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**Views of Improving The Preparation of Social Studies And  
History Teachers: Involving Preservice Teachers With History  
Museums**

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*This paper proposes that preservice and inservice teachers be afforded opportunities to acquire skills in teaching social studies through utilization of museum resources. Reform requires collaboration among experts in teacher preparation and museum education and may entail that (a) students in social studies methodologies courses frequently visit a museum and prepare innovative lessons; (b) preservice teachers work as history museum apprentices; (c) teacher educators and museum educators offer workshops in content and pedagogy to prepare teachers to use museum resources.*

Important changes in approaches to preparing social studies and history teachers are currently being conceptualized by postsecondary programs in teacher education. Current approaches suggest a more active role for teachers and students in constructing knowledge. Reform is taking place in social studies pedagogy, intent on cultivating content area knowledge in the form of local to global studies of societies, cultures, and history as well as the procedural knowledge involved in "doing history," a catchy phrase that describes the process of understanding the past through active research, critical thinking, and handling artifacts that have survived from the past (Western Reserve Historical Society, 1995; Levstik & Barton, 1997).

This reconceptualization of teachers' and students' roles requires that social studies and history teachers be prepared to teach students by using ideas and methods central to professional pursuits related to social studies and history. Historians view history as dynamic and understand that interpretations of historical knowledge transform, particularly when previously silent voices of history are heard. However, the concept of a dynamically changing interpretation of history, as presented in history museums, is often not familiar to school teachers. History, as taught in schools, is often a static review of textbooks, as opposed to being an interdisciplinary inquiry where historical events are explored for personal and social relevance and where a collaborative construction of the meaning of historical events is brought to light through transactions with historical materials. Teachers and students must ask the fundamental question, "How do we know what we know about the past?" (Noting deficiencies in textbooks, see Ravitch and Finn, 1987.)

Preparation of teachers needs to be undertaken by university faculty in education departments in collaboration with trained professionals in social studies areas, such as demographic researchers and actuaries, geographers and cartographers, political analysts, historians, and museum personnel. Teacher preparation programs must emphasize methodologies that teachers may employ to communicate to students that school learning is connected to life beyond school and that learning social studies and history will enable students to acquire cognitive skills that will be needed in adult life to pursue rewarding careers, raise families, and participate in society with a sense of personal and social responsibility. (See Goodlad, 1984; Houston, 1990, Newman and Wehlage, 1995; Tye, 1990.)

This profound curricular and methodological contrast needs to be addressed in the professional development of preservice (undergraduate and graduate students not yet certified to teach) and inservice (certified) teachers. Preparing teachers to teach through inquiry, interaction, utilization of community resources and teacher-developed resources requires collaboration among experts in teacher preparation and practitioners of allied social studies and history professions, particularly museum educators. (See Beninati, 1991; Chancellor, 1989; Chenoweth, 1989; Pahl, 1994; Peters, 1994; Punske, 1992; Robinson, 1991; Schlene, 1992; Shamy, 1991; Siebert, 1989.) Preservice teachers must experience museum learning situations which are similar to those which they are being trained to bring to their students. This approach to postsecondary education will prepare teachers to meet changing federal and state curriculum standards. (For example, see Ohio Department of Education, 1994; also Wilson and Sykes, 1989.)

Museums provide a rich environment for stimulating interest in historical topics and connecting history to the real world. Oral histories, artifacts, visual images, and live actor recreations bring alive the social, political, cultural and economic narratives found in textbooks. Student visitors of all ages and their teachers collaborate to tie local history to US and world history. They work as historians do to form questions, research answers, and share ideas. This innovative approach stresses that teachers and students acquire procedural knowledge for historical research, critical thinking, and interpreting artifacts.

This paper will address some problems noted in preservice teacher education and review various programs which have offered potential solutions through collaborative teacher enhancement and that promote more involvement of education majors with museums.

**Preservice Teacher Education: Problems and Needs**

It appears that major concerns exist in the preparedness of preservice social studies and history teachers that necessitate reform. A brief review of traditional social studies instruction may describe the national context of this problem, although more specific enumeration of practical concerns will appear below.

