

Facilitating museum to classroom connections: How designing museum activities transformed teachers' ideas about informal educational resources

Camellia Sanford
Learning Research and Development Center, University of Pittsburgh

Introduction

Many teachers are skilled at supporting student learning in the classroom. Yet information about some of the successful ways to reach students in settings like museums is not often sought out by teachers because they either do not have access to that information or do not think that findings regarding students' informal learning apply to them (Griffin, 1994; Kisiel, 2005; Bamberger & Tal, 2005).

Melber & Cox-Peterson (2005) stressed the importance of making teachers aware of the resources available in museums that can support classroom instruction. Exposure to museum learning and theories can empower teachers to identify a wider variety of "teachable moments", adopt more flexible pedagogical strategies, and be better prepared to bring their students to an informal institution (Anderson, Lawson, & Mayer-Smith, 2006). Therefore, it is important to make the connections between learning in the classroom and learning in museums explicit to the teachers who are engaging with these educational resources.

This research project examines changes in teacher knowledge and perceptions, regarding how informal institutions can be relevant to their own classroom, as a result of their participation in a summer course. In particular, this study looks for evidence of interdisciplinary connections between the teacher's formal experiences and their ability to integrate informal opportunities into their practice.

Research Questions

- Does teachers' understanding of informal learning strategies and their perceptions of educational resources change as a result of their participation in a museum-centric course?
- What aspects of the course resonated most with teachers?

Research Context



In Summer 2007, a six-week course, Building Bridges Between Museums and Schools, was taught as part of a Masters in Teaching (MAT) program. Teachers met twice a week to discuss the implications of informal learning research for their own practice.

Sessions were also held at local museums. Education staff at each location provided information about their museum resources. At the end of the course, teachers developed their own educational programs that included both museum and classroom components.

Methods

Participants

14 Pre-service elementary and secondary school teachers

Procedure

On the first and last days of the course, participants filled out questionnaires regarding their thoughts on learning and their role as a teacher in a museum. They also discussed beneficial elements of the course and activities they thought could be improved. Their answers were grouped into common themes.

Findings

Changes in Teachers' Understanding

After participating in the course, many of the teachers said that they now understood learning resources inside and outside of the museum, the educational and philosophical connections between museums and the classroom, and how to plan for and design their own field trip activities.

Topics Teachers Mentioned Learning From the Course *	Percentage of Teachers Who Mentioned
Gained knowledge of museum resources	57%
Formed connections from museum to classroom	50%
Emphasized planning/logistics	43%
Learned how to develop meaningful educational experiences	43%
Made new museum contacts	14%
Found out how to assess students beyond simple worksheets	14%

* Based on teachers' open-ended responses to the question, "what did you learn from this class?" Many teachers gave more than one answer to this question.

The following examples illustrate the two topics teachers mentioned most when discussing learning from the course:

Gained knowledge of museum resources

"In this class I learned how to design and implement a truly meaningful class visit to a museum utilizing resources made available by those museums that I had no idea existed before this course. Museum visits are powerful ways to enrich curriculum and should be made as enriching as possible. The resources made available by the museums themselves to ensure beneficial visits by schools are things that I will always continue to look for when planning a museum visit." -Teacher #5

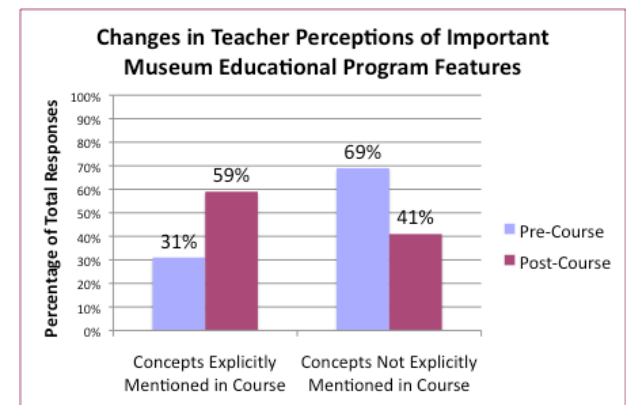
Formed connections from museum to classroom

"[I learned] how to design an educational program to bring together the formal setting [classroom] and the informal setting [museum]. I also learned that museums have defined programs that tie into standards." - Teacher #12

Findings, cont.

Changes in Teachers' Perceptions

Before participating in the course, most teachers believed that museum educational programs should include novel materials, hands-on interactives, and opportunities for student interaction, as well as be relevant, challenging, enjoyable and age appropriate. These concepts were not explicitly discussed in class.



After participating in the course, teachers' perceptions shifted to incorporate findings from informal learning research. These ideas included forming explicit classroom connections, designing rich activities before and after the visit, visiting a venue multiple times to deepen the experience, coordinating more with experienced museum educators, providing free or limited choice activities, following students' interests, and using more open-ended assessment tools. All of these concepts were frequently discussed during class.

Beneficial Aspects of the Course Identified By Teachers

- Visiting local museums
- Learning about museum resources
- Making new museum contacts for future collaborations
- Creating an educational program linked to a museum visit
- Being introduced to the concept of informal learning

Recommendations for Future Course Iterations

- Balance information that caters to teachers' practical museum visit concerns with theoretical frameworks that explain the mechanisms behind those visits.
- Make teacher roles explicit. When is the lens of the formal educator required? When is the viewpoint of the museum visitor appropriate?