Understanding Museum Learning From The Visitor's Perspective

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ABSTRACT

Museums are increasingly positioning themselves in the market as places for rich learning experiences. When asked why they visit institutions such as museums people often say 'to learn' but there has been little exploration into what this actually means. As current theories of learning focus on the meanings an individual makes based on their experiences, both alone and as part of a community, we need to better understand learning from an individual's perspective. One way of beginning to explore how individuals make meanings about learning in relation to their museum experiences is to link their experiences to how they see themselves as a learner - their 'learning image'.

My research seeks to understand learning from an individual's point of view through studying the question: how do adult museum visitors describe learning? Through a series of depth interviews people were asked to describe their views of learning and how these related to their museum learning experiences. This paper will outline my research to date through an analysis of both the literature and preliminary research findings and, from this, discuss issues this raises for further study.

Keywords

Learning and assessment
Research methods

1. INTRODUCTION

Museums present different contexts for learning, they are visited by a broad range of people and are often described as free-choice learning environments (Falk & Dierking, 2000). Museums have a role to play in shaping identity: through access to objects, knowledge and information visitors can see themselves and their culture reflected in ways that encourages new connections, meaning making and learning in both physical and virtual environments (Bradburne, 1998; Hein, 1998; Silverman, 1995; Weil, 1997). However, museums are finding themselves competing with other leisure and learning experiences in an increasingly global world in 'the experience economy', where people engage in highly memorable, rich
experiences across a wide range of contexts (Falk, 2000; Kelly & Gordon, 2002; Mintz, 1994; Pines & Gilmore, 1999; Scott & Burton, 2001).

Museums have always seen themselves as having some kind of educational role. The earliest museums were founded on the premise of 'education for the uneducated masses' (Bennett, 1995), 'cabinets of curiosities' established to '... raise the level of public understanding ... to elevate the spirit of its visitors ... to refine and uplift the common taste' (Weil, 1997, p.257). Current museum discourse has identified the need for a conceptual change from museums as places of education to places for learning, responding to the needs and interests of those who visit and use their services (Bradburne, 1998; Carr, 1999; Falk & Dierking, 2000; Griffin, 1998b; Pitman, 1999; Weil, 1997).

Museums are increasingly positioning themselves in the market as places for rich learning experiences. During the 1990s learning emerged as one of the critical issues shaping the museum of the future. In early work on museums and visitors, Falk and Dierking argued that museums '... would now be inclined to state that they are, first and foremost, centres for public learning' (1992, p.xiii). More recent work that focussed on the future of museums cited learning as a key issue for further research and exploration (Bradburne, 1998; Carr, 1999; Falk, 2000; Falk & Dierking, 1992, 1995, 2000; Pitman, 1999). A major symposium held about future directions for museum learning research argued that visitor perceptions of learning needed additional research because '... if researchers use the term 'learning' to talk with visitors it might affect the outcome of the study, since many of them might [associate] 'learning' with formal education and [therefore] have difficulty with the question' (Falk & Dierking, 1995, p.27).

It was suggested that understanding learning has become vital for museums for a number of reasons. First, to demonstrate the value of museum visiting to external agencies, including funding bodies. Second, to be able to show how museum learning fits within broader educational frameworks and lifelong learning (Anderson, 1997). Finally, by understanding how museum learning happens museums will be able to provide better learning experiences for visitors (Falk, 2000; Falk & Dierking, 2000). This is particularly important given the key issues that museums are concerned with: sustainability and biodiversity, the environment, social justice and human rights, social history, cultural identity and change (Kelly & Gordon, 2002).

In discussing the need for the museum Carr asserted that '... cultural institutions and learners have deep needs for each other ... They cause each other to exist and they cause each other to become different ... People, users, learners ought to be at the centre of a museum's purpose and intention, and they must engage as equals in defining conversations' (1999, p.51). To do this museums need to become aware of attitudes towards learning as a general construct and how learning fits into peoples' lives. If learning is, as Carr alluded, more about the process of getting to knowledge rather than the knowledge itself, then it is critical that the intent, or the underlying perception of how the museum functions as a learning environment is considered from the perspective of the visitor, user, learner.

