MUSEUMS AS SOCIAL LEARNING SPACES

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Lynn Dierking recently completed a retrospective study of the long-term impact of gender-focused free-choice learning programmes on young women’s lives 5-25+ years after the experience. Cascading influences: Long-term impacts of informal STEM programs for girls, describing findings of the study, was published in 2013. Lynn’s other research projects include: a four-year longitudinal study, SYNERGIES: Understanding and Connecting STEM Learning in the Community, tracking the STEM learning trajectories of 10-year-olds, in school and outside school, in a diverse neighbourhood of Portland, a Denver Museum of Nature & Science study to improve scientific literacy among urban middle school youth and the Hispanic Pathways to Family Science Literacy and Green Jobs (Hispanic Pathways) project, offering free-choice science education experiences to Hispanic youth, many who are currently ‘at risk’ of dropping out of high school, joining gangs, and/or are already incarcerated in the juvenile justice system. Lynn has published extensively and serves on the Editorial Boards for Journal of Research in Science Teaching, Journal of Museum Management and Curatorship and Afterschool Matters. In 2006 she was recognised by the American Association of Museums (AAM) as one of the 100 most influential museum professionals of the past 100 years, and in 2010, she received the AAM Education Committee’s highest award, the John Cotton Dana Award for Leadership, recognising her work to promote the educational responsibility and capacity of museums.
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So long as a dedication to public service is its driving force, a museum can be a good one in an almost infinite number of ways... In everything museums do, they must remember the cornerstone on which the whole enterprise rests: to make a positive difference in the quality of people’s lives. Museums that do that, matter – they matter a great deal.

Stephen E. Weil, 2002

The discourse of my article is threefold:

1. To describe the socio-cultural context of museums (and learning!), using the data from the survey to support these ideas.
2. To advocate for museums as social learning spaces well suited to interaction and meaning-making among visiting groups and facilitation by other visitors and staff.
3. To argue that museums consider themselves well-positioned to support social outcomes by being of value at the level of the individual, group, community and society.

I focus on the socio-cultural dimensions of the museum experience as a lens in which to understand who visits museums and why, and importantly, who does not visit and why. The socio-cultural context of museums arrives with the visitor and is embodied within the institution itself. Although research demonstrates that visitors use museums to meet personal needs, these needs vary greatly, as does a person’s knowledge of how and why a museum could meet those needs. Beyond an individual’s personal needs, there are also the collective needs of communities and societies, for instance, to preserve heritage or educate one’s citizenry within a democratic, civil society. These collective needs also shape personal and societal perspectives on the roles and affordances of museums. Two questions arise for me:

1. How can museums support the socio-cultural resources, identities and motivations that groups bring to the experience?
2. Can museums learn to be of value to individuals, groups and society by framing their activities within the fabric of people’s lives, needs and community?

By acknowledging themselves as social learning spaces, museums may better be able to be of value.

MUSEUMS AS SOCIETAL INSTITUTIONS

Examining the cultural dimensions of the museum experience, particularly why some people use museums as rich community resources for personal learning and others do not, is a complex and challenging topic, full of nuance and subtlety, a topic that can evoke strong emotions. As a result, it is inherently difficult to discuss, particularly in a brief article. However, the place of museums within societies is too important a topic not to raise and discuss, particularly in rapidly changing times. However, appreciate that I will only be scratching the surface of a complex and layered issue.

The notion of a societal view of the institution museum is not a new idea. People grow and develop within a cultural milieu that influences their language, customs, values and thought processes. Historically museums were ‘created’ to preserve things deemed by some members of society as valuable and important, worthy of keeping and caring for. From early on in their history, museums also have played learning and educational functions; societies deemed the contents of museums worth knowing and learning about. Depending upon the time and circumstances, people (at least some people) have been invited to take advantage of opportunities to experience the unique objects, specimens and ideas preserved in museums. What has only been explored more recently, though, is the appreciation that since people visiting are from varied cultures and backgrounds, the museum as institution is experienced differently, and perhaps even more importantly, perceived differently by people, too.

