

THE IMPACT OF SOCIAL MEDIA ON MUSEUM PRACTICE

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The demands of the “information age” have raised new questions for museums. It has been argued that museums need to move from being suppliers of information to providing usable knowledge and tools for visitors to explore their own ideas and reach their own conclusions (Bradburne, 1998; Hein, 1997) which is especially relevant today as increasing access to technologies, such as the internet, ‘... have put the power of communication, information gathering, and analysis in the hands of the individuals of the world’ (Freedman, 2000, p.299). Freedman also argued that museums should become mediators of information and knowledge for a range of users to access on their terms, through their own choices, and within their own place and time.

This paper explores the impact of social media across museums, using three areas of museum practice as examples: learning, exhibition development and organisational change. Note that parts of this paper have been published in:

- The MAG Issue 2, 2008 (http://mgnsww.org.au/publications/issue_2_2008/),
- Museums and the Web 2008 conference paper *From Ladders Of Participation To Networks Of Participation: Social Media And Museum Audiences* (Kelly & Russo - http://www.archimuse.com/mw2008/papers/kelly_1/kelly_1.html)
- The Fall 2009 edition of the *Exhibitionist* (Jensen & Kelly - <http://name-aam.org/resources/exhibitionist>)

WHAT IS SOCIAL MEDIA?

‘Social media is a term for the tools and platforms people use to publish, converse and share content online. The tools include blogs, wikis, podcasts, and sites to share photos and bookmarks’¹. An important component of social media is the idea of social networking², which refers to ‘... online places where users can create a profile for themselves, and then socialise with others using a range of social media tools including blogs, video, images, tagging, lists of friends, forums and messaging.’³ Examples of social networking activities and sites include⁴:

- Creating profiles or descriptions of yourself on Facebook , LinkedIn, and eBay
- Blogging on Blogger and Wordpress
- Video sharing on YouTube
- Photo sharing on Flickr and Google Images
- Saving your favourite websites (i.e. bookmarking) on delicious and Digg
- Microblogging on Twitter
- “Living” in virtual worlds such as Second Life and Habbo Hotel through creating a virtual identity
- Instant messaging (IM) or chat features on most social network sites including MSN, Facebook and ning

INFORMAL LEARNING IN MUSEUMS AND SOCIAL MEDIA

Museums are considered to be free-choice, or informal, learning environments (Falk, 2004; Falk & Dierking, 2002; Hein, 1998; Hein & Alexander, 1998). Free-choice learning has been described as ‘... self-directed, voluntary, and guided by individual needs and interests— learning that we will engage in throughout our lives’ (Falk & Dierking, 2002, p.9). Informal learning is different from the formal contexts of school and universities, being described as:

- occurring outside of the formal, structured school or university environment
- a lifelong process, given that humans spend more time outside, than inside, school

- happening across a variety of mediums, such as television, the internet and museums
- linking to formal learning in an unplanned way
- voluntary (Crane, Nicholson, Chen & Bitgood, 1994; Falk & Dierking, 1992).

Paris (1997) stated that to facilitate meaningful learning museums need to create environments that encourage exploration and enable meaning to be constructed through choice, challenge, control and collaboration, leading to self-discovery, pride in achievements, learning and change.

To date many theories about museum learning have been based within the context of the physical building, exhibitions and programs. However, the above points could just as easily relate to the on-line context in general, and social media in particular. Constructivism, with its emphasis on the individual learner, as well as choice, control, challenge and social learning is an approach used by many museums as basis for their thinking about learning. George Hein in his seminal work, *Learning in Museums*, outlined the characteristics of constructivist exhibitions (Hein, 1998, p.35). When examining these a little more closely it becomes clear that many of the principles of constructivist learning in museum exhibitions correlate very closely to the tools of social media as outlined in Table 1.

Constructivist exhibitions	Social media
Free choice	Free choice
Many entry points	Many entry points
No specific path, no beginning, no end	No specific path, no beginning, no end
Based on prior knowledge and experience	Based on prior knowledge, experience and interests
User-controlled	User-controlled
Usually visited in own time and as part of structured educational experience	Usually visited in own time and place, may be part of structured educational experience as well as leisure
Present range of points of view and perspectives, museum seen as authority	Present range of points of view and perspectives, yet authority can be questioned or unclear
Provide materials that allow to experiment, conjecture and draw conclusions	Interactive websites can provide programs and information that allow to experiment, conjecture and draw conclusions
Used for leisure, entertainment and learning	Used for leisure, entertainment and learning
May be difficult to remain up-to-date	Usually up-to-date, constantly changes