My research is located within current debates in the museum sector about 'dumbing down', and the challenge of how museums position themselves within this 'experience economy' (Pines & Gilmore, 1999). How can museums differentiate themselves without losing sight of their aims and objectives of providing enjoyable and meaningful learning for a range of audiences without dumbing down content and messages? The problem is that these arguments have taken place primarily from within the museum industry through the museology literature, media and various symposia, without seeking views from visitors about the roles they think that museums play in learning, education and entertainment. To date, little attempt has been made to unpack views of visitors about these issues (for example see
Combs, 1999; Kelly, 2000a, 2001b). Are there real or perceived differences between the concepts of learning, education and entertainment? Where do museums fit? Do visitors think that if museums provide entertaining experiences they are failing in their learning goals or dumbing down? This research is significant for industry practice in that it will inform these debates through data that has explored these issues from a visitor's perspective.

2. WHAT DOES 'LEARNING' MEAN?

Two bodies of literature that researched learning from the learner's perspective were reviewed: conceptions of learning studies that used a theoretical framework of phenomenography, and studies of perceptions of learning that utilised a variety of techniques in a number of settings, such as academia, government and museums.

2.1. Researching Conceptions of Learning

A substantial amount of research into understanding conceptions of learning has been undertaken within the discipline of phenomenography. These researchers argued that in order to understand learning the starting point should be the learner and their experience, rather than the content or outcome of learning, '... putting the person's experience of a phenomenon into a context of, and in relation with experience of other phenomenon.' (Marton & Booth, 1996, p.538). According to White (1994) conceptions may be considered as 'systems of explanation' (p.118). This body of research focussed on the systems people used to explain their knowledge of and associations made with learning. It was led by a school of Swedish, United Kingdom and Australian researchers using a technique of analysis called phenomenography, where '... qualitatively different ways of understanding are described ... [that] provides us with a model for describing qualitative differences in the outcome of learning.' (Marton & Booth, 1996, p.543). They took as their starting point the experience of the learner and the context of the learning rather than the content of learning. This doesn't mean that content was discounted. Instead of being the starting point, or research focus, it was one of a series of issues that needed to be considered. Ultimately, for these researchers 'conceptions of learning' was the terminology used that described the '... variation in [peoples'] explanations of their experiences of learning' (Schmeck, 1988, p.3).

In a synthesis of the literature six hierarchically arranged conceptions of learning that were consistently found in phenomenological research were described (Marton, Dall'Allba & Beaty, 1993, p.283-284):

1. Learning as increasing one's knowledge, the consumption of ready made facts and information.

2. Learning as memorising and reproducing, where learning was entirely devoted to reproducing facts and information for a specific purpose, such as passing an examination.

3. Learning as applying, where the learner applied what was learned as the need arose, as in driving a car.

4. Learning as understanding where the individual developed some meaning from their learning, they started to see things in a different way or developed a point of view.

5. Learning as seeing something in a different way or gaining new perspectives.

6. Learning as 'changing as a person'. Through developing insights and points of view the learner saw the world differently, as well as themselves as an agent of change, being responsible for their own learning.
Although conceptions were a potentially useful way of understanding how people saw themselves as a learner and charting a developmental change in a learner, what was not clear from this research was how dependant these were on age, life experience and education. When did people begin to think about what learning was rather the content of it? A major shortcoming in this field of research was that a majority of studies were conducted using students in university settings who, in becoming involved in the study, had the motivation to pass some kind of examination as their underlying learning agenda. This hierarchical approach to explaining learning failed to take account of the significant factors in the sociocultural context that comprised an individual's lived history, as well as seeing learning as an iterative, ongoing process of making meaning (Silverman, 1995, 1999; Wenger, 1998).

2.2. Uncovering Perceptions of Learning

There were few studies found that looked at perceptions of learning from the learners' point of view (see for example Park, 1994; Taylor & Spencer, 1994), and minimal work on this in museums (Combs, 1999; Environmetrics, 1998; Rowe, 1998). What meanings do visitors attribute to the word learning?

