THE INTERRELATIONSHIPS BETWEEN ADULT MUSEUM VISITORS’ LEARNING IDENTITIES AND THEIR MUSEUM EXPERIENCES

CHAPTER 5: STAGE ONE ANALYSIS AND DISCUSSION

CHAPTER 6: ADULT MUSEUM VISITORS’ LEARNING IDENTITIES AND A MUSEUM EXHIBITION

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Abstract

Many museums around the world are reviewing the ways they are thinking about visitors and learning. Current theories of learning focus on the meaning individuals make based on their experiences—alone, within a social context and as part of a community. A critical aspect in better understanding the process of learning for individuals is to find out how people view themselves as learners across the rich array of available formal and informal learning experiences. Research has shown that when asked why they visit museums people often say “to learn” but there has been little exploration into what this means. What do museum visitors think learning is? How do visitors view themselves as learners within the context of a museum visit and does this change during and after their visit?

The research question investigated in this study was *What are the interrelationships between adult visitors’ views of learning and their learning experiences at a museum?* A key focus of the study was on how adults describe learning, the place of learning in their lives and where museums are situated. Other areas examined included the relationship between learning, education and entertainment, as well as the roles visitors play during a museum visit. The framework of *learning identity* was used to characterise how individuals describes themselves as learners within a sociocultural context, including their future views of learning and the roles learning plays in their lives.

The study was undertaken in two parts—*Stage One* investigated individuals’ personal philosophies and views about learning, and *Stage Two* explored how a museum exhibition experience provided insights into visitors’ learning identities.

It was found that participants in the study describe learning in very rich and detailed ways, yet there were also a number of common ideas that emerged. It is proposed that museum learning can be framed under six interrelated categories—person, purpose, process, people, place and product—called the *6P model of museum learning*. The literature review showed that visitors learn a great deal from museums across a diverse range of content areas and at many different levels. However, the method used in this study also revealed that visitors could learn more about the concept of learning as well as their own learning processes—likes, dislikes, preferred strategies—if they are encouraged to think about themselves as a learner before they engage with an exhibition.
Chapter 5. Stage One Analysis and Discussion

Chapter 4 presented the major findings from Stage One, with a number of key findings outlined. First, the wide variety of descriptions, thoughts and issues identified by a range of different people across all sample groups showed that learning was essentially an individual process. It was also possible to identify a range of common themes about learning as a concept across all data sets and connect these to the literature. These have been combined under a framework called the 6P model of museum learning. Second, it was found that while the concepts of learning, education and entertainment were described differently, they were also related in positive ways.

This chapter analyses and discusses the findings in relation to data presented in Chapter 4, coupled with another look at specific areas of the literature from Chapter 2. The data reported in this chapter comes from three different groups of adults: eight in-depth interviews with visitors to the Australian Museum; 100 questionnaires with Australian Museum visitors; and a telephone survey of 300 Sydney adults to compare Museum visitors’ responses to the general population. When discussing findings across all three samples the term participants has been used.

5.1 Describing learning: a model of museum learning

As detailed in Chapter 2, Section 2.6, the essential elements of learning that emerged across the learning literature were that while learning is unique to an individual, it is also a shared process. Learning is dependent on context, and happens both in the short and long-term. It is an active process of reflection leading to self-awareness and change, chosen by individuals based on their interests, preferences, prior knowledge and experiences. Learning is facilitated by a wide range of tools, with the social dimensions also being critical.
Reflecting on data from Stage One with a re-examination of the literature, I developed a 6P model of museum learning (Figure 5.1), which has been used as a way to organise the discussion in this chapter. Many elements of the model are interrelated, with these connections explored in more detail in Stage Two. An expanded 6P model, which also incorporates outcomes from Stage Two, is presented in Chapter 7.

**Figure 5.1. 6P model of museum learning: Stage One**

<table>
<thead>
<tr>
<th>MUSEUM LEARNING</th>
<th>PERSON</th>
<th>PURPOSE</th>
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|                 | • discovering  
|                 | • exploring  
|                 | • experiencing  
|                 | • thinking  
|                 | • hands-on  
|                 | • objects & tools  
|                 | • school  
|                 | • museums, galleries, cultural institutions  
|                 | • libraries  
|                 | • internet  
|                 | • life  
|                 | • outcomes  
|                 | • facts & ideas  
|                 | • short & longterm  
|                 | • growth |

### 5.1.1 Person

The category of **person** relates to the individual learner, including prior knowledge, experience and lived history; cultural background and gender; as well as roles played at different times in a person’s everyday life. It also covers individual changes that result from learning through meaning making and seeing something in different ways. The framework of social constructivism, with its emphasis on the learner (Chapter 2, Section 2.2.4), has been used as one basis for the person category. As noted by Woolfolk (1998) constructivism ‘…
emphasises the active role of the learner in building understanding and making sense of information’ (p.346, emphasis added).

The aspects of constructivism generally supported by participants in the present study were prior knowledge; learning that builds on what people already know; personal interest; personal change and seeing something in a different way; as well as meaning making.

Fienberg and Leinhardt (2002) found that visitors with high levels of **prior knowledge** about a subject not only engaged in deeper conversations about the content of an exhibition, but did so at more sophisticated levels. Prior knowledge forms the basis of learning and growth through progressive development from what is already learned into a fuller, richer and more organised form of knowledge (Dewey, 1938; Paris, 1997; Paris & Mercer, 2002).

The data revealed that participants believed building on prior knowledge was important for later learning, as illustrated by agreement with the statement *Learning that builds on what I already know* by more than eight in ten of the questionnaire respondents. When describing learning the role that prior knowledge plays was also mentioned:

- **Expanding your knowledge, a new aspect on life** (Questionnaire respondent #11).
- **An expansion of what you already know** (Questionnaire respondent #47).
- **New things that add to your body of knowledge** (Questionnaire respondent #78).

The findings also emphasised the importance of **personal interest** in learning. When discussing his learning Stephen reported that once people became interested in a topic they were more likely to notice related information. He used the example of gardening, as he had recently purchased a new house: ... *we bought a place last year, so we do things in and around the garden or in the house, but mainly in the garden. So you get the books, newspapers, it's funny actually that once you're interested in a subject it's just there. I mean all of a sudden you see it in a newspaper, you see it in magazines. It's just when you buy a car and you see so many of those cars, that same type driving around, where before you never noticed it, where all of a sudden you are looking for it and so you find it.* (Interview Transcript 3.5,
Similarly, the statement *Learning when the information provided is of immediate interest to me* was rated as important/very important in learning something new by 83% of questionnaire respondents and 91% of the telephone survey respondents.

Museums have been described as environments where visitors make meaning (Falk & Dierking, 2000; Hein, 1999; Jeffery-Clay, 1998; Silverman, 1995). Strong support for learning as meaning making was expressed by participants in this study. The statement *Constructing meaning based on my own experiences* was rated as important/very important in learning something new by 82% of questionnaire respondents and 90% of the telephone survey. In the open-ended responses participants talked about learning as a process of gaining some knowledge, thinking about it and then making new meanings. For example, Dennis explained that learning was a process where you *gather information, you turn it around in your head, you apply that information.* (Interview Transcript 3.8, 13/03/01). Several questionnaire respondents described learning as making sense of something in order to draw conclusions and reach understanding:

- **Finding your place in the world. Engaging with the world in a way to discover more about it and make sense of things. That's the big picture** (Questionnaire respondent #40).
- **Gaining ideas and knowledge which then enables you to gain understanding** (Questionnaire respondent #68).
- **Being able to put pieces of information together [to] draw conclusions** (Questionnaire respondent #71).

Meaning making enables an individual to view the world in new ways (Hein, 1999), demonstrated in this study by support for the statement *Seeing something in a different way*. This was rated as important/very important in learning something new by 82% of questionnaire respondents and 86% of the telephone survey. From the questionnaire data this statement was also significantly more likely to be rated as important by adults who visited with their family and by those aged 35-49.
As concluded from the literature, learning is about change (Dewey, 1938; Hein & Alexander, 1998; Malone, 1990). Participants talked extensively about learning as a process of **personal change and growth**. Stephen discussed how his views about Aboriginal Australians changed after seeing the *Indigenous Australians* 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 Aboriginals in regards to losing land, growing up in their communities and culture, differences in culture and ways of working.* (Interview Transcript 3.5, 5/03/01).

How deeply change occurs and is articulated may depend on the questions asked and the “reflective space” available to respondents, illustrated by responses to the statement *Changing how I see myself.* Agreement with this statement was lower compared with other ratings. Fifty percent of the questionnaire respondents and 64% of the telephone survey rated it as important/very important. Interestingly the statement *Seeing something in a different way,* which could be seen as less “personal”, was rated as important/very important by 82% of questionnaire respondents and 86% of the telephone survey. Could this mean that people saw “change” as something external to themselves and not an internal process?

However, in-depth interviewees acknowledged the deeper personal changes that were a result of learning. Louise felt that learning needed to be a challenge, beyond facts: *To me it’s about informing and also challenging you as well ... That’s how I think learning comes about, it’s about giving you something to begin with and then questioning you about that and challenging you.* (Interview Transcript 3.7, 13/03/01). Another example was Rosemary who, at the end of the interview, added the words *new insights, innovation* and *self-analysis* to her learning diagram because she felt that she had thought about these issues during the discussion. Does this mean that when thinking and talking about learning people need “prompts” to think more deeply about how learning personally influences them and their identity? These issues are also closely related to product (discussed in Section 5.1.6).
5.1.2 Purpose

As reported in Chapter 1, Section 1.1, a wide range of purposes, or motivations, have been identified for visiting museums. In the 6P model two specific aspects related to purpose—enjoyment/fun and choice—were discussed in the greatest detail by participants and are detailed below.

Sachatello-Sawyer et al. (2002) found that 80% of older learners surveyed who had attended an adult education program did so for ‘… the joy of learning’ (p.8). Participants in the present study also associated learning with enjoyment and fun:

- Seeing something, understanding, can be fun (Questionnaire respondent #2).
- Discovery, education, fun (Questionnaire respondent #75).

Stephen remarked that It’s more fun to learn more and more about all the little things. (Interview Transcript 3.5, 5/03/01). Participants recognised that enjoyment can also contribute to deeper learning. For example, Doug talked about fun and learning when he visited the Skeletons exhibition at the Australian Museum: You just sit there and all of a sudden in the back [of the exhibit] you see a mouse, a skeleton of a mouse and that’s really fun. But it’s also interesting to see the differences in the bone structures. (Interview Transcript 3.6, 5/03/01).

When asked whether she thought learning was enjoyable Rosemary stated: I think it is. I think you get a different view of it as you get older, whereas it was imposed on you at school, it’s not imposed on you as you become an adult. It’s basically your choice. It can be fun, I’m putting fun [on the learning diagram] because it can be. A lot of people don’t look at it that way. (Interview Transcript 3.2, 13/12/00). For Rosemary, the idea of fun and enjoyment in learning was closely linked with choice, which was also noted by Griffin (2004):

Children declared that learning and enjoyment went together when it was fun, they had choice and they were with friends or family (p.564).

As detailed in Chapter 2, Section 2.2.4, choice is an important factor in learning. Dewey (1938) argued that learners must be actively involved in constructing the purpose of their learning in order to have better learning experiences.
summarising learning in museums, Paris (1997) acknowledged the important role that choice played because

... people learn best when they actively manipulate the information to be learned and when that information builds on previous knowledge (p.22).

Earlier research with family visitors found that when pursuing their personal agendas families valued being able to choose what they attended to according to their needs and interests (Kelly, Savage, Griffin & Tonkin, 2004). Leinhardt and Knutson (2004) suggested that choice was the major factor that distinguished informal from formal learning environments.

