


Melding SOUND LEARNING THEORY and Practices

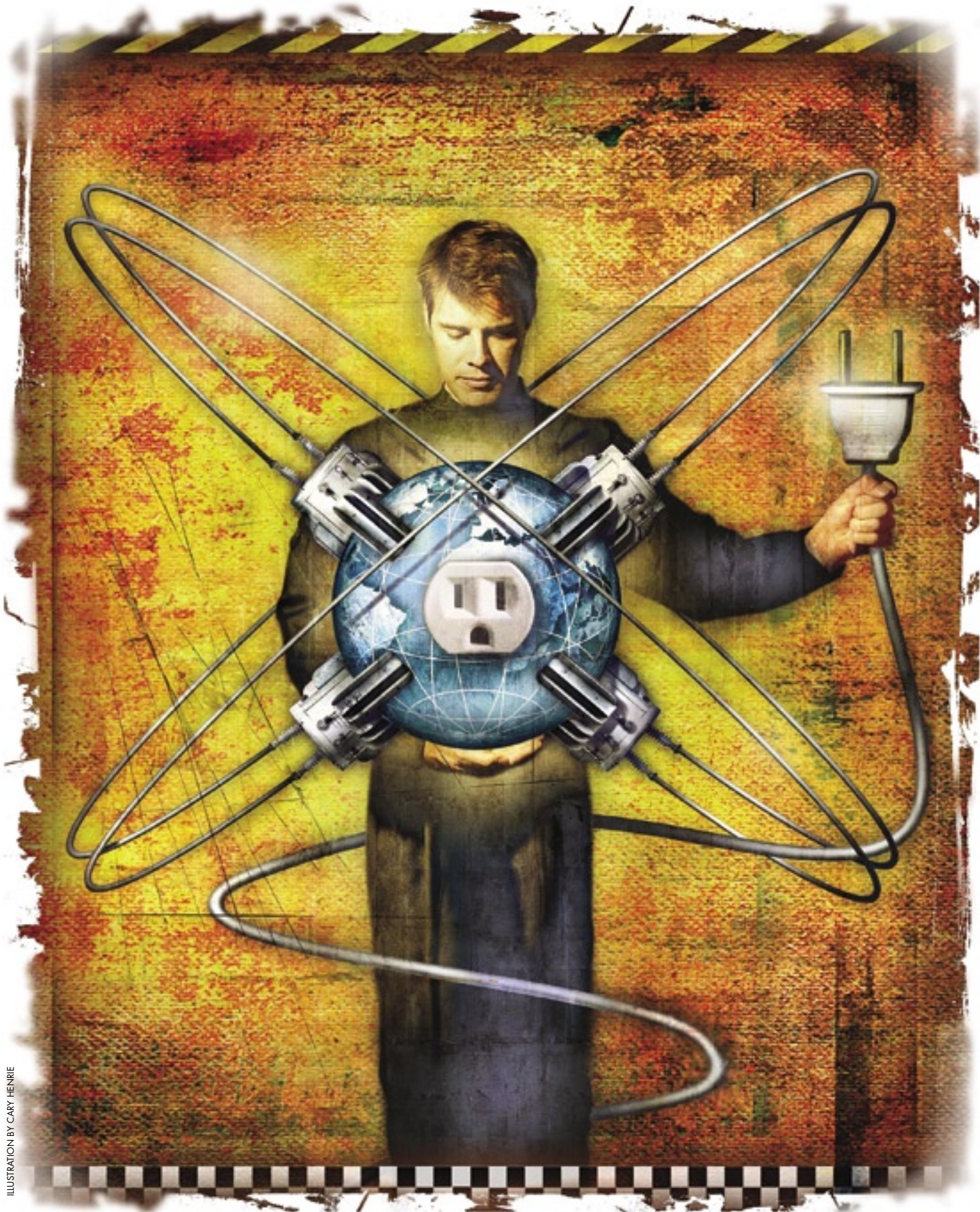
Online learning has become a well-respected alternative to traditional bricks and mortar. Almost every institution of higher education in the United States, and many secondary educational institutions, feature opportunities for students to take courses, if not earn an entire degree, online. Community colleges have been at the forefront of this seminal change in delivery, innovating and exploring new ways to extend their access mission to more and more students.

Increasing access to education is also a central goal of Walden University, which has offered working professionals the opportunity to earn advanced degrees through distance learning for 35 years. Two years ago, Walden University created the Community College Leadership (CCL) program, which enables community college teachers and administrators to earn graduate degrees. This unique program combines the best elements of learning-centered practices with on-line formats. Walden University's CCL program challenges community college leaders to think broadly about the implications of their work. Practitioners are encouraged to critically examine issues from the perspective of research and evidence to design better evaluative frameworks.

