

Utilizing Wireless Pocket-PCs to Promote Collaboration in Field-based Courses

The Innovative Technology Center at The University of Tennessee, USA, is currently facilitating the fourth year of the Wireless Instructional Initiatives (WII) project, an ongoing effort to encourage faculty to incorporate collaborative learning principles and wireless technology, via the existing campus-wide 802.11b/g wireless network, into their teaching. In previous years the project has equipped students with wireless laptops and digital cameras, but during the 2004-2005 academic year wireless Pocket-PC devices, with add-on cameras and GPS receivers, and Tablet PCs were distributed to students in three courses which will utilize the equipment for field-based activities and data collection: food science, animal science, and environmental science (GIS-focused).

Prior to the start of classes, faculty participants from the College of Agricultural Sciences and Natural Resources attended a faculty development institute designed to help them infuse collaborative learning activities and the mobile technology into their course curricula, with a particular emphasis on group projects. The WII team also provided initial equipment training for the students and supplied ongoing assistance and technical support for faculty participants. This year students have been using the devices for a variety of activities including diet analysis, exercise tracking, and GIS data collection, and faculty have begun incorporating student response system and synchronous communication applications as well.

This paper will share experiences and lessons learned from the project, which was completed in May 2005. Data gathered includes pre- and post-course student surveys, faculty interviews, and summative project reports submitted by faculty participants, coupled with ongoing WII team observations.

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Michael Burke is a Technology Integration Specialist in the ITC of the University of Tennessee. His areas of expertise are networks, PC and Mac hardware, PC and Mac software, digital audio and video, Novell administration, projection and presentation technologies and classroom design. Michael holds a PhD in Education and has 15 years special education and counselling experience and 10 years in Instructional Technologies. Some of his research interests include classroom design, student/faculty interaction, student/student interaction, distributed learning communities, web-based instructional applications and human/computer interfaces.



Shane Colter joined the ITC staff in November 2000 as Program Coordinator. His job duties include providing coordination, organization, research, and administrative support for the ITC's business practices, programs, and training operations, in addition to coordination and logistical oversight for specific UT faculty grant implementation project. He currently serves as the coordinator of the Wireless Instructional Initiatives project, a member of the synchronous collaboration tools working group, and as the Program Coordinator for the Educational Technology Collaborative, a systemwide professional development and resource initiative for UT faculty. Prior to joining at the ITC, Shane worked for three years at UT in marketing as the production coordinator for publications, specialty media, advertising, and web-design for University Outreach and Continuing Education. His duties included coordinating various print, media, and web projects; scheduling personnel; overseeing web content maintenance and management; and serving as a liaison with clients and vendors. Shane is originally from Colorado and received his Bachelors of Science in psychology from Colorado State. He also has a background in writing and editing university publications and has pursued graduate studies in law and international relations



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Dr. Julie Little works with faculty and graduate teaching assistants across the University to integrate various computer technologies - from basic applications to multimedia and web authoring - into their teaching practice. In addition, she conducts instructional technology workshops for faculty, interns, and field practitioners. Dr. Little's interest areas for teaching and research include facilitating interaction in the distance education classroom, developing courses for distributed learning environments, and designing effective uses of instructional technologies in the teaching practice.



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