Choice was a key issue that arose in the present study, particularly when comparing learning with education. The differences seemed to lie in the word *teach* which was associated with being “talked to” or “told to do something” in an educational sense, and the word *learn* that was connected with personal choice. Choice was seen as an important way of facilitating learning by in-depth interviewees, as Stephen noted: *... learning never, never ends ... it's a choice ... a very natural process ... [whereas] education is more given to you.* (Interview Transcript 3.5, 5/03/01). Brenda mentioned that *Obviously [learning is] 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, 22/11/00).

Results from the questionnaire sample and telephone survey also supported these views. For example, 66% of respondents in each sample rated the statement *Being told what to learn* as *not* important or slightly important when learning something new. As well, the statement *Teacher-led learning at school/other formal place* was supported by 44% of questionnaire respondents (Museum visitors) and 63% of the telephone survey (general population), which was significantly lower than for most other statements.
5.1.3 Process

The category of *process* includes the myriad ways that learning actually happens. It has been acknowledged in the literature that individuals access a range of different styles when learning (Cassels, 1992; Dierking, 1989; Gardner, 1993; Schmeck, 1988).

Words and phrases listed in the 6P model (Figure 5.1) were actually used by participants, demonstrating the diversity of ways that learning as a process was described, shown in the following examples from questionnaire respondents:

- *Opening the mind to new experience* (Questionnaire respondent #4).
- *Expanding your knowledge about an area by a variety of means* (Questionnaire respondent #11).
- *Acquisition of new information* (Questionnaire respondent #14).
- *… exploration of ideas* (Questionnaire respondent #20).
- *An understanding of how things work* (Questionnaire respondent #42).
- *Absorbing new information* (Questionnaire respondent #50).
- *A discovery path* (Questionnaire respondent #52).
- *Discovering new ways of thinking and knowledge* (Questionnaire respondent #99).

Dennis talked about learning as the application of facts and information in acquiring knowledge: *Knowledge is applied, information is more facts and I guess knowledge is applied information.* (Interview Transcript 3.8, 13/03/01). Dennis described learning as an everyday practice, an active process of change from obtaining information to gaining knowledge, where *… you gather information, you turn it around in your head, you apply that information.* (Interview Transcript 3.8, 13/03/01). Scott also talked about learning as *… building up your knowledge.* (Interview Transcript 3.4, 24/02/01).

Dewey (1938) recognised that learning is active and involves the senses and all parts of the body, giving individuals the freedom to observe and to judge, both intellectually and physically. Participants in the present study recognised the
importance of physical, active experiences, closely associating learning with hands-on activities. For example, Scott talked about learning as 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, 24/02/01).

Across all samples learning was described as an everyday process undertaken by all humans that is both cognitive and physical. It was seen as a way of acquiring and gathering something, for example, information, skills or knowledge. Through processes such as understanding, applying, expanding, discovering, assimilating, experiencing and exploring learning leads to change, or an end-product, described in Section 5.1.6.

5.1.4 People
The category of people covers the social dimensions of learning. Participants identified a broad and diverse range of people they learned with, including family, friends, colleagues/work peers, and professionals such as museum staff, teachers and university lecturers. Learning based within a community is also included under people.

Falk and Dierking remarked that ‘... much of the social behaviour observed within and among groups is learning oriented’ (2000, p.91). Paris and Mercer (2002) also found that the social aspects of a visit were important, particularly in the ways visitors responded to objects in emotional and humorous ways. The present study supports the views expressed in the literature about the importance of social learning and participation in learning.

In-depth interviewees felt that the social dimensions of a visit were important ways that learning happened, through interactions with others in the group coupled with the roles played in a museum visit. The recognition that family and the general community were valuable learning units was a particularly strong result. When discussing their museum experiences participants acknowledged that they learned with and through others—learning about themselves and other people, as well as the subject matter. In-depth interviewees talked about
interacting with both the content of the exhibition and other members of their visiting group. For example, Scott 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, 24/02/01). Scott’s description also illustrates McManus’s ideas about group learning (1987; 1988; 1989; 1991a), particularly the “hunter-gatherer” model of visiting (1994) where members actively “foraged” in the museum to find areas that interested them, coming together at various points to share their experiences.

Falk and Dierking’s work on adult learning and museum visiting (2000) concluded that for

… many adults, the social reasons for their visit are so dominant that it is these aspects that are the take-away messages from a museum experience (p.101).

To demonstrate this point, Doug talked about the social experience his group had in just being together: We were all of us, the three of us, were all fascinated by the young crocodiles upstairs, the live ones. We just sat down and watched them for ten minutes. Because initially it looks like it's all fake because they don't move. Then gradually we saw one move its’ legs under, and this other was sort of sunning itself, and that was interesting. (Interview Transcript 3.6, 5/03/01).

Mavis described a visit to an art gallery with her granddaughter as a social outing: We looked at everything, every mask quite thoroughly because there was only one other man there. We took our time and she read the little pamphlet that we were given. She seemed very interested. (Interview Transcript 3.3, 8/01/01).

Morrissey (2002) reported that adults exhibited learning behaviours that were group-based, resulting in people learning ‘… about each other while they learn *through* each other’ (p.285, emphasis in original). This was illustrated in the present study by Scott when describing his visit to the Australian Museum’s Body Art exhibition with a group of friends who shared the same interest in the topic and an understanding of it as a cultural practice. The learning that Scott talked about involved both personal and social aspects, with a resulting change in attitudes and seeing things 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, 24/02/01). Through social engagement, both as an individual and within the group, Scott felt that he had learned more about himself and others: 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, 24/02/01).

As outlined in Chapter 2, Section 2.2.3, research has established the value of the family in learning across formal and informal settings, particularly museums (Borun, 2002; Buckingham & Scanlon, 2003; Crane, Nicholson, Chen & Bitgood, 1994; Ellenbogen, Luke & Dierking, 2004; Falk & Dierking, 2002; Hicks, 2005; Kelly et al., 2004; Kropf, 1992; Moussouri, 1997). It has also been found that families accessed a wide range of information sources when learning together (Ellenbogen, 2002) and that early family visits established later visiting habits (Falk & Dierking, 1997; McManus, 1994).

The data also demonstrated that the family group was important in both general learning and museum visiting. In-depth interviewees discussed the role of the family in some detail. For example, Rosemary believed that learning was very strongly influenced by family. She claimed that this impact started when a person was very young, with learning being a key “life skill” that assisted a child develop along the right “life path”: With the correct guidance from the family you hope that they will have a better life with all these learning skills that they have gained. (Interview Transcript 3.2, 13/12/00). Stephen talked about the influence of family in forming attitudes and views of the world: Your parents, your family, those are the ones who basically give you a view of life ... [That’s] why [it is] so important with family because they teach you when you’re at home, and you look at TV and Dad says “Look at those people, they’re rich and they don’t have anything to complain about and we’re poor”, obviously then those kids would have a perception of the world because Dada said that. It’s why family is so important. (Interview Transcript 3.5, 5/03/01).
The questionnaire data showed that, when compared with other types of visitors, those visiting with families more strongly supported the statement *Learning in a physical/”hands-on” way* when learning something new. This suggests that families highly value hands-on learning, again consistent with the literature (Anderson, Piscitelli, Weier, Everett & Tayler, 2002; Borun & Dritsas, 1997; Ellenbogen, 2002; Ellenbogen et al., 2004; Kelly et al., 2004; Moussouri, 1997; Paris & Hapgood, 2002; Puchner, Rapoport & Gaskins, 2001).

Another interesting perspective on social learning that emerged from the study was the idea of learning within a *community*, including the role of individuals within their community and their cultural background. This was demonstrated by Louise, who was of Torres Strait Islander descent. Louise viewed learning very much as an exchange with community members through talking, listening and sharing. Louise’s learning diagram (Figure 5.2) included the words oral, exchange, sharing and two-way as a way to explain the collective approach to learning that, for her, was strongly culturally-based. Her first thoughts in her interview also reflected the idea of exchange: *My first word is “sharing” when I think of this topic of learning.* (Interview Transcript 3.7, 13/03/01).

Figure 5.2. Learning diagram: Louise
Louise described a recent learning situation when she and a group of community Elders were looking at objects from a collection held in an overseas university: [This] was a very good opportunity to learn first hand and directly from older people about these objects and their stories … we’d just sit down and talk about things and one story may trigger off another story and another string of events or something that was associated with the object or family. Because people were looking at these objects and at the same time through written documentation, so it was really good to say, “OK this is what this person … had discovered, his own drawings and sketches”. [Then] someone would be sitting down and reading through this and would say “Oh look at this”, and reading about [what the Anthropologist concluded about] this particular piece when actually it means something else. Another delegate would then say “Yeah you’re right and it was also used for this and this …”. (Interview Transcript 3.7, 13/03/01).

Louise’s story illustrated ideas about what have been called “interpretive communities” (Hooper-Greenhill, 1999, 2000), or “learning communities” (Brown, 1995; Falk & Dierking, 2000; Matusov & Rogoff, 1995) characterised by the “… mutuality in joint activity and guidance rather than on control by one side or another’ (Matusov & Rogoff, 1995, p.98). How strongly did Louise’s cultural background and the cultural norms of learning together employed by the Torres Strait Island community underpin her views of learning? Louise also spoke about learning as acquiring skills and customs that were then shared through a process of social exchange and as a cultural practice. She stated that learning happened: … through sharing, through talking, sitting down, passing on information that way … I don’t think you can ever stop learning about, from my point of view, from my people. (Interview Transcript 3.7, 13/03/01).

It has been acknowledged that the role of accompanying adults are a critical influence on museum learning (Anderson, 2003; Anderson et al., 2002; Griffin, 1998; Landman, Fishburn, Kelly & Tonkin, 2005; Puchner et al., 2001). A study of chaperones visiting a variety of museums with school students (Sedzielarz, 2003) found that they didn’t see learning as their primary role, instead they recognised that they had multiple roles including ‘… guide, group facilitator, timekeeper, learning leader, teacher, role model, security guard, learner, and strategist’ (p.22). In the present study an interesting finding emerged relating to role in the visit. Two of those interviewed were grandmothers who talked about
visiting exhibitions with their grandchildren. When asked about their own learning, they didn’t see that they were there to learn personally—they felt they were there to support the child’s learning. Does this mean that the way they think of themselves as learners changes depending on the perceived role an individual takes on when visiting with a group? Do visitors essentially accept what is offered to them, rather than seek experiences that match their views about themselves as a learner? These issues are explored further in Stage Two (Chapter 6).

5.1.5 Place

In the 6P model the category of place incorporates where learning happens. It has been reported in the literature that people accessed museums as one of a wide range of information resources used when learning (Anderson, 1997; Crane et al., 1994; Ellenbogen, 2002; Falk & Dierking, 2000, 2002; Kelly, 2006; Rennie & Johnston, 2004; Sachatello-Sawyer & Fellenz, 2000).

While participants in the present study stated that learning occurred across all aspects of their lives there were specific places nominated by individuals when thinking about where they learned. High levels of support were expressed for libraries; museums, galleries and other cultural institutions; and universities. Internet/websites which emerged as important in learning, have been included in the place category, as people spoke about the internet as a “virtual place”. Other places named were schools; formal education courses; adult education courses; and the home (through television, movies and computer programs). This section focuses on three places that elicited more detailed responses from participants—the internet, museums/cultural institutions and schools.

The internet was the first place mentioned by the majority of in-depth interviewees when asked how they accessed information when learning something new. They recognised that the internet was a convenient and easy place to retrieve information when compared with other places. In contrast, less questionnaire respondents thought that internet/websites were important/very important when learning something new. These results could be explained by the
very strong opinions about the range, depth, reliability and credibility of information on the internet that were expressed in the interviews. For example, Stephen stated: ... you type in a word and you get ten to fifty thousand options to look for so it's a good tool, but ... [rolls eyes] (Interview Transcript 3.5, 5/03/01).

