

Evaluation strategies in the cultural sector: the case of the Kelvingrove Museum and Art Gallery in Glasgow

*Maria Economou**

University of the Aegean.

Abstract

The paper examines museum evaluation activities in their social and political context and advocates the need for evaluation strategies in the cultural sector. It analyses the case of the Kelvingrove Museum and Art Gallery in Glasgow, which commissioned the design of such a strategy as part of its current project for the redevelopment of displays and visitor facilities. The Strategy covered the evaluation of the new displays, of orientation provision, of the new and improved facilities, as well as information to inform future policies and plans. The paper examines methodological issues related to the design of the evaluation strategy and to evaluation work at the Museum in general. It also examines the objectives set by the specific project and the relevant actions suggested by the strategy in order to meet these. Finally, it critically examines the role and effectiveness of evaluation in this context.

Keywords: Evaluation strategy, Kelvingrove Museum and Art Gallery, Glasgow Museums

1. Introduction: the need for evaluation strategies in the cultural sector.

Evaluation studies and research in cultural institutions are used to provide information for improving displays and services and offer lessons for further development. They can take many different forms, from observing visitors interacting with objects in an exhibition to interviewing a small group about their reasons for not visiting museums, often reflecting the differing, and in some cases competing, theoretical perspectives and methodologies which may be applied to the whole range of evaluation work in the cultural sector. Most evaluators make a distinction between museum visitor research and other evaluation procedures (e.g. Korn 1989, Shettel 1991, Borun 1992; Miles 1993). 'Research' involves the exploration of hypotheses on human behaviour and communication (McManus 1991: 5) and results in the generation of new knowledge (Korn 1989: 221). 'Evaluation' or 'assessment studies', on the other hand, refer to the systematic collection of data for making decisions about the continuation of improvement of a specific exhibit or activity under study. Usually more pragmatic in nature and of smaller scale, they provide feedback to designers and managers about the successes and failures of the particular exhibit. Similar methodological tools are used in both evaluative and research efforts but with different objectives (Miles 1993).

Both visitor research and evaluation studies can help organizations in the cultural sector to understand better the needs of their visitors and users. For cultural organizations, with their usually tight budgets and increased public accountability, it is important to evaluate the success of any major new venture—especially when additional funding is sought for its development. Furthermore, the growing professionalism that is to be found in the cultural sector over the last few decades has placed emphasis on the use of widely recognized standards and the development of good practice guidelines based on critical review of past experience and instances (Hein 1982). This has put pressure on staff in cultural organizations to document and justify their practices and has highlighted the need for evaluation.

The recent socio-economic changes in the cultural sector in Britain, Lottery projects¹

and new government funding schemes have resulted in numerous activities. These have given the sector a new boost, resulting in redisplay of collections, the creation of new museums and buildings, and the development of services and events. Although in this context, the need for evaluation is mentioned increasingly often, particularly when new technologies are used in displays and services (e.g. Department for Culture, Media and Sport 1999; Stiff 1998), remarkably few organizations in the cultural sector have actually developed systematic strategies for carrying out visitor studies and evaluation work. In some cases, evaluation of the new developments and of their impact is not undertaken at all or is limited to the personal feelings and impressions of the staff involved and to anecdotal evidence. In other cases, evaluation studies tend to be individual efforts of limited scope, without forming part of an overall plan or strategy and without use of their results to inform the working practices and approach of the organization. In many cases, evaluation seems to be planned more as an afterthought, after the project is already underway or when it is nearing completion, rather than be carefully thought out at the beginning and be integrated in the development process.

Thus, evaluation is rarely considered when the initial project management plan is drawn and is therefore, not allocated sufficient resources and time to be carried out thoroughly and effectively. Another problem is that as evaluation research can reveal sensitive information and highlight problematic areas, its results are not always made publicly available. This is compounded by the lack of comparative evaluation frameworks and the varying quality and depth of the data collected which make it difficult to compare between projects and institutions and draw some conclusions and recommendations that could be generalised across the cultural sector and inform new developments.

In order for evaluation work to have the most beneficial and wide-ranging impact, it should ideally be an on-going process, integrated into all the activities of the organization, with all staff implementing evaluation mechanisms and incorporating channels of communication with the public where relevant in their work. In this way, evaluation can be a valuable tool for cultural management and strategic development. In order to achieve this, however, it is important to define evaluation strategies which outline how evaluation work will relate to the organization's aims and assist it in fulfilling its goals. Strategies and general policy documents can ensure that evaluation is thought out on a larger scale across the institution with individual projects and initiatives complimenting each other and sharing the same methodological framework. They can also ensure that evaluation activities are placed in a wider institutional, regional, national, and even international context and are not carried out in isolation.

The paper is a case-study of an evaluation strategy which was designed in 1999 for the re-development of the displays and visitor facilities of the Museum and Art Gallery, Kelvingrove in Glasgow (hereafter Kelvingrove or the Museum). It provides an interim account of the Strategy and of how it was devised and implemented at Kelvingrove. It also places the Strategy within the context of wider issues of museum research and evaluation. More than four years after it was designed, this remains one of the few evaluation strategies in the museum world. The strategy was a real step forward for the Museum and the field as a whole, as it outlined a wide range of evaluation activities and examined the issues that these raise for the whole of the institution, and not just for small independent projects or services. After a few years of ad hoc or project-by-project studies and evaluation, outlined briefly below, the strategy addressed evaluation holistically, and planned extensively and in depth how it could be used as a useful tool to support the key activities throughout the organization. Unlike the more usual practice described above, the strategy was designed at the beginning of a major re-development of the Museum, and ensured that evaluation was integrated in the planning process and not conceived as an afterthought when reports to funders would have to be prepared.

Although the Kelvingrove evaluation strategy is unique, the context in which it was produced reflects at the same time some common trends in the cultural sector in Britain and beyond at the turn of the millennium. As with many other cultural institutions in the UK, the Kelvingrove's application for a large public grant to the Heritage Lottery Fund led to a period of reflection, analysis, internal and external assessment. In common with other museums, the plans for the re-development were designed at a period of transition when the Museum was thinking again about its identity, its role and its priorities. It was also designed at the same

time that the Glasgow City Council, following developments in local authority cultural organizations across the UK and spurred by government demands for greater efficiency and value for money, was carrying out a review of the whole Museums, Heritage and Visual Art Service as part of its commitment to 'Best Value', in order to assess service effectiveness and methods of delivery² (Glasgow City Council 1999). The increasing pressures for widening access to museum collections and related information, for making these relevant to a diverse audience, and for exploring information technology and new media in this direction, while maintaining cost effectiveness, are all trends which, to a different extent, are apparent in cultural organizations world-wide. For this reason, as well as for the example it sets in using the strategy as a methodological framework to plan evaluation activity, the case study of the Kelvingrove strategy raises issues that have wider relevance and applicability and these are the ones that I will focus on below.