Goodlad's (1989) study of 27,000 students and school personnel revealed the status of social studies instruction at the elementary, junior high, and secondary school levels. Goodlad reported that elementary teachers sampled spend an average of 2.8 hours per week on social studies instruction. Upper elementary students reported that social studies is the subject that they like the least, find the most difficult to learn, and view overall as only moderately important. At the junior high level students rated social studies as very difficult, not that well liked and only moderately important. Secondary students sampled did not find social studies to be quite as difficult as their younger counterparts did but they disliked social studies and rated it as not very useful or important. While 35% of the elementary sample liked social studies very much, this figure dropped to 25% of high school students.

Goodlad noted two paradoxes in social studies instruction. First, while the topics covered in the field of social studies appear as though they would have great human interest (e.g. exploring different cultures, experiencing the anguish of war, investigating current events, envisioning the lives of many of the world's most glorious and infamous people, and marveling at the ingenuity of technological invention) these topics lose their appeal in the classroom. The authentic human character is removed and social studies is reduced to lists of names, places and dates for memorization. Textbooks repeat information with overwhelming sameness and their tone fails to capture the sense of real people, real lives, real times, real places and real conflicts. Rote learning fails to teach students to compare and synthesize information or to find personal meaning in historical events.

Second, the teachers in Goodlad's study endeavored to teach the basics of US history, map reading skills, and library use. Teachers recognized the need for higher level reasoning, cross-cultural understanding, group work and class discussion, but generally relied on worksheets, quizzes, and reports prepared for the teacher as sole audience and evaluator. Therefore, students did not experience ownership and complex thinking.

The authors of the present paper have been involved in teacher preparation and have determined that the following five problems are of importance.

1. **Preservice teachers lack content knowledge.** Students enrolled in undergraduate elementary school social studies methods courses whose academic concentration is not in social studies lack sufficient content knowledge in areas such as local and state history, world history, United States and world government, multicultural studies, and geography. While these preservice educators may be eager to explore innovations in curriculum and instructional design, their desire to improve elementary level pedagogy through the use of authentic learning experiences can't possibly compensate for their lack of history and social studies content knowledge. Perhaps due to a limited history curriculum when they were in school, they tend to equate history with military history and equate social studies with instruction in civics and government. Many students have never had the opportunity to study the history of topic they may be interested in, such as theater, mathematics, or music. Further, they do not have an understanding of how to improve their own content knowledge through experiences other than by reading history books, which many students seem unmotivated to do. These students need exposure to resources that will acquaint them with stimulating information about history and social studies. Options might include museum visits, museum internships, travel, volunteerism, service learning, political activism, and working with local history resources, such as community historical societies.
2. **Preservice teachers lack pedagogical knowledge.** Students enrolled in undergraduate secondary school social studies methods courses appear to have a somewhat better content knowledge of history and social studies. However, these preservice educators do not have experience in providing active, relevant learning experiences for students. These college students appear to be entering the teaching profession with a text-based approach to teaching. They have significant gaps in knowledge about how to lead students in an inquiry-based approach that utilizes hands-on learning and that teaches through the use of historical objects. These preservice educators need to experience authentic instruction (Newmann and Wehlage, 1995) and then learn how to design lessons that reflect the principles of authentic instruction (see Appendix 1 for a description of these principles). Preservice educators need to

experience authentic pedagogy and design lessons that reflect its principles.

3. **There are currently few programs of internship in museum education nation wide geared to education majors.** Given successful experiences in elementary or secondary level methodologies courses, well-qualified upper division undergraduate and graduate students need to be offered a chance to apply their strong skills in both social studies content and authentic learning pedagogy to teaching in a museum education setting. Internships need to be offered in conjunction with an upper division or graduate level independent study course. Students may gain valuable experience that they will be able to apply when they enter the teaching profession.
4. **Museum educators may have no forum for ongoing contact with education professionals at the university level.** It is important to acknowledge historical museums which have more involvement in teacher education programs than just situational contact related to academic research. Ideally, museum education staff need an opportunity to interact with faculty experts in social studies, curriculum and instructional design, special needs, and reading/language arts in order to offer a more well-rounded, meaningful, and accessible program to students of varying ability levels and to prepare better resources for teachers to use with their students prior to and after museum visits. Education majors who join museum staffs as student interns may also provide a link to curricular aims of preservice teacher education programs. Interns are distinct from staff in that they offer diversity in ideas and perspectives. They bring fresh ideas from their university coursework and field experiences that can enhance the meaningfulness and relevancy of a museum's educational programming. It is also important that interns be offered the opportunity to enhance their knowledge of content area and/or instructional design by creating units for an authentic audience, that is, teachers who utilize museum resources. Students can contribute units and lesson plans that teachers can use to teach social studies and history using historical objects and community resources. This assignment is of far greater purpose and value than if students merely designed units to hand in to a professor for a grade. Students are motivated to excel so that their units can be used by teachers.