The relationship between museum learning and the internet is one area that is just beginning to be explored by museums (Chadwick, 2003; Haley Goldman & Haley Goldman, 2005; Haley Goldman & Wadman, 2002; Witcomb, 2003). The internet is becoming a significant factor in influencing how and where people learn as it is available to a wide range of users. In Australia, for example, there has been a 40% increase over a six-year period in access to and use of the internet (Figure 5.3), with the most current available figures (released in 2006) showing over half of the population having access in 2004-05 and continually increasing.

Figure 5.3. Access to technology in Australia

(Adapted from Australian Bureau of Statistics, 2006)
As it has been recognised that museums are important places for learning, Falk and Dierking (2000) suggested that museums ‘… need to be understood and promoted as integral parts of a society-wide learning infrastructure’ (p.225). Recent research found that visitors appreciated the role museums could play as authoritative, trusted and credible sources of information, and that they were accessed by a wide range of people (Cameron, 2003, 2006; Ellenbogen, 2002; Falk, Brooks & Amin, 2001; Kelly, 2006; Lake Snell Perry & Associates, 2001). It has long been understood that perceptions of museums are formed through visiting as children, especially their positive and negative school visit experiences (Falk & Dierking, 1997, 2000; Griffin, 1998, 2004; Hein, 1998; Pitman, 1999).

Participants in the present study were generally positive about museums, recognising that often their earlier negative views of museums had changed as they got older, illustrated in the following discussion with Rosemary. First, she outlined her negative perceptions of museums formed when she was younger: It’s unfortunate, when you’re at school the museum was always sort of pushed at you. … [and] I think it’s a shame that people step away from it. (Interview Transcript 3.2, 13/12/00). Now she felt that her views had changed, with museums as one of a number of places she believed benefited childrens’ learning. Rosemary made the point that, as children have such rich learning experiences already, museums need to recognise and respond to these through providing different levels of engagement and learning opportunities.

Both the questionnaire and telephone survey respondents did think about and use museums when learning something new. Seventy-five percent of those interviewed at the Australian Museum chose museums, galleries, other cultural institutions as important in learning. However, a similar percentage (76%) of the telephone survey respondents (general public) also chose museums, galleries, other cultural institutions as important in learning. This was surprising, considering that they were not told that the survey was being conducted on behalf of a museum.
Didactic learning (Hein, 1998) has been described as a “teacher-student” approach to learning, usually associated with school, where a teacher imparted information which the student absorbed in a logical, rational and linear sequence. From the data little support was found for ideas surrounding didactic learning. The statement *Being told what to learn* was rated the lowest in importance by both the questionnaire sample and telephone survey. Sixty-six per cent in each sample rated this statement as *not* important/slightly important when learning something new. Results for the statement *Teacher-led learning at school/other formal place*, showed that 44% of questionnaire respondents rated it as important/very important when learning something new as against 63% of the telephone survey.

It was found that participants in this study often associated the word “education” with school. Data from the in-depth interviews showed that school was seen both in positive and negative ways, with some focussing on their beneficial school learning experiences and others on exams, pressure and rote learning which were remembered as being unpleasant. School was also recalled as a place where learning was “forced” on you rather than providing choice, as noted by Stephen when comparing his school and university experiences: *I think school is more [a] forced way in learning … in uni normally you have an open discussion with professors, whereas at school the teacher normally has an attitude of ‘this is what you have to do’. It is a set way of learning, whereas at uni you discuss, so it’s not forced.* (Interview Transcript 3.5, 5/03/01). One of the questionnaire respondents defined education as a process that *Channels the student through pathways according to policies of the day* (Questionnaire respondent #7). Questionnaire respondents also described education as a process of delivering learning, associated with teaching/teachers/school and something you are told to do/have to do. Does this mean that using the word education in a museum context might conjure up negative images as suggested by Prince (1990)?
However, it was recognised by in-depth interviewees that school experiences had changed enormously in recent times, with many more opportunities available for rich, deep and active learning. For example, Rosemary talked about her grandson’s positive school experiences: *I believe these days children have just got so much at their beck and call compared to when I went to school, because they really encourage them. [My grandson had] just finished Kindergarten and it’s just really blown me away his school report that it’s five pages and they’ve assessed him on computer skills, on self-esteem, on their presentation …* (Interview Transcript 3.2, 13/12/00).

5.1.6 Product

Marton and Svensson (1979) suggested that learning resulted in a large range of outcomes for an individual. Griffin (2004) outlined conditions that promoted effective learning in museum settings, particularly in relation to school students’ learning, with an essential one being conceptual change through making links between new and existing ideas. Sachatello-Sawyer et al. (2002) proposed a hierarchical description of museum learning outcomes which suggested that acquiring skills and knowledge was the most common and immediate outcome of adult learning in museums, with higher-level changes (such as life-changing experiences and transformed perspectives) more important but less common.

When discussing the *products* of learning several respondents articulated ideas that addressed learning as changing a point of view, attitudes or behaviour; gaining new ideas or different ways of seeing something:

- A new way of looking at something – new facts, an interaction (Questionnaire respondent #28).
- A broadening and deepening of your understanding of all things (Questionnaire respondent #31).
- The application of knowledge to new circumstances (Questionnaire respondent #55).
- Gaining ideas and knowledge which then enables you to gain understanding (Questionnaire respondent #68).
Useful outcomes from learning were identified across all samples, with ideas proposed such as increased information, knowledge, facts and self-awareness:

- Acquiring new knowledge and applying that (Questionnaire respondent #5).
- Discovering everything that’s new and rediscovering, see different things the second time round (Questionnaire respondent #21).
- Picking up from other peoples’ or your own experiences, and applying that to whatever you do (Questionnaire respondent #39).

Doug talked about his experiences in the *More Than Dinosaurs* exhibition at the Australian Museum when visiting with his teenage daughter and her friend, expressing surprise at his reactions and behaviour during the visit: *Well I stopped to read everything and it surprised me … when I was doing the dinosaurs I honestly thought it would be a kids’ show, I kept going and reading every plaque. It got to the stage where the girls were about half a mile in front of me.* (Interview Transcript 3.6, 5/03/01).

The descriptions of learning from the interviews suggested that a learner gathers information, knowledge and skills in a variety of ways, manipulating them to reach new insights into yourself or personal change (as described in Section 5.1.1). This process was outlined by Rosemary who talked through this transition during her interview and illustrated it on her learning diagram (Figure 5.4 over the page).

First, she mentioned skills and knowledge as *just things on the surface* (Interview Transcript 3.2, 13/12/00), the first things that sprang to her mind when thinking about the word learning. As the interview progressed she acknowledged that new insights and self analysis were the result of deeper learning. She concluded the interview by reflecting that the whole process of learning was a personal change through developing new insights into herself. When Rosemary summarised her thoughts about the actual outcomes of learning a deeper meaning and increased self-awareness emerged for her: *So I do believe you gain new insights from learning and you do feel that you can be more innovative through your learning and then you self-analyse yourself as to whether you’re capable of exploring or going further with what you’re learning.* (Interview Transcript 3.2, 13/12/00).
Another example of personal change came from Louise, who believed that through learning she discovered more about herself and about life in general: *For me personally its been a very interesting journey of learning for me about my culture, my people, but also confirming a lot of things … [and] also learning about other things that I wasn't aware of.* (Interview Transcript 3.7, 13/03/01). This self-awareness expressed by both Rosemary and Louise is linked to identity, which is discussed further in Section 5.3.

### 5.1.7 Summary: 6P model of museum learning

Overall, learning was viewed very positively across all samples. However, one important finding was that learning was initially hard for participants to define and, therefore, to talk about. They needed to be given time to reflect about learning as a concept and its role in their own lives. Using the 6P framework, a range of ways that learning was described as a *process* and a range of *places* where learning happened have been uncovered so far. The *personal* aspects of learning as meaning making and the importance of prior knowledge and experience, interest and physical learning were also supported. Learning had a *purpose* and was an enjoyable practice with end-*products*, particularly when choice was provided.
5.2 Relationships: learning, education and entertainment

One of the research areas studied was how learning, education and entertainment were described and whether there was a relationship between them. As discussed in Chapter 1, Section 1.1.2, it was suggested that the word “learning” may be confused with “education” and therefore be negatively perceived (Falk, Dierking & Holland, 1995; Prince, 1990; Roberts, 1991). In the present study participants were asked to describe each concept and then rate them across a range of constructs. It was found that although the concepts of learning, education and entertainment shared some similar characteristics, four major differences between them were identified. These are reported below, followed by a discussion of how the three concepts are linked, and finally a way to explain this relationship proposed.

5.2.1 Differences between learning, education and entertainment

The first difference found was that the general language used to explain each concept differed. More active words were used to talk about learning, such as discovering, exploring, applying and experiencing. Participants described education in more concrete ways, including words and phrases such as “structured/formal” and “something you are told to do/tell others to do”.

Education was seen as a structured process that delivered learning in a formal way: I think education conjures up the air of the State and a system of providing learning (Interview Transcript 2.3). Other comments about the formal and structured nature of education included:

- Pretty structured, involves discipline, it’s necessary for preparing yourself for life (Questionnaire respondent #13).
- Learning is more subliminal, education is formal and [a] more structured means of learning (Questionnaire respondent #27).
- A structured learning, not necessarily needed (Questionnaire respondent #65).
- Learning facts, comprehending ideas (Questionnaire respondent #69).
- Structured learning, schooling (Questionnaire respondent #89).
Second, previous research established that people had generally negative views of education as a passive process over which they had no control (Park, 1994; Taylor & Spencer, 1994). These researchers found that respondents in their studies thought of education as a formal process usually associated with school, something imposed and prescriptive. However, the negative views of education expressed by participants in the present study seemed to emanate from a perceived lack of choice. For example, when comparing learning and education, Stephen said that ... learning never, never ends ... it's a choice ... a very natural process ... [whereas] education is more given to you. (Interview Transcript 3.5, 5/03/01).

Third, although there were differences in the language used to describe these concepts, there was still an appreciation of the role that education played in both acquiring facts and information, and in delivering learning. For example, when distinguishing learning and education, a participant in the pilot study said that education assumes: You're a bunch of empty buckets, I've got knowledge and I'll pour the knowledge in, whereas learning describes the actual process that's occurring inside you and therefore is much more rooted in the individual. (Interview Transcript 2.1). Sixteen percent of questionnaire respondents stated that education was an extension of learning or a way to deliver learning:

- Techniques used to teach people, teaching is a process of imparting learning (Questionnaire respondent #18).
- Learning from somebody else or someone else teaching you (Questionnaire respondent #39).

The results suggest that education and learning were closely linked, with education a process that leads to learning. Unlike some of the studies reviewed in the literature, education was not seen as necessarily negative, just different—something we all have to experience at some stage of our learning lives.
The final difference emerged when comparing entertainment with learning. Entertainment was described as fleeting, short-term, a good time, with the recognition that the medium or delivery mechanism (such as film, videos and multimedia programs) formed an important part of the entertainment experience. In contrast, participants felt that learning used your brain, built on previous knowledge, was long-term and could be entertaining as well: *I certainly can’t see a reason why you can’t learn and be entertained at the same time* (Interview Transcript 1.4). A strong finding was that, in contrast to learning and education, descriptions of entertainment included words and phrases that were based on feelings and emotions.

The semantic scales results also illustrate the differences between learning, education and entertainment across the ten constructs assessed (Figure 5.5). This demonstrates that entertainment is an obvious outlier, with education and learning following an interestingly similar pattern.

*Figure 5.5. Semantic differential scale: learning, education, entertainment*
5.2.2 Linking learning, education and entertainment

Several writers have addressed the concepts of learning, education and entertainment or linked them in some way. Mintz (1994) discussed the role of entertainment within a leisure-oriented society using the term “edutainment” to address the question: ‘What is the optimum combination of entertainment and education?’ (1994, p.34). Hooper-Greenhill (2003) suggested that the construct of edutainment had attempted to integrate the perceived separation between education and entertainment. She noted that education was ‘… hard work, cognition, instructive mode, experts and novices and schooldays’ (p.3) with entertainment associated with ‘… pleasure, affective/emotions, discovery mode, friends and family and holidays’ (p.3).