Research conducted by the Winterthur Museum, Garden and Library, Delaware, U.S.A., looked at motivations for visiting and where learning, education and entertainment fitted (Combs, 1999). This study concluded that learning and recreation were two of the main reasons for museum visiting, defined separately from education and entertainment, which were seen as passive processes. The researchers concluded that 'Learning and recreation are very different from education and entertainment as expressed through the words of Winterthur visitors' (p.195). Learning was seen as '... a personal, social discovery experience for the group viewing the exhibition (p. 195) ... the act of acquiring knowledge with little effort or conscious intention ... Self growth ... Enriching' (p.190, original emphasis). Two studies of museum staff perceptions of learning were undertaken. The St Louis Science Centre, Missouri, U.S.A., used a series of staff interviews to map the similarities and differences in meanings held about a range of concepts, including learning and education (Rowe, 1998). Focus groups that were held with a variety of staff at the Australian Museum, Sydney, attempted to uncover both their views of learning and how these underpinned the public programs that they had worked on (Environmetrics, 1998). In both of these it was found that differences in opinions related to the backgrounds of staff, with their epistemological views on learning and education being heavily influenced by their training and experience. Another finding was that although there seemed to be a broad agreement of what learning was, the language used by staff to express these concepts varied according to their professional backgrounds.

A study commissioned by the Department of Employment (United Kingdom) aimed to find out the extent of knowledge about education and training opportunities available to adults beyond formal schooling. Through focus groups and a quantitative telephone survey people's attitudes to the concepts of education, training, studying and learning were examined (Park, 1994; Taylor & Spencer, 1994).

These studies found that learning was the most difficult concept for people to define - they were able to state examples of what was learning rather than what it meant. Learning was viewed as a positive process, ongoing, everyday and lifelong, broadening horizons and taking an active interest in the world in many diverse ways such as talking to friends, reading books and watching television. It was described as a subliminal process rather than a conscious activity sought out by the individual. Education was viewed as a formal process usually associated with school, something imposed and prescriptive, left behind when they finished. Respondents also made distinctions between informal and formal education, with
the latter being viewed negatively and the former more positively as a developmental process. This study established that there was a clear relationship between a person's early learning or educational experiences and their attitudes to later, post-school learning. It was also found that positive reinforcement and encouragement early in life, particularly from parents, teachers and peers, resulted in a continued desire for learning (Taylor & Spencer, 1994).

Much of the literature, particularly relating to museum learning, has focussed on what people learned, where people learned, and, to a lesser extent, how people learned, with a variety of theoretical approaches proposed (Falk & Dierking, 1992, 2000; Hein, 1995, 1997, 1998). However, much of this discourse has been introspective and speculative within the industry, without any evidence to support these claims from the audience or end-user perspective. Research was also primarily focussed on exhibition evaluation, content learning, or audience-specific studies, such as families, school children or preschoolers (Borun, Chambers & Cleghorn, 1996; Falk & Dierking, 2000; Griffin, 1998; Hein, 1998; Hein & Alexander, 1998; Piscitelli & Anderson, 2000). There has been little research that sought to uncover why people learned - what museum visitors thought learning was and how they viewed themselves as a learner within the context of a museum visit.

My earlier research has shown that people visit museums to learn (Kelly, 2000; 2001), but there has been no exploration into what this actually means. As current theories of learning focus on the meaning that the individual makes based on their experience, both alone and as part of a community, one way of beginning to explore how individuals make meaning of learning in relation to museum experiences is to link this to how people see themselves as a learner - their 'learning image' (van Rossum, Diejkers & Hamer, 1985, p.637). Following from this, my research question is How do adult museum visitors describe learning, focusing on uncovering a range of personal views, perceptions and ideas about learning, particularly in relation to museum visiting within broader educational infrastructures.