These varied public perceptions of museums interact and influence the personal and collective needs of visitors, shaping their expectations of whether these institutions are for them and have offerings they value. For those who do visit, these perceptions influence their satisfaction with the experience. Cultural differences among visitors are further complicated by the fact that the museum itself is a socio-cultural entity, created by people with their own cultural values and biases. The experiences visitors have in a museum can be consistent with the value and belief systems of the museum’s creators, or be at odds with the institution. How ‘museums as societal institutions’ dimension shape, interact and are affected by personal and collective needs is key to understanding why only some people use museums. These perceptions matter as museums in the 21st century attempt to reach out and be relevant to larger numbers of people across the economic and cultural spectrum; it is critically important to honestly...
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It is also important to understand the social nature of museums. Extensive research provides empirical evidence that most visitors to most museums visit with others. In the U.S., UK and Australia, about 60-70% of visitors are families. Another 25-35% of visitors are school groups or adult tour groups; only 5% or less of the visiting public comes alone. The User Survey 2012 shows similar trends in Denmark; only 7% of visitors in the national survey visited alone and 46% arrived in groups of 3-6, although at the Museum of Copenhagen, 63% were in groups. Interestingly, the number of groups of 3-6 has risen but the proportion of larger groups has fallen.

Because most people visit museums as part of social groups, studies show that a large part of people’s attention during visits is devoted to the people with whom they are visiting. Data on what visitors recall from museum experiences many years later consistently indicate that the social aspects of a visit are rarely, if ever, forgotten and, sometimes, are primarily what a visitor does recollect.

Most of the research on the social context of museums has focused on families; however, this is changing. For instance, long under-valued and under-studied, children visiting as part of organised school groups arrive at museum settings with social agendas that can powerfully influence their museum experience. And as observed by Lois Silverman, adult groups also bring their own social agendas. Staff and volunteers who work with groups are a part of the social context as well, as are other museum visitors with whom a group might interact. There is even widespread anecdotal evidence to suggest that some visitors go to museums specifically to meet others, and it is not unusual for museums to offer programmes for singles and young adults; some even host science or history pub nights. Finally, an increasingly important way that museums are attempting to be more interactive and engaging, as well as to reach out to groups who have not traditionally visited the museum, is through programming, particularly efforts focused on families and youth. Museums are also working to support the learning of home-educating families, many of whom use museums regularly and are eager to have more personalised and in-depth experiences. It is also significant that the majority of visitors to the Danish museums in the survey had heard about the museum through their social networks of family, friends or acquaintances.

Socio-cultural nature of learning

Whatever the group, what is important is that the museum experience is, in great part, shaped by the socio-cultural context, both the perceptions of museums as institutions brought to the visit, and the actual on the ground, in-museum interactions groups have during the visit or programme. These socio-cultural dimensions are not independent; they shape and are shaped by each other and play a role in shaping the museum experience, be it in an exhibition or through a programme.

In fact, a uniquely rich aspect of museums is their ability, if designed well and in partnership with their audiences, to tap into the very nature of learning, since socio-cultural factors are key to the learning process. Research shows that learning involves others; we construct meaning by interacting and sharing within these rich socio-cultural / physical contexts. We learn through group interaction, conversations, gestures, emotions, and watching one other. In fact, if we specifically focus on families, they are the very first learning group a person belongs to; a group considered so essential that anthropologists, sociologists and social psychologists refer to the family as an educational institution, without the bricks and mortar.

Our brains are wired to learn through stories and narrative. Intergenerational, school and all-adult groups learn by talking, watching and interacting; even when alone, a visitor is interacting with those who created the experience. At the most basic level, learning is identity-building. Visiting groups use museums to shape and reinforce their individual/collective identity. Our activities should be about them and their needs, rather than the needs of the institution.