Moore (1997) and Witcomb (2003) focussed on how museums positioned themselves as entertaining venues through integrating popular culture with exhibition programs. Newhouse (1998) and Trulove (2000) outlined new museum developments around the world and the role that architecture played in promoting enjoyable, entertaining and educational experiences. Trulove (2000) commented that while it was important for museums to be entertaining, he felt that entertainment wasn’t just an exercise in simple fun but a process of “enlightenment” that could be deeply satisfying for visitors. Lisa Roberts (1997) investigated practices across discipline areas within museums and theorised about the changing roles of staff in exhibition development. She traced the development of museum education in the United States and noted the important role that entertainment had played in the establishment of early institutions.
Laura Roberts (2001) developed a model of education and entertainment based on Pine and Gilmore’s “experience economy” concept (1999), illustrated in Figure 5.6.

![Figure 5.6. The Experience Economy](image)

(Source: Roberts, 2001, p.24)

Roberts’ ideas are relevant as she conceptually linked education and entertainment within a participatory and experiential framework. However, findings from the present study pointed to some differences. First, although absorbing, entertainment was also described by questionnaire respondents as active. Second, entertainment was seen very strongly as an escape from the everyday, a release, shutting off, escape from other things (Questionnaire respondent #23). Third, participants felt that learning was more “active and absorbing” than education. Finally, although Roberts stated that ‘While there’s a large element of entertainment in most experiences, they’re not incompatible with education’ (2001, p.25), the difference found from the present study was not the word entertainment, but the word education. The views of education shown in Figure 5.6 were consistent with how participants viewed learning, suggesting that the word education could be replaced with the word learning in Roberts’ model, with each concept overlapping rather than separate processes.
In reflecting on how the findings from the present study relate to this literature, it is concluded that the museum environment enables the concepts of learning, education and entertainment to closely overlap in positive ways (Figure 5.7).

Figure 5.7. Learning, education and entertainment

Museums have a strong learning focus, with education a formal way of providing museum learning programs, and entertainment representing the enjoyment, leisure, emotional and sensory aspects of a museum visit. In relation to the 6P model of museum learning described earlier, it is proposed that education is a process that occurs within a defined place, that enables the delivery of formal products of learning. Entertainment also happens within a defined place, either real or imaginary, yet is person-centred—being sensory, escapist and relaxing. Learning, while it involves other people, is essentially an individual process that happens inside a person’s head and at their own instigation, with a specific purpose and end-products. It is also place-oriented, occurring across a broad range of formal and informal contexts.
The challenge for museums is to combine these three concepts in ways that build on the positive aspects of each. It has been recognised that museums are places for rich sensory experiences (Bedford, 2001; Carr, 2003; McLaughlin, 1997; Pine & Gilmore, 1999; Pitman, 1999) and visitors also value the sensory aspects of museums (Groundwater-Smith & Kelly, 2003; Kelly et al., 2004; Packer, 2004). Some particular elements of entertainment found from the present study that are relevant to museum experiences include sensory, escapism, relaxation, something undertaken within a person’s own time and that they choose to do. Positioning themselves as places for entertainment may not necessarily be perceived as superficial or shallow by museum visitors.

5.2.3 Summary

The discussion so far has focussed on museum learning as explained by the 6P model of person, purpose, process, people, place and product; and how learning relates to education and entertainment. Some of the findings that are particularly applicable to personal change and growth are linked to a person’s identity—how a person sees themselves in relation to their world and their role in it, as well as in relation to others. The next section looks more closely at the findings in relation to identity, and outlines the new areas of investigation that emerged.

5.3 Learning and identity in museums

Wenger (1998) viewed identity as ‘… an integral aspect of a social theory of learning … a pivot between the social and the individual’ (p.145). In Stage One an example of linking learning and identity was expressed by Louise when she described learning. Louise felt that learning was a complex multi-layering of artefacts, stories and spirituality: … it's not only just about the physical form, it's about the environment, it's about spirituality, it's about, at the end of the day, identity. That's what it's all linked back to and again learning is very much a part of that … (Interview Transcript 3.7, 13/03/01).
Worts (1996) suggested that identity was the way that people made meaning, which was ‘… reflected in one’s knowledge, beliefs, taste and skills’ (p.128-129). When thinking about the nature of their museum experiences in-depth interview participants expressed broader views of themselves and the world, which make reference to their identity, for example:

- learning more about others (Scott) and about your family (Mavis)
- being able to “read through” media images of Aboriginal people based on new knowledge (Stephen)
- discovering that you will read text if it interests you (Doug)
- discovering that the museum from your childhood was smaller than you remembered (Doug)
- reflecting on your role in the visit as a “carer” rather a “learner” (Rosemary)
- showing surprise when realising that learning was a process of deeper insights and change (Rosemary)
- expressing learning as a process of cultural engagement and exchange with others within a community of practice (Louise)
- finding out that learning could be enjoyable (Dennis)
- realising that learning was about broadening your horizons as well as new facts and information (Brenda).

Meaning making, change, learning and identity are closely linked. In thinking about identity as involving a person’s attitudes, values and belief systems, several examples of personal change were uncovered in Stage One. For example, Stephen reported that his views were challenged and then changed in a positive way from the new information he had acquired during his visit:

> 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, 5/03/01).
Questionnaire respondents also reported that learning could be about increased understanding and attitude change:

- *Opening the mind to new experience* (Questionnaire respondent #4).
- *Picking up from other peoples’ or your own experiences, and applying that to whatever you do* (Questionnaire respondent #39).
- *Discovering new ways of thinking and knowledge* (Questionnaire respondent #99).

As described in the literature review (Chapter 2, Section 2.5) identity is an essential component of how people make sense of themselves and their place in the world. By making reference to the past, people employ a range of “cultural tools” to help them understand where they have come from, where they are now and where they are going through a process of meaning making (Wertsch, 1997). A range of formal and informal institutions are involved in the production of these cultural tools, including museums (Ogbu, 1995). People make meaning from their museum experiences in many different ways based on a conjunction between what the museum provides and the social norms of their visiting group (Fienberg & Leinhardt, 2002). Meaning making is an important way that people learn in museums (Falk & Dierking, 2000; Hein, 1999; Silverman, 1995), and is closely related to an individual’s identity (Rounds, 2006; Worts, 1996).

It has been recognised that individuals ‘… make meaning privately, but they also make meanings by embodying and representing them externally — in word, image, and object’ (Stevens & Martell, 2003, p.26). Recent museum learning research used methods and reported outcomes through *conversation* (Callanan, Jipson & Soennichsen, 2002; Leinhardt & Knutson, 2004; Pierroux, 2003; Rice & Yenawine, 2002). It was felt that conversations could give insights into how social and cultural processes were integrated through demonstrating both the processes of learning and the outcomes of a learning experience through reflection (Leinhardt, Crowley & Knutson, 2002; Leinhardt & Knutson, 2004). For example, research into the role of chaperones in a museum visit concluded that ‘Often the interview helped clarify the chaperone’s intent and perceptions’ (Sedzielarz, 2003, p.21). A study of visitors to a glass exhibition in a social
history museum in the United States (Fienberg & Leinhardt, 2002) looked at identity and what participants’ conversations revealed about visitor engagement and identity. Fienberg and Leinhardt suggested that

... the conversation visitors have ... both reflect certain aspects of the identity of those visitors and mediate visitors’ engagement and understanding (p.167, emphasis added).

It was felt that conversations encouraged deeper insights by both the person talking and those who are listening.

To illustrate the way conversation can facilitate reflection, those interviewed in-depth in Stage One were asked to think about what had been discussed, with a number reporting that they themselves had learned during the interview process. Initially, they described their museum learning in terms of the exhibition content. Once they had reflected on the social context of their learning and their roles as a visitor, they could identify subsequent changes they experienced in themselves and their identity as a learner. For example, Rosemary acknowledged that new insights and self analysis were the result of a deeper reflection on learning, and led to personal change. When she further reflected on the actual outcomes of learning a deeper meaning emerged for her: So I do believe you gain new insights from learning and you do feel that you can be more innovative through your learning and then you self-analyse yourself as to whether you’re capable of exploring or going further with what you’re learning. (Interview Transcript 3.2, 13/12/00). At the end of the interview Rosemary added the words new insights, innovation, self-analysis to her learning diagram as she felt that she had acquired these ideas during the discussion.

Leinhardt, Tittle et al. (2002) suggested that in museums

What we are seeing is human beings in a social setting bringing to bear their own identities and responding to a particular context (p.131).

Given the emphasis on learning as essentially a process of social engagement (Dewey, 1938; Falk & Dierking, 2000; Hein, 1998; Vygotsky, 1978) elaborated through conversation (Leinhardt, Crowley et al., 2002; Leinhardt & Knutson, 2004; Stainton, 2002) it is still critical to focus on individuals and their perceived and actual roles. The way people see themselves as learners now and in the
future, underpins what they do and what they learn during a museum visit—I have called this their learning identity. Findings from Stage One suggest that this learning identity was fluid and heavily dependent on the role a person played in the visit. Were they a friend tagging along as company? Were they parents, grandparents or carers who perceive that they are looking after the learning needs of others? Were they seeking something specific or just wandering and seeing what could happen? What were their visiting agendas (Falk, Moussouri & Coulson, 1998) or “entrance narratives” (Doering & Pekarik, 1996) and where did learning fit?

5.4 Reflecting on learning and learning identities

As described in Chapter 1, a visitor’s learning identity is defined as how individuals describe themselves as learners within a sociocultural context, including their future views of learning and the roles learning plays in their lives. Within the context of museum learning, identity can be influenced by the tools with which visitors interact (the exhibitions, exhibits, objects and texts), as well as staff, companions and other visitors. These come together in ways that shape not only what is learned, but how people see themselves as a learner during and after a visit and how that might influence future learning activities.

Stage One revealed that adult museum visitors tailored their learning style to suit their particular situation, rather than seeking learning experiences that matched how they stated that they liked to learn. Learning was seen as an adaptive process, both a structured and unstructured experience, where learners used a set of tools in accordance with their preferred learning styles and identity within a sociocultural context, such as a museum. For example, a person’s learning identity coupled with the roles they play in a visit may influence how they experience the museum as a learner and what they learn. This is an interesting and potentially controversial proposition—do visitors learn regardless of the museum’s intentions? Do visitors make choices in exhibitions that take advantage of their learning preferences? Do people adapt and respond to museum exhibitions, as visitors and as learners, according to the roles played in the visit? In order to encourage better learning outcomes do visitors need assistance to...
think of themselves as learners in a museum? If identities constantly change and transform (Bauman, 1996; Hall, 1996) do visitors amend their learning identity to fit with the experiences they are provided with and, in turn, do these experiences influence their learning identity?

A person’s learning identity is the subject of Stage Two, which investigated whether engagement with a museum exhibition had any effect on a visitor’s learning identity. If visitors were encouraged to think about themselves as learners before they encountered an exhibition would their learning identity change afterwards? The next chapter explores these questions and presents the analysis of the Stage Two findings in conjunction with outcomes from Stage One and the literature.
Chapter 6. Adult museum visitors’ learning identities and a Museum exhibition

Stage Two examined adult museum visitors’ learning identities focussing on the interrelationships between their views of learning and their learning experiences at a museum. The two sub-questions investigated in this stage were:

- How well do the learning opportunities provided by museums match how an individual likes to learn?
- What roles do visitors play in a museum visit and do these roles influence their learning identity?

This chapter reports on Stage Two, briefly re-visiting the method and sample, then outlining the analysis and findings. Areas of the literature described in Chapter 2 that relate to these findings are also discussed where relevant.

6.1 Stage Two method

The method for Stage Two was presented in Chapter 3, Section 3.4. This section provides details about the five families and five couples that participated in the study. A total of 29 people were involved—17 adults aged from 20-75 years (5 male and 12 female) and 12 children aged from 3-16 years (5 male and 7 female).

