Chapter 5: *The user's view of the Internet* applies the research from Chapters 3 to 4 to develop a model of how the Internet is perceived and how it affects the users' life. The user's view of the Internet is seen as a result of all users' activities and beliefs in interacting with the Internet. The result is development of six principles that represents a user model of the Internet. Users learn through use, apply the technology to specific contexts, expand their own skills through exploration, and gain enjoyment from their Internet experiences. A result is that the Internet is perceived as a resource for serving professional and personal needs for information and enjoyment. This will be the driving force in evolving the Internet.

References

Agarwal, R., & Prasad, J. (1999). Are individual differences germane to the acceptance of new technology. *Decision Sciences*, *30*(2), 361–391.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*, 179–211.

Davis, F. (1989). Perceived usefulness, perceived ease-of-use and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340.

Rogers, E. M. (1983). *Diffusion of innovations* (3rd ed.). New York: Free Press.

William Hafner
Graduate School of Computer and Information Sciences,
Nova Southeastern University, 6100 Griffin Road,
Ft. Lauderdale, FL 33314, USA
Email address: hafnerw@nova.edu
Tel.: +1-954-262-2097; fax: +1-954-262-3915

28 April 2003

doi:10.1016/S1096-7516(03)00048-4

Delivering Learning on the Net: The Why, What, and How of Online Education
Weller, M. (2002). London: Kogan Page, 182 pages, ISBN: 0749436751, US$25.00

1. Introduction

Martin Weller's recent book, *Delivering Learning on the Net: the Why, What, and How of Online Education*, is aimed at several audiences. These include educators seeking guidance in online course development, administrators with decision-making responsibilities for online education, and readers in the commercial sector who are offering online educational products. Weller is well qualified to author this book. As a lecturer with the Open University, he developed the course, T171, ''You, your computer and the Net,'' a fully online course that has

about 12,000 students annually. Also, Weller is the author of numerous articles on online education. As the book's subtitle suggests, Weller is concerned with the *Why, What, and How of Online Education*. In keeping with this, the first four chapters explore why the Net is important for education. Successive chapters follow up with some of the theoretical and implementation issues associated with online education.

2. Overview

Weller opens with a discussion of the significance of the Net for education. He contrasts the Net with two earlier promises of educational technology, broadcast media and CD-ROM. Weller identifies several problems with both. For students using broadcast media, viewing a lecture is a passive, noninteractive experience that occurs in isolation, providing no opportunity for informal discussion; hence, the experience of witnessing a broadcast is an ineffective educational experience. Although high-quality educational CDs are available, the CD-ROM, like broadcasting, failed to live up to initial expectations. CD-ROM failed to integrate with the educational experience but instead has been largely treated as reference material. It was never central to the course. In contrast, Weller finds the Net to be quite different. Unlike CD-ROMs, the Net already has a high level of acceptance in the general public, and its entry-level technology is conducive to educator involvement in media production. While CD-ROM publication typically requires a highly specialized production phase, web browsers provide a generic, accessible, and highly interactive interface framework that is generally consistent from one course to another. Thus, as an education technology, the Net tends to be more accessible than its predecessors. Web page design may present difficulties but it is far easier and less expensive than producing a CD-ROM or television program. There are, in Weller's view, some significant implications for course development. Because the Net is basically a two-way medium, it does not lend itself readily to mass audiences. Courses should be integrated into the overall educational process. Because the educational Net is largely terra incognita, educators must be willing to experiment. Finally, if the course is to succeed, the Net must be a central point of focus.

In Chapter 2, Weller explores some of the myths associated with online learning. Of the first myth, that online learning leads to the commercialization of education, Weller suggests that commercial organizations will have difficulties in gaining access to the education market, for example, in meeting accreditation requirements. As the case of the University of Phoenix shows, he allows, these hurdles are not insurmountable. Other myths Weller discusses include that online learning eliminates the need for campus universities and will lead to declining educational standards. Whether these will prove true may depend on educators. The traditional campus has the potential to provide an environment highly conducive to learning but it is up to educators to ensure that its advantages are realized. Although online learning *can* lead to declining standards, there is nothing in the nature of the medium that dictates that this should be so.

In "Lessons from e-Commerce," Weller looks at e-commerce and its implications for online learning. Weller shows how education can be deconstructed into a value chain of

specialized services that could be performed by specialized businesses. Other topics discussed include disintermediation, richness and reach, clicks and mortar, and boom and bust. While Weller introduces little new material in this discussion, his discussion is articulate, and he provides plenty of useful advice for prospective online educators.

