

Palm Education Pioneers: Examining the Potential of the Handheld Computer

Handheld computers are showing up in classrooms across the country as school systems are searching for relevant technology that is affordable, versatile, and portable. The Research Center for Educational Technology (RCET) at Kent State University in Ohio has been investigating the use of handheld computers since the Center became a research hub under the Palm Education Pioneer (PEP) Project in May 2001. The PEP Project was sponsored by Palm Inc., and administered and evaluated by SRI International. The PEP project was designed to investigate the following questions:

- How can handheld computers in the classroom improve teaching and learning?
- What educational activities do handhelds make possible?
- Just as important, what is missing in this new technology?
- How can handhelds be adapted to harness their full potential in the classroom?

As a result of their involvement in the PEP Project, RCET researchers and staff created a CD-ROM titled *Palm Education Pioneers: Examining the Potential of the Handheld Computer*. The purpose of the poster session is to demonstrate the information on the CD-ROM.

Eleven teachers, all alumni of Kent State University's SBC Ameritech Classroom, agreed to participate in the PEP Project. They were each given class sets of Palm IIIc handheld computers (about 300 total). RCET staff provided both technical and curricular support throughout the year. An array of instructional applications emerged as the teachers and students explored together the potential of their Palm handhelds. Teachers soon discovered that a wealth of software exists to support handheld learning and the Palms became much more than personal calendars and information managers.

Three of the teachers who participated in the Palm Education Pioneer Project through the Kent State research hub are featured on the CD-ROM. These veteran teachers have effectively and meaningfully integrated handheld computer technology into their curriculum. The poster presentation will take a look at these classrooms, including the learning outcomes of the highlighted curriculum, the teachers' perspectives on how technology has changed the way that they teach, and how technology helps their students learn. The teachers are eloquent about their reasons for embracing technology at this point in their careers. One teacher is a middle school language arts teacher, the second teaches fifth grade, and the third teaches a multi-aged class of special needs children at the elementary level.

RCET researchers designed an evaluation study of the yearlong project. The study is a preliminary investigation of the implementation of handheld computers in K-12 classrooms by participating teachers who have effectively and meaningfully integrated handheld computer technology into their curriculum. The study utilizes survey analysis to measure both quantitatively and qualitatively students' and teachers' perceptions of their experiences with handheld computers throughout an academic year. The evaluation results can be accessed on the CD-ROM. The presenter will discuss the evaluation

findings and describe subsequent research that is taking place with the teachers and classrooms.

The CD-ROM will be made available at no charge to all those who speak with the presenter and are interested in the topic of handheld technology.