All ten groups were met on entry to the Australian Museum and briefed about the study. They then participated in a pre-visit interview which asked them to describe “learning” and discuss how they personally like to learn, using the same questions from Stage One (Chapter 3, Section 3.3). After the interview each group was taken to the Uncovered: Treasures of the Australian Museum exhibition (outlined in Chapter 3, Section 3.4.3, with the entry shown in Figure 6.1) where they were observed and their conversations audio-recorded.
Table 6.1 outlines the details of those involved in Stage Two, with pseudonyms used to protect privacy.

Table 6.1. Sample details: Stage Two

<table>
<thead>
<tr>
<th>Code</th>
<th>Group type</th>
<th>Details</th>
<th>Primary participant</th>
<th>Other participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Family</td>
<td>Mother aged 34 years, daughter aged 8 years and son aged 7 years</td>
<td>Mother (Liz)</td>
<td>Girl (Tara) Boy (Paul)</td>
</tr>
<tr>
<td>F2</td>
<td>Family</td>
<td>Mother aged 28, daughters aged 5 and 3, and male partner aged 25</td>
<td>Mother (Jo)</td>
<td>Male (Mark) Girl (Ally) Girl (Nat)</td>
</tr>
<tr>
<td>F3</td>
<td>Family</td>
<td>Mother aged 41 years visiting with 3 children (girl aged 5 and boy 7)</td>
<td>Mother (Kay)</td>
<td>Boy (Zeke) Girl (Mia)</td>
</tr>
<tr>
<td>F4</td>
<td>Family</td>
<td>Mother aged 46 years visiting with 3 children (girl aged 15 and twin boys aged 12)</td>
<td>Mother (Mary)</td>
<td>Girl (Rox) Boy (Jake) Boy (Sam)</td>
</tr>
<tr>
<td>F5</td>
<td>Family</td>
<td>Mother aged 39 years, daughter aged 14, son 12</td>
<td>Mother (Cath)</td>
<td>Girl (Bree) Boy (Eddie)</td>
</tr>
<tr>
<td>C1</td>
<td>Couple</td>
<td>Male and female both aged 20, university students</td>
<td>Male (Tim)</td>
<td>Female (Jules)</td>
</tr>
<tr>
<td>C2</td>
<td>Couple</td>
<td>Male aged 60 and female 58, both retired</td>
<td>Male (Art)</td>
<td>Female (Dot)</td>
</tr>
<tr>
<td>C3</td>
<td>Couple</td>
<td>Male and female couple both aged 44 (both teachers), with mother-in-law and daughter, 16</td>
<td>Male (Rick)</td>
<td>Female (Toni) Girl (Kate) Female (Edna)</td>
</tr>
<tr>
<td>C4</td>
<td>Couple</td>
<td>Male aged 73 and female aged 69, both retired</td>
<td>Female (Fran)</td>
<td>Male (Ted)</td>
</tr>
<tr>
<td>C5</td>
<td>Friends</td>
<td>Females aged 23 and 26, students at TAFE and uni</td>
<td>Female (Bron)</td>
<td>Female (Kris)</td>
</tr>
</tbody>
</table>
For the purposes of this study each person who carried the tape recorder is called the primary participant. Sometimes more than one person was involved in the pre- and post-interviews—when this occurred the primary participant’s information is used in the analysis and supplemented by others where relevant. Several children enthusiastically participated in both the exhibition visit (heard on the tape and through observations) and the post-visit interviews. However, as this study focusses on adults, the only data from children used are incidental comments from the conversations and interviews where relevant.

When participants had completed their exhibition visit, a second interview was undertaken which addressed the main messages of the exhibition and what they found particularly interesting and would tell others. As one way for them to state how they felt they learned in the exhibition they then rated the following ten statements on a four-point scale:

1. I discovered things I didn’t know.
2. I learned more about things I already knew.
3. I remembered things I hadn’t thought of for awhile.
4. I shared some of my knowledge with other people.
5. I got curious about finding out more about some things.
6. I was reminded of the importance of some issues.
7. I got a real buzz out of what I learned.
8. It was pleasant to be reminded and to learn more.
9. It was all very familiar to me.
10. Some of the things I learned will be very useful to me.

These statements were derived from those used in a study of museum learning across a range of cultural institutions in Australia (Griffin, Kelly, Hatherly & Savage, 2005).

Finally, they were asked to review their earlier description of learning and discuss how their exhibition experience matched (or not) the ways they had stated they like to learn in the pre-interview.
6.2 Data analysis

The data gathered from each group—pre- and post-interview responses, rating scales, observation notes and conversation transcripts were analysed in two ways. First, a narrative description was written for each group under the following headings:

- background detail about participants
- views of learning pre-exhibition
- behavioural observations, time spent in exhibition and visit pathways
- general views of learning post-exhibition
- significant conversation events (described in Chapter 3, Section 3.7.1) that revealed aspects of learning
- general comments.

An example of this analysis is in Appendix 14.

Drawing on these narrative descriptions, the interrelationships between adult museum visitors’ views of learning (their learning identities) and their exhibition experiences were then examined. This analysis found that the method used in Stage Two enabled adult visitors to gain insights into themselves as learners in three areas by:

1. Influencing their learning identity through identifying new ways that they learn from their exhibition experience or becoming more confident in their learning.
2. Resonating with, or matching, how they like to learn.
3. Conflicting with their learning identity, reinforcing in their minds the ways they do not like to learn.

These are further explored in Section 6.3.
Finally, the total data set across all ten groups was reviewed using Miles and Huberman’s (1994) guidelines for analysing qualitative data. A particular focus was on noting themes that related to outcomes from Stage One (Chapters 4 and 5) and the literature (Chapter 2). From that analysis the following three themes were identified:

- the roles visitors play
- sharing learning
- linking to past, present and future experiences.

These are discussed in Section 6.4.

6.3 Findings in relation to learning identities

Paris and Mercer (2002) concluded that objects remembered by visitors were those that were either related to or created feelings that resonated with their identity. Paris et al. (2001) argued that people constantly formed, re-formed and shaped their identity in order to understand themselves ‘… partly in relation to their own histories and anticipated futures’ (p.257). Leinhardt and Knutson (2004) suggested that a visitor’s identity was participatory and changed in response to the visit itself. Hooper-Greenhill (2004b) identified outcomes from a visit that included a deeper understanding about self, family and the world.

In the present study the process of data collection (particularly the pre- and post-interviews and observations) enabled participants to reflect on their views of learning before and after their exhibition visit. This resulted in both the participants’ and the researcher gaining insights into learning identities described below. There was also one instance, outlined in Section 6.3.4, where these insights were unclear.
6.3.1 Learning identity influenced by experience

When comparing views of learning from the pre- and post-visit interviews, there were four instances where the experience influenced the ways participants thought about themselves as learners. Members of these groups felt they had learned in new ways, both drawing from and adding to their previous knowledge and life experiences, learning more than expected, becoming more confident in their learning and finding out new information about family members.

In her pre-visit interview Liz (F1) described herself as a visual learner. She also noted that she didn’t learn for herself but that her role was to help her children learn. However, in her post-visit interview Liz reported that she had used strategies that she felt a reader-learner would use. She found being able to get up close to the objects intriguing, giving her the motivation for deeper investigation.

Liz also realised that the family had travelled through the exhibition as a group, rather than only following pathways dictated by the children. She felt that this enabled them to learn more together than she had first thought. Liz stated that she usually doesn’t have the time to go into detail (hence her description of herself as a visual learner), but as her children continually pointed out objects that they were interested in, Liz felt she got more into it and learned more about them as well as the Museum objects. The interview and observation data for Liz’s group is presented in Table 6.2 (over the page).
Table 6.2. Liz (F1): interview and observation data

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Visual learner</td>
<td>• Spent 25 minutes in exhibition</td>
<td>• Learned about marine animals</td>
</tr>
<tr>
<td>• Based on interests and prior knowledge</td>
<td>• Started on the right-hand side of exhibition and did not see/read the Introductory text about the Museum and why it collects</td>
<td>• Learned about childrens’ interests</td>
</tr>
<tr>
<td>• Learning with and through others</td>
<td>• Spent most of time engaged with exhibits, especially the mammals, reptiles and birds sections</td>
<td>• Linked what seen to previous shared experiences and future holiday destinations</td>
</tr>
<tr>
<td>• Interest</td>
<td>• Lots of bending, peering, pointing, discussion and getting “up close”</td>
<td>• Discovered new interests</td>
</tr>
<tr>
<td>• Learn with children</td>
<td>• When exhibition got crowded (about half-way through visit) they still looked closely but didn’t spend as long at each case</td>
<td>• Learned new things</td>
</tr>
<tr>
<td>• Grasping concepts</td>
<td>• Tracing shapes of skeletons on the glass</td>
<td></td>
</tr>
<tr>
<td>• Investigation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cath (F5) visited with her two children, Bree and Ed. In her pre-visit interview Cath described learning as *absorbing information* and *finding out things of interest that I can tell others about*. When in an exhibition she wants *visual experiences* that *catch your eye*, with accompanying *short summary paragraphs of text to absorb and remember*, stating that she was a *top-level reader-learner*.

All members of F5 participated in the post-visit interview, and were clearly very excited about *Uncovered*, animatedly discussing all the things they had seen and learned in a positive and confident manner. They felt that they were able to make numerous connections from the exhibition to what they already knew and, at the same time, extend their knowledge and expand their interests. They mentioned an upcoming holiday to the north coast of New South Wales and reported that they had made notes about the seahorses they saw in the exhibition that came from that area so that they could look out for them. They also noticed a whole range of the similarities and differences between the colours of the seahorses that they previously weren’t aware of, and would now observe in the wild.
In her research with teachers and students in the United Kingdom, Hooper-Greenhill (2004a) concluded that children exhibited more positive learning identities after visiting a museum, and this was demonstrated by the F5 group. They really enjoyed the exhibition and appreciated the joy of sharing learning together with positive outcomes for each individual’s learning identity in terms of confidence in using the information they had learned in future. Cath, Bree and Ed enthusiastically listed all the familiar as well as the cool new things they had seen and could now “show off” these new facts to others.

Cath also reported in her pre-visit interview the importance of sharing her knowledge with others. Again, in the post-visit interview, the whole group was amazed that they shared as much as they did, realising the importance of this process as a family bonding experience. The interview and observation data for Cath and her group is presented in Table 6.3.

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Visual experiences that catch your eye</td>
<td>• Spent 45 minutes in exhibition</td>
<td>• Excited at the amount they learned</td>
</tr>
<tr>
<td>• Share knowledge with others</td>
<td>• Visited all parts of the exhibition and looked at the majority of exhibits</td>
<td>• New knowledge gained based on previous life experiences</td>
</tr>
<tr>
<td>• “Top-level reader-learner”</td>
<td>• Stayed together as a group</td>
<td>• Linked what seen to previous and future holiday destinations</td>
</tr>
<tr>
<td>• Absorbing information</td>
<td>• Exhibition was very crowded at the time of their visit and they were observed waiting, as well as pushing through and asking people to move</td>
<td>• Shared knowledge and information, found that was a bonding process</td>
</tr>
<tr>
<td>• Read books</td>
<td>• Animated discussion at case with starfish, lots of pointing and talking</td>
<td>• Will use information gained in other contexts</td>
</tr>
<tr>
<td>• Wondering</td>
<td>• 30 minutes into the exhibition they had a lively discussion about where to go next, what else was there to see that they may have missed</td>
<td>• Made links from familiar to unfamiliar</td>
</tr>
</tbody>
</table>
In her pre-visit interview Jo (F2) stated that learning was *growth, development and change*. She thought that learning at museums was about history and finding out about different cultures. As a learner, Jo felt that she needed a lot of *repetition to retain information*, acknowledging the role of prior interest in her personal learning: *If I’m interested I’ll excel, if not it goes straight through.*

In the post-visit interview Jo reported that she had a wider interest in animals than she had imagined, especially marine creatures. Jo had initially thought that museums focussed on fossils and dinosaurs, not realising the variety of objects and subject areas and the amount of artefacts they hold. She also reported that her family shared and generally enjoyed learning together more than she had expected, especially as her children were younger and she was unsure how interested they would be in the exhibition. Jo was surprised that her family had developed an informal “system” for visiting the exhibition—once they had oriented themselves they worked out a plan to ensure they didn’t miss anything. Through this process of visiting together and sharing their experiences as a group, Jo felt she personally learned more, even in areas she wasn’t interested in.