2. The Kelvingrove Museum and Art Gallery Evaluation Strategy.

2.1 Background and Context.

The Museum and Art Gallery, Kelvingrove is run by the Culture and Leisure Services Department of Glasgow City Council. Together with another eight museums and the Open Museum (a community outreach service), it forms part of Glasgow Museums. Its wide-ranging collections of art, history, and science are of national and in some cases, international importance. The Museum is housed in an impressive Category A listed building which was first opened in 1901 as part of the International Exhibition and is one of Glasgow's landmarks.

Kelvingrove is the most visited museum outside London, receiving over one million visitors a year in the last five years (Scottish Tourist Board). The 1998/99 Visitor Survey carried out by Lowland Market Research for Glasgow Museums showed that almost a third of visitors to the Kelvingrove (30%) come from Glasgow, with another 19% from areas around Glasgow (local authority areas having a boundary with the city), and 25% from the rest of Scotland. The great popularity of the Museum among the local community is also demonstrated by the high number of repeat visits of Glasgow visitors (respondents from Glasgow mentioned that they visited the Museum six times per year on average) (Lowland Market Research 1999a).

Glasgow Museums proposed a large project for the development of new displays and visitor facilities at the Kelvingrove Museum and Art Gallery which will run until July 2004 (adjusted during the development of the project to November 2005, date when the Museum is scheduled to re-open). This is funded by the Heritage Lottery Fund, the European Regional Development Fund, the Glasgow City Council, and Historic Scotland and is:

- making changes to the building to improve its accessibility and functionality (e.g. new ground level public entrance, improvement of vertical access through the building, removal of all non-original features, increase of display space)
- improving and developing visitor facilities (e.g. development of visitor facilities on all levels of the building)
- improving and developing the displays (e.g. development of new displays in the basement of the building, increase in the number and range of objects on display, development of new flexible display system that is easy and affordable to change in response to new research and visitors' interests and needs).

2.2 The Kelvingrove Evaluation Strategy

The Kelvingrove Strategy (initially designed for the period from July 1999 to July 2004, but later extended until 2005) identified a number of strategic goals which support the Museum's overall mission and aims, and particularly the objectives of the re-display and developments taking place over this period. The evaluation of the new displays and the study of the visitors are playing a crucial part in achieving these aims.³

The evaluation strategy was prepared by the author (based at the time at the Humanities Advanced Technology and Information Institute of the University of Glasgow) in

consultation with the Museum staff (Economou 1999). The author outlined the main principles, approaches, and methods for assessing the use and effect of the Museum's new displays and facilities, as well as related key actions that should be implemented in the Museum's everyday practice.

The aim of this strategy document was to:

- set out the overall vision and context for the development of evaluation work in the Museum
- ensure that the Museum staff understand the aims of the evaluation and how it can be incorporated in their everyday work
- inform visitors and interested bodies as to how the Museum intends to implement evaluation to improve communication with its audience (both current and targeted) and the provision of services
- assist in the communication and potential collaboration with external evaluation and other related consultants and researchers.

The Museum recognized the important role that evaluation and audience consultation would have to play in all its activities, and in this project in particular, where they were seen as an integral part of the re-development, to be employed at all its stages. Following the general pattern described in the introduction above, before the design of the strategy, evaluation work at the Museum was carried out mainly on a project basis. Evaluation projects were usually undertaken by individual curators on their own initiative, without being part of an overall strategy to better understand visitors, their needs and interests. In most cases this consisted of summative evaluation surveys, with no work being carried out with non-visitors. Despite these limitations, the results from these preliminary surveys provided useful information (recording, for example, in a small scale visitors' preferences and reactions to particular displays), which was taken into account in the design of the strategy and indicated that further emphasis should be placed on evaluation work by the Museum.

Over the last few years, and particularly since 1998-99, at a period when the Museum is re-examining its role and communication methods, evaluation has intensified and become more rigorous, with work carried out either in-house or by external researchers contracted by the Museum. A variety of evaluation studies have been organized by the Museum in order to learn more about its visitors and help develop more effective displays and visitor facilities. These range from large scale demographic visitor surveys and self-completion questionnaires to qualitative focus groups with visitors and non-visitors and formative evaluation of the prototype display systems. Apart from the specific findings from these studies, the Museum staff have learned valuable lessons about the evaluation process itself, the advantages and shortcomings of a variety of methods, the implications of this work on their everyday practice, and the relationship with external collaborators and members of the community.

These evaluation studies have been a first step in determining who visits the museum and how the displays are perceived by visitors and non-visitors; they explored the initial reactions to the new display methods and themes; and recorded visitor satisfaction with the existing facilities. They have helped to paint a clearer picture of visitors and the experience of their visit, which the Strategy has attempted to clarify further by outlining a plan of systematic evaluation work to be carried out over a period of five years.

2.3 Purpose of the evaluation of re-development of displays and visitor facilities.

Following the brief for the study which specified the areas which required attention, the author focused primarily on the following areas of the re-development project when designing the evaluation strategy:

Evaluation of the new displays

The programme of activities in this area has entailed evaluation of:

- the effectiveness of the new displays in meeting visitors' needs

- how effectively new displays communicate their intended messages
- the physical and intellectual accessibility of the new displays
- the quality of the experience offered to all visitors

Evaluation of orientation provision

- the use and effectiveness of the proposed new Orientation Centre in providing information and orientation
- the effectiveness of various media and means for providing orientation (e.g. maps, guides, audiovisuals, computer orientation points)
- the effect of the choice and organization of gallery themes on visitors' orientation and movement around the building

Evaluation of the new and improved facilities

Evaluation of both the new and improved facilities of the Museum will assess:

- the effectiveness of the facilities in meeting visitors' needs;
- the quality and turnover of the Museum's retail and food and drink outlet.

Information to inform policies and plans

The data from properly carried out evaluation should assist the Museum in:

- developing an appropriate and effective marketing strategy
- improving customer care
- taking informed decisions to enhance the connections with areas and institutions outside the Museum building, such as the Kelvingrove Park, other museums, schools, etc.