**5. Inservice and preservice teachers have little knowledge of how to utilize the resources of history museums to teach social studies.**

There is a need for workshops on teaching and learning social studies in collaboration with history museums. This will provide for ongoing professional development of practicing teachers and create a forum for sharing the perspectives of preservice teachers, inservice teachers, and museum educators. Profound curricular and methodological contrasts can be addressed in the context of opportunities for professional development for preservice and inservice teachers.

**Improving Practice**

Several programs have improved teachers' practices and students' learnings by providing teachers with the opportunity to use museum methodologies in diverse areas of the curriculum. Perhaps the best known is the Harvard Graduate School of Education's Project MUSE (Museums Uniting with Schools in Education) which was developed by intelligence researcher Howard Gardner, author of *The Unschooled Mind: How Children Think and How Schools Should Teach*. Gardner maintains that museums stimulate, animate, and motivate students partially due to the fact that museums go beyond the verbal and logical learning that is dominant in the classroom and provide connections to visual, kinesthetic, emotional, and imaginative aspects of learning. Students who are unsuccessful at traditional classroom tasks may find rewards in the interdisciplinary, hands-on, experiential learning offered by museums (ASCD, 1997).

Several museums can be credited with extensive and successful museum education programs. The USS Constitution Museum in Boston, Brigham Young University Museum, the Rochester Museum and Science Center, the Lawrence Hall of Science in Berkeley, the Buffalo Museum of Science, the Franklin Institute Science Museum in Philadelphia, the San Francisco Exploratorium, the Boston Museum of Science, the Chicago Museum of Science and Industry, the Western Reserve Historical Society and the Great Lakes Science Center, both in Cleveland, and the Hudson River Museum in Yonkers all promote teacher training that provides purpose and context for students' museum visits. Teachers work with museum educators from these sites to design individualized programs that interface with ongoing curricula. Students are prepared for the visit by their teachers based on the teachers' discussion with museum staff and use of pre-visit materials sent by the museum. Museum educators maximize students' opportunities for



hypothesis testing, observation, hands-on learning, participation, social interaction and discovery learning. Knowledge gained during the museum visit is revisited later in the classroom, either as increased content area knowledge or as improved procedural knowledge, such as methods for carrying out historical or scientific research, applying art techniques, and/or stimulating reflection on thinking and learning, sometimes through the use of post-visit materials and experiences offered by the museum (ASCD, 1997; Ohio Schools, 1997; Ramey-Gassert and Walberg, 1994).

Reports of university-based programs collaborating with museums note common aims of school reform, renewal of spirit for inservice teachers, and comprehensive and innovative preparation of preservice teachers. A consortium of eleven museums in Massachusetts has been funded by the National Science Foundation to provide inquiry-based summer institutes for teachers and school year follow up programs. The New York Hall of Science, supported by the Fund for the Improvement of Postsecondary Education, has improved access to teaching careers for women and minority students by providing them with a paid field experience as “explainers” at the museum. A college seminar connected their practical experience with coursework. Participants’ positive outcomes of this experience included increasing confidence in working with children, increasing hands-on teaching ability, securing teaching or museum jobs, and improving attitudes toward science.