3. RESEARCH METHODOLOGY

To begin to relate the museum learning experience to the meaning-making of the individual, I began my research with attention to how visitors saw themselves as learners. A sample of adult museum visitors who had visited a museum within the previous twelve months were interviewed. Due to the nature of the study and because little research had been carried out in the specific area of museums, effort went into trying different approaches to answer the research question through two pilot studies. The aim of these were to test the guiding questions, data collection instruments and initial analysis, as well as the opportunity to practise and refine interview techniques. The questions arrived at were based on an extensive literature review covering four subject areas: learning theory; museological theory and practice; researching conceptions/perceptions of learning; and research into why people visit museums (Kelly, 2000a). These instruments were then trialled and modified after feedback from interviewees and reflection. The final method developed for this stage of the research consisted of a depth interview with eight adult museum visitors, using a Concept Map and set of Semantic Differential Scales.

A Concept Map was used as a starting point in the interview to encourage participants to write their descriptions of learning. Concept Maps as visual ways of organising ideas and representing knowledge show links and connections and enable researchers to look at how knowledge was being constructed, meanings that were being made, and progressive changes in thinking (Jefferay-Clay, 1997; Novak & Gowin, 1984). In this research a simple map was used where people wrote down words and phrases that came to mind when they saw the word ‘learning’, followed by a depth interview that asked questions that covered describing learning, discussing a recent learning experience, describing a recent museum
visit and attitudes to a range of concepts through completing a Semantic Differential Scale. These scales were used as another way to obtain data about attitudes and feelings towards a topic or set of concepts (de Vaus, 1991; Henerson, Lyons, Morris & Taylor Fitz-Gibbon, 1987). This technique was first described in 1952 as a methodology proposed to account for the variations in meanings that combined both associational research methods and scaling procedures (Osgood, 1969). In my study, these questions consisted of sets of words and their antonyms were placed on opposite sides of a five-point scale (constructs), with respondents asked to indicate what best represented their attitude towards a topic or object written at the top of the scale (concepts). The ten constructs used in the research were developed from the literature review, as well as some of the initial findings from the first two pilot studies (Kelly, 2000a, 2001a), and cover structured/unstructured; formal/informal; active/passive; hard/easy; fun/boring; chosen/imposed; dull/lively; useless/useful; alone/with others; facts/ideas. The eleven concepts that were used directly related to the research question, as well as from the pilot studies and developments in the research, and include national park, theme park, learning, art gallery, education, internet, school, library, entertainment, museum now and museum ideal.

4. RESEARCH FINDINGS

Eight interviews were conducted in this stage of the research. Due to the complexities and individual nature of learning it was quite a challenge to figure out how to examine the data. The interview transcripts were analysed individually and then grouped to see what common themes emerged from the full data set, using a grounded theory methodology (Strauss & Corbin, 1998). So far these have provided a fruitful source of information about what individuals think learning is, how they like to learn and, through deconstructing a recent visit, their museum learning experiences. Initially, respondents found learning a difficult concept to define, seen as something 'you just did' without necessarily theorising or explaining it, an activity that all humans engaged in without really thinking about it. However, once presented with the word on a Concept Map and asked to write down their thoughts and talk about it as the interview progressed, participants were usually able to analytically discuss learning as it related to them and their experience of the world, with their views evolving and changing during the interview. The personal nature of learning through experience was very much emphasised, with people explaining it through their own perspectives and experiences.

From this analysis the identified themes were: place, where learning happens; people, who learning happens with; tools, what ‘things’ are utilised in learning; motivation, interest, choice, control; and outcomes of learning - from information, knowledge and skills to new insights, changed attitudes and self-perception. Each of these themes both stood alone and were inextricably linked with the others - no one theme took precedence over another, rather they were interconnected, flexible and changed according to the individual and the learning environment. In contrast to the research described earlier, the combination of these themes paint a rich picture of learning as a conceptual idea rather than as a process.

4.1 Place

The first word associated with learning was ‘school’, usually followed by ‘education’. Other places that were frequently mentioned were museums, work and university. The view that learning happened everywhere was also prevalent when participants were asked to talk about where learning takes place: I think learning is what you do everyday, from everyone you see, from everything you see. (Interview Transcript 3.5). Another participant said that: Probably subconsciously it happens everywhere. (Interview Transcript 3.8).

