Book Review

Keith Grant-Davie and Kelli Cargile Cook, Editors

Online Education 2.0: Evolving, Adapting, and Reinventing Online Technical Education

—Reviewed by
MARIAN BARCHILON

Index Terms—Communities of practice, constructivist learning theories, digital transfer, distributed learning, education rubrics, ethos, intellectual privacy, intellectual property, mentoring, mobile applications, mobile technologies, online education, online gaming, online instruction, online pedagogy, scaffolding, social networking, textual sharing, videoconferencing, virtual worlds.

n Online Education 2.0: Evolving, Adapting, and Reinventing Online Technical Education, editors Keith Grant-Davie and Kelli Cargile Cook wondered how online pedagogy and learning have changed and how have faculty, students, and programs evolved over the last ten years.

The main purpose of the book is to explore the following:

- How we have moved beyond theory-building to a more theory-based instruction?
- How online education is responding to a new austerity;
- Why and how are we using the technologies and the technological context (social networking, virtual worlds, or mobile technologies) that exists?

Topics examined include the economic recession in the US and its impact on programming, multimodal course material design, privacy and intellectual property, and faculty development and training. Also included is the first collection's consideration of instructional design topics, such as scaffolding, and of students' abilities to access student services. Familiar deliveries include Blackboard and Design2Learn as well as Second Life and online games.

Manuscript received September 25, 2013; accepted October 13, 2013. Date of current version May 20, 2014. The reviewer is with Arizona State University, Mesa, AZ 85212

IEEE 10.1109/TPC.2014.2311871

USA (email: marian.barchilon@asu.edu).

Book Publisher: Amityville, NY: Baywood Publishing Company Inc, 2013, 332 pp.

The main themes addressed in the text focus on how pedagogical aims should drive the use of technology and how online education is different from face to face (f2f). The 2.0 collection emphasizes what to do when resources are constrained and how to build programs that can be sustained through inevitable changes in resources, personnel, and technology, how to train and mentor full-time and part-time faculty teaching online for the first time, and how to achieve consistency across multiple sections and instructors.

The essays in the collection reflect the growing popularity of online education, as well as challenges and rewards of the work. Emphasis is placed on the next steps that can be taken to sustain online programs and the dramatic increase in faculty and students engaged in online education.

The need for training, mentoring, or communities of practice is a common theme. Also mentioned is the more diverse populations we are seeing along with older, nontraditional students from a wide variety of majors as well as international students.

SECTION I

This section examines online education from the perspectives of teachers and administrators. Maid and D'Angelo discuss from their perspective the history of Multimedia Writing and Technical Communication program at Arizona State University. Maid indicates that he was hired in 2000 to create the program. Prior to that time, however, another perspective needs to be considered: Barchilon was developing the program in technical communication at Arizona State University, Mesa. Barchilon actively sought out state-of-art pedagogy and innovative ideas about curriculum design. In designing the new program,

Barchilon began by looking to the available research about what works and to people who had developed similarly spirited academic programs. Barchilon and Dean David Schwalm invited Karen Schriver to consult with them in thinking through the issues of program development. As the former co-director of Carnegie Mellon University's technical and professional communication programs, Schriver offered advice about structuring the curriculum. As an author of a best-selling book on document design (Dynamics in Document Design. NY: Wiley), Schriver could suggest the sorts of practical hurdles Arizona State might expect in teaching students new to the field. Working with Dean Schwalm, Barchilon worked to create their program. In 2000, Marian's work resulted in the new B.S. and a certificate program in Multimedia Writing and Technical Communication. ASU became one of the first programs in the country to integrate the teaching of technical communication with emerging ideas about multimedia technologies, positioning the program uniquely within Arizona and more broadly. Dean Schwalm then hired Maid to continue the work.

Maid and D'Angelo discuss the economic turndown, institutional change, and the "vanilla" program that Maid believes he saw. They mention the program was underfunded and understaffed and they address the technology problems they faced as well as losing control of the budget. They also indicate problems with hiring new full-time faculty and ASU's decision to no longer support a program head position with a 12-month salary. Moreover, they indicate that D'Angelo's position was reduced from 10 months to 9 months. Claiming they are concerned about the integrity of the curriculum, and the fact that they no longer have administrative responsibility for the program, they are considering new ways to develop a unit-based service role in which Maid can chair a program curriculum group that can begin to look at modularizing or developing courses. Based upon their experiences, Maid and D'Angelo believe what they have learned can help others. As the program moves forward with Eva Brumberger, the new program head from Virginia Polytechnic Institute and State University, they will have learned and been shaped by their experiences.