Walden's Community College Leadership program now enrolls more than 100 doctoral students representing 35 community colleges nationwide. The online learning format has contributed significantly to the success of the CCL program. Students do not need to leave their current jobs to participate in the program; rather they are encouraged to use their jobs at colleges as laboratories for much of their work.

A Walden CCL doctoral student's current project is a prime example of successfully combining professional work with graduate studies. The student, Ann Beheler, is also the dean of the Engineering and Emerging Technologies Division at Collin County Community College District (CCCCD) in Texas. As part of her dissertation, Beheler is formally evaluating how remote synchronous interactive (RSI) online learning compares with face-to-face traditional classroom learning in technical classes.

Beheler has a strong corporate learning and technology background as well as an academic background. She was previously the director of certifications for Novell and director of product and marketing technology for Raytheon Professional Services. During her tenure in corporate America, she realized the potential of remote synchronous interactive technology (RSI). Beheler used RSI technology for corporate video conferencing and professional 



training for several years prior to implementing the technology at Collin.

Since joining Collin four years ago, Beheler has managed the engineering technology division as well as several major grants. She has used RSI to supplement face-to-face instruction, both academically and with her grant program. In January, she took over leadership of distance learning and the Teaching and Learning Center for the entire district and has begun to expand the use of RSI. This was a natural progression since Beheler has directed the professional development for IT faculty statewide through the Working Connections IT Faculty Development Institute for Texas and is dedicated to professional development for faculty. She is also the primary investigator on a National Science Foundation Regional ATE Center for Convergence Technology.

Beheler realized that as more students pursue learning at a distance it was imperative that community colleges keep pace with technology innovations to provide effective learning for the students. To remain competitive through innovation meant augmenting largely asynchronous distance learning by providing a real-time online environment that supports the dynamics of the live classroom experience. Through remote synchronous interactive technology, she has been able to provide exactly that at Collin.

RSI technology enables any student, anywhere, to connect not just with the lecture class, but also with other students to truly mimic the live experience. Students can ask questions, engage in large-group discussions and have break-out sessions in real time.

Because of her interest in RSI, Beheler designed a pilot RSI project to deliver instructor training through Microsoft's Regional IT Academy, which was hosted by Collin. The pilot was a blended learning class on designing security for Microsoft networks. Twenty-one people participated in the synchronous event using Centra's online learning tool that allowed the instructor to teach the class and the students to interact with one another using voice over IP (Internet Protocol) over the web.



To participate in the program, students just needed a computer, a headset with microphone, and an Internet connection. Because audio is provided through Voiceover IP technology, there were no conference-call fees or long-distance charges. Centra's tool enabled real-time lectures with live classroom discussions among the students and the instructor. In addition, the lectures were recorded and posted for students who could not join a particular synchronous session.

During the pilot project, the instructor had the option to conduct open microphone sessions, where students could ask questions at any time in live discussions as though they were all in the same classroom. The instructor was also able to divide students into different groups, in a synchronous fashion over the Internet, and then groups were able to discuss their findings with the entire class. The synchronous online class also allowed both the instructor and the students to write on a "white board," which is very helpful in technical, math, and science classes where formulas are used and the content cannot be completely expressed in words.

In the pilot class, students participated from all over the country—Florida, Ohio, Pennsylvania, and Hawaii. One student was able to participate while on a trip to Amsterdam. The online class "met" once a week for three hours over the course of

six weeks. At the end of the course, a survey was conducted to determine the effectiveness of the synchronous approach. The results indicated that 70 percent of the students considered this form of blended learning to be a very viable approach for learning.

Through her initial pilot projects, Beheler demonstrated that remote synchronous interactive technology is a promising innovation in expanding educational opportunities. As she continues her study on the effectiveness of RSI classroom activities versus traditional learning, she is becoming more aware of the importance of ensuring that the interactive classes are couched in sound learning theory.

Beheler has been a thoughtful and innovative leader in championing technology to expand access to education, and she will now have the opportunity to evaluate and study the impact of RSI technology in depth. As part of her graduate studies in Walden's Community College Leadership program, Beheler will have the chance to critically examine issues as well as the technology and design evaluative protocols to determine the value and the impact of innovations. Her work at Collin and her work at Walden mesh into creative opportunities in which Beheler observes "my doctoral work is real, and my professional work is more substantive as a result of Walden. Through the program I've gained a better understanding of the importance of grounding innovations in sound learning theory, and I have learned how to design research frameworks to assess the value of these innovations." Beheler's leadership at Collin College, in Texas, and nationally holds a great deal of promise for community college students who will benefit from the RSI technology she has introduced and continues to study.

Terry O'Banion is director of Walden University's Community College Leadership Program.

Ann Beheler, a Walden University student and dean of the School of Engineering and Emerging Technologies at Collin County Community College, contributed to this article.