The interview and observation data for Jo’s group is presented in Table 6.4.

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW</th>
</tr>
</thead>
</table>
| • Learning needs to be based on personal interests  
  • An active brain  
  • Growth  
  • Development  
  • Change  
  • Repetition | • Spent 55 minutes in exhibition  
  • Followed the intended pathway through the exhibition and saw the majority of exhibits  
  • Children kept pointing and asking questions  
  • Read all texts thoroughly  
  • Adult female was directing the visit to begin with, then girls took over  
  • The exhibition was crowded and, as the girls were little, adult female tended to stick quite closely to them  
  • Very engaged and absorbed at marine exhibitions, kept calling adult male over to point out specimens | • Wider interest in animals than first thought, especially marine life  
  • Shared learning more than expected  
  • Planned route through exhibition |
In their post-visit interview Ted and Fran (C4), thought differently about themselves as learners. In the pre-visit interview Fran talked about learning as *taking in what you see around you and using it in your everyday life*. Ted described learning as *taking an interest in things*, adding that people learn continually throughout their lives. When discussing how they personally learn Ted stated that he liked hands-on approaches, and Fran talked about *trial and error, learning through others*.

In their post-visit interview when asked how Uncovered fitted with the ways they like to learn, both Fran and Ted stated that they were surprised that exhibition encouraged them to remember things from their past and make connections. They were also amazed at the amount of new information they learned, more than they expected. In his post-visit interview Ted had rated *I discovered things I didn’t know* very highly. Both Ted and Fran reported learning new things that also triggered long-forgotten memories. For example, in their post-visit interview Fran and Ted discussed their visit to a butterfly house in Singapore in some detail, a memory prompted by a showcase full of butterflies (shown in Figure 6.2).

**Figure 6.2. Uncovered exhibition: butterflies showcase**
Ted particularly enjoyed the geological formations leading him to reflect on the wonder of nature in forming these minerals. Fran also liked the crystals and rocks which reminded her of a long-forgotten prior interest in fossicking. The interview and observation data for Ted and Fran is presented in Table 6.5.

Table 6.5. Ted and Fran (C4): interview and observation data

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>• New information used to reflect on previous knowledge</td>
<td>• Spent one hour in exhibition</td>
<td>• Learned new information</td>
</tr>
<tr>
<td>• Interests</td>
<td>• Spent more time at the history/timeline display (in the Introductory area)</td>
<td>• Remembered things from the past and make connections</td>
</tr>
<tr>
<td>• Learning through others</td>
<td>• Read many text panels – naming and pointing</td>
<td>• Reminisced about holidays and travel</td>
</tr>
<tr>
<td>• Travelling</td>
<td>• Seemed to (un)consciously decide not to visit the Anthropology section even though they did read the introduction panel to this section, yet once they saw the gamelan display (near the exit of exhibition) they doubled-back to the Anthropology section</td>
<td>• Showed surprise at what seeing and how much they learned</td>
</tr>
<tr>
<td>• Learn new facts</td>
<td>• Fran got into deep conversation with another female (elderly) visitor twice during the visit</td>
<td></td>
</tr>
<tr>
<td>• Taking in what you see around you</td>
<td>• Looking and peering intently, crouching to see more</td>
<td></td>
</tr>
<tr>
<td>• Trial and error</td>
<td>• Viewed most of the exhibition</td>
<td></td>
</tr>
<tr>
<td>• Hands-on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lifelong</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.3.2 Experience resonated with learning identity

The C3 group were originally recruited as a couple, but Rick and Toni also visited with their 16-year-old daughter Kate and Toni’s mother Edna. Rick was the primary participant, however Toni also took part in the pre- and post-visit interviews. When asked in the post-visit interview both Rick and Toni reported that Uncovered matched how they liked to learn, and they both stated they learned new things. Additionally, the conversations revealed that learning was strongly shared across all members of this group (discussed further in Section 6.4.2).
In the pre-visit interview Rick stated that learning was making changes - personal, mental, spiritual, physical, with learning a catalyst for change. Toni described learning as enhancing my understanding of the world and acting on that understanding. Rick felt that the exhibition did continually encourage him to make links from familiar to unfamiliar things, which fitted with the way he likes to learn expressed in his post-visit interview as taking what we know and making connections to that from what is in the exhibition.

In Toni’s pre-visit interview she said she learns through *processing information that was reinforced with concrete examples that enable you to put into practice what you are learning*. In the post-visit interview Toni stated that although there was a lot of information to read, it was not overloaded and therefore she could *read and process*, another way she likes to learn as reported in her pre-visit interview.

The interview and observation data for Ric’s group is presented in Table 6.6.

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Personal, mental, physical, spiritual change</td>
<td>• 53 minutes in exhibition</td>
<td>• Learned new things</td>
</tr>
<tr>
<td>• Enhance understanding, act on it</td>
<td>• Mostly stayed together as a group, when did separate were frequently called back together by the daughter</td>
<td>• Connected current information with new</td>
</tr>
<tr>
<td>• Visual</td>
<td>• After half-way the Toni ad Edna moved off together with Rick and Kate staying together and talking</td>
<td>• Shared knowledge with others</td>
</tr>
<tr>
<td>• Talks &amp; lectures</td>
<td>• Adult male and daughter observed walking, talking, animatedly sharing information</td>
<td>• Shared family experiences</td>
</tr>
<tr>
<td>• Learning by doing</td>
<td></td>
<td>• Learned about each other’s likes/dislikes</td>
</tr>
<tr>
<td>• Reading, looking</td>
<td></td>
<td>• Remembered</td>
</tr>
<tr>
<td>• Concrete examples</td>
<td></td>
<td>• Linked familiar to unfamiliar</td>
</tr>
</tbody>
</table>

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6.3.3 Experience conflicted with learning identity

The literature has consistently reported that visitors’ are able to articulate what they do and do not like in museum exhibitions and programs, as well as how they want to engage with exhibitions (Durbin, 1996; Groundwater-Smith & Kelly, 2003; Hein & Alexander, 1998; McManus, 1991b). In Stage Two there were four examples where visitors’ views about how they did not like to learn were reinforced by their experiences in Uncovered. Yet, this wasn’t necessarily a negative outcome, as each participant could still identify and appreciate that they had learned from the exhibition.

In her pre-visit interview Kay (F3) described herself as an “immersive learner”. When talking about how she personally learned, Kay stated that she became obsessed and had to do something non-stop, becoming really immersed in it. She stated that learning was a hands-on experience, where a person was involved with something, and gave words, texts and objects as examples. However, in her post-visit interview Kay remarked that the browsing nature of the exhibition did not fit with the immersive way she preferred to learn. While she acknowledged that browsing enabled her to pick up lots of new information, she felt that the exhibition didn’t hold the attention of her and her family as much as she wanted.

The data did reveal, however, that the F3 group were learning in Uncovered. To illustrate, Kay mentioned that she is developing an interest in art and reported that she used the exhibition to think about how she might pursue that further. She also expressed surprise that her children had more general interests than she first thought.
The interview and observation data for Kay’s group is outlined in Table 6.7.

Table 6.7. Kay (F3): interview and observation data

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Immersive learner • Other people • Hands-on • Involved with something – words, texts, objects • Take classes • Reading books</td>
<td>• Spent 20 minutes in exhibition • Missed the middle sections of the exhibition – stuck to the sides of it • Children dictated the path and how long they spent in exhibition • Adult female stuck with daughter, but also had interaction with one of the boys • Adult male and other male sibling moved through the exhibition as a pair • Adult male continually called away to look at something • Had a break at 20 minutes to watch a DVD in the exhibition</td>
<td>• Connected objects to art interests • Linked to prior experiences • Facilitated learning through questioning and linking • Shared family experiences • Learned more about others • Made links to popular culture</td>
</tr>
</tbody>
</table>

In his pre-visit interview Art (C2) described learning as finding out something you didn’t know already and adding to what you already know. Dot talked about learning as educating me on something I have no idea about. As a learner, Art likes to see things in written ways in a language I can understand and that there is a lot of emotion in learning things.

In their post-visit interview both Art and Dot stated that Uncovered did not give them the deeper information they were seeking in order to learn. While they said that a general look is fine, there was not enough in the text to help them make sense of what they were seeing, in a language that they could understand—too many big concepts and not enough detail. In his post-visit interview, Art realised that he was a technical learner, and reiterated that the exhibition did not give him enough detailed information, citing an example of how fossils and crystals were formed. These resulted in some frustration that was also evident in their conversation transcript. The interview and observation data for Art and Dot is presented in Table 6.8 (over the page).
Table 6.8. Art and Dot (C2): interview and observation data

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>• New information and adding to what already know</td>
<td>• Spent 50 minutes in exhibition</td>
<td>• Reinforced that a technical learner</td>
</tr>
<tr>
<td>• Reader-learner</td>
<td>• Did not read the Introductory text panels</td>
<td>• Added to already existing knowledge</td>
</tr>
<tr>
<td>• Background and training</td>
<td>• Looked intently at most exhibits, and read all of the stories</td>
<td>• Learned new things</td>
</tr>
<tr>
<td>• Groups of like-minded people</td>
<td>• Not much talking</td>
<td>• Wanted more information and deeper layers</td>
</tr>
<tr>
<td>• Teachers</td>
<td>• Missed the Anthropology section, however, once they saw the Captain Cook cloak display (near the exhibition exit) realised they hadn’t seen the Anthropology section and went back to view it</td>
<td></td>
</tr>
<tr>
<td>• Educating</td>
<td>• Reinforced that a technical learner</td>
<td></td>
</tr>
<tr>
<td>• Emotional learning</td>
<td>• Added to already existing knowledge</td>
<td></td>
</tr>
</tbody>
</table>

In their pre-visit interview Tim and Jules (C1) described learning as new facts, processes, books and teachers, something that happens at school or university. When discussing how they personally like to learn they both framed their answers in the context of their learning identity as university students. They talked about enjoying reading and debating issues at tutorials, especially as they felt you remember it more if it is discussed and argued rather than someone telling you (Jules). They both felt that effective learning is based on interest; if not then it becomes merely rote learning and not as durable. They reported that they enjoy discussing issues and ideas with their peers and friends.

When asked how Uncovered fitted with the ways they like to learn, they both felt the exhibition was full of interesting “trivia”, but reported that they didn’t develop any new knowledge or insights. They stated that although there were fascinating snapshots there were no deep learning opportunities. As they felt the exhibition wasn’t related at all to their university studies, they thought it would be more relevant and interesting to marine biologists or other specialists. They reported that Uncovered didn’t engage them on an emotional level, particularly when compared with their recent museum experiences in Vietnam, which they had recalled in vivid detail in their pre-visit interview.
The interview and observation data for Tim and Jules is shown in Table 6.9.

