Museums as Learning Spaces: Exploring Trainee Teachers' Attitudes to the Value of Museum Visits as Learning Experiences for Children

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"Learning is experience, everything else is just information." Einstein (1879-1955)

INTRODUCTION

There can be little doubt that museums are unique and experiential spaces for learning (Dewey, 1928, cited in Hein 2004). However, the relatively few schools that regularly make visits to museums suggests that many teachers may be unaware of their potential to enrich children's learning and experience. Nichols (2014), in her article as guest editor of the Journal of Museum Education, identifies Initial Teacher Education (ITE) as the missing part of the museum/ school partnership. Similar views have been expressed by Talboys (2011) who suggests that museums as an educational resource, should be included in ITE curricula. He recommends the development of partnerships between museum professionals and lecturers who recognise the values of museums and galleries.

A partnership initiative between, the Faculty of Education at Liverpool Hope University and the Museum of Liverpool's Education Team was designed to introduce ITE trainees to the potential of museums as spaces for contextual and experiential learning. Both partners were also keen to discover the barriers to museum visits. This collaborative project provided opportunities to maximise impact through aligning the strengths of professionals from

► Key Point

Cross-institutional, experientially grounded partnerships are key to harnessing the potential of museums as rich learning spaces.

both institutions in order to introduce museum pedagogy at an early stage in a teacher's learning journey. This notion supports the rationale of the initiative: to connect with and inspire a greater number of trainee teachers by including museum learning as part of their compulsory programme of study.

THE PROJECT

One hundred and eighty students, all undertaking their Post Graduate Certificate in Education (PGCE) at Liverpool Hope University, were scheduled for a two-day intensive programme, **Museums as Learning Spaces**, at five National Museums of Liverpool venues. Trainees were introduced to the kind of experiential learning that children might encounter while on a museum visit. Workshops and activities were then introduced to demonstrate how these experiences could be embedded into school curricula as an enhancement and extension of the learning.

Trainees' attitudes towards the course were investigated using pre- and postprogramme questionnaires, employing a range of open ended and multiple-choice questions. The questionnaires focused on whether trainees could see the potential for developing experiential and contextual out-of-school learning (specifically in museums) across the curriculum. Items were designed to uncover potential barriers to museum visits and to gain information that might assist the museum education team with improvements to its provision for schools. A random sample of seventy-five trainees was selected to complete the questionnaires out of the 180 students who took part in the course.

RESULTS AND DISCUSSION

Questionnaire data indicated that the partnership between the Museum of Liverpool and Liverpool Hope University resulted in a programme that made a positive impact on ITE trainees' attitudes toward museum visits. This in turn offered the possibility of increasing the frequency of school visits to museums, due to improved perceptions of the quality of learning that might take place.

Trainee Experience and Expectations of Museum Visits, Pre- and Post-Programme

The research sought to discover the expectations of trainees towards a museum visit and if these changed following their participation in the course. The data indicates that before the course, although 76% of the trainees had made a visit to a museum in the past year, they did not have clear notions of what this could bring to their practice. A significant number of the trainees (86%) saw value in museum visits, characterising them as stimulating and interesting, but few expanded on this in relation to their professional practice. Twenty-four percent of the trainees felt that a visit would be expensive, boring and/or irrelevant.

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Before participating in the University Museum partnership programme, the majority of teacher trainees did not recognise the pedagogical value of a museum visit. Following the programme, a substantial 94% of trainees said that their expectations had changed (Figure 1). The quality of this change is reflected in the comments made in answering this question.

Pre-programme: "It will be boring and there won't be anything of interest or relevance to me."

Same trainee post-programme: "I feel more confident to bring a group of children to the museums and I didn't realise how much they could learn here."

Before the programme most trainees only appeared to connect the museum with learning if a multiple-choice question was specifically posed to them that directly related to school. After the project their qualitative answers became more focused on learning without prompting.

Pre-programme: "Interesting, interactive."

Same trainee post-programme: "Interactive and practical learning experiences - role play, dressing up. Historical skills - interpreting evidence and artefacts."

Moreover, they appeared to recognise that enjoyment/engagement was part of the learning process and not a separate entity. These findings correspond with similar research by Kisiel (2012), who studied ITE trainees in informal science settings. He found that the students changed their perceptions of such sites to develop a deepened pedagogical understanding of the learning potential in relation to their own practice.

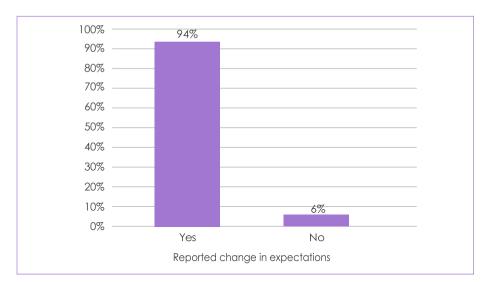


Figure 1. Percentage of teachers reporting pre-post course changes in expectations.

Post-programme comments were also more closely connected to trainees' professional experience than those in the pre-project questionnaire, which tended to be more vague and generalised. This shift perhaps reflects the active, experiential nature of the learning activities that brought trainees together through various workshops involving personal scenarios, group work and role-play. Statements were made such as:

"Kinaesthetic (hands-on) learning, resources, access to artefacts, interactive, engaging, stimulating learning environment."

"Learning outside the classroom consolidates learning and puts it into a real life context."

Key Point

The experiential nature of the partnership programme, grounded in active learning opportunities (e.g. personal scenarios, group work and roleplay), brought the theories of Dewey and Vygotsky to life for trainees.