Table 1. Comparison of constructivist exhibitions and social media

An on-line survey of 2,006 participants across eastern Australia was undertaken in November 2007 asking about the kinds of on-line activities they had undertaken in the previous month, as well as where they accessed the internet, how comfortable they felt with technology and demographic information (Australian Museum, 2007). They were also asked whether they had visited a museum/gallery in the previous six months, with 41% (n=829) having done so. The data from this group was separated to compare against the rest of the sample to see if there were any differences in their on-line behaviour (Table 2). The data shows that museum/gallery visitors participated at higher levels across all activities. Apart from using social networking sites, statistical tests revealed that these differences were highly significant across all categories.

Activity	Total sample (n=2,006)	Museum/gallery visitors (n=829)
Watch a video	43%	46%
Use social networking site	34%	36%
Participate in discussion board/forum	32%	39%
Read customer rating/review	37%	48%
Read blogs	27%	34%
Tag web pages	19%	27%
Listen to podcasts	16%	23%
Use a wiki	15%	20%
Post ratings/reviews	15%	21%
Comment on blogs	13%	18%
Upload video/audio they created	12%	15%
Publish own web page	10%	13%
Publish/maintain blog	8%	9%
Use RSS feeds	8%	11%

Table 2. Comparison of museum visitors and total sample

A Pew Internet study found that ‘... 36% of on-line Americans consult Wikipedia ... [it is] is far more popular among the well-educated than among those with lower levels of education ... 50% of those with at least a college degree consult the site, compared to 22% of those with high school diploma.’ (Pew Internet, 2007). It is worth remembering that the majority of people who visit museums are college-educated or higher.

A one-day workshop was held in November, 2007 with twenty-four students from nine schools across New South Wales (Kelly & Groundwater-Smith, 2009) to look further at some of these findings. Students were consulted on a range of issues encompassing their use of digital technologies in leisure and for learning. They undertook a behind-the-scenes tour of the Museum, spoke with a number of scientific staff and experienced the public areas of the Museum in order to provide feedback about the Museum’s potential on-line offer. An

important component of the research was to seek feedback and advice about how the Museum's research and collection could be better utilised through digital media to match their needs and interests.

The overall impression from this day was the overwhelming interest by the students in the Museum's content, staff and sensory engagement primarily through touch, but also the visual aesthetic. They were also very thoughtful about how the Museum could complement what is already available on-line and carve out its' own place. One student, who had attended both our 2006 *Kids' College* and the *e-kids' college* in 2007 had this to say:

Last time I came here [in 2006] we focussed mainly on new technology and we were constantly saying we needed more screens, games and interactive displays, but since then I have been thinking: I can do that at home, I can watch movies, play games etc at home. If I come to the Museum I want to be able to get information, read it and be able to learn from it. It is good to have these things (screens etc) but I guess, like all things, in moderation. The Web site needs to suit all audiences. I got the feeling that you were trying to find out what we want but we are not the only people that use the Museum. A section on the site, with bright colours, games etc could be good, but it is unlikely that the reason we are at a Museum site in the first place is to play the games. We can do that anywhere. If we are there we are probably looking for information of some kind.

Research has 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). In a study of museums and controversial topics it was found that visitors welcomed museums having exhibitions and programs on these kinds of topics as long as they could comment on them somehow (Kelly, 2006). At the time that research was undertaken the Internet was in early stages of development, a Web 1.0 environment with a primary focus on access to information (Seely Brown & Adler, 2008). Since that time the Internet has opened up a whole new way of engaging users, with social media now giving access to people – where those with common interests can meet, share ideas and collaborate. Seely Brown and Adler feel that the most profound impact of the Internet is ‘... its ability to support and expand the various aspects of social learning’ (2008, p.18) and therefore, the ability to solve problems together.

Taken together, these findings have broad implications for museums and their relationships with both their on-line and physical audiences and how they learn. The data suggests that, not only do those who visit museums (adults and young people) participate in more on-line activities, they are engaging in activities that are participatory and two-way, such as posting and reading customer reviews, reading blogs, listening to podcasts and tagging content. What does this mean for museums? Will museum visitors bring increased expectations and different modes of behaviour and learning styles to their physical visit based on what they are doing on-line?