Among other aspects, such as thematic displays, the Museum's re-display project places great importance on the appropriate use of information technology. Despite the advantages of information and communication technology (ICT) and multimedia and the possibilities these offer, there are several areas related to their use in museums which need to be evaluated and investigated further as these applications can have a powerful impact in public exhibitions (Economou 1998a; McManus 1993; Worts 1990). Several years after McNamara's initial concern that not enough in-depth research was being carried out on the impact of computers in museum exhibitions (McNamara 1986), this is to some extent, still true. As the pressure on cultural institutions increases to use new media and ICT in order to attract new audiences and keep up-to-date with the information society, it was necessary for the Kelvingrove evaluation strategy to include a careful re-assessment and examination of the effect of these applications on visitors and users.

2.4 Methodology for designing the strategy

In order to design an effective evaluation strategy it is important to study and use a wide range of materials, so as to acquire a holistic picture of the cultural organization and the context within which it operates. As in this case the strategy was designed by an external collaborator,⁴ namely the author, it was necessary to gain an in-depth understanding of the complex set of parameters which affected the character of the Museum and the design of the re-development project (American Association of Museums 1996). For these reasons, discussions with various members of staff throughout the preparation and design of the strategy were extremely useful, as was the participation in several meetings, such as those with the Education and Community panels discussed below. It was also important to collect and analyse grey literature related to the project and the Museum, as well as to study reports and findings of previous evaluation studies.

Another step was to carry out small scale evaluation work in collaboration with Museum staff, interviewing and observing visitors to the Museum. For example, a small sample of

visitors were asked to 'think aloud' as they were browsing the prototype display system and exhibition areas of the museum, while participant observation when different members of the Education and Community panels were examining the display system and parts of the Museum helped to illuminate how the particular displays and the whole visit to the Kelvingrove was experienced by different type of visitors. Family groups were also observed for their entire visit to the museum, and not only in an individual gallery. Finally, focus group discussions helped to record and understand the preferences and reactions of targeted groups towards the planned story displays. These activities allowed a clearer picture to be formed about visitors the Museum, carrying out evaluation in this context, and the implication it has on the organization.

In general, anthropological tools such as participant observation, and the analysis of formal and informal sources of information assisted in the careful examination of the aims and objectives of the re-display and re-development project and an understanding of its wider context. After that stage, the methodology involved examining carefully each area of activity and proposing appropriate evaluation methods and procedures.

3. Evaluation objectives and relevant actions

The Kelvingrove strategy examined a number of general objectives of the Museum, as well as objectives related to specific aspects of the project. It outlined the necessary actions related to evaluation and community consultation which needed to be planned in relation to each objective and discussed the issues that these raised. Given their nature, the general objectives are relevant to most cultural institutions and particularly to museums where providing access and communicating with a wide audience are high priorities. For this reason they are the main focus of the following section.

3.1 Acquiring and maintaining an informed picture of the profile of visitors

It is important for all museums to record information about their visitors. Institutions open to the public would need to know at least some basic facts about that public if there is to be an effective channel of communication between the two. The strategy addressed initially the issues related primarily to quantitative evaluation and the collection of data appropriate for statistical analysis, while the qualitative aspect of visitor's preferences and needs was dealt in the next objective and other sections of the strategy that were related to specific displays.

The Strategy recommended that the Museum should record regularly and systematically information on visitor profile and characteristics of the visit. Information on visitor statistics can have a direct and important effect not only the institution's general policy and planning decisions, but also on those of the wider service, in cases such as the Kelvingrove's where the Museum is part of a larger grouping of cultural organizations.

Museum professionals and scholars are often sceptical of the methodology and results of visitor surveys and of the effectiveness of evaluation in general. Evaluating the effects of museum exhibitions has been seen by some as a trivializing exercise which is incapable of recording the subtle and unmeasurable experiences which visitors have in a gallery. Kenneth Hudson, for example, observed that visitor surveys 'can be helpful, provided that they confine themselves to simple facts which can be processed and classified without too much distortion' (1993:35) but questioned their usefulness in general. Others have referred to the danger of stereotyping visitors and the lack of consistent survey format and information categories (Loomis 1973, Loomis 1987) or the limitations of quantitative-based surveys produced for management which do not relate their results to the local area or the population in general and might provide a misleading picture when not combined with interpretative and ethnographic methods (Hooper-Greenhill 1988). Merriman (1991, 43) believes that the lack of a theoretical framework within which to interpret the results has prevented visitor surveys from advancing the overall understanding of what motivates museum visiting and non-visiting. However, despite the criticisms about their limited usefulness, when properly administered, visitor surveys can be very effective in helping museums understand the needs and characteristics of their visitors, as long as they are not the only way of carrying out evaluation and visitor consultation and are complemented by other methods, such as the

ones described below.

Visitor surveys

In the case of the Kelvingrove Strategy my recommendation was that visitor surveys should be carried out regularly in order to provide data against which the impact of the institution's programme of exhibitions and events can be benchmarked effectively. In general, once an institution builds a reliable body of knowledge and establishes that there is no significant variation in visitors' profile from year to year, visitor surveys can be carried out less frequently on a longer cycle (every four or five years). Issues such as sample size, proportional distribution over time, and treatment of refusals should be addressed whether the visitor survey is carried out internally by staff or commissioned externally. With any type of large survey, it is important that a pilot survey is carried out and that if a questionnaire is going to be used, that this is tested first.

Another issue related to visitor surveys has to do with young visitors. Visitors under sixteen are an important audience of museums which is often ignored in surveys due to the legal and practical difficulties involved in surveying under aged participants. In the case of the Kelvingrove, a headcount carried out in 1999 indicated that visitors under sixteen represent 31% of visitors to the Museum (Lowland Market Research 1999b and 1999c). The importance of young visitors is not only related to their large proportion among visitors; it also relates to the fact that they are visiting cultural institutions at a formative age, often for the first time. A pleasant and memorable experience during their visit can instil a positive attitude towards the museum, gallery, or other cultural institution that will make them future adult visitors. Additionally, serving young students and children and providing them with an educational and enriching experience is one of the primary missions not only of the Kelvingrove, but also of many other organizations in the cultural sector. However, some of the ethical and practical considerations related to surveying children and young teenagers include the fact that parental permission should be sought before the interviews and that these are more successful when parents or guardians are not present during the interview, as they can influence children's responses or inhibit them. Additionally, questionnaires need to be suitably constructed and worded to be appropriate for young visitors.

Information to be collected

The Kelvingrove Evaluation Strategy has recommended that a basic set of information is recorded in the same way through all the visitor surveys carried out by the organization in order to allow for comparison of results. This should make it possible to identify changes or trends through time.