The National Science Foundation has sponsored a similar project at the Museum of History and Science in Louisville, wherein pairs of first year teachers and veteran mentor teachers work as a team and both divide their time by spending part of their week teaching in their co-taught classroom and part of their week teaching in a museum. The aim was that participants improved their knowledge of resources for participatory learning. A ten-month teacher-in-residence program, also underwritten by the National Science Foundation, has been initiated by the Oregon Museum of Science and Industry, offering a sabbatical leave to teachers who work as museum educators then conduct summer institutes for teachers and ongoing inservice when they return to their home districts.

The Tsongas Industrial History Center, a museum and education center in Lowell, MA, is a cooperative venture between the National Park Service and the University of Massachusetts-Lowell which provides integrated curricular programming to 40,000 school children annually. Exhibits are all hands-on workshops on industrial history, science, and

technology topics such as water power, textile weaving, immigration, invention, and factory automation. The Tsongas Center sponsors frequent teacher workshops and annual summer institutes (see Hanlan, 1996).

Since 1987, math, science, and social studies teachers have formed an Educators Advisory Board which actively contributes to the design, development, and operation of the Tsongas Center. While many museums work with teacher groups, this is the first known example of a teacher group that has built an interactive history museum from the ground up. The Educators Advisory Board connected all of the center's programs to the Massachusetts standards for teaching social studies. University of Massachusetts-Lowell faculty consult on pedagogy and methodology.

Copenhaver (1994) reports on a program at Southern Illinois University at Carbondale which resulted in history teachers increasing and changing their use of museum resources. The Mandel Teacher Fellowship Program at the United States Holocaust Memorial Museum provides intensive summer institutes (NCTE, 1997). Zilversmit and Reed (1993) engaged 40 teachers in a summer immersion workshop with college-based historians. Portfolios and journals revealed teachers gained greater understanding of history as a discipline and acquired innovative teaching methods. In another instance, preservice art teachers collaborated with an art museum to enhance participants' multicultural visual literacy (Sandell, 1994). (See also report by Hammonds, 1994.)

In some ways science education has led the way for social studies education to emulate. Inquiry-based Learning and Teaching: Mathematics and Science through Museum Collections was an 18-month project funded by the Eisenhower Program and Ball State University. This research project involved faculty and classroom teachers in the exploration of object-based learning in order to make classroom instruction more inquiry-based. Twenty-nine participants in a summer workshop used museum objects on loan from the Smithsonian to explore ways of engaging students in thinking like mathematicians and scientists. Activities that faculty and teachers developed are available at <http://iwonder.bsu.edu>.

Ramey-Gassert and Walberg (1994) report that evaluations of school-museum partnerships in science education have concluded that museum visits are most beneficial when directed learning objectives are a part of the visits, especially those objectives that are met by activities

that are hands-on, participatory, and that encourage social interaction among students. (See similar information on the attraction of concrete, high-interaction exhibits for museum visitors in Boisvert and Jochums-Slez, 1995.)

Overall, it appears that teacher enhancement programs involving museum components are most successful when coupled with curricular review, when training can be offered at no or minimal cost to schools or teachers, when teachers become familiar with the content of museum resources, and when teachers are given access to technology that their schools lack (Ramey-Gassert and Walberg, 1994).

#### **Outcomes for Students**

While it is difficult to assess learning in somewhat informal situations such as museums, there are reports of a number of positive outcomes for students of teachers who have experienced collaborative ventures with science museums. Assessment conditions are difficult to replicate but typically include observations of students, interviewing, and testing of task-specific learnings. Students have scored better on a measure of inferential thinking related to ecology, showed positive capabilities in manipulating objects, had better attitudes toward science, exhibited intrinsic motivation for learning due to enjoyment coupled with understanding, and expressed a desire to take responsibility for their own learning apart from curriculum requirements and textbook content (David, 1995; Dow, 1993; Ramey-Gassert and Walberg, 1994; Rennie, 1995).