Very strong images of school learning came from this sample of people, even amongst the older participants. School was usually one of the first words mentioned in relation to
learning: That's where we learn, are formally meant to learn, is through the education system. (Interview Transcript 3.8). School was seen both in positive and negative ways, some focussed on their beneficial learning experiences and others on exams, pressure and rote learning which were not recalled pleasantly.

Museums were less frequently spontaneously mentioned as places for learning, which was consistent with the pilot studies (Kelly, 2000a). However, those that reported having visited museums as children, either with family members or school had vivid, enduring memories, which has been demonstrated in other research (see for example Falk & Dierking, 1997; McManus, 1993). One interviewee was an avid museum visitor in her youth, recalling in detail those early experiences: As a child I was often taken to the precursor of the Powerhouse. It used to fascinate me to watch the clock with the figures going around, the Strasburg Clock. (Interview Transcript 3.3). When she was young, museums were places that she and her sibling chose to visit, building a lifelong interest in and appreciation of what museums had to offer: My father died when I was very young and my mother had to work, so she trusted me and my young brother, we'd get our friends and we'd just take ourselves off to this museum. We probably spent a lot of time there and we grew up on them. That's, no doubt, stayed with me I suppose. (Interview Transcript 3.3).

Another recalled high school museum excursions, where they were given the choice to visit a museum or wait outside: ... at school, when I was seventeen/eighteen, we went to Paris for a week, and one of the things within the budget was that we had to go to musea. So one of the museums, this teacher said it's in the budget, you don't have to go in, we're expected to be here a few hours but here's your ticket. So the first time a lot of them went straight outside but me and the group quickly went around for a quick peek and then we were waiting for a few hours drinking beer. So it was fun the first day, but the second day he said exactly the same. But now almost all of them went in because they knew they had to wait for three hours anyway, so we may as well walk around and there was a guided tour. So, by the end of the week everyone was going in and everyone was enjoying it. (Interview Transcript 3.5).

4.2 People

An important way that people felt learning happened was through their interactions with others: People to me in learning is very important as well ... you learn from everyone, everyday. (Interview Transcript 3.5). When discussing their museum experiences it was recognised that you learned with and through others - about yourself, about them, and about the subject matter. People talked through the museum visit as a process of engagement with both the content and the other people in the group visiting at the time. For example, one participant discussed the nature of the learning between himself and his friends as a social event: ... sometimes we'd bounce off something of interest to ourselves, then we'd look at it a bit more, wander off. Then we'd come together a few times to have a look at things. (Interview Transcript 3.4).

The family as an important social group that impacted on both learning and museum visiting was identified, with the belief that learning was very strongly influenced by family starting when you were very young. One participant talked about early influences on museum visiting with his family: My parents always took me to musea with my sister, not forced but we'll just have a look. Something like in Sydney the technical one, there's something like that in Holland where you grab two bits and the electricity in your hair makes you go up straight. That was quite interesting. Also the Ryksmuseum with the Nitewatch and other Dutch painters and international painters. So, when I was young, like twelve or even younger, I didn't really like it but my parents said well lets' do this and then have more fun. My parents
always took us to those places, not every week but every now and then. (Interview Transcript 3.5).

Some interviewees mentioned the workplace as an important place where learning happens in conjunction with others through a process of exchange. People were also important in workplace learning because ... you learn everyday something from other people around you ... Especially in my job because I'm working with so many people. Everyday I'm learning from them, but I teach them a lot as well, and that's why the interaction is important to me. (Interview Transcript 3.5).

4.3 Tools For Learning

A number of tools people used to learn were discussed, with the internet, libraries and books most frequently mentioned, often working together to enable a wide range of information sources to be sifted through in order to make meaningful connections that resulted in learning.