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Based on personal interest</td>
<td>• Spent 55 minutes in exhibition</td>
<td>• Developed new knowledge and insights</td>
</tr>
<tr>
<td>• Teachers, university lecturers</td>
<td>• Read the Introductory panels, spending 10 minutes in the Introductory area</td>
<td>• Exhibition visit a social experience, planned new social activities</td>
</tr>
<tr>
<td>• New facts</td>
<td>• Stayed together, discussing and determining the best paths to take</td>
<td>• Related content to other shared experiences</td>
</tr>
<tr>
<td>• Processes</td>
<td>• Pointing; reading; intense looking</td>
<td>• Wanted deeper layers of information</td>
</tr>
<tr>
<td>• Books</td>
<td>• Spent lots of time at the geckos/lizards and flies displays, doubling back several times to re-look at these cases</td>
<td></td>
</tr>
<tr>
<td>• Reading</td>
<td>• Lots of animated discussion noted in the Anthropology section, particularly the artworks and headdresses</td>
<td></td>
</tr>
<tr>
<td>• Debating, discussing, arguing</td>
<td>• At two separate sections observed them laughing, pulling faces and generally enjoying themselves</td>
<td></td>
</tr>
</tbody>
</table>

In her pre-visit interview Mary (F4) described learning as looking at different subjects and objects, gathering information, doing research, studying something in detail, depending on both the subject of interest and the learning goals: getting as much information as possible about a subject.

Looking at Mary’s post-visit interview responses it emerged that Uncovered did not change the way Mary thought about herself as a learner, rather it confirmed in her mind the types of exhibition experiences that she and her family did not want. This conclusion was also supported by the observations and conversation transcript which suggested that the material and object displays were not engaging enough for this family. Mary gave quite detailed feedback about how the exhibition did not fit with how she wanted to learn: she felt that better use of hands-on experiences and more information pitched at different learning levels was required.
The interview and observation data for Mary and her group is presented in Table 6.10.

### Table 6.10. Mary (F4): interview and observation data

<table>
<thead>
<tr>
<th>Pre-Visit Interview</th>
<th>Observations</th>
<th>Post-Visit Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interests</td>
<td>Spent 30 minutes in exhibition</td>
<td></td>
</tr>
<tr>
<td>Building on experience</td>
<td>Missed the beginning of the exhibition, and therefore the Introductory texts</td>
<td></td>
</tr>
<tr>
<td>Learn through others, including experts</td>
<td>Skimmed the Anthropology section at the back</td>
<td></td>
</tr>
<tr>
<td>Seminars, talks</td>
<td>Family separated and came together periodically</td>
<td></td>
</tr>
<tr>
<td>Gather as much information as possible</td>
<td>Girl stayed mostly alone, but all came together at the possums/echidnas section</td>
<td></td>
</tr>
<tr>
<td>Doing research</td>
<td>Unlike others groups observed with younger children, these children didn’t “direct” the visit</td>
<td></td>
</tr>
<tr>
<td>Studying in detail</td>
<td>After 15 minutes sit and watch DVD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very interested in possums, echidnas and tree kangaroos showcases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reinforced how did not want to learn—exhibition not engaging enough</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wanted more hands-on, technology and more to touch</td>
<td></td>
</tr>
</tbody>
</table>
6.3.4 Insights into learning identity unclear

In reviewing the data from Bron and Kris (C5), two university students aged 23 and 26, the impact Uncovered had on their learning identities was less clear. Compared with the other nine groups Bron and Kris gave very brief responses to the questions, particularly when asked to describe their views of learning in the pre-visit and then again in their post-visit interviews, even when prompted. Both Bron and Kris were very quiet and reserved with their conversation transcript revealing only a few instances of lively conversation. However, they did report after the visit that they had learned more new facts than they had expected. Bron also felt that she could now appreciate an exhibition on a visual level, rather than just reading text. The interview and observation data for Bron and Kris is shown in Table 6.11.

Table 6.11. Bron and Kris (C5): interview and observation data

<table>
<thead>
<tr>
<th>PRE-VISIT INTERVIEW</th>
<th>OBSERVATIONS</th>
<th>POST-VISIT INTERVIEW / CONVERSATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>Spent 35 minutes in exhibition</td>
<td>Remembered and learned more than first thought</td>
</tr>
<tr>
<td>Industry experts</td>
<td>Exhibition not as busy and crowded which meant that they were</td>
<td>Reader learner and visual learner</td>
</tr>
<tr>
<td>Researching</td>
<td>able to get close to exhibits and read the text panels</td>
<td>Links made to animals found in home and pets</td>
</tr>
<tr>
<td>Reading</td>
<td>Didn't observe much interaction, but became more animated at the</td>
<td></td>
</tr>
<tr>
<td>Acquiring</td>
<td>beetles/butterflies cases (10 minutes into their visit)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intensely read the Introductory panels, spending 10 minutes in the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introductory area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Didn't stay together as much as other couples observed</td>
<td></td>
</tr>
</tbody>
</table>
6.4 Themes in relation to Stage One

When further reflecting on the findings in relation to Stage One, three additional themes emerged—the roles visitors play; sharing learning; and making links to past, present and future life experiences. These are further discussed in the next sections, drawing on the interview, observation and conversation data where relevant. As detailed in Chapter 3, Section 3.7.1, Ash’s (2002) idea of significant conversation events (SEs) was applied when analysing the conversation data. In the present study SEs were identified as short, sustained segments of conversation with definite beginnings and endings that related to a particular exhibit, content area or theme. In the SEs reported in the following sections the adult participants’ names are in bold to distinguish their conversation from their childrens’.

6.4.1 The roles visitors play

Anderson’s research (2003) found that visitors reflected on their experiences through the “frame” of their identity as well as their role in the visit. Ellenbogen (2002) noted that parents often played a “teaching” role in a museum visit. Ash (2002) stated that parents assisted learning through drawing on their own experiences, and they often took “central control” over the visit. Sedzielarz’s (2003) study found that chaperones recognised their multiple roles which included guide, group facilitator, learning leader, teacher, learner, and visit planner. Stage One of the present study revealed that some participants (particularly mothers and grandmothers visiting with children) felt that their role was to support the learning of the children they accompanied to museums and other cultural institutions, rather than learn themselves.
From the Stage Two data it is suggested that visitors play three roles in a visit:

1. The visit manager by directing and organising.
2. The museum expert through explaining, clarifying and correcting.
3. The learning-facilitator in questioning, linking, reminiscing and wondering.

These roles occur simultaneously, are closely linked to the process of learning and are dependent on both the social context of the visit and the group composition, particularly the ages of any accompanying children.

In several families in this study the adults spent as much time playing the visit manager role and engaging their children as looking at displays themselves. It was found that adults had many strategies on hand to manage their childrens’ needs, such as distracting them, asking questions and directing their attention to something they might like, as in the following SE (with the associated displays shown in Figure 6.3):

Liz. Now see this over here. Come. Remember we found those didn’t we? Where did we find them? Do you remember? We had a couple of those.
Tara. What?
Liz. Those urchins.
Paul. No.
Liz. Do you remember? We had one of those at home. You don’t? Have a look at those.
Paul. [mumbles about wanting to go somewhere else]
Liz. Well, if we all stick together they might be able to show us … OK then, should we go this way? Or that way? Oooh, a crown of thorns!

(Conversation Transcript F1, 27/09/2004)

Figure 6.3. Uncovered exhibition: marine animals displays
For adults accompanying children the mood and behaviour of the child may impact on the learning that takes place. Adults sometimes have to spend time trying to activate interest and enthusiasm from a disengaged and bored child, which can also create tension if the adult wants to see something that appeals to them:

Paul. Mum I hate this.
Liz. What do you hate?
Paul. I don’t want to see all these things …
Liz. Don’t you?
Paul. AGAIN.
Liz. Well it sounded as if you were quite interested.
Paul. Let’s move onto the second thing.
Liz. Well, I want to move to the back part. We’ve only looked at the front part so far.

(Conversation Transcript F1, 27/09/2004)

Liz did mention in her post-visit interview that she would like to visit Uncovered again either alone or when Paul was in a better mood, so that she could have another chance at enjoying the exhibition.

Mary (F4) reported that her family liked visiting the Museum, but for them to stay longer exhibitions need to attract and maintain the attention of children as she stated that they are the ones’ learning. Mary’s views echo some of those in Stage One who felt that they were there to assist with their childrens’ learning, not necessarily to learn themselves. This was demonstrated in F4’s conversations, particularly when Mary takes on the role of explaining the work of the Museum to her children, as shown in the following SE:

Rox. Stag beetles.
Mary. You can buy them as pets.
Rox. Are they dangerous?
Mary. No.
Rox. [reads text] “Cholapetra family lupin”, whatever. Is that a dodo?
Mary. It’s an albatross.
Rox. Disgusting, how can they just kill animals like that?
Mary. If they’re, like, endangered, they won’t kill them, they wait for them to die.

(Conversation Transcript F4, 29/09/2004)
The albatross specimen referred to above is shown in Figure 6.4.

Figure 6.4. *Uncovered* exhibition: large birds showcase

Lave and Wenger (1991) proposed that within a community of practice there were both novices and experts, however the present study suggests that when visiting an exhibition sometimes all group members may be novices, and someone takes on the role of filling in perceived gaps in the group’s collective knowledge. The content of *Uncovered* raised many questions about the work of museums, often resulting in one adult in the group taking on the role of museum expert. This was demonstrated in the conversations through visitors’ explanations of how museums worked or by dealing with questions that weren’t answered in the text by drawing from their prior knowledge. These are illustrated in the following examples:

*Rox.* How do they catch them, Mum? I wonder what they put them in a bottle for?

*Mary.* So you can see them, because the backs are white, so you can see them better.

(Conversation Transcript F4, 29/09/2004)

*Tara.* Eoww, disgusting! Look at the little bugs … with a needle through them.

*Liz.* Well that’s just to hold them in place.

(Conversation Transcript F1, 27/09/2004)
Art. That’s from India again.

Dot. I know, I wonder where they find them. Just walking along?

Art. I don’t know, probably dug up from somewhere. Caves, mines, it doesn’t say.

Dot. I think the variety of rocks and crystals is something you don’t realise.

Dot. It’s all fossils. So how does that happen?

Art. I think a leaf falls down into … [inaudible] and gets flooded over and then silt builds up, goes hard over the fossils and fossilises. I guess so?

(Conversation Transcript C2, 28/09/2004)

Adults also play the role of learning-facilitator, whether visiting with children or other adults. The transcripts and observations revealed that parents, in particular, direct the visit and adopt the learner-facilitator role more than they thought they did when they were interviewed.

In her learning-facilitator role, Liz (F1) continually points out objects of interest, asks questions of her children, answers their questions and makes links to other activities the family have shared. Liz assists her children in understanding what they are looking at, while also discovering new insights into herself by following her childrens’ interests and investigating deeper through reading texts, answering their questions and general discussion:

Tara. What’s in the liquid?

Liz. [reading text] “World’s smallest vertebrate, an evolutionary one found in New Zealand”. I can’t even see it. … Oh look! That’s the smallest vertebrate of a fish ever found! I don’t know but it’s a mean-looking one. Look at all those spikes.

Tara, Paul. Wow.

Liz. It’s tiny! Look at this thing, you can see it through the end. No, that’s it’s vertebrae, which is it’s spine.

Tara. It’s absolutely tiny!

Liz. I know, so small and light that a million of them would only weigh one kilo.

Tara. Ohh.

Liz. Absolutely tiny. I wonder how they found it?

Paul. Or a million of them?!

(Conversation Transcript F1, 27/09/2004)
In the next example, Kay (F3) uses her role as parent to call her son (Zeke) to her, then through questioning, linking and drawing on prior knowledge and experiences she encourages Zeke to identify an object for himself. Zeke also uses the tools provided in the exhibition (object and accompanying text) to reach an understanding of what he is looking at:

Kay.  *Come and look at this. What is that? Where’s that from Zeke?*
Zeke.  *Bali.*
Kay.  *Yes, good boy.*
Zeke.  *I knew that.*
Kay.  *How did you know that?*
Zeke.  *Because it has all these on it “Javanese and Balinese” [reading from text] in the second line. I’ll tell you why I knew it was Balinese, because I saw those little gold things in Bali.*

(Conversation Transcript F3, 29/09/2004)

The Indonesian gamelan that Kay and Zeke are discussing is in Figure 6.5.