EXHIBITION DEVELOPMENT IN MUSEUMS AND SOCIAL MEDIA

Audience research has a long history in museum practice. From Gilman's studies in the early twentieth century through the psychology movement of the 1930s, 1940s and 1950s and more recently the focus on the visitor as learner, museums have long demonstrated an interest in their audiences (Kelly, 2004). In the past, front-end evaluation studies would have been time-consuming, costly, and rather limited in the number and types of audiences that can be researched, especially when using a focus group approach. Now, however, museums have the opportunity to use tools provided by social media to interact more directly with a range of audiences on their own terms in a more equal, two-way relationship.

Social media offer greater scope for collaboration, enabling museums to respond to changing demographics and psychographic characteristics of the public. Significantly, the tools of social media also provide new ways to learn about audiences through interacting with them directly, where curatorial and exhibition development staff can act as stimulators and facilitators. Audiences can invest in and contribute their ideas, with the subsequent interactions informing and shaping their exhibition experiences. However, the challenge for the museum sector is the patchy uptake of these tools and many reservations about what social media actually offer. A range of museums have been actively experimenting with social media, and many have established a strong online presence both on their own websites and across other spaces on the web (Bernstein, 2008; Russo et al, 2008). However, little exploration has been undertaken into how these tools may work in developing exhibition content.

This section presents a case study using social media as a front end evaluation tool to revise or redevelop content and themes for an exhibition at the Australian Museum, Sydney, on the topic of evil.

The *All About Evil* exhibition concept came to the Australian Museum from the Royal Tropical Institute (Tropenmuseum) Amsterdam after the success of their exhibition displayed in 2006. The exhibition was built from the Tropenmuseum's cultural collections and included over 900 items, including loans from European collections and private lenders. Historical artefacts were supplemented with contemporary / popular-culture content to cover three main themes: Origins of Evil, Images of Evil and Protection from Evil, drawing together stories about the concept of evil throughout human experience. While an interesting topic, it is a controversial one with provocative connotations and potentially graphic subject matter. With this in mind the Australian Museum did some preliminary work with audiences to gauge reactions to the overall topic, as well as feedback about some of the material that may be displayed. Early focus groups showed that there was more interest in fact in the contemporary relevance of evil played out in society than in the historical 'brown statues' displays of the Tropenmuseum exhibit. The exhibition is now being considered for showing in a 'redeveloped' form at the Australian Museum sometime in the future.

In order to conduct some further evaluation it was decided to use social media to both engage potential audiences and compare this approach to a more 'traditional' front-end evaluation process. Initially an exhibition development blog was established in January 2009 using Blogger, a free online blogging tools. We wanted to engage with potential audiences to invite feedback and workshop exhibition themes and stories further. We sent emails to a wide range of colleagues, friends and friends of friends (as a snowball sample) asking them to read and contribute to the blog. We decided to make the blog unmoderated and to not host it on the Australian Museum's website. This was risky but we assumed that in being "removed" from the Museum respondents could be freer in their comments and participation and, to date, there have been no inappropriate comments posted.

Both the exhibition project manager and audience researcher wrote a series of posts and gradually added to the blog in order to start the discussions. We found that the blog seemed to be more of a static interface which was slightly depressing at first until Google Analytics (an online statistical tool counting site visitation) was added. The figures demonstrated a surprising level of activity – people were reading the blog even if they didn't contribute. For example, during June 2009 there were 261 visitors from 34 countries with 395 page views. However, of those who did comment, there were some passionate responses to the discussion board "What is Evil?" with contributors taking a serious angle and having quite a bit to say. As of 30 June the blog had 24 followers; 10 posts and 29 comments. We envision that the blog and Facebook group will continue during the life of exhibition planning, development and showing, and we will continue to monitor interactions and feedback.

In February 2009 an *All About Evil* Facebook group was created⁶, in part to address the frustrations of little two-way activity on the blog, but also to test whether Facebook would provide a better vehicle for discussion on themes and possible content for a target audience of young people. The group proved to be popular, gaining 218 members in the first three weeks and generating a great deal of activity and discussion between the Museum and members, as well as among members themselves. Currently (at 30 June 2009) there are 305 members with 10 discussion topics, 65 comments, 38 wall posts, 54 photos uploaded and 20 links to other sites posted by members.

Participants certainly embraced the tools of Facebook, even contributing photographs and tagging photos uploaded by Museum staff. Through the Facebook group we found that there was some consistency with the contemporary themes identified in the focus groups and staff workshops. In addition, it demonstrated that this dialogue can help shape the exhibition content. Although this has been an experiment of sorts there have been interesting results so far and some people are also having fun on the group, illustrating that moments of light relief will be needed to pace the physical exhibition.