The internet was a primary way that most of those interviewed accessed information when learning about something new. In the interviews people spoke about the internet as being fast, usually accurate and immediate, something that you controlled, and as a good starting point to investigate a subject further through other means: ... you can get so much information from the internet ... It's been a very valuable first port of call... I think it's a very enjoyable way to do it ... I think you get immediate reward. (Interview Transcript 3.1). When learning something new, one person reported undertaking research through firstly turning to the internet because of ease of access: [I] see if there's a related website or any information on it because its easy and accessible. (Interview Transcript 3.4). This finding has broad implications for the learning experiences offered by informal learning sites such as museums, given what people think the internet is and the nature of the information and learning it provided, as well as the increasing access and use of the internet by a broader range of Australians. Why visit a museum when you can get what you need from the internet, tailored to your specific needs?

Other tools for learning mentioned were libraries and books, usually as an additional source of information after the internet: ... everybody falls back on the Library don't they? (Interview Transcript 3.2).

4.4 Motivations for Learning

Individual aspects related to learning that were identified included interest, choice and active learning. Participants recognised that the motivation for learning was strongly based on personal interest - you needed to be interested in a topic and engaged with it somehow for learning to happen. Learning was described as an active process of seeking information about an area of interest, then making meaning in order to create knowledge and new ways of seeing. This was also related to what people gave their attention to: ... it's funny actually that once you're interested in a subject it's just there ... before you never noticed it, where all of a sudden you are looking for it and so you find it. (Interview Transcript 3.5). Interest has been identified as a key motivator for learning (Csikszentmihalyi & Hermanson, 1995; Pressick-Kilborn & Walker, 1999, in press; Roschelle, 1995), and my findings so far confirm this.

Choice also emerged as a key way of facilitating learning, particularly when comparing learning with education: ... learning never, never ends...it's a choice...a very natural process ... [whereas] education is more given to you. (Interview Transcript 3.5). This was also found
in the Taylor and Spencer (1994) study where one respondent summed up this difference as 'Learning is you doing it and education is somebody doing it to you' (p.5).

All interviewees described learning as an active, physical process - something that you actively engage in to discover something. Theories of learning have identified activity and 'hands-on' as important elements for effective learning (Csikszentmihalyi & Hermanson, 1995; Hein, 1998; Roschelle, 1995), and participants in this study also recognised this, with one interviewee stating that learning was a physical as well as a mental process: ... *when you have your mind and body connected it's a learning process as well.* (Interview Transcript 3.4).

This theme was neatly summed up as: *Well I think there are a number of things you've [the interviewer] used about it being unstructured, a group activity, an interactive thing/experience, like it's more informal when there's more choice about what you do. Obviously something that's not boring, something that's not passive, so it's more of an active thing...Something where you choose to be involved, that you're interested in doing.* (Interview Transcript 3.1).

### 4.5 Learning Outcomes

Different levels of learning outcomes were identified, from gaining information, knowledge and skills through to developing new insights, appreciation, as well as deep learning through increased understanding and changed attitudes. Initially, learning was viewed as an everyday practice, the application of facts and information in an active process of change from having information to gaining knowledge: *Knowledge is applied, information is more facts and I guess knowledge is applied information ... [you] gather information, you turn it around in your head, you apply that information.* (Interview Transcript 3.8). By experiencing something new, reinforcing and building on previous knowledge, attitudes were modified as a result of personal change and growth.

Following from this, a number of participants reflected on how their learning, whether the museum experience or just life in general, caused them to change as a person somehow - a shift in attitude, a greater understanding of a topic or concept, or learning more about themselves and others. For example, when visiting the *Body Art* exhibition at the Australian Museum, one interviewee stated: ... *I also learned a bit more about my friends. I didn't know they had an interest in [tattoos] either, and you sort of learn more of what they're about as well.* (Interview Transcript 3.4). His attitude towards people with body art also changed, he now understood and appreciated why others engaged in this practice as well as looking at them in a different way: *You have this stereotype about people who've got tattoos and it really gives you a different perspective on it ... I probably just thought it was an abuse to your body, sort of, beforehand ... And since then, like, when people have piercings I just look at it, not stare at it, and think about where they got it, what sort of thing they had done.* (Interview Transcript 3.4). Ultimately he felt he learned from this exhibition through: *The way you perceive things and often they change. They can change my learning because you have preconceived ideas sometimes and then once you learn more about it your perception changes as I think I did with the 'Body Art' exhibition.* (Interview Transcript 3.4).