Tillery and Negelhout share how they learned to make the most of a low-tech university-sponsored off-the-shelf management system in a business writing program staffed by adjunct instructors. While using templates, individual faculty have some individual freedom. Administrators, teachers, and students take part in the development of the course and form a community of practice. Dutkiewicz, Holder, and Sneath also discuss communities of practice. Conducting a study at Davenport University, the faculty is largely adjunct, and faculty and administrators are distributed geographically. The study examines faculty and student responses to these courses and for opportunities to customize them, recommending that faculty be involved in communities of practice devoted to developing and managing courses.

Melancon and Arduser argue that communities of practice (COPs) help make courses sustainable in the face of shifting technologies, teaching practices, and course content. They advocate that it helps alleviate isolation that may ensue with online teaching.

Jaramillo-Santoy and Cano-Monreal discuss a peer-mentoring program to train teachers new to online instruction. In their case-study at Texas State Technical College, they address the Mentor2Mentor program and illustrate how a well-designed mentoring network can ensure the long-term success of a program that faces personnel and financial limitations.

SECTION II

This section asks how faculty and courses have adapted to students' changing students' needs and abilities. In this section, Thrush and Popham argue that there is more online teaching and increasing numbers of international students. Eaton surveys online students that she reported in her first book. Tucker argues that participation in online communities does not harm students' abilities to write but eases them to lead to participate in online class discussions. Scopes and Carter describe communities of practice that develop when online classes take place in Second Life, an unscripted social centric 3-D immersive virtual world. They see virtual environments as good places to enact constructivist learning theories where the focus is on creation of meaning and collaboration with others. Gibson and Martinez reflect that students who populate online classes are not necessarily digital natives. Students are spread along a digital continuum with those who have unlimited access and those who do not. They discuss advantages and disadvantages of four current technologies: mobile applications, social networking, interactive videoconferencing, and multiplayer online games.

SECTION III

The final and third section of the text examines ways that online has led them to make innovations in their teaching materials or in the ways they interface with student populations. Carson and Jenkins discuss the adaptation of teaching materials for online classes. They describe three phrases that have evolved and emphasize the ways in which our course materials may enable and constrain our pedagogical intentions and about ways technological choices made by instructors and institutions may constrain and enable our students. Jones discusses three methods of scaffolding to develop a strong instructor ethos. He discusses a system of folders, education rubrics, and techniques for establishing and projection instructor ethos and building community in the classroom. Jones argues that scaffolding online courses as well other best practices provide students with the best online learning experiences. Tesdell views the online classroom as a distributed activity system that enables teachers to become innovative and creative in pedagogy. He discusses distributed learning in light of activity theory and discusses benefits and challenges that online instructors encounter. Fagerheim talks about how libraries are revising their collection and services in response to more students engaged in distance learning. She describes new policies and procedures, modifying collections, and developing online instructional materials. Finally, Natalie Stillman-Webb addresses that teaching

online can bring new pedagogical strategies and different forms of communication, collaboration, and information distribution. She argues that with easier distribution and information comes questions of ownership of information and ethics in digital transfer. She confronts the legal, ethical, and practical limits of textual sharing. Stillman-Webb presents strategies for negotiation, encouraging students to gain composing experience and addressing intellectual property and privacy issues in theory and practice.

In summary, Online Education 2.0: Evolving, Adapting, and Reinventing Online Technical Education is an interesting collection of articles that address fiscal, technological, and theoretical questions to help audiences who are addressing a virtual landscape in which online education is expanding to include more schools, levels of education, and a more diverse population of students. It is a helpful text for a wide-variety of audiences—administrators, scholars, and online instructors—to help them understand where online instruction has been, and where it is headed. As one who advocated early for developing quality online education as an alternative to face-to-face instruction, I suggest that one read the text to garner new insights into training, mentoring, and practice, regardless of whether you are a seasoned online educator, a novice, or somewhere in between. Each of us has lessons to teach as well as to learn, and this text will help guide your understanding of how to navigate the virtual landscape.