*Figure 6.5. Uncovered exhibition: gamelan orchestra instrument display*
Screven (1990; 1995) and Serrell (1996; 1998) have pointed out the importance of asking questions in texts. Stage Two demonstrated that questions are used by visitors to help manage the visit, to engage those in the group who are disinterested and as ways for groups to learn together:

*Nat.*, *Ally.* [both shouting out] *Look at this, look at this.*
*Jo.* Okay … you want to tell me what it is?
*Nat.* What do you think it is?
*Jo.* I don’t know, but what do you think all those are?
*Ally.* Sticks.
*Jo.* Sticks?
*Ally.* Yeah, sticks.
*Jo.* Do you think they are sticks? Well, I’ll read it to you and it says [reading from text] “It’s feathers and fibre”. So they’re actually feathers.
*Nat.* Feathers?
*Ally.* C’mon, let’s get a move along!

(Conversation Transcript F2, 28/09/2004)

*Bron.* Look at this one. Is it real?
*Kris.* Nah, it’s not real, it’s not real. Is it real?
*Bron.* I think so.
*Kris.* [reads] “Actual skin over plastic cast”. Oh, sick, it’s real skin!
*Bron.* Yeah but it looks fake, is it real? Should be real, huh? The eyes look fake.
*Kris.* But look how big this thing is!
*Bron.* Hmm.

(Conversation Transcript C5, 30/09/2004)

These findings suggest that visitors’ questions could be a good place to start when thinking about writing exhibition texts, with the Stage Two conversations containing many examples of using questions to keep the conversation flowing and sharing learning, discussed in the next section.
6.4.2 Sharing learning

Worts (1996) reflected on the social nature of identity, suggesting that collective identity was manifest in belonging to family, friends and community. Wenger (1998) stated that identity was a social phenomenon, with Kidd (2002) also identifying an important aspect of identity as group membership. Similar to Stage One, a strong theme that emerged from Stage Two was sharing learning with others, learning about each other and enjoying themselves at the same time. Evidence that visitors’ share their knowledge and experiences has been found in numerous studies of museum learning (detailed in Chapter 2, Section 2.2.3), with sharing learning a particular feature of family visiting, yet less so in couples (McManus, 1987, 1988). However, Stage Two of this study also revealed many examples of sharing learning across the five couples sampled.

In their post-visit interview all three members of F5 (Cath, Bree and Ed) commented on the statement *I shared some of my knowledge with other people.* They remarked that they felt sharing was a way that *got them bonding* through imparting new information gained on things they already knew something about. Their conversations at several parts of the exhibition demonstrate sharing, for example:

- **Cath.** That’s a gift to Captain Cook. [reads text] “A Hawaiian gift to Captain Cook” Move over sweetie.
- **Bree.** Hang on, can I read it too? I’m really curious. [reads text] “The king of the tribe did …”
- **Ed.** Hang on let me read this.
- **Cath.** They’re feathers. That’s feathers. Mad, you couldn’t tell. By the backing, I’m sorry your head's in the shadow, I can’t see when there's shadow. You've got to stand at a certain angle to be able to read it. Red feather, can you see the red feathers?
- **Ed.** Yep.
- **Bree.** Yellow feathers.
- **Ed.** Yep.
- **Cath.** Black feathers. Can you see black ones?
- **Ed.** Where?
- **Cath.** Hidden among the long bits.
- **Ed.** Okay. This is cool.
Cath. You can see the black ones from the outside.
Bree. Very eye-catching. I would like one of these on my ring.

(Conversation Transcript F5, 30/09/2004)

The transcript from Rick’s group (C3) was full of examples of learning together through talking and sharing the expertise and knowledge of all group members:

Rick. Hey Kate look at these ones, how’s that for a shell?
Kate. That’s an unusual one.
Toni. That’s beautiful.
Kate. Were shells alive, are shells alive?
Toni. They’ve got things inside them.
Rick. Molluscs in them.
Kate. But are the actual shells alive?
Rick. No.
Toni. They’re a shell.
Rick. I think the shell is the shell of the mollusc that originally lived in them, like a snail.
Kate. So they’re part of something?
Rick. They’re part of something that was, yes.

(Conversation Transcript C3, 29/09/2004)

The showcase referred to in this SE is shown in Figure 6.6.

Figure 6.6. Uncovered exhibition: mollusc and shells showcase
Also in C3, Kate (the daughter) drew the group’s attention to objects she found interesting and were relevant to their shared social experiences, with the other group members contributing to the conversation from their own perspectives:

Kate. Are they stick insects?
Toni. Some of them are. That’s at the end of [names place on an island].
Kate. Did we sail past that?
Toni. We didn’t sail past that but we flew nearby. You could see it from the top of the mountain Daddy climbed. Look at the frogs. Look at the size of those. Not like our piddly little ones.
Kate. Like that small one? [points]
Toni. Ours would be like that.

(Conversation Transcript C3, 29/09/2004)

McManus (1987; 1988), using taped conversations from uncued visitors, found that couples typically did not interact as much with each other in exhibitions as other groups. However, there were many examples of sharing learning through animated discussions across all five couples that participated in Stage Two:

Art. Brown snake, now they’re very deadly aren’t they, brown snakes?
Dot. Yeah, well king browns are. Here’s all your cicadas.
Art. Now they take years and years to come up from under the ground. Seven years or something. Where’s the huntsman? I’m trying to see where it is.
Dot. There it is.
Art. Ooh, [it’s] hidden a bit!

(Conversation Transcript C2, 28/09/2004)

Fran. Oh, look at this. Look at this Ted, x-rays.
Ted. … they’re ugly looking creatures aren’t they? They’re sort of frightening.
Fran. They’re frightening, yes. They’re creepy. Ooh my goodness … Look at that. Is that a skeleton?
Fran. They are pretty common aren’t they, the flying fox?
Ted. Look at the length of that. You wouldn’t want that flying at you would you!

(Conversation Transcript C4, 30/09/2004)
Sharing learning can also be enjoyable (Dierking & Griffin, 2001; Griffin, 1998; Kelly et al., 2004; Packer & Ballantyne, 2002). Stage One found that learning and enjoyment were linked, and there were also several examples from Stage Two that demonstrate visitors having fun while learning:

**Jules.** How do you say that? Quoll? Quoll?
**Tim.** [reads text] “Spotted Quoll”?
**Jules.** I don’t like how they’ve got little cotton wool in their eyes!
**Tim.** Mmmm
**Jules.** Eoww – it’s so gross! [laughs]

(Conversation Transcript C1, 28/09/2004)

**Art.** I can’t get over the size of those flies.
**Dot.** [reads title] “Entomology”.
**Art.** Ooh, cockroaches, yuck! Ooh!
**Dot.** I think I put my foot on one like that last night.
**Art.** [laughs]
**Dot.** Out in the backyard.

(Conversation Transcript C2, 28/09/2004)

When sharing learning, Bron and Kris (C5) became excited and animated, enjoying what they were viewing:

**Bron.** Walking sticks. Oh, hey, I saw real ones in Canada. Real ones like that.
They’re, like [this] stick in this box, and they really move.
**Kris.** No!
**Bron.** Yeah, they’re like sticks, I’ve seen them, I’ve seen them. They look like sticks! It’s amazing. They jump, it’s really gross, they go “phht” like that, they’re like grasshoppers.

(Conversation Transcript C5, 30/09/2004)
6.4.3 Linking to prior, present and future life experiences

Stainton (2002) noted that visitors’ engaged with exhibitions through the lens of their personal experiences and identity. Leinhardt, Tittle and Knutson (2002) found that participants in their study made personal meanings from the objects they were looking at and connected these to their own lives.

In Stage Two there were many examples of adults using objects they saw in the exhibition as triggers that linked to previous life events, often holidays and other “environmental” experiences:

Rick. There’s a crayfish, a yabby.

Toni. Oh yes.

Rick. We’ve seen yabbies walking across the ground. They actually walk across fields looking for water.

Edna. They have been down our drive. As a matter of fact, when Dad was alive, he took a couple to the pond in the golf course. But the kids used to bring them home from somewhere.

Toni. And they escaped?

Edna. Yes.

(Conversation Transcript C3, 29/09/2004)

Bree. This makes you want to go under the sea and see how things actually live.

Cath. You know how you go on those boat trips with the glass bottoms up at the [names place]. It does, it really entices you to want to see more, even know more.

(Conversation Transcript F5, 30/09/2004)
Jules. [reads text] “Fossils”

Tim. Mum LOVES her fossils. It’s pretty amazing.

Jules. I like fossils too. When we were at [north coast NSW] they had fossil rocks, and we would always go to the fossil rocks. Have a look at the plants that were fossilised. Look how clear that is … weird hey? I like it, it’s cool.

(Conversation Transcript C1, 28/09/2004)

Figure 6.7 shows the fossils showcase Tim and Jules refer to.

Figure 6.7. Uncovered exhibition: fossils showcase

The F5 group also reported how they would use information gained about seahorses from the exhibition during their next holiday to expand their understanding of these animals and show their knowledge off to others:

Ed. Look at the seahorses.

Cath. Like the one in the salt water.

Bree. They’re just so cute and they swim along.

Ed. I’d hate to be bitten by these fish, look at the teeth.

Cath. But they don’t normally attack. … When we go to [north coast NSW] next week we should go and find the white seahorses. Wouldn’t that be mad if we see one and we go “That’s a white seahorse”. The guy’s going to just look at us [and go] “How do you know that”?

(Conversation Transcript F5, 30/09/2004)
The next SE demonstrates Fran and Ted relating what they are looking at to the seemingly unrelated topic of embroidery:

**Fran.** Numbat. That’s the one that was in that thing that I, the alphabet that I sewed. N was the numbat.

**Ted.** The embroidery?

**Fran.** Yes.

**Ted.** Is that just a smaller one of those? And the quoll was the Q.

**Fran.** Yes, the quoll was the Q, and the platypus was the P [reads text] “Spotted-tailed quoll, Taree, NSW”.

(Conversation Transcript C4, 30/09/2004)

The showcase that Fran and Ted are discussing is shown in Figure 6.8.

**Figure 6.8. Uncovered exhibition: quoll showcase**
In her post-visit interview Kay chose the statement *I remembered things I haven’t thought of for awhile* as a way she learned in the exhibition, illustrated in the following SE:

**Kay.** We used to collect those, we used to have shoeboxes full of those at Christmas time. You don’t see as many around now do you?

**Mia.** I have not seen [any]. What are they?

**Kay.** They’re beetles, Christmas beetles.

(Conversation Transcript F3, 29/09/2004)

Fran and Ted were also very interested in the beetles display, with Ted citing this exhibit as matching how he liked to learn through reminiscing about the past and making connections to today:

**Fran.** Look at these beautiful green ones [indicates showcase full of beetles].

**Ted.** Mmm.

**Fran.** Their colour is incredible, the variety.

**Ted.** Yes, they look like our Christmas beetles that we hardly ever see these days, but when we were kids we used to get them. I think a lot of these fertilisers and weed killers and all the rest of it, they’ve probably wiped the damn things out.

(Conversation Transcript C4, 30/09/2004)

The beetles showcase these groups refer to is shown in Figure 6.9.

**Figure 6.9. Uncovered exhibition: beetles showcase**
6.5 **Reflections: adult museum visitors’ learning identities**

The method used in Stage Two demonstrated that adult museum visitors can learn more about the concept of learning as well as their own learning processes when encouraged to think about learning before they engage with an exhibition. It was found that sometimes the learning opportunities provided by museums match how an individual likes to learn, and sometimes they don’t. The findings also suggest that visitors play three interchangeable roles in a visit—the visit manager, the museum expert and the learning-facilitator. Sharing learning and linking exhibition experiences to other life events are also key findings that emerged from Stage Two.

The next chapter discusses the findings and implications from both stages of the study, with suggestions made about ways to improve museum visiting experiences to better cater for the wide range of adult visitors’ learning identities.
References


Interview Transcript 3.8. (13/03/01). *Dennis*. Unpublished manuscript.


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