Another participant mentioned that his views about Aboriginal Australians changed after seeing the *Indigenous Australian* exhibition at the Australian Museum. Although he felt he knew quite a bit about the topic he acknowledged that: ... *there's always a lot of information you don't know about, like the Lost Generation and the difficulties of the Aboroinials in regards to losing land, growing up in their communities and culture, differences in culture and way of working.* (Interview Transcript 3.5). From this new information he had his views challenged and changed in a positive way: *And it was interesting that on some of the...*
TVs [oral history videos in the exhibition] there were Aboriginals talking about different subjects, but there were a lot of positive Aboriginals. What I mean is that normally in the media and a lot of information, you see the original Aboriginal in their old clothes, in hardly any clothes, you never in the media see a smart Aboriginal or Islander; it's always someone who's wearing the old clothes, and what happened to the many of them that did go to university? Who had a good job? You hardly ever see that aspect. So in the end you actually saw some people who did make a change, did make a difference in their cultures and that was nice and good to see actually. (Interview Transcript 3.5).

5. CONCLUSIONS SO FAR...

From my research findings so far, one major finding was that an individual's learning image was fluid, responding to the situation and social circumstances at a particular point in time. Individuals don't have a single learning image, rather, they had a series of learning images or personal frameworks for themselves as a learner which changed according to role and circumstance. The adult museum visitors in this sample tailored their learning style to suit their particular situation, rather than seeking learning experiences that matched how they stated that they liked to learn. In this sense learning was an adaptive process, both a structured and unstructured experience, where learners took a set of tools and used them in accordance with the learning image they were functioning in at the time. For example, in the context of a museum visit how an individual saw themselves and the role they played within the social and physical environment influenced both how they experienced the museum as a learner, as well as what they were learning.

Following from this, it was hypothesised that an individual's learning image was flexible depending on role and circumstance, coupled with the tools provided at a particular time, visiting environment, social group and a specific place. As it was difficult to separate an individual's learning image from the social and cultural contexts, it seemed that a sociocultural theoretical framework for the research could be appropriate. Therefore, it has been theorised that museum learning occurred within a sociocultural context, situated in time and place leading to some personal change (Falk & Dierking, 2000; Hansman, 2001; Kelly & Gordon, 2002; Matusov & Rogoff, 1995; Paris, 1997a, 1997b; Schauble, Leinhardt & Martin, 1997).

As a number of unintended outcomes have emerged, opportunities to expand the research are being pursued in order to provide more data, test the findings to date, analyse trends across a range of variables and uncover 'cultural meanings' (Osgood, Suci & Tannenbaum, 1969) about key concepts from the perspective of those who have experienced museums. The broad questions being researched in this next stage of my study include a deeper analysis of the applicability of theory to practice. Do people explain learning in terms related to theoretical descriptions of learning? What are the key elements of sociocultural theory that relate to museum learning experiences? What are the effects of age, gender, cultural background or visiting patterns on attitudes to a range of concepts including learning? Which of the cultural institutions are most or least like each other in terms of learning, education and entertainment? How closely is learning and entertainment related to current perceptions of a museum? What attitudes are held towards the internet and how closely are these aligned with learning?

Two further studies are being carried out. First, a quantitative survey is being undertaken to uncover a range of perceptions and understandings about the concept of learning across a larger sample; reveal a range of attitudes towards concepts that can be mapped across a broad sample of visitors and constructs; and look more closely at matching views of learning with perceptions of a range of cultural institutions, including museums and the internet. A set of eleven statements about ways of learning and outcomes of learning were developed from
the literature and my research so far. Each statement has been rated on the importance to
the individual by two samples of people so far: 300 Sydney adults via a random telephone
poll (Market Attitude Research Services, 2002) and, at this stage, 55 adult visitors to the
Australian Museum through an onsite survey. The statements being tested are shown on
Table 1 with results for high ratings only (that is, a score of important or very important).