In common with most visitor surveys, the ones commissioned by the Museum so far provided information about basic demographics, socio-economic grouping, and geo-demographics (e.g. postcode of residence). Apart from the using the standard and broad IPA socio-economic classification⁵ of categories A, B, C, D, and E (and sub-groups within these), in some cases information from surveys was related to ACORN profiling by using the postcode of the respondents' residence.⁶ Other information was related to the characteristics of the visit and referred to group composition, whether it was an organized visit or not, the frequency of the visit, the means of transport to the museum, advanced planning of the visit and sources used, the specific object/collection as reason for visiting, and the collections/galleries visited.

In addition to this basic information on visitors' profile and the characteristics of the visit, surveys can also include questions related to visitor satisfaction with the organization's facilities and services, on visitors' interests and needs and their preferences of presentation and interpretation media. More questions relating to the evaluation of particular exhibitions or services can be added to this basic set, depending on particular features and issues that the museum might want to investigate. However, the strategy referred to the fact that this has implications of cost and time and that it might prove more effective to evaluate particular features or displays with other evaluation tools.

Selection of survey instrument

Simple visitor demographics at the Kelvingrove were recorded with a headcount survey (Lowland Market Research 1999c). This is quicker and less expensive than an interview-based survey using structured questionnaires, but records only a minimum amount of information and is less accurate, as the observer records the assumed age group and ethnic group of visitors. Furthermore, it does not record those disabilities which are not visible. In the case of the Kelvingrove, the headcount survey complemented the data from the structured interviews (Lowland Market Research 1999a).

Interviews using a structured questionnaire are the most common method for carrying out visitor surveys. These can provide a large quantity of useful and meaningful data, but are time consuming to conduct and analyse and demanding on the interviewer. Also, one of their most important disadvantages is that interviewees usually offer socially acceptable answers, biasing the results. However, the problem of the 'halo' effect (where respondents are reluctant to be negative or criticise the institution they are visiting during the interviews) is less likely to occur in the case of visitor surveys that are limited to the collection of mainly factual information and do not explore the attitude and feelings of visitors towards the museum and specific displays and services.

3.2 Understanding what visitors want from a visit, their interests, preferences, and needs

Apart from recording visitor demographics, it is important for any cultural organization to try to understand the motivations, aspirations, and needs of its visitors or targeted audience. The Kelvingrove Evaluation Strategy suggested a range of studies for exploring at different levels the effect of particular displays or activities and assessing their cognitive and emotional effect on various visitor groups. In this section I place the Strategy within the broader context of visitor studies research.

There is no single golden method for studying visitors in depth and understanding the way they experience the museum visit and construct their own personal meaning of the displays. The Strategy acknowledged that although qualitative methods are more likely to be used in this area, it is generally better to combine different methods recording different aspects of this multifaceted phenomenon. Building for example, on existing qualitative evaluations, the Strategy recommendation has been for further work with focus groups as these help to draw a more vivid and complex picture of visitors' needs and preferences than the one based only on the quantitative demographic data. Qualitative focus-group research with visitors and non-visitors (including local and non-Scottish residents of both sexes and of different age groups) has offered rich information about perceptions of the Museum, its services and displays and has provided feedback on orientation provision, types of displays, content, sequence, and presentation that both visitors and non-visitors prefer (System Three 1998).

Formative evaluation of the prototype display system which the Museum wants to use in the new displays tested in practice whether this fulfilled the criteria of flexibility and adaptability with the ability to accommodate a wide range of objects and media, and relatively easy to change. This was evaluated with a prototype of two story displays using new media which the Museum plans to develop and enabled the testing of both practical and design aspects of the displays, as well as the evaluation of issues of content and language using observation and interviews with visitors, discussions with the Education and Community Panel, designers, architects, technology specialists, and Museum staff (Fitzgerald and Taylor 1999).

In devising the Strategy I have found that formative testing of new displays while these are under development can be useful even with small groups and with low cost options using display mock-ups or prototypes. A summative evaluation on the other hand, can establish for example, how the displays are being used for self-directed learning and record the learning outcomes, but also emotional involvement and aesthetic appreciation, since these were among the objectives for the design of the Kelvingrove Project. The experience of others in the field suggests these important aspects of the museum visit are amongst the most difficult

to record and to measure; the methodology used for this type of evaluation should be flexible and wide-ranging. Thus, research design needs to embrace a variety of methods, such as participant observation, in-depth interviews, analysis of children's drawings that can express their feelings and views of the museum, the use of concept maps where visitors draw diagrams and write down the words that come to their mind about a topic before and after their visit, collection of post-visit narratives and memories, etc. In this type of evaluation work there is a need to be creative in the choice of methods and responsive to the characteristics of the particular groups studied. For example, the *Museum Impact and Evaluation Study*, a programme of qualitative evaluation undertaken at the Chicago Museum of Science and Industry, found that the 'instant camera method' worked particularly well. This involved giving visitors an instant camera to take photographs of exhibits that impressed them for one reason or another and interviewing them later, using the photographs as props for discussion (Anderson and Cook Roe 1993).

The Kelvingrove is planning the design of multi-sensory displays which will use a variety of media and approaches, such as touch trails, object handling, broadcast and head-set audio. Following completion of these, the Strategy recommendation is for a summative evaluation which aims to establish who is using displays and in what way, relating the profile of the users to their preferred method of presentation. The Strategy has been devised in the light of existing knowledge and research about IT in museums. Thus, in the case of computer displays (e.g. orientation systems, collections information stations, interpretative multimedia stories), their interface should be tested extensively at the formative stage to ensure it is clear and easy to use (Economou 1998b, Raphling 1994). This can be carried out with groups of targeted users, observing them and encouraging them to 'think aloud' while they are exploring prototypes or early versions of the system. Once computer systems of this kind have been set up, automatic logging of user's interaction and queries would help to evaluate how they are being used (Heinecke 1995). One of the limitations of computer logging is that although it reveals the most popular visitor choices, it does not explain why they were chosen. The results are more meaningful when combined for example, with interviews and observation. In the case of web pages, the analysis of web statistics and the use of online questionnaires are methods that can also be used as part of their evaluation (taking into account in the analysis, the limitation of web counts and the self-selecting nature of the sample in the case of the online questionnaires). The design of these tools should be related to the institution's ICT strategy and be planned at an early stage in the design of the computer system.