We are so wired to learn socio-culturally that I believe museums should be positioning themselves in the 21st century as social learning spaces. Groups bring many assets to their visits: shared background, history and knowledge; for the most part they understand how others in the group learn, their interests, strengths and weaknesses. Most are choosing to be there because they find places like museums interesting and enjoyable. They are settings in which to converse, collaborate and construct their own experience using the objects and activities the institution offers. Visitors make meaning together, ideally in enjoyable and fun ways, what my colleague, Marilyn Solvay, coined, “laughing and learning”.

A research-based approach to intergenerational learning

So how can embracing the socio-cultural nature of museums and learning at the level of visitor interactions help one respond to the question raised earlier: Are museums doing everything they can do, even with their current visitors, to support the socio-cultural resources, identities and motivations that groups bring to the experience? A recent Oregon State University (OSU) research study conducted by Scott Pattison at Oregon Museum of Science & Industry (OMSI) would suggest perhaps not.

In this study, Pattison investigated unstructured interactions between staff and family visitors to OMSI, the many unscripted conversations and
interactions that occur regularly between staff and visitors, which likely represent the most common type of staff-mediated experience in museums. His early review of the literature showed a dearth of research on this topic, with only two notable exceptions: a mixed-method study of zoo educators\(^\text{20}\) and a qualitative study of living history museum interpreters.\(^\text{21}\) Findings from both of these studies indicated that the ways in which staff facilitation interacts with the socio-cultural context of family learning is important to understanding the nature and outcomes of these interactions.

This study was framed within everyday social interaction and sociolinguistics literature. Such research has rarely been applied to the study of behaviour and learning in free-choice settings but offers insights into the rules and patterns that govern everyday interactions and likely shape unstructured staff-visitor interactions.\(^\text{22}\) Findings highlight the importance of opening sequences such as greeting, the negotiation of roles and relationships, and nonverbal communication.\(^\text{23}\)

Pattison inductively coded and analysed 63 videotapes of unstructured staff-family interactions in two lab spaces at OMSI. The analysis highlighted the importance of role negotiation between staff and adult family members, particularly during the initiation of interactions, the balancing of staff and visitor facilitation, and the introduction of new learning goals by staff members. Aligned with prior research on family learning in museums, adult family members played a critical role in shaping the nature of the interactions and determining the level of involvement and the success of staff members. Four themes emerged from the qualitative analysis:

1. Staff-visitor interactions in these settings are complex social encounters, defined by ongoing role negotiation.
2. The opening greeting and role negotiation strongly influenced the nature of the interaction.
3. Adult visitors played a critical role during interactions with staff.
4. The physical context of the interaction affords and constrains the negotiation of roles between staff and visitors.

Study findings highlighted unstructured staff-family interactions as challenging contexts for front-line museum educators, with adults in families playing a strong role even in the presence of museum educators. Adults used a variety of strategies to maintain and support their role as learning facilitators for their families; in most cases, it was clear that there were tensions between staff and adult perceptions of who was “in charge” and what the focus of the experience was to be. Very few staff members even introduced themselves and they seemed to have an implicit idea that their job was to teach science to the family, often directing their attention to children in the family and not respecting that in many cases facilitation was already underway, either directed by adults in the family or in a few cases by children.

The findings reinforce much of what we know from studies of family learning in museums more generally. Prior research indicates that adult visitors come to museums with identities, motivations, and goals of their own, including for many a desire to facilitate learning for other family members.\(^\text{24}\) which shape the nature and outcomes of their visits. However, in a very concrete way, this study demonstrates that even though the field knows this, its efforts to facilitate family learning for the most part are still focused on the museum meeting its agenda, in this case to teach science, rather than respecting and supporting the agenda of the family itself, which was sometimes aligned with the museum’s but sometimes was focused on other equally appropriate outcomes: encouraging creativity, exploring together or discovering something new. The science centre in this case was missing the opportunity to support and build upon the socio-cultural resources, identities and motivations that families were bringing to the experience.

