledge and views into the data held in collections in documentation systems. I have coined the term 'open documentation' to describe this, and suggested that that it is one of the directions in which we should be developing collections management systems for public access (article due in *Museums Journal*, November 1999).

Consultants

This is a particularly common and valuable way of involving audiences, as people give front-end and formative evaluative input into projects.

'Flights of Inspiration' is a website designed by the Science Museum collaboratively with the Franklin Institute, Philadelphia, funded by a grant from Unisys Corporation within the framework of the Science Learning Network http://www.sln.org. The main objective was to produce a resource suitable for teaching about the science and technology of flight to students aged around 11, placed in the context of interesting materials about two great achievements: the first flight by the Wright brothers and the first non-stop transatlantic flight by Alcock and Brown. In addition, the intention was to digitise and make accessible historical archive material relating to these flights, of interest to flight enthusiasts. The plan was to involve teachers from the outset and during the development of the resource, with the resource itself authored by a specialist in producing educational materials.

Many useful ideas were contributed by the teachers, but it was not easy to

sustain their involvement at a time when both access to and use of the technology were relatively new to them. Nevertheless, the overall structure and content of the site were developed with their views very much in mind, together with some additional input from a professional group of educational multimedia evaluators. Subsequent summative evaluation has highlighted the problems (at least in the UK) of trying to develop a science learning resource based on historical material. Most teachers do not favour this approach: which was not an unexpected lesson to us but nevertheless a lesson of caution to museums in general.

Despite these problems the site has been very popular. Indeed, on the day it was launched it was listed as the top item in Yahoo News. This popularity has probably been with informal and self-directed flight enthusiasts rather than the formal sector, and the further evaluation planned should help us to find out more about the audience profile. The copy on the Franklin server received over 200,000 page hits in the first eight months and the average dwell time of 'visitors' to the Science Museum copy is 20 minutes, considerably more than the average for the Science Museum's website as a whole.

This experience has highlighted the problems and challenges of produced curriculum-related web resources, especially for the UK curriculum, and the need to find (and fund) expert teacher consultants who can advise throughout the process.