A Technology Enriched Approach to Social Studies Preservice Education in Project MiddleData

MiddleData project, a PT3 study, at North Carolina State University is based in standards based teaching and learning. Teaching in the middle grades programs are facilitated by data driven decision-making and integration of computer technologies. This paper will focus on the modeling and the development of technology portfolio components in the Social Studies methods and materials course for pre-service teachers.

MiddleData as noted on the project website, http://ced.ncsu.edu/2/mga/middledata/main.htm, addresses the issue of the relative decline of American students' academic achievement compared to the rest of the industrial world as they enter the middle school years. Hence, goals for the MiddleData project include facilitating standards-driven reform of North Carolina State University's middle-grades teacher preparation program, improved technology and data-driven decision-making skills, improved integration of technology in core curricula, and increased exposure to diverse classrooms and master teachers. Activities in the project will include course redesign and subsequent faculty modeling of data driven decision-making and integration of advanced technologies. Also included will be teaching portfolio development and proficiency certification. Preservice teachers will receive robust and diverse field experience including interactive observations via real-time videoconferencing technologies.

The Fall 2004 Social Studies methods and materials course is based in the national and state curriculum standards for middle grades social studies.[1] Students began the semester with an examination of these standards. In addition to the content area standards the preservice educators were expected to understand and work with the national and state technology standards.[2]   The curriculum and technology standards are the underlying structure for assignments and related coursework. This is a shift from the previous year. Technology portfolio development was explicit within the middle grades program however was not an overt expectation within any one course. This shift occurred due to the MiddleGrades project and a change in the instructor of the course.

In order to model data driven decision-making in the course, students were given a pre-test regarding their technology knowledge and comfort levels. The pre-tests administered in the first week of class to the eighteen students were tools developed for the research by Dr. P. Hycy Bull (2003) in his study of preservice secondary social studies teachers. The data collected included the "NC Basic Technology Competencies for Educators- Modified" and the "Teachers' Attitudes Toward Computer" surveys. The students will also be administered these instruments at the end of the methods course as well as at the end of their student teaching practicum to examine change in attitudes, if any, toward technology over time and with classroom experience. This paper will discuss those findings as well as the qualitative observations found in the reflections, assignments and video taped observations of the class throughout the semester.

This change to a technology enriched approach to social studies methods will be examined by both the quantitative survey instruments as well as the qualitative observations. The focus of this study will contribute to the growing research in social studies technology use. In addition it will contribute to the literature regarding preservice education and instructional technology integration. The research will help better understand the attitudes of preservice teachers regarding technology use in a specific content area as well as across multiple content areas. Technologies explored include: internet resources, WebQuests, video creation using iMovie, multimedia production, Inspiration digital image processing, ethics and legal issues surrounding computer and other technology uses in the middle school classroom.

References

Bull, P. H. (2003). From the computer lab to the classroom: a case study on the nature of technology integration in a social studies methods course with preservice teacher. Retrieved Oct 15, 2004, from http://catalog.lib.ncsu.edu/web2/tramp2.exe/authority_hits/A07evkoc.001?server=webhome&item=2&hitlist_screen=hitlist_standard.html.

North Carolina State University, (2004). retrieved Oct 15, 2004, from Project MiddleData Web site: http://ced.ncsu.edu/2/mga/middledata/main.htm.

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[1] National Social Studies standards can be found on the National Council for Social Studies website: http://www.ncss.org. North Carolina Social Studies curriculum standards can be found on the following website: http://www.ncpublicschools.org/curriculum/socialstudies/.

[2] National Technology Standards may be found at: http://cnets.iste.org/ and North Carolina Technology Standards for preservice educators may be found at: http://ced.ncsu.edu/teachered/technology.html.