**Table 1. Learning Statements**

<table>
<thead>
<tr>
<th>Statement</th>
<th>PHONE SURVEY (n=300)</th>
<th>VISITOR SURVEY (n=55)</th>
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<tbody>
<tr>
<td>Learning in a physical, 'hands-on' way</td>
<td>92%</td>
<td>80%</td>
</tr>
<tr>
<td>Learning when the information provided is of immediate interest to me</td>
<td>91%</td>
<td>82%</td>
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<tr>
<td>Learning that builds on what I already know</td>
<td>88%</td>
<td>84%</td>
</tr>
<tr>
<td>Learning that specifically fits with how I like to learn</td>
<td>81%</td>
<td>64%</td>
</tr>
<tr>
<td>Teacher-led learning at school/other formal place</td>
<td>63%</td>
<td>45%</td>
</tr>
<tr>
<td>Being told what to learn</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td>Constructing meaning based on my own experiences</td>
<td>90%</td>
<td>87%</td>
</tr>
<tr>
<td>Changing how I see myself</td>
<td>64%</td>
<td>56%</td>
</tr>
<tr>
<td>Seeing something in a different way</td>
<td>86%</td>
<td>84%</td>
</tr>
<tr>
<td>Learning with and through others</td>
<td>85%</td>
<td>73%</td>
</tr>
<tr>
<td>Learning new facts</td>
<td>87%</td>
<td>76%</td>
</tr>
</tbody>
</table>

In addition to this, the tools that were identified as important in learning were also rated by
these samples using the same scales. These are shown on Table 2, again with
important/very important ratings only included.

**Table 2. Resources for Learning**

<table>
<thead>
<tr>
<th>Resource</th>
<th>PHONE SURVEY (n=300)</th>
<th>VISITOR SURVEY (n=55)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other people (family, friends)</td>
<td>87%</td>
<td>51%</td>
</tr>
<tr>
<td>Books/libraries</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>Museums, galleries, other cultural institutions</td>
<td>76%</td>
<td>73%</td>
</tr>
<tr>
<td>Work colleagues/peers</td>
<td>61%</td>
<td>65%</td>
</tr>
<tr>
<td>Internet/websites</td>
<td>61%</td>
<td>58%</td>
</tr>
<tr>
<td>Universities, formal education</td>
<td>59%</td>
<td>67%</td>
</tr>
<tr>
<td>Television programs</td>
<td>57%</td>
<td>36%</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Adult education</td>
<td>53%</td>
<td>55%</td>
</tr>
<tr>
<td>Computers/CD-ROMS</td>
<td>39%</td>
<td>35%</td>
</tr>
</tbody>
</table>

It is worth noting that in the phone survey this question was asked without indicating that a museum or gallery was sponsoring the research, so the results came as a pleasant surprise! Results from both studies are currently being analysed to see if there are differences across demographic characteristics such as age, sex and education levels.

Second, another round of depth interviews will be undertaken with adult museum visitors who have visited two different institutions in assorted social situations using the current methodology. A number of questions will be looked at through extending the depth interviews. Do visitors have more than one learning image and how does this vary? How does learning differ according to the social circumstances, experiences offered and learning image? Can findings be explained in terms of sociocultural theory? As in the current study, analysis of these interviews will use a grounded theory methodology to identify key themes and issues, and unpack some of the findings from the quantitative research.

The outcomes of this research will further understandings about learning, education and entertainment in a way that has received minimal attention in museum and educational research to date. Findings from this research will be significant for industry practice by informing current debates about the museum learning through gathering data that unpacks these issues from the visitor's point of view. Although there has been much theorising about visitor learning, particularly how and what is learned, there has only been one study with visitors about what they think learning and education are. Overall, this will assist the museum industry to better understand learning from the visitor's perspective in order to provide better learning outcomes for visitors.

6. BIBLIOGRAPHY