Fortunately, Pattison is a Research & Evaluation Strategist on the OMSI staff, and so in partnership with museum educators, he has shared his findings and they have begun implementing facilitation strategies that recognise and support the unique role that adults play in family learning at OMSI. In particular, they are focusing on approaches that leverage the deep understanding parents and caregivers often have of their children’s knowledge, interests and prior learning experiences, as well as adult family members’ natural inclination to facilitate successful learning experiences for their families. They are also encouraging designers, exhibit developers, and front-line educators to work together to create learning environments that take into account the role of educational staff as they attempt to support family learning in respectful ways that leverage the ongoing interactions of families, appreciating in many cases that the design of the physical context may be just as critical to supporting successful staff-family interactions as the strategies used by front-line educators.

AN APPROACH TO THE DANISH CONTEXT

I believe that a similar approach could be used to tackle a problem presented in the User Survey 2012. A major finding in the study is that youths & young adults (14-29) are significantly underrepresented in relationship to the rest of the sample of users and they are dissatisfied with school visits. Interestingly to me also were the three lowest scores in core services:

1. A lack of variety in museums’ learning opportunities (7.6).
2. Decreased suitability for children (7.5).
3. Little possibility for active participation (6.7).\(^\text{25}\)

I wondered if these low ‘experience’ scores could be contributing to less use by youths and young adults, as well as their dissatisfaction with school excursions.
I should acknowledge that this is not a Danish concern only. Although children consider museums interesting places to visit in order to see and learn about ‘cool’ things, in the U.S., the UK and Australia, children consistently say they prefer to visit with family rather than school.24 In these studies, children indicated that they often prefer to visit museums with their families because they get to look at more things of interest to them personally; they get to ‘do’ things, and can talk to their families about what they are doing and seeing.25 It is perhaps not surprising that as a result, research indicates that visiting museums as a child with one’s family correlates more highly with adult use of museums than visiting with a school group.26 Research also demonstrates that children want purpose, choice and ownership in their visit and opportunities to be actively engaged.27

My major recommendation for improving interaction with schools would be to better tap into the socio-cultural needs of the children and youths themselves. Perhaps one could rely less on school administrators and teachers to design school visits. Talk to users directly; 14-18-year-olds could be great advisors. Also taking the literature into account, try to design experiences with real purpose by creating meaningful before, during and after visit experiences so that the museum visit is needed and valued by the students because it serves a purposeful function, just not a day away from school. Some museums in the U.S. are requiring a commitment from teachers that the museum visit will be used in meaningful ways; strategies include letting children design their visits, offering lengthier, deeper experiences and multiple visits.

THE SOCIAL VALUE OF MUSEUMS

The second question I raised revolves around whether museums can learn to be of value to individuals, groups and society by framing their activities within the fabric of people’s lives, needs and community. The discussion of public value is in the air among museums and other cultural institutions as they strive to achieve strategic impact for and with their communities, rather than merely operational impact for themselves. At the most basic level, it is about ensuring that their work is fully and meaningfully connected to the fabric and true needs of the communities in which they reside and the audiences they serve. It is important to recognise that public value is not a new concept for museums. Public museums in the U.S. in the late 19th and early 20th century were founded with missions of supporting public good. John Cotton Dana, a progressive educator and museum director who founded the Newark Museum in 1909 as a resource for the working people of Newark, believed to his core that museums should be useful to their communities or not exist.28 More recently, the U.S. Institute for Museum and Library Services (IMLS) annually makes awards for museum excellence utilising as a principal criterion, a ‘commitment to public service through exemplary and innovative programs and community partnerships’.

On the surface, approaches to accomplishing public good may seem to be only nuanced and subtle differences from what museums have always done, but like Pattison’s family learning research, the results are actually quite different and profound. Taking a community-centred approach focuses an institution on achieving strategic impact for the community, rather than operational impact for the institution itself. This distinction is important because unfortunately even with the best of intentions, starting from the perspective of the institution can result in activities that an institution thinks the community needs (or portions of the community at least), often leading to the conclusion that what the community needs most is a healthy and vital museum! This is a circular and self-serving argument. A healthy, vital museum is a means toward accomplishing public good, rather than the end goal itself.