In comparing the blog and Facebook sites the blog seemed to be more of a “reader space” rather than a “commenting space”, with Facebook providing more discussion and interaction. There could be a number of reasons for this. First is the nature of the subject matter. Evil may be a “sexier” topic for a Facebook audience that tends to be aged around 20-30 years. Second, although an attempt was made to make the blog as conversational as possible, it still seemed to have a (somewhat) authoritative voice. In the Facebook environment discussions seem more free flowing and casual. People are able to drop a few lines in a chatty way or write paragraphs if they really have something to say. Finally, we speculate that the lesser amount of activity on the blog could be technologically-related. Signing up to use a blog is not necessarily easy. Participants need to have a Google login name and password and subscribe to an RSS feed to keep updated. These could be barriers to participation, especially if people aren’t familiar with using online blogging applications such as Blogger or Wordpress.

When comparing using social media tools to traditional front-end studies some issues emerged that warrant further research and thought. One was around sampling – what are the backgrounds of those participating? Are they a representative sample? What could be done about minimising potential bias? Another was to do with copyright and intellectual property – who “owns” the ideas proposed? Finally, what might happen if for some reason the physical exhibition does not go ahead? Have expectations been set up which may have negative implications for the Museum’s relationship with this particular community? These issues don’t arise when doing a front-end study in a traditional way as participants only have a fleeting relationship with the museum. However, even given these constraints, using social media tools proved to be an easy and efficient way to elicit feedback and dialogue at no actual cost apart from a maximum time investment of two hours per week.

ORGANISATIONAL CHANGE IN MUSEUMS AND SOCIAL MEDIA

Our research to date shows that there are strong synergies between the physical and on-line experience. Our work with the Coalition over the years suggests that when it comes to designing fantastic physical and on-line museum experiences for young people (and for all kinds of visitors), the principles are the same and include a range of elements:

- *experiences* that encourage discovery, interaction, cater for the unexpected, provide many pathways to explore, give a taste for what happens behind-the-scenes and are fun
- *content* that is challenging, real, authoritative, meaningful, encourages questions and is well-organised and easy to navigate
- *staff* that can relate to young people, are respectful of their ideas and views, are knowledgeable in their field and are easy to talk to
- *opportunities* to socialise, hang out with their friends and learn together.

Although many museums are getting better at their physical offerings (although some still have a way to go), the web environment is somewhat lagging, with a patchy uptake in social media tools and some (healthy and not-so-healthy!) skepticism about the role and value of these. Given that social media is a great way to fulfil these requirements – it supports learning objectives, is relatively low-cost, is being used by Australians and has a close relationship with the physical – then why hasn't it been taken up by museums in greater numbers?

MacArthur (2007) identified that *institutional bias* is the most pressing problem in the uptake of social media/Web 2.0 in museums. If this is the case, what can be done?

Some clues come from two sources: first a Harvard Business Review article interview with Mitchell Baker, chair and former CEO of Mozilla who created the open source web interface Firefox (Mendonca & Sutton, 2008). The other is a post sourced from the Gurteen Knowledge Website⁷ about the skills that knowledge workers will need in the future.

In reflecting on these, it is suggested that for an organisation to embrace a Web 2.0 mindset through new approaches to museum practice, has these elements:

- is prepared to let go
- takes risks
- gives people permission to go for it, then learns from that
- encourages connections and networks
- provides scaffolding and support that others can work from – we don't always need to innovate ourselves, others can use our material and do it instead
- acknowledges that a healthy community will self-monitor and self-correct
- remembers that some areas will still need “discipline” and organisational input, yet many more need participation.

Ellis & Kelly stated ‘Web 2.0 puts users and not the organisation at the centre of the equation. This is threatening, but also exciting in that it has the potential to lead to richer content, a more personal experience’ (2007). Many years ago now, Stephen Weil stated that museums need to transform themselves from ‘... being *about* something to being *for* somebody’ (p.229, emphasis in original). Social media provides the perfect vehicle to take this further, with museums enabling learners, users, visitors to become participants wherever they are and however they choose – what I term “Museum 3.0”. However, this depends how willing museums are to implement organisational change and conduct meaningful two-way interaction and dialogue with their audiences. Learning studies, audience research and social media experiments have demonstrated that audiences want this kind of interaction, yet will museums come to the party?