Another of the objectives of the Kelvingrove project is to improve both physical and intellectual access to the building and the collections. The Museum intends to greatly increase the amount of display space and access into the building, primarily by opening up the basement to the public and creating new street level access into the building. Since one of the aims is to make the Museum more accessible to people with disabilities and special needs, the Strategy recommendation is for small group evaluation of these aspects of the project with people (both visitors and non-visitors) with mobility difficulties, with visual impairments, with hearing difficulties, and with learning difficulties that would include also their companions and carers. These groups may offer valuable advice on several aspects of the project and following the success of the Education and Community Panels, the Strategy has proposed setting up an Access Advisory Panel with representatives of access and special needs organizations and the City Council's Special Needs Arts Officer, who could be consulted regularly during the development stage. Setting up panels of this kind can help cultural organizations establish and cultivate longer term relationships with their user groups, get assistance in identifying conflicting visitors' needs, and establishing procedures for resolving them.

Physical access is an important issue in the case of the Kelvingrove which is housed in a complex nineteenth-century building. This is why as part of the evaluation process, the Museum commissioned at the beginning of the re-development project a survey of the building's usage at the Welsh School of Architecture of the University of Wales which used observation combined with interviews to assess how visitors use the building and move around it (Grajewski and Psarra 1999). It also commissioned the ADAPT Trust to carry out an access audit of the building for disabled visitors and staff (ADAPT Trust 1999). Apart from

usage surveys, the Strategy has also made recommendations about the design and evaluation of pre-visit resources, orientation information, signage and labelling, and special displays, as well as the provision of staff training on disability awareness and visitor communication. Though not all cultural organizations are housed in buildings of this type, there may still be lessons to learn about issues of physical and intellectual accessibility and the methods of evaluating and improving usage of buildings by different user groups. Many modern buildings share with older buildings accessibility problems (for example, in cases where the architects introduce features for aesthetic reasons which might not comply with access standards).

3.3 Communicating with non-visitors

One of the aims of the Kelvingrove re-development project was to build a museum open to the whole of the community. The project mission statement included the following key aims:

- 'We will build on the museum's tradition as a social place, owned by the people of Glasgow
- We will work with the strengths of the collection to communicate across time and cultural diversity to inspire people of all ages to learn and understand more about themselves and the world we live in
- We will connect to the lives of our multicultural audience by being flexible and inclusive to create a genuinely visitor-centred museum'

In order to ensure that these aims were met, it was important for the evaluation strategy to conduct research with non-visitors, particularly those from ethnic minority groups, people living in poverty, and people with disabilities, which would study their reasons for *not* visiting the Museum, their interests and needs.

The importance of studying non-visitors has been widely recognised in the museum community and research in this area has identified people's well-established reasons for visiting and for staying away from museums and cultural institutions (e.g. Hood 1983, Merriman 1991, Trevelyan 1991), as well as the effectiveness of various social inclusion strategies (e.g. Research Centre for Museums and Galleries 2000). Apart from the generally applicable findings and observations, however, there are several aspects of museum visiting which are particular to the specific context of each cultural institution. In the case of Glasgow and the Kelvingrove for example, the focus group discussions carried out with visitors and non-visitors have indicated, among others, how the Museum is perceived by non-visitors; showed that there are strong similarities in the preferences of presentation methods between visitors and non-visitors; and highlighted that teenagers feel that the Museum does not make any effort to communicate with them (System Three 1998). The Strategy proposal is for further evaluation work, outreach, and communication with non-visitors from the Asian community, as despite the location of the Kelvingrove in a neighbourhood with a relatively high percentage of Asian families, these are currently underrepresented among visitors to the Museum. The Strategy recommendation has been that the results from non-visitors evaluation and community consultation inform the Museum's marketing strategy in order to change the Museum's image and the way its events and exhibitions are presented and perceived.

The Strategy has also proposed front-end analysis with non-visitors, carried out before the exhibits are developed, in order to provide feedback about the selection of new exhibition themes, activities, and the approach to displays. Front-end evaluation provides a 'mechanism for testing one's assumptions about people—either assumptions about what people know or feel or understand about a topic or what they are interested in finding out more about and even assumptions of the best way to organize material within an exhibition' (Dierking 1999). It was also suggested using qualitative work with non-visitors during the development of the displays for formative testing of the effectiveness and best use of the various presentation media considered, the language used, the level of information provided, while also offering the opportunity to build a relationship with these groups.

Evaluation with non-visitors is usually more effective when integrated in outreach, community, and education work with targeted groups. As suggested by the Public Access Policy of the Science Museum, London:

'[a]n extended approach to audiences requires a more targeted approach to groups (or communities) with particular interests (such as subject specialists) or from particular social backgrounds (e.g. ethnic, cultural, geographic, age, gender or income level), while recognising that treating an audience group as monolithic (e.g. as 'Afro-Caribbean') may not be the most productive way to attract individuals within that group. In most if not all these cases the means of increasing use of the museum lie not simply in removing perceived barriers to visiting but actively seeking the views of, and establishing relationships with, particular individuals and groups' (Science Museum 1999: para 3.1)

In the case of the Kelvingrove, the Strategy recommended the continued use and expansion of existing channels of communication further, to cultivate links with non-visitors and use these to seek the views and participation of groups which traditionally do not visit the Museum. For example, the Open Museum is carrying out groundbreaking and important work linking Glasgow Museums with community groups and people in the area, which has been subject to a qualitative evaluation by the Research Centre for Museums and Galleries, Leicester University (2002). The Museum has also set up an Education and a Community Advisory Panel which provide valuable feedback and communication channels with various groups, communities, and institutions in the city and beyond about the new and proposed displays and facilities. The Education Panel includes representatives of different formal and informal educational institutions in the Glasgow area who provide feedback to the Museum and raise issues about the provision of lifelong and experience-based learning opportunities. The Community Panel includes representatives of community groups who help the Museum to make all aspects of the project relevant to the lives of its multicultural audience. Apart from offering advice on several aspects of the project, the Panel assists the Museum staff in recruiting members or clients of the organizations that they represent for further evaluation. As in most cases the members of their respective organizations represent non-visitors to the Museum, the suggestions of the Community Panel for increasing physical and intellectual access are valuable.

3.4 Involving members of staff with evaluation and communication with the visitors

Evaluation should be an integral part of exhibition development in order to be effective. Familiarity with evaluation procedures and results should not be limited only to one or two members of staff, but should be extended to all staff who deal with the public, as well as decision-makers. The Kelvingrove Evaluation Strategy recommendation has been that all Museum staff working in exhibition development and public services should receive training on visitor research and exhibition development. This referred to training on evaluation methodology, such as surveying, observation, and interviewing techniques, as well as training on more specific aspects of exhibition development, such as use of audience feedback for testing exhibition text or the use of multimedia interactives. Apart from helping staff to include evaluation in their everyday practice, training experience can also help them to brief outside contractors more effectively.