The elephant in the room, of course, whether the field is willing to admit it or not, is that many museums are not as relevant to their communities as the professionals who work within them care to think. However, not to paint too bleak a picture, the truth is that many museums are grappling with how to be more intentional in terms of planning for, initiating and documenting public value, value defined by the community and its needs, rather than from the perspective of the institution. Strategic efforts that start from a community perspective reframe and use ‘why’ and ‘to what end’ language in describing the activities being undertaken by the museum. The major question that an institution needs to answer when planning strategically for public value from a community-centred perspective is: ‘How will my community be different in positive and recognised ways because the museum exists and undertook this effort?’ Sub-questions that can help one reframe and strengthen activities through this lens of community impact include:

- Who is/are the primary audience(s)? Why have you selected them?
- What specific needs or wants of the audience are being met? How do you know?
- Have the ‘right’ people been involved in planning from the outset?
- How will the audience benefit from the planned activities? How will you know?
- How will the community as a whole benefit from the activities? How will you know?

To successfully achieve public value requires a long-term commitment to continually engage and listen to the community, but the pay-offs for the museum, and most importantly, for the community, can be huge and highly gratifying. For instance, in an effort to reach the ‘less usual’ suspects, museums increasingly are investing in the creation and imple-
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For young adults, the opportunity to explore new roles, perspectives and identities within the family, as well as learn new things about family members. There was evidence that interests that young adults developed within the programme were carried over into the family context, resulting in shared family interests. Programmes also influenced young adults’ contributions and connections to the larger community, fostering a tolerance of other people and cultures, and cultivating a sense of civic responsibility. Interestingly, research also shows that even though many of these programmes, even family ones, primarily focused on the children in the group, they positively influenced adults in the families individually, as well as the family as a whole. For example, summative evaluation studies of family programmes indicate that, in some cases, these programmes have enriched family relationships to some degree, changing not just what adults and children did together at the museum, but also how they interacted and communicated at other times, providing valuable opportunities for children and adults to engage in positive learning experiences together, something not offered in other parts of their lives. These programmes also often helped adults understand the importance of supporting their children’s learning and boosted their confidence, as well as provided tools for them to be successful at this task. The major innovation of such programming has been to involve participants in the activities of the museum in meaningful and productive ways, with an approach that is not merely exhibition-focused.

ADDRESSING GENDER ISSUES

Findings from a retrospective research study I recently completed with Dale McCreedy at the Franklin Institute Science Museum, demonstrate that these impacts can be long-lasting as well. Starting in the 1980s in the U.S., funders including the National Science Foundation (NSF) began supporting informal science education programmes for girls, many of them occurring in museums. Evaluation work had shown that well-designed and implemented programmes offer rich and engaging experiences that often inspire girls and women in science in the short term. However, we wondered about their long-term impacts.

With funding from the NSF, we were able to pursue this line of inquiry. Our goal was to investigate whether girls-only, informal science experiences had potential long-term influences on young women’s lives, both in terms of science and more generally. We wanted to explore a broad variety of impacts; not only the important yet fairly typical science education and career outcomes, but also changes in girls’ interest, engagement, and participation in science-related leisure pursuits, hobbies, and ways of thinking about what science is and who does it. We wanted to consider how, and to what degree, young women’s participation in informal science communities influenced their self-identity, including science, gender, cultural identity, and their ultimate relationship to sustained interest, engagement and participation with science.

This was not an experimental or quasi-experimental study. Appropriate to the participation and engagement goals of many informal STEM programmes for girls, we used a socio-cultural lens to frame the study and approached most of our data collection from a qualitative perspective. Since this was a retrospective study to explore possible long-term impacts (5-20+ years) of informal STEM experiences for girls, this was a study of girls who were most likely to have been influenced. We felt that it was a place to begin since we know so little about long-term impact. Research participants (174 young women) were recruited from six successful girls-only programmes whose focus was to engage girls, particularly girls from traditionally under-served communities, in free-choice/informal science education practices.