It could be, as Wunder (2002) suggests, that experiences of museum learning brought the theories of Dewey and Vygotsky to life for pre-service teachers, increasing their understanding of pupil centred learning activities (Chin, 2004). In doing so, they were more able to link previous knowledge of learning theories with good practice and find synergy.

Barriers to Museum Visits

Prior to the project, the trainees were able to identify several positive features associated with out of school visits, with 80-91% labelling them as "memorable",

"fun" and "rewarding" for pupils (Figure 2). Fewer trainees (56%) appeared to recognise the learning potential inherent in these activities when given a range of answers to choose from. However, when probed further with a multiple choice question directly asking what a museum visit could offer them as a teacher - and with three out of four answers specifically relating to learning, thereby giving cues - 100% of trainees identified outcomes specifically relating to learning.

A number of negative aspects of out of school trips emerged as barriers. Almost half the sample anticipated that these activities would be stressful, 39% feltit would add to their workload and 16% stated that behaviour management could be an issue. 48% also felt that the cost could be prohibitive. These attitudes appear to be in line with those of teachers in schools. Indeed, research consistently indicates that concerns over children's behaviour could be a barrier to off-site visits. Other barriers were health and safety, time away from curriculum, financial cost and teacher workload (Griffin, 2007; OFSTED, 2008).

Key Point

Trainees identified a number of barriers to museum visits:

- Increased workload
- Heightened stress
- Managing Behaviour
- Cost

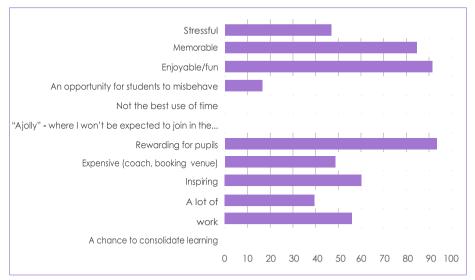


Figure 2. Teachers' pre-project attitudes towards learning outside the classroom.

However, research also shows how schools have been able to overcome barriers because they value the experience for pupils in terms of learning, personal development and motivation. Indeed, helping offset anticipated barriers against potential benefits through collaborations between teachers and museum educators might have considerable impact (Griffin, 2007). Lemon and Jarvis's (2014) research highlights the importance of engaging with art galleries during teacher training "to allow pre-service teachers to experience and understand the importance within their teaching and educational contexts" (p.28). Their survey captured perceived changes in the beliefs of trainees about the role of visits to art galleries once exposed to a visit. Results from this research also indicate that giving trainee teachers authentic, experiential learning opportunities in order to experience the pedagogical value of a museum visit, could persuade them that potential barriers are worth overcoming.

IMPLICATIONS

► Key Point

Embedding experiential museum learning opportunities into teacher training can have asignificantimpact on trainees' views of the value of a museum visit and persuade them that anticipated barriers can be effectively addressed.

Before participating in the programme, 46% of trainees indicated that visiting a museum with their class was "most likely" (Figure 3). Following the programme this figure increased markedly to 74%, with 99% of trainees indicating that a visit was more than just likely (Figure 4). When comparing pre-post responses it is clear that having experienced the programme, trainees felt they were more likely to take groups of children to the museum. This is a significant result in terms of the aims of the programme and indicates that cross-institutional, experientially grounded initiatives can increase the likelihood of school visits to museums.

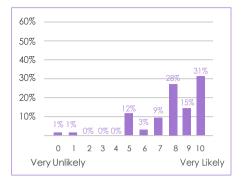
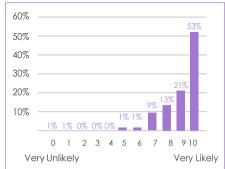


Figure 3. Pre-project likelihood of bringing a group to visit a museum.

Figure 4. Post-project likelihood of bringing a group to visit a museum.



The developing partnership between professionals from the Museum of Liverpool's Education Team and Liverpool Hope University's Teacher Education Programmes has shown that the objectives of different institutions can be met through the collaborations of committed professionals. Similar projects have taken place with the following year's PGCE cohort and with Year 3 of the BA QTS programme, and in both cases results have indicated an improvement in ResearchinAction 17 trainee perceptions of the value of museum visits. It would, however, be useful to explore whether the change in attitudes translates into actual visits once trainees take up positions within schools; this could be followed up with further research.

In order to strengthen the existing provision and outcomes for museums, universities and schools, the results of this project indicate that positive and proactive partnerships should be established and sustained.

REFERENCES

Chin, C. (2004). Museum Experience – Aresource for science teacher education. *Journal of Science and Mathematics Education*, 2(1), 63-90.

Griffin, J. (2007). Students, teachers and museums: Towards an intertwined learning cycle. In J. Falk, L. Deirking & S. Foutz (Eds.), *In principle, in practice: Museums as learning institutions* (pp. 31-43). Rowman, Altamira.

Hein, G. (2004) Learning in the Museum. New York: Routledge.

Kisiel, J. (2012). Introducing future science teachers to science beyond the classroom. *Junior Science Teacher Education*, 24, 67-91.

Lemon, N & Jarvis, S. (2014). Perceptions of pre-service teachers' value of art museums and galleries. *Journal of Museum Education*, 39(1), 28-41.

Nichols, S. (2014). Museums, universities and pre-service teachers. *Journal of Museum Education*. 39(1), 3-9.

OFSTED (2008). Learning outside the classroom: How far should it go? Retrieved January 14, 2015, from http://www.ofsted.gov.uk/resources/learning-outsideclassroom.

Talboys, G. K. (2011) *Museum Educator's Handbook*. Hants, England: Ashgate.

Wunder, S. (2002). Learning to teach for historical understanding: pre-service teachers at a hands-on museum. *Social Studies*, 93(4), 159-167.