Museum evaluation has become an area of rapid growth over the last few years. Evaluation research is developing in university departments, research institutes, and tourism and heritage centres. This is complemented by literature on evaluation studies conducted in other fields which can offer some useful comparisons, building up a body of knowledge about museum visitors (which can help to combat the continuing lack of evaluation strategies and similar overall plans integrated in a systematic way in cultural organizations, as was mentioned in the introduction). All this activity is resulting in a number of publications, reports, conferences, and professional activities. Although these are not easy to keep up-to-date with, attending relevant conferences, subscribing to relevant publications and evaluation groups, and communicating with colleagues and visitor studies professionals around the world can

be very beneficial for staff involved in evaluation and audience advocacy.

Apart from formal training and professional development, the Strategy recommended providing opportunities for informal discussion of audience research issues involving as many members of staff as possible. Staff in cultural organizations come from diverse backgrounds and have different perspectives which can be brought together in a creative way in discussions of this kind, helping to place their everyday work in a wider context and dialogue.

Given the limitations of time that museum staff face, the large amount of paper work they need to go through, and the need for introduction to an unfamiliar subject, it is important to create a positive and friendly environment for the discussion of evaluation issues and try to incorporate memorable experiences. For example, the Visitor Studies team of the Science Museum in London has set up a series of activities which range from the 'Inside the Visitor's Head' training programme in visitor awareness to weekly coffee morning meetings on various aspects of visitor behaviour and exhibit development (Gammon and Graham 1998). Examples of visitor awareness exercises include:

- 'A Day at the Museum' where a member of the exhibition team joins a visitor group invited to the Museum (usually friends or relatives of staff) and participates in the visit, behaving as much as possible as a member of the group.
- 'Have a bad day' where members of the exhibition team are asked to recruit a friend or relative with an interest or hobby that they themselves do not share and visit an exhibition or museum on that very topic.
- 'Insect visitors' forces museum staff to spend at least some time simply watching visitors out in the gallery (45 minutes in four locations around the museum at different times of the day). Participants are asked to imagine that they classify visitors like insects, e.g. grasshoppers leaping quickly from one to another, or army ants moving in columns destroying all in their path...

The Strategy recommended also that information and results from evaluation work which takes place in the institution should be communicated widely to all relevant staff and discussed at appropriate meetings. All too often evaluation reports are left on the shelf, with their results forgotten soon after the project is completed, without informing future practice. Both formal and informal procedures are important to keep evaluation issues and results in the agenda and to influence strategic decisions. It has also been proposed that simple ways in which museum staff might incorporate evaluation procedures in their work may be devised. For example, an assessment tool that is relatively easy to design and implement by the Education staff is a brief evaluation form which can be included in the educational material they send out and be offered to those participating in the events and activities. Although this requires setting up procedures for collecting the forms and analysing and communicating the results, they need not be very time-consuming. Evaluation forms of this kind can be a first small step to help museums communicate with their audience, ensure that their education service meets the needs of a diverse community, and get feedback from teachers and educators about the ways that the collections can be used creatively in the classroom, in other educational settings, and for self-directed learning. The best way to ensure a high quality service is to consult with the stakeholders. Communication with teachers, staff in higher, further, and vocational education, and students can inform education staff of their needs and the way that it can best support them. Apart from written comments and evaluation forms, other useful activities suggested in this direction included individual and group discussions, observation of how the Museum's resources were being used during organised visits, and meetings with education practitioners.

4. Evaluating the evaluation

The paper has discussed some of the lessons that have emerged from the Kelvingrove case study. It has emphasized the importance of recording systematically quantitative and qualitative information about the visitors' profile, needs and preferences by combining various methods at different stages of the design process; the need for formative testing of information

technology exhibits; the usefulness of involving different visitor and community groups and using the Education, Community, and Access Advisory Panels in the effort to improve physical and intellectual access to the collections and the building; the significance of carrying front-end analysis and of developing relationships with non-visitors; and finally, the need to involve members of staff with evaluation work and communication with visitors.

However, the lessons outlined above would be incomplete without an assessment of the effectiveness of the Evaluation Strategy, in other words, an evaluation of the evaluation. For the author, the process of developing the Strategy showed that working as an external contractor allowed a certain distance from the internal politics of the institutions providing a degree of independence and objectivity. At the same time, taking into account these politics and understanding the environment within which the Museum operates, as well as collaborating closely with the staff was invaluable for the design of the Strategy. It was also important that this collaboration involved staff at different levels including the managerial team, since receiving high-level support from the institution was indispensable for the success of the project and helped to incorporate the steps recommended by the Strategy into the organization. Apart from participating in staff meetings and having access to internal documents, it was also very useful to be involved in parts of the evaluation research itself, to have direct contact with different types of visitors and participate in panel meetings. All these procedures can be very time-consuming, but are very important for building an informed view of the different aspects which affect evaluation work. The case study confirmed also that strategies of this kind are not static but need to be adapted in practice by the organization itself, in order to reflect the dynamic nature of effective evaluation work and respond directly to the changing museum environment.

As with most documents related to strategy and planning in the cultural world, the Evaluation Strategy described best practice and the ideal, which are not always possible to implement to their full extent in the real world. For example, due to changes in the European Union funding, the budget for the project had to be cut substantially after the design of the Strategy, resulting in removing evaluation from the capital budget to be funded from the revenue one. This will hopefully still allow for the creation of a new post on evaluation and audience advocacy, as evaluation is currently carried out or managed by a very small number of already overstretched staff who take this on in addition to their other duties. The Strategy confirmed the importance of evaluation training and awareness for all staff. An evaluation coordinator or audience advocate in this new post who can educate the rest of the staff about the value of evaluation work, but also explain about its limitations and potential misuse, can help to carry the momentum of the Strategy further and assist in changing attitudes and practices.

Several changes in the management structure are also taking place in the organization, while the staff are working on the content development of the displays and are seeking further funding. It is difficult to assess the full impact of the Strategy while the project is still underway, but some initial observations can already be made. Despite the practical limitations and changes, the Museum managed to implement the initial ideas of the Evaluation Strategy. For example, the team have commissioned evaluation of the proposed themes and story displays to assess people's interest. As part of the same research and as a follow-up to the evaluation of the prototype display, they are also assessing people's interest in different forms and methods of learning. The team have also carried out further evaluation of the 'object cinema' presentation which they are planning for the new displays, while an Access Advisory Panel has been set up. Having an overall strategy which prioritised the areas of activity and provided a wider framework, assisted the Museum in adapting evaluation work to meet effectively changing needs in the face of project alterations and resource limitations.