We conducted three investigations:

2. A web-based questionnaire developed using the data from the PMM study.
3. Group conversations and the development of stories about girls’ informal STEM programme experiences and their perceived impacts.

We analysed the questionnaire data; three clusters of outcomes emerged:

1. Participants formed long-lasting memories of their experiences in the programmes.
2. Programme experiences influenced women’s attitudes toward and understanding of science, shaping future education, careers, leisure pursuits, and ways of thinking about what science is and who does it.
3. Participation in these programmes helped to shape women's personal identities and their life trajectories.

First, these programmes were highly memorable, and memories of these experiences were critical resources in these girls’ stories about their lives. Findings confirmed that these experiences were not only salient but, in some cases, powerful, as evidenced by the detail, diversity and emotional quality of the memories and stories women shared (memories were equally detailed and salient whether the young woman had participated 5 years or 20 years before). Young women recalled engaging in hands-on activities, trips, outdoor experiences, and specific skills and practices such as learning to be a facilitator at a museum. Young women also had strong, positive memories of the community of people with whom they interacted (mentors, programme leaders and peers); many girls were advised, mentored and supported long after they participated, particularly important to the young women who pursued science careers.

Years after the women could look back and say definitively that these experiences made significant contributions to their lives, both in the area of science and beyond. For some, science experiences were important to career choice. They discussed how participation had increased their understanding, appreciation and enjoyment of science. For others, the programme helped to build a sense of competence and a desire to teach or lead. Programme participation also supported participants’ interest in science and their appreciation for the diversity of disciplines and practices embodied within it. Many discovered that science was interesting enough to merit continued focus through reading, television or hobbies.

In addition to these outcomes, women perceived that participation positively influenced their personal identity and agency, social capital, networks and skills, and commitment to civic engagement. Some women also felt that the programme had contributed to an increased sense of agency – including increased self-confidence, self-esteem and aspirations. Women also discussed changes in their identity – changes in trajectory, interests, sense of self – both in science and more general. There were also outcomes such as increased awareness, recognition and pride around gender and race-ethnicity-specific issues: “I received support and motivation, which I did not receive from others. The programme gives young girls an opportunity to participate in activities schools do not offer. It helps girls set aside any stereotypes set for women in the field of science and engineering.” Noteworthy, these programme effects – both science impacts and more general impacts – were particularly significant and impactful for girls living in urban areas when compared to those in suburban areas (unfortunately the sample size for rural girls was too small for statistical comparisons).

Recognising the complexity of documenting learning, particularly long-term learning, it is important to remember that the focus of this study was to determine how participation in these programmes contributed to women’s long-term understanding of science, and most importantly to their relationship to and with science, so it is critical to reinforce that these programmes alone were not the reason for these impacts; participation in them contributed to these impacts. There was rich evidence that young women’s experiences in these programmes were not isolated, but connected to their activities at school, home and in other free-choice learning settings and programmes.

SHIFTING NEEDS AND VALUES OF THE PUBLIC

These research findings demonstrate the role that museums can play in supporting lifelong learning and public good, resulting in powerful, lasting effects. It also points to opportunities for partnerships that connect experiences across youths’ lives. Continuity was very important so helping youths (or the audiences you are working with) to see your programme as one step in their learning trajectory is important. Although there is no doubt that the six programmes from which young women were drawn for this study were successful, they are not unlike other programmes offered by museums and community-based organisations elsewhere in the world. And although this study focused on young women, I am certain that similar outcomes would result for young men or co-educational programmes.

At the core of this example is the ability of the museum to understand the shifting needs and values of the public they hope to serve. In the 21st century, museums no longer have the ‘luxury’ of dictating top down what the public should receive; no longer can the museum expect that one approach, one label, one type of experience will satisfy all.

