Handhelds as an Assessment Tool

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The No Child Left Behind Act (US Department of Education, 2002) emphasized the importance of accountability in education and moved issues related to assessment into the forefront in the field of education. The CEO Forum Report (2001) also emphasized the need to focus technology resources on assessment and accountability of student achievement. Additional pressure for improved accountability developed from growing numbers of professional and state standards and the revised NCATE accreditation standards that emphasize assessment over the last several years (2000). At the same time, Stiggins (2002) noted little emphasis on assessment in the preparation or professional development of educators. Teacher educators and administrators are facing the challenge of being held accountable for student learning at the same time as technology offers new potential for managing assessment and evaluation. Using technology to manage and deliver assessment can involve replacing a traditional tool with a new one. It also can involve new ways of thinking about assessment. Given mobile and networked technologies, teachers and administrators can now assess student performance, report and retrieve data, and adjust instruction “on the fly.”

The National Education Association (2002) asserts that the most effective type of assessment is that developed by the classroom teacher. Ongoing, continuous assessment allows teachers to give immediate feedback to students, to modify instruction, and to determine what skills or concepts should be addressed. In an ideal world, the educator would have the time and resources to assess, report, and modify to meet students’ needs. But time and money are both short. The growing paperwork and data entry required by increased assessment demands have added to the burden of the classroom teacher. Teachers’ weekends and evenings are filled with grading student work and completing required reports on performance indicators.

The convenience and low cost of handhelds have attracted the attention of educators interested in developing effective assessment tools and procedures. While hundreds of educational software programs for handheld computers offer to help teachers organize and manage lesson plans, design rubrics, and assess student performance, a review of the literature to date reveals a significant lack of research or information on the effectiveness of using handheld computing to assess student performance. Educators just learning how to use their handhelds to help them teach and evaluate are faced with long lists of software programs offering to make their jobs simpler and more productive. A wide variety of freeware, shareware, and commercial teacher utility programs offer solutions for grade tracking, assessment, lesson planning, and student records. Simple quiz generators such as Quizzer offer quick feedback of student understanding. Spreadsheet programs such as Quicksheet or Sheet to Go provide a bridge to gradebooks and provide continuous and convenient records of student achievement. Database programs such as HanDBase, ThinkDB, and FileMaker Mobile can assist educators with recording and sharing data and creating reports.

This symposium offers an overview of how handhelds can assist educators by demonstrating a variety of solutions, ranging from simple student generated tests to school and district management programs and by discussing the advantages and disadvantages of using handhelds for assessment and accountability.

References: