



BENEFITS OF WIRELESS TECHNOLOGY FOR UNDERGRADUATE PROGRAMS

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Many Textiles and Clothing programs face similar challenges, that of rapidly increasing enrollments with larger class sizes and steady or shrinking budgets. Computer facilities many times cannot handle the demand created by expanding use of computers in most classes, nonetheless the increasing demand of burgeoning enrollments. Whereas student computer fees or competitive grants exist for purchase of hardware, funding for costly expansion of the physical computer lab space is scarce. We have found that the use of 12 laptop computers and three wireless hubs, allowing access to College servers and the Internet, has helped us overcome these challenges.

Implementation of Technology

The expandable laboratory

Use of such wireless technology has been beneficial to our program by offering a cost-effective means of creating an “expandable lab” that expands to accommodate larger size classes when needed without the need for permanent, physical remodeling or rewiring.

After-hours learning

After-hours (5:00pm to 8:00am) checkout by students of the laptops (with course specific software installed) allows students to complete projects when the permanent labs may be closed. Checkout of the laptops facilitates group project meetings held in locations such as the library. Checkout of the laptops has also facilitated the development of innovative “field assignments” where students apply course content to “real world” situations. For instance, students use general software to collect customer data at a point-of-purchase location or use industry specific software to make color notations, literally in the field, for design projects.

The portable laboratory

In addition, we placed relatively inexpensive (around \$300) wireless hubs in various locations within the buildings to allow smaller “portable labs” to be easily and temporarily set up using the laptops within classrooms. Convenience is a benefit of these labs. Students simply collect laptops from the computer services office in the building and launch them at the beginning of class without the need for classroom power or Internet connection wires, a tripping hazard of harm to students and the hardware. The easy set-up of the wireless computer technology in classrooms has fostered innovative course instruction. These portable labs also provide the benefit of availability of the larger permanent lab for general student use when smaller classes want to reserve a lab for class instruction.

Effectiveness and Future Plans



The use of wireless technology has helped accommodate varying class sizes using the permanent laboratory, has allowed for more open time for general student use, and led to more innovative course instruction. Having supportive computer services staff, well-publicized capabilities of the technology, and written checkout policies are essential for management of the technology. More wireless hubs and laptops will be purchased with student computer fee funds in the future.