Successful museums in the 21st century will be those who figure out how to develop long-lasting, meaningful relationships with their public; that means thinking of those they serve as assemblages of individuals and not as some undefined, mass ‘public’. The successful museum will be an institution designed to provide a specific public with something of worth that they desire. A number of museums would argue that they exist to serve their community, that they are there to support civic engagement and to build social capital, but how many museums have made the effort to actually go into the communities they serve, or would like to serve, and ask them directly what it is that they really need, and then deliver on that need? This approach is starkly different from strategies used in the past, when priorities were set on the inside by a small group of individuals who felt they knew what the public needed; without the benefit, of course, of ever actually communicating with the people they claimed to be serving.
Arguably, the museum community’s strongest public role in this new age is the recognition that, despite the wide variety of museums, all are essentially institutions of public education – particularly if we take a broad, 21st century view of learning and what it means to be a public education institution. People who come to museums do so, to a greater or lesser extent and often subconsciously, to engage in meaning-making, the fundamental core of learning and being human – to wonder, consider, question and/or to discover something about themselves, their companions and their place in the cosmos. Collectively, museums have an unfathomable number of resources – points of connection of unlimited possibility. Individually, they are found in all kinds of communities, proudly embraced as community assets.

Does this mean that museums should never try to expand visitors’ horizons and challenge their thinking? The answer is obviously no. Museums will continue to be mission-driven with goals of their own. The museum agenda is no more, and no less important than a visitor’s agenda; for true value to be achieved, both agendas need to be satisfied, and ideally, if possible, connected like a bridge. Museums invest a huge amount of their resources getting one side of the bridge “right” – the objects, the scholarship around those objects, the design of the exhibitions and programmes, the skilled staff to interpret these ideas. However, most museums invest relatively little time and resources understanding the other side – the needs, interests, priorities, expectations and capabilities of the visitors and potential visitors who make up their public.

Perhaps the key to maximising the impact of an institution lies with finding that ‘tipping point’ which intellectually nudges individuals to actively engage with important topics, ideas and behaviours that are just beyond their current awareness. The nudge cannot be too small nor can it be too hard; and just to make matters more challenging, it is not going to be the same for every visitor. However, as the findings from the retrospective study demonstrate, these ‘nudges’, if created within an environment that feels safe and culturally relevant, and, if possible, includes knowledgeable and supportive guides, can result in major impacts. One of the most common outcomes the women in this study reported were changes in awareness – about science of course, but also about one another, themselves, the adults in their lives and the role of museums and other free-choice learning environments.

How to find this tipping point, the personalised ‘nudge’, that will make a difference in the lives of individuals in our communities? To accomplish this, we need to work more diligently at two levels. First, we must reshape institutional goals to make them more compatible with what we currently know about visitors’ experiences in our institutions. Think of the work at OMSI where they are acknowledging and respecting both the strengths and weaknesses of their museum as a learning institution and trying to make changes that respect and honour the resources families bring to their institution. It means taking seriously the importance of the identity-related needs and expectations that visitors arrive with; all of which involve learning at some level, but many of which sublimate learning to more social, emotional or aesthetic considerations.

In summary, I am arguing for a radical shift from traditional museum practice. This approach challenges the notion of the museum as authority and the visitor as learner and suggests a process through which the strengths of both are the basis for co-learning and the development of new knowledge and understanding – knowledge producing processes. The museum becomes a learning resource for all, including the staff working there, and takes on new meaning through this dynamic use. Whether the goal is fostering more frequent visits or building community, the world outside the museum’s walls is experiencing dramatic change. The societal institution of museums needs to join in or I believe sadly be left behind. There is a fleeting opportunity for museums to embrace not just new ways of thinking about who they are – both internally and externally – but a new vision of how to engage and interact with their communities.
Endnotes


5 Museum of Copenhagen, local user survey 2011.

6 Jensen & Lundgaard, 2013.

7 Rosenfeld, 1979; Rosenfeld, 1980.


26 Jensen, 1994; Birney, 1986.