Despite their stated aim, all too often strategic documents and planning procedures in the cultural world end up creating large documents through time-consuming processes, which are then ignored. Fortunately, this was not the case with the Kelvingrove Evaluation Strategy. It is already evident that this helped the Museum look carefully at the available options and the stages involved; clarified the issues which the staff need to be thinking about in relation to evaluation during the design and implementation of new displays and services; and indicated targets to be achieved. It provided a framework for interpreting the evaluation data

in terms of the Museum's overall strategy and for acting upon that interpretation. The Museum is unusual not only in having an evaluation strategy, but also in having one which it currently implements. Further analysis once the re-development project is completed will illuminate in greater depth issues related to the implementation of the Strategy and the factors which influence its effectiveness. It is already clear, however, that the design and existence of an evaluation strategy helped the Museum focus on its objectives and mission and the best ways of assessing whether these have been achieved.

Acknowledgements

I would like to thank the staff of the Kelvingrove Museum and Art Gallery, particularly Mark O'Neill and Lawrence Fitzgerald, and Dr Seamus Ross, Director of the Humanities Advanced Technology and Information Institute of the University of Glasgow, for their support throughout the design of the Evaluation Strategy. I am also grateful to Mark O'Neill and to Dr Helen Rees, Director of the Centre for Museology, University of Manchester, for useful comments on the paper; and to Anne Pennington from National Museums Liverpool (then, National Museums and Galleries on Merseyside), Roland Jackson and Ben Gammon from the Science Museum, for information which they kindly provided for the Strategy.

Notes

¹ The National Lottery was set up in Britain in 1994 and proved very successful from the beginning. Through the various Lottery Distributors (the four Arts Councils and the four Sports Councils for England, Scotland, Wales, and Northern Ireland, the Heritage Lottery Fund, the Community Fund, the New Opportunities Fund, the Millennium Commission, the Film Council and Scottish Screen), the Lottery proceeds complement government funding, originally supporting five good causes, arts, sport, heritage, charities and the Millennium, to which health, the environment and education were added in 1998. Changes were introduced in 1998 to address concerns for more fair distribution of Lottery funding to support people, rather than buildings and to assist smaller organizations, groups and areas which were felt to have been initially ignored. For museums, National Lottery funding has led to significant investment to enhance displays and facilities on a wide scale and to make them more attractive and more accessible.

² The Strategy did not include specific targets or performance indicators about the areas of activities it covered, as these would be greatly affected by the City Council's 'Best Value' review which was still underway when the Strategy was designed. It can however, be used in the future as the basis on which to draw indicators which combine qualitative and quantitative measures. (According to the 1999 Local Government Act (Best Value and Capping) which was proposed by the Labour government in the UK in order to modernise the local government, 'Best Value' reviews were introduced as a management system intended to encourage the improvement of 'the quality, efficiency and effectiveness of [local government] services and its activities for its community and other service users'. They referred to 'the achievement of maximum added quality at minimum, zero or reduced cost'. Local authorities were required to set out a programme for Best Value reviews of council services, including museums, outlining measurable targets for the years ahead, starting with 2000/2001, and to complete a fundamental review of their services within a five-year period. For more information, see Vize 1999 and Lawley 2003).

³ For this reason, the Evaluation Strategy focused mainly on the study of visitors' and non-visitors' and the recording of their feedback, complementing these with input from external experts, such as those consulted in the Advisory Panels described below. In this sense and following the terminology often adapted from the managerial field and frequently used in large-scale public-funded programmes, the Strategy focused more on 'output evaluation' (which assesses the extent to which particular programme activities have been provided in relation to particular targets) and to some extent on 'process evaluation' (which examines how a

programme was implemented). 'Process' and 'cost effectiveness evaluation' (which looks at questions of efficiency by standardising the outcomes of a programme in terms of their financial costs) were dealt with at later stages of the project and relate to the monitoring procedure of the funding bodies and the City Council's 'Best Value' review mentioned in the note above.

⁴ The important issue of who will carry out the evaluation work (Hein 1998: 61-2), in-house staff, external professional survey or marketing companies or evaluation experts, and the different implications each option were examined in detail in the Strategy.

⁵ The IPA (Institute Practitioners in Advertising) definition is as follows. Allocation to social class is based on the head of household's occupation. Class A, higher managerial, administrative or professional; Class B, intermediate managerial, administrative or professional; Class C1, supervisory or clerical and junior managerial, administrative or professional; Class C2, skilled manual workers; Class D, semi-skilled and unskilled manual workers; Class E, state pensioners or widows, casual or lowest grade workers, or long term unemployed.

⁶ The ACORN system is based on census data, according to which every address in the UK is allocated via its post-code to one of about thirty-eight neighbourhood classifications; these take account of forty regularly updated variables, such as housing, car ownership or employment.

References

ADAPT Trust (1999) *Art Gallery and Museum, Kelvingrove: Access Audit Report*, (prepared for Glasgow Museums), May 1999.

American Association of Museums (1996) *Museums and Consultants: Maximizing the Collaboration Resource Report*, Washington, DC: American Association of Museums.

Anderson, P. and Cook Roe, B. (1993) *The Museum Impact and Evaluation Study: Roles of Affect in the Museum Visit and Ways of Assessing Them*, Vol. 1: Summary, Chicago: Museum of Science and Industry.

Borun, M. (1992) 'Part I: Where Do We Go from Here?', in A. Benefield, S. Bitgood, and H. Shettel (Eds) *Visitor Studies: Theory, Research, and Practice, Volume 4. Proceedings of the 1991 Visitor Studies Conference*, Jacksonville, AL: Centre for Social Design, 209-14.

Department for Culture, Media and Sport (Museums and Galleries Division) (1999) *Museums for the Many: Standards for Museums and Galleries to Use when Developing Access Policies*

Dierking, L. (1999) *Front-End Studies: A Guidebook for Museums*, Washington, DC: American Association of Science-Technology Centers.

Economou, M. (1998a) 'The Evaluation of Museum Multimedia Applications: Lessons from Research', *Journal of Museum Management & Curatorship* 17 (2), 173-87.

Economou, M. (1998b) 'Evaluating Multimedia', *Museum Practice*, December (9), 38-40.

Economou, M. (1999) *Evaluation Strategy for the Re-development of the Displays and Visitor Facilities at the Museum and Art Gallery, Kelvingrove*, Prepared for Glasgow Museums, June 1999 (available online at: <http://www.hatii.arts.gla.ac.uk/research/KelvinEval/>>).