REFERENCES

- Australian Museum. (2007). *What are Australians doing online?* Sydney: Australian Museum.
- Bernstein, S. (2008). Where do we go from here? Continuing with Web 2.0 at the Brooklyn Museum. In J. Trant and D. Bearman (eds). *Museums and the Web 2008: Selected Papers from an International Conference*. Toronto: Archives and Museum Informatics, 37-47.
- Bradburne, J. (1998). Dinosaurs and White Elephants: the Science Centre in the 21st Century. *Museum Management and Curatorship*, 17(2), 119-137.
- Cameron, F. (2003). Transgressing fear - engaging emotions and opinion - a case for museums in the 21st century. *Open Museum Journal*, 6.
- Cameron, F. (2006). Beyond Surface Representations: Museums, Edgy Topics, Civic Responsibilities and Modes of Engagement. *Open Museum Journal*, 8.
- Crane, V., Nicholson, H., Chen, M., & Bitgood, S. (Eds.). (1994). *Informal Science Learning: What the Research Says About Television, Science Museums, and Community-Based Projects*. Dedham: Research Communications Ltd.
- Ellenbogen, K. (2002). Museums in Family Life: An Ethnographic Case Study. In G. Leinhardt & K. Crowley & K. Knutson (Eds.), *Learning Conversations in Museums* (pp. 81-101). Mahwah: Lawrence Erlbaum Associates.
- Ellis, M., & Kelly, B. (2007). Web 2.0: How to Stop Thinking and Start Doing: Addressing Organisational Barriers. In J. Trant & D. Bearman (Eds.), *Museums and the Web 2007: Proceedings*. Toronto: Archives & Museum Informatics.
- Falk, J. (2004). The Director's Cut: Toward an Improved Understanding of Learning from Museums. *Science Education*, 88(Supplement 1), S82-S96.
- Falk, J., Brooks, P., & Amin, R. (2001). Investigating the long-term impact of a science center on its community: The California Science Center L.A.S.E.R. Project. In J. Falk (Ed.), *Free-Choice Science Education: How We Learn Science Outside of School* (pp. 115-132). New York: Teacher's College Press, Columbia University.
- Falk, J., & Dierking, L. (1992). *The Museum Experience*. Washington: Whalesback Books.
- Falk, J., & Dierking, L. (2002). *Lessons Without Limit: How Free-Choice Learning is Transforming Education*. Walnut Creek: AltaMira Press.
- Freedman, G. (2000). The Changing Nature of Museums. *Curator*, 43(4), 295-306.
- Hein, G. (1997). *The Maze and the Web: Implications of Constructivist Theory for Visitor Studies*. Paper presented at the Visitor Studies Association Conference, Alabama.
- Hein, G. (1998). *Learning in the Museum*. London: Routledge.
- Hein, G., & Alexander, M. (1998). *Museums: Places of Learning*. Washington: American Association of Museums.
- Kelly, L. (2004). Evaluation, Research and Communities of Practice: Program Evaluation in Museums. *Archival Science*, 4, 45-69.
- Kelly, L. (2006). Museums as Sources of Information and Learning: The Decision-Making Process. *Open Museum Journal*, 8.
- Kelly, L. and Groundwater-Smith, S. (2009). Revisioning the Physical and Online Museum: A Partnership with the Coalition of Knowledge Building Schools. *Journal of Museum Education*, 34(4), 55-68.
- Lake Snell Perry & Associates. (2001). *Americans Identify A Source of Information They Can Really Trust*. Washington: American Association of Museums.
- MacArthur, M. (2007). *Can Museums Allow Online Users to Become Participants?* Washington: AAM.

- Mendonca, L., & Sutton, R. (2008). Succeeding at open-source innovation: An interview with Mozilla's Mitchell Baker. *The McKinsey Quarterly*, 1-7.
- Paris, S. (1997). Situated Motivation and Informal Learning. *Journal of Museum Education*, 22, 22-27.
- Russo, A., Watkins, J., Kelly, L. and Chan, S. (2008). Participatory Communication with Social Media. *Curator*, 51(1), 21-32.
- Seely Brown, J., & Adler, R. (2008). Minds on Fire: Open Education, the Long Tail, and Learning 2.0. *EDUCAUSE*, January/February, 17-32.

¹ <http://socialmedia.wikispaces.com/ShortAZ>

² In this paper the term “social media” is used to encompass the concepts of Web 2.0 and social networking

³ <http://socialmedia.wikispaces.com/ShortAZ>

⁴ Adapted from Australian Communications and Media Authority Quick Guide *Personal and peer safety: Safe social networking* (<http://www.acma.gov.au/WEB/HOMEPAGE/pc=HOME>)

⁵ <http://allaboutevillk.blogspot.com/>

⁶ <http://www.facebook.com/home.php?ref=home#/group.php?gid=63750884739>

⁷ <http://www.australianmuseum.net.au/blogpost/Knowledge-Workers/>