Chapter 5, "Pedagogies for Online Teaching," is an overview of some of the teaching methodologies associated with online learning. Constructivism, resource-based learning, collaborative learning, problem-based learning, narrative-based learning, and situated learning are introduced and discussed. Weller believes successful online teaching demands that educators give renewed consideration to pedagogical strategy, not merely for its differences, but for its strengths.

In Chapter 6 on "Communication," Weller presents some of the key features that online teaching brings to the educator, the most important of which is perhaps asynchronous communication. The nature of the technology lends itself to an egalitarian culture, which for online learning is conducive to a moderating style of teaching.

In Chapter 7, "New Working Methods," Weller identifies some areas of concern for online educators. Among these are workload, stress, and technology churn. The uninitiated might suppose that moderating an online course would involve little effort but quite the opposite appears to be true. Asynchronous communications have no natural boundaries. "Anytime, anyplace" can easily encroach into every time, everywhere. Asynchronous communication can mean increased stress: exchanges of information can last for days. While this has advantages, it also means that any emotions associated with a discussion (confrontation, disagreement, anticipation, etc.) are extended. With technology churn, Weller comments, "Once you enter the online world, you step onto a treadmill . . . " and there may be no getting off.

In Chapter 8, Weller introduces assessment as another area where classroom methods fail to translate. The technologies and the pedagogies do not lend themselves to outcome-based assessment. Particularly, in constructivist environments, when the educator is a facilitator, the idea of giving exams may be incongruous. Weller discusses various alternatives, such as automatic testing and peer assessment, but does not propose a clear solution.

In Chapter 9 on "Technology and media," such topics as XML, data mining, and intelligent agents are explored with a somewhat surprising level of detail. It is the reviewer's opinion that these topics, while personally interesting, need not be prerequisite to a commitment to online learning. On the contrary, it seems more likely that the success of online learning will depend on making the medium accessible to instructors who have little interest in computer technology. One hopes that educators will have other commitments, such as research and teaching in their own chosen fields.

In Chapter 10, Weller introduces his framework for online course classification. This framework classifies online courses along two axes into four general categories. The *y*-axis ranges from low to high technology and the *x*-axis ranges from didactic to constructivist teaching styles. This enables him to classify online courses in four groups: (1) high technology–didactic, (2) high technology–constructivist, (3) low technology–didactic, and (4) low technology–constructivist. For example, a course implemented in Web-Based Training (WBT) would be high technology–didactic. Low technology–didactic might consist of simple text-based instructional Web sites. Low technology–constructivist could include a

more sophisticated Web site, containing text and images and perhaps computer-mediated communication (CMC) technology. High technology–constructivist would use a variety of sophisticated teaching tools and media resources but would follow a constructivist methodology. Weller does not view one category as necessarily superior to another; rather, it depends on the subject, the audience, the teacher preferences, and the resources. The framework provides a tool for thinking about these topics.

3. Conclusion

Delivering Learning on the Net is Weller's vision of what online learning is, what it can be, and how to get from here to there. At times, Weller seems caught up in his own infatuation with education technology—a book by a teacher of technology about using technology to teach—yet this surely is an understandable ingredient in the motivation to write such a book. In addition to being well written, accessible, and insightful, the book includes an excellent list of references for readers looking for more.

Andrew Potter
Sentar, Inc., 4900 University Square, Suite 8, Huntsville, AL 85816, USA
E-mail address: apotter@Sentar.com
Tel.: +1-256-430-0860; fax: +1-256-430-0840

11 October 2002

doi:10.1016/S1096-7516(03)00049-6

Design and Implementation of Web-Enabled Teaching Tools
By Hricko, M. (2003). Hershey, PA: Information Science Publishing, Idea Group Inc., 284 pages, ISBN 1-59140-107-0, US$79.95

1. Introduction

Using a five-part structure for her book, editor Mary Hricko offers a detailed explanation of Internet Web accessibility. Hricko discusses the legal implications of Web accessibility, the guidelines for Web accessibility, the implementation of those guidelines in distance education, current studies related to applying Web accessibility, and a comprehensive reference section for materials and resources related to Web accessibility. Involving academic professionals from throughout the United States and Canada, Hricko is able to explore an array of issues relating to developing accessible Web-enabled teaching tools.