Using Technology in the Primary Grades: An Innovative Educational Pocket PC Project

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The playing field in our nation’s public schools is not level and East Carolina University (ECU) and Newport Elementary are collaborating to change that. All students need access, at home and at school, to the tools necessary to allow them the freedom to academically compete with their classmates, regardless of race or socioeconomic background. School leaders need new technological, pedagogical and financial models to make the field as level as possible. Parents and teachers must be part of a communications team to support student achievement. All children must be given an equal chance. The fact that some have more financial resources does not mean they should have a monopoly on essential learning tools.

Many students lacking financial resources do not have necessary technology in their homes. Small and rural schools do not have proper digital equipment in their classrooms. Students negatively affected by this lack of resources are part of America’s rapidly developing digital divide. Their work is often inferior to those who have access to tools supporting content mastery. Without innovative, knowledgeable intervention by school leaders this situation will manifest itself as low scores on local and national standardized tests intended to measure student progress and academic accountability.

Methodology will be both quantitative and qualitative. Standard instruments will be used to quantitatively measure student progress in mastery of technology and curriculum content. Technological, pedagogical and financial models will be constructed before the study begins and modified as necessary. More subjective qualitative measurements will be use for parental assessment of the pilot.

A grant has been procured to purchase the necessary technology. The teacher, her assistant and selected school leaders have been given Jornadas and are being trained to use them. Kick-off meetings have been held with central office, school personnel, university officials, students and their parents/guardians.

In October, 2001 each student will be given a Jornada equipped with electronic reader, software for word processing, spreadsheet application, email, Internet access capability, a calculator and scheduling/tasking packages for homework and communication with parents. Students will be tested at that time for knowledge of the technology and content related to the North Carolina Standard Course of Study in the areas of reading and writing.

In November, or whenever the teacher believes a pre-determined level of mastery has been met, students will be retested on their knowledge of the technology, and on their mastery of reading and writing. This testing, intervention and retesting will repeat throughout the school year, moving to different content areas once a pre-selected level of mastery is achieved.

Parents will be expected to nightly review a folder on the Pocket PC reserved for them and to stay informed of students’ progress. They will also be required to assess the project. The second graders in this study will be measured against norms established by all second graders in the school. Data will be gathered and analyzed in the late spring and early summer of 2002 and a final report will be produced.