Bridging the Digital Divide through Technology Integration in an Urban Elementary School: A Study Report

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Teachers who possess strong content knowledge and embed technology across all aspects of their teaching as a central means of creating active, engaging, and challenging learning communities have the potential to close the perennial gap in achievement between students in urban schools—who typically are members of minority, and often lower socioeconomic, groups—and their counterparts elsewhere (Children’s Defense Fund, 1999). Statistics show that children of color in urban environments have fewer opportunities to access technology than their Caucasian counterparts of comparable income (Hoffman and Novak, 1998). Further, Caucasian Americans are more than twice as likely to own a computer than their peers of color (Hoffman and Novak, 1998). Even when children are placed in schools with computer technology, children in urban environments tend to engage in drill and practice activities rather than more meaningful activities which entail higher order thinking (CEO Forum, 1999). This finding may be due in part to teachers’ feelings of inadequacy regarding effective technology use (NCES, 1998). NCES (1998) reports that only 20% of teachers feel well-prepared to integrate technology into their teaching.

In an effort to ease the digital divide, faculty and staff from the Schools of Education (SOE) and Library and Information Sciences (SLIS) at the University of Wisconsin-Milwaukee (UWM) and faculty at Starms Discovery Learning Center (DLC) in the Milwaukee Public Schools (MPS) forged a collaborative effort to address three key issues: teacher preparedness, technology availability, and technology integration. Students and teachers participated in a community-based project designed to narrow the digital divide through increasing students’ knowledge of the local community and civil rights movement via the construction of a multimedia documentary.

Subjects in the study were kindergarten through fifth grade students in an inner city school, 80% of whom qualified for free or reduced lunch, 80% of whom were African American, and 20% of whom had disabilities. In other words, children who, due to their race, socioeconomic status, disability, and location of residence, are the very children who are typically excluded from enrichment programs such as the one herein. Teachers received staff development in various technologies and consulted with technology staff regarding the conceptualization of classwide projects which integrated technology. Students used digital cameras, digital video cameras, scanners, and various software tools to learn and share information about the civil rights movement in their city.
and nation. Information was obtained through traditional print resources as well as interviews with notable public activists, prominent local individuals, and neighborhood families, visits to the Black Holocaust Museum, and presentations by journalists who documented and archived the civil rights movement. Teacher and student attitudes, skills and beliefs surrounding technology were surveyed via questionnaire, interview, videotape, and worksample review.

The proposed presentation will discuss the projects and share findings, including student technology projects.