Chapter 8

Mobile Technology in the Classroom

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EXECUTIVE SUMMARY

Today's educators must deal with a tremendous gap between how students live and how they learn. While technology is a vital part of most students' lives, their schools frequently fall critically behind in utilizing these emerging technologies for educational purposes. As new technologies become available, educators have tried with varying degrees of success to incorporate these technologies into the curriculum. Individual computers in classrooms were tried first and while they have shown themselves to be beneficial in the classroom, their applications are limited. Computer labs have also proved to be problematic in terms of cost and their availability is limited by scheduling issues. Laptop computers have addressed a number of the problems associated with desktop computers, but there are still many issues which limit their effectiveness. Mobile handheld technology is the latest evolution of personal computing and it has demonstrated that these new devices have the power to transition occasional, supplemental use of computers for instruction to more frequent use allowing educators to make them an integral part of the curriculum.

BACKGROUND

With headlines calling for improvements in public education becoming an almost daily occurrence, our schools are under a great deal of scrutiny and it is no secret that they have serious challenges in a number of areas. They must contend with crime, drugs, student apathy, absenteeism, lack of parental involvement, and in

some cases self-serving teachers, administrations and unions that frequently put their own needs above those of the students. Scores on national achievement tests indicate that students are not performing as well as many would like and far too many either drop out of school altogether or graduate without the skills necessary to prosper in our modern world. These problems, and the unfavorable publicity that they generate, inevitably lead to calls for drastic changes in our current educational system, but what form should these changes take? In the article *Get Cell Phones into Schools*, Norris and Soloway (2009) point out that the curriculum currently followed in most U.S. schools is antiquated and does not meet the needs of 21st century students (Norris & Soloway, 2009). They point out that the basic framework of our current curriculum was designed by a select committee at Harvard University in the late 1800s and reflected their thoughts on what curriculum would best prepare students to attend Harvard College at the beginning of the twentieth century (paragraph 4). Obviously, 21st century computing skills did not figure into this equation and neither did most of the skills our students need in order to function and prosper in our modern society. Nevertheless, "U.S. K-12 schools are still shackled to the fact-focused, information-transmission pedagogy of that 1892 curriculum." They go on to add that emphasizing memorization as a key element of the curriculum made sense in earlier times when printed materials were scarce and information was difficult to find but in our modern society where a Google search gives you access to vast quantities of information in seconds, these skills have become considerably less important. Problem solving, analysis, communications, and the ability to work well with others are fast becoming the new skill sets most desired by employers.

Public education sees new programs introduced regularly to address what some have termed our failing schools but many questions remain about what types of changes will lead to increased student performance. While these programs are well intentioned, some are not founded on sound educational principles and many lack proper planning. Frequently we see new educational initiatives proposed with lofty goals but soon it becomes evident that sufficient thought was not given to the unintended consequences of these actions. A good example of this is the *No Child Left Behind* initiative which was signed into law in 2002. While the goals of the legislation were admirable, the results have been incredibly disappointing. This legislation was passed as an example of how politicians could solve problems in a bipartisan manner but soon after the law went into effect, the problems began to surface. It was noted in the May 21, 2007 edition of *The Nation* that "high profile Republicans are expressing their disenchantment with NCLB, while many newly elected Democrats are seeking a major overhaul as well" (Darling-Hammond, 2007). Sponsors of this bill neglected to address the root causes of inequities in our educational system and ignored the fact that students are all different and they learn and progress at different rates. Forcing every student in the United States to

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