Fitzerald, L. and Taylor, C. (1999) *Prototype Gallery Evaluation* (April-June 1999), internal report prepared for Glasgow Museums, June 1999.

Gammon, B. and Graham, J. (1998) 'Putting the Value Back into Evaluation', *Visitor Studies Today*, 1(1), 6-8.

Glasgow City Council (1999) *Best Value Review - Museums, Heritage and Visual Arts: First Stage Research Report*, June 1999.

Grajewski, T. and Psarra, S. (1999). *The Art Gallery and Museum - Kelvingrove, Glasgow: A Study of Existing Layout and its Pattern of Movement and Use*, report prepared for Glasgow Museums, 14 May 1999, Welsh School of Architecture, University of Wales, Cardiff.

Hein, G. (1982) 'Evaluation of Museum Programmes and Exhibits', in T. H. Hansen, K.-E. Andersen, and P. Vestergaard (Eds) *Museum Education*, Copenhagen: Danish ICOM/CECA, 21-6.

Hein, G. (1998) *Learning in the Museum*, London: Routledge.

Heinecke, A. M. (1995) 'Evaluation of Hypermedia Systems in Museums', in D. Bearman (Ed.) *Multimedia Computing and Museums*, vol. 1. *ICHIM '95/MCN '95* (1), (Conf. Proceedings), Pittsburgh, PA: Archives & Museum Informatics, 67-78.

Hood, M. G. (1983) 'Staying Away: Why People Choose not to Visit Museums', *Museum News* 61(4), 50-7.

Hooper Greenhill, E. (1988) 'Counting Visitors or Visitors who Count?', in R. Lumley (Ed.) *The Museum Time Machine*, London and New York: Comedia/ Routledge, 213-32.

Hudson, K. (1993) 'Visitor Studies: Luxuries, Placebos, or Useful Tools?', in S. Bicknell and G. Farmelo (Eds) *Museum visitor studies in the 90s*, London: Science Museum, 34-40.

Korn, R. (1989) 'Introduction to Evaluation: Theory and Methodology', in N. W. Berry and S. M. Mayer (Eds) *Museum Education: History, Theory and Practice*, Reston, VA: National Art Education Association, 219-38.

Lawley, I. (2003) 'Local Authority Museums and the Modernizing Government Agenda in England', *museum and society* 1 (2), 75-86 <<http://www.le.ac.uk/museumstudies/m&s/mslawley.pdf>>

Loomis, R. J. (1973) 'Please, Not another Visitor Survey', *Museum News* 52 (2), 21-26.

Loomis, R. J. (1987) *Museum Visitor Evaluation: New Tool for Management*, Nashville, TN: American Association for State and Local History.

Lowland Market Research (1999a) *Glasgow City Council Museums and Galleries Research: Comparative Report Interviewing Programme 1998/99*, report prepared for Glasgow Museums, March.

Lowland Market Research (1999b) *Glasgow City Council Museums and Galleries Research: Kelvingrove Museum and Gallery Winter 1999*, report prepared for Glasgow Museums, March.

Lowland Market Research (1999c) *Glasgow City Council Museums and Galleries Research: Kelvingrove Museum and Gallery Headcount*, report prepared for Glasgow Museums, June.

McManus, P. (1991) 'Museum Visitor Research: a Critical Overview', *Journal of Education in Museums (JEM)* 12, 4-8.

McManus, P. (1993) 'A Survey of Visitors' Reactions to the Interactive Video Programme

"Collectors in the South Pacific", in J. Peirson Jones (Ed.) *Gallery 33: A Visitor Study*, Birmingham: Birmingham Museums and Art Gallery, 74-114.

McNamara, P. (1986) 'Computers Everywhere - But What Happened to the Research?', *The Journal of Museum Education: Roundtable Reports* 11 (1), 21-4.

Merriman, N. (1991) *Beyond the Glass Case: The Past, the Heritage and the Public*, Leicester: Leicester University Press.

Miles, R. (1993) 'Grasping the greased pig: evaluation of educational exhibits', in S. Bicknell and G. Farmelo (eds) *Museum visitor studies in the 90s*, London: Science Museum, 24-33.

Raphling, B. (1994) 'An "Ideal" Way to Evaluate Interactive Computer Programs', *Current Trends in Audience Research and Evaluation* 8, 44-8.

Research Centre for Museums and Galleries (RCMG) (2000) *Museums and Social Inclusion: The GLLAM Report*. Commissioned by the Group for Large Local Authority Museums (GLLAM), Leicester: RCMG, University of Leicester.

Research Centre for Museums and Galleries (RCMG) (2002) *A Catalyst for Change: the Social Impact of the Open Museum*, Commissioned by the Heritage Lottery Fund, Leicester: RCMG, University of Leicester.

Science Museum (1999) *Public Access Policy* (prepared by Roland Jackson), February 1999.

Shettel, H. H. (1991) 'Research and Evaluation: Two Concepts or One?', in S. Bitgood, A. Benefield, and D. Paterson (Eds) *Visitor Studies: Theory, Research and Practice, Volume 3. Proceedings of the 1990 Visitor Studies Conference*. Jacksonville, AL: Centre for Social Design, 35-9.

Stiff, M. (ed.) (1998) *Carnegie UK Trust Grants for IT Innovation in Independent Museums: Evaluation Reports*, Carnegie UK Trust and mda.

System Three (1998) *Kelvingrove Art Gallery and Museum Re-Display: A Qualitative Research Presentation*, report prepared for Glasgow Museums, September 1998.

Trevelyan, V. (ed.) (1991) 'Dingy Places with Different Kind of Bits': *an Attitudes Survey of London Museums among Non-visitors*, London: London Museums Service.

Vize, R. (1999) 'Good, Better, Best', *Museums Journal*, August, 39-43.

Worts, D. (1990) 'The Computer as Catalyst: Experiences at the Art Gallery of Ontario', *ILVS Review* 1 (2), 91-108.

*Maria Economou is Assistant Professor in Museology and New Technologies at the Department of Cultural Technology and Communication, University of the Aegean. She is also Fellow of the Centre for Museology of the University of Manchester, where she was previously based. Before that she worked at the Humanities Advanced Technology and Information Institute (HATII) of the University of Glasgow and at the Pitt Rivers Museum in Oxford. She specializes in the use of information and communication technology in the cultural sector on which she has written extensively. Other interests include visitor studies in cultural organizations, the evaluation of exhibitions and communication in museums, and the use of ICT for presentation and interpretation.