Wireless: Changing Teaching and Learning
“Everywhere, Everyday”

By Carl Berger

O n a beautiful fall day, Maria Jones walked onto campus carrying her usual “stuff.” Stacked in a backpack with a book, a clipboard, and a magazine was Maria’s 7½-by-9-inch “minibook” computer, buzzing merrily away. Rather than buzzing as the result of a reminder that Maria had set earlier, her computer was buzzing because she had come into proximity of and triggered another computer about one hundred feet away, which then sent information about her courses for the day to her minibook. Reaching into the minibook’s plastic button and looked at the exposed flat screen. She noticed that one of her classmates had tapped the “send” icon on her minibook, and then a few minutes later that day. “Whoops, something wrong here?” she thought, looking for a convenient bench nearby. Maria sat down and canceled the screen upward to reveal a full keyboard underneath, which automatically slid open to where she tapped the “send” icon on the screen, typed in a message, used her pen to circle the error on the graph, and then sent it. She tapped the “respond” icon underneath, which automatically slid open to the local network file system and at the end of the class can copy work to their file system for later use.

The most visible of these types of connection is Apple’s iBook and Air-Port. Comments from professors like Andrew Lumpe of Southern Illinois University say it best: “The first semester we brought the classrooms online, we noticed that the students started using them like crazy.” Lumpe highlighted the enthusiasm and the efficiency gains: “They’d be in their iBooks before class, between class . . . they were all coming over to the lab just to use the machines, for all kinds of work related to their program. It was really exciting and invigorating to the faculty teaching in these rooms, because we all saw the immediate benefits. The productivity just went sky-high!” Lumpe added, “The AirPort hub stays in the computer lab, and you can use the technology or enjoy a more traditional teaching environment.”

We often associate the phrase “anywhere, anytime” with the phrase “distance learning.” But most of us realize that in teaching and learning, what works best at a distance also works best on campus and even in the classroom. The above illustrations demonstrate that wireless technology helps make it so.

With such beginning use of wireless, there is a distinct change in the air. For example, a librarian from a public school library in Michigan recently mentioned that some library patrons, possibly the more experienced computer users, were returning the checked-out wireless portables because, they said, the computers weren’t working. The librarian found out that normally spent on connection and speed issues can be spent on the content and processes of learning. Further, connectivity with the Internet also may increase, and student satisfaction with the learning process isn’t hampered by technology support problems.

Cheaper and more ubiquitous wireless chips such as Bluetooth will allow wireless to stretch beyond typical computer and office applications. For example, having a wireless chip in a probe makes remote sensing a realistic laboratory experience even when that laboratory may be a class with students sitting on the banks of a stream as they gather data on dissolved oxygen, temperature, turbidity, and pH. Such ubiquity will allow wireless interaction to truly become the “everywhere, everytime” phenomenon that we could remember from the five letters that would make a difference in the future: “TCP/IP.” Even though higher education computing administrators may sometimes feel depredated, having a small prevalence as they were just a few years ago, perhaps we can assist in the future by whispering the word “wireless” to those companies trying to probe and expand the future of learning and instructional technology and can thus help make that future truly “everywhere, everytime.”

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