Students involved in the Smithsonian Institution's Museum-in-Progress said that learning about history in a hands-on, problem solving approach was superior to reading books. Positive reflections by elementary school students described the excitement they felt while building a walk-in model of an Egyptian pyramid. They commented on the diverse ways they had to perceive and process information to become initiators of a project rather than receivers of information (Koetsch, Daniels, Goldman, and Leahy, 1994). David (1995) found that significantly more teachers who participated in a school-museum partnership involved their students in science instruction activities than nonparticipating teachers. Students of trained teachers were found to have greater understanding of and interest in science. Rennie (1995) reports that school and science museum partnerships increase student understanding and interest in science. Soren (1993) discusses similar attitudinal effects for art appreciation and multicultural awareness when students participate in school and art museum collaboration. A writing

workshop developed for secondary students by the Smithsonian Institution used museum visits to stimulate exploration and thinking that generated topics for student writing (Marshall and O'Flahavan 1995).

There appears to be a need for more in-depth educational research on outcomes for students in museum settings. The National Science Foundation has funded two studies exploring this learning phenomenon, one by the Indianapolis Children's Museum to examine how children learn in museums and how exhibits can be designed to support learning, and another study sponsored by Lesley College on constructivist learning in museums as informal learning settings. (See also Vallance, 1979 on assessment of learning variables in non-traditional settings.)

#### **Utilizing the Models**

Given the five main problems facing social studies teacher educators and given the description of the successful programs to date, it seems that the following suggestions might define how teacher preparation programs and museums might join forces.

1. **Coursework in social studies methodologies might incorporate field visits to museums.** In an exploratory course, preservice teachers interact with a museum's education staff and observe how school age children and their teachers who visit the museum are taught by museum staff primarily through artifact analysis and critical thinking. As school age visitors interact with museum objects and inquire about their relevance, they are learning that the material goods of a culture are often pertinent in explaining the historical issues which they have encountered in their history texts. Participants in the exploratory course might incorporate object-based learning about history into lesson plans that can be shared with and implemented by school teachers. These plans would offer suggested lesson content to be used prior to, during, after, or instead of a museum visit. Coursework would touch on allied areas, such as using literature to teach social studies, adapting social studies content to the needs of special education populations, and overall familiarity with pedagogical concepts that support object based and inquiry-based methodologies.
2. **Graduate students who are either preservice or experienced teachers might apprentice at a museum.** The apprenticeship will emphasize a restructuring of the apprentice's approach to social studies by exposing him or her to the teaching methodologies in use at the museum and, what is more important, by providing for ongoing

dialogue with museum professionals about the process of interpreting historical events through artifact analysis in ways that are engaging to learners. The apprentice could participate in the development of museum exhibits and would create curriculum relevant to the exhibits for implementation both in classrooms and at the museum. The apprentice will deepen his or her understanding of how to enrich and integrate curriculum in history by exploration of other content areas, including children's literature and concrete experiences such as art, music, or movement.

3. **Universities might collaborate with history museums to provide enhanced professional development workshops for preservice and inservice social studies teachers as well as for educators who teach social studies content as part of their curriculum in areas such as language arts, reading, or art.** Participants can be given the opportunity to learn how the professional study of history is approached as well as study how museum exhibits are designed around cross disciplinary content or themes. This background knowledge about museums that can help teachers engage students in the study of history through an interactive, inquiry based approach that utilizes community resources.

Teachers attending the workshops may also become involved in artifact analysis and inquiry activities. By taking on the role of learner, teachers attending the workshop would be given the opportunity to examine alternative ways of exploring history. Teachers would be given exposure to learning as a way to prepare them for teaching.

#### **Outcome Evaluation**

During field visits, apprenticeships, or workshops, students might keep a journal of their experiences and write a final outcome essay. These writings can be reviewed by teacher educators and museum staff to analyze the strengths and weaknesses of the experience. A brief survey can be given to participants in an attempt to assess their views of the experience. Participants might be phoned one year after completion of their experience to determine whether attendance influenced teaching practices. An effort can be made to determine whether students who participate in field placement or apprenticeship are especially marketable to employers. It is anticipated that the content of student writings and teacher surveys would be suitable data on which to base research about a program's effectiveness.

### Conclusions

There does not appear to be a comprehensive body of information that can guide preservice teacher education faculty and museum educators as they design programs for preservice and inservice teacher enhancement. This paper has attempted to define some of the problems in the preparation of social studies teachers and describe how innovative museum education programs might be a resource to utilize to improve teacher preparation in history and social studies.

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