

## **Cybereducation: The Future of Long Distance Education**

Editors: L.R. Vandervert, L. V. Shavinina, R. A. Cornell

Mary Ann Liebert, Inc. Publishers, 2001

257 pgs.

Reviewer: Dirk Morrison

Over the span of a less than a decade, educational technology, and its first cousin, distance education (AKA distributed learning, asynchronous learning networks, and cybereducation) have moved from the margins of higher education into the heated nucleus of debate and discussion on the current and future state of technology enhanced learning. Many factors fuel the present preoccupation, one of which is the expanding body of knowledge regarding optimal use of such technologies for the purposes of teaching and learning in higher education. *Cybereducation: The Future of Long Distance Education* is yet another addition to the avalanche of books, journals, articles, web sites, etc. being generated of late on this topic. In many ways, the current state of exhilaration regarding the potentials of these new technologies to transform teaching and learning is not unlike the frenetic, oftentimes absurd, zeitgeist of the California gold rush era. However, just as in those bygone days, we need to exert cautious optimism when the hue and cry of "gold!" resounds. Like the grizzled prospectors of old, only much sifting and experience will enable university continuing educators to sort the iron pyrite from the real stuff.

It is with this sort of cautious optimism that I approached this book boldly carrying the prefix "cyber" in its title. For me, the use of this term usually forewarns of overly-enthusiastic hyperbole. (And "long distance education"? When was the last time you heard that?) Resisting premature judgment, however, I

agreed to review this book hoping that, despite its awkward title, I would encounter solid, useful, even cutting-edge ideas on how best to apply the current and future cornucopia of new communication and educational technologies to the challenges of learning at a distance. So, like the seasoned prospector, the panning began in hopes of finding the valuable nuggets that make the whole effort worthwhile.

**Purpose, scope and central thesis of the book; Key ideas, methodology, and conclusions**

The central theme, embedded in some chapters and made explicit in others, namely, that technology enhanced learning initiatives and products need to take full advantage of what we currently know about how humans learn, is an important one for continuing educators. This book reflects the growing body of knowledge on how to optimize new communication and educational technologies for the purposes of higher and continuing education. Importantly, it addresses current trajectories of intersection between psychology, education, and communication and media technologies. From the chapter on Media Determinism in Cyberspace by Ebersole, to an esoteric discussion by Vandervert on How Algorithms of the Human Brain Will Embed in Cybereducation, to an articulation of the importance of HICEMTs (High Intellectual and Creative Multimedia Technologies) by Shavinina, the underlying theme is that we need to take a deeper, more integrated approach to researching, designing, and developing technology enhance learning tools and environments. And, these efforts need to be informed and coordinated by a multidisciplinary, if not transdisciplinary approach.

**Commendable features**

One of the more commendable features of the book is that it follows the three "theory" chapters cited above with a series of

case studies included to expand on these ideas and concepts by highlighting concrete examples of their application. This is generally a sound strategy, especially in an edited volume with a variety of contributors from diverse backgrounds. However, *Cybereducation* falls short of the mark in the sense that there seems to be a lack of coherent and consistent integration between chapters, both within these divisions, and without. At least two chapters are straightforward descriptions of the application of technologies to very particular contexts (e.g., World project; MVHS Websims online science lab), useful and interesting in themselves, but somewhat misplaced in this book.

### **Conceptual or stylistic shortcomings**

While some chapters were very well-crafted (coherent, well-organized, and well-written), others were difficult to comprehend, not because the concepts presented were overly complicated, but because the writing was often incomprehensible, obtuse, full of jargon, disjointed, etc. One often felt that at least some of the authors were drawing on private discussions amongst themselves, using their own vocabulary, idioms, acronyms, etc. In fact, out of 18 contributors, five are from the same institution.

More importantly, while some of the ideas presented, especially in the theory section, are intriguing and may be "cutting edge", they are often muddled by repetition or confusing writing. Promises to address particular issues, especially when the reader asks "what this would actually look like?!" are rarely articulated in any useful level of detail.

### **Assessment of the book's special contribution to the existing body of literature in the field**

Authors Westra and Sloep offer a balanced perspective on the "upsides" and "downsides" of communication and information technologies applied to the design of instruction. An impressive simulation program entitled "The Virtual Learning Company" is showcased; many of the precepts of constructivist learning environments can be seen to be actualized. Positing optimistic, but reasonable views on "the future of cybereducation," the authors balance these insights with an even-handed (unlike Postman) and candid treatise of the potential threats of technology enhanced learning; "dematerialization of human activity" dehumanization of communication, inescapable information chaos/overwhelming abundance of facts, affordability, etc. Their final statement is one all too often missing from such treatises: "...we advise the reader to not accept our conclusions as unquestioned facts, but to use these as agents for further discussion, reasoning and reflection." I would second this encouragement as you read *Cybereducation*.

**Any estimate of its relevance to continuing education practice.**

Chapter eight, *Present and Future Directions for Assessing Cybereducation: The Changing Research Paradigm*, is a particularly relevant chapter for continuing education practitioners, especially those wrestling with the question "what are the most effective strategies for delivering instruction to an increasingly diverse student population?" Drawing on the experiences of the University of Central Florida's efforts to provide greater access support to its large population of nontraditional students (p.158) via an integrated approach to distributed learning plan, this case study provides useful evaluation and research design strategies. show best to take advantage of the learning potentials of current educational technologies, is

Chapter 6: The Future of Education in Cyberspace

Chapter 7: Design and Assessment of Web-based Learning Environments: The Smart Engineering Project and the Instructional Software Development Center at the University of Missouri-Rolla by R. H. Hall, S. E. Watkins, R. L. Davis, A. Belarbi, and K. Chandrashekara

Chapter 8: Present and Future Directions for Assessing Cybereducation: The Changing Research Paradigm by P.D. Moskal and C.D. Dziuban

Chapter 9: Edmonds and Kamiak Cyberschools: Two Innovative Emerging Models for Cybereducation by M. A. Javid

Chapter 10: The Online and Digital Experience: Reassuring Higher-Order Learning Outcomes by J. G. Hedberg

Chapter 11: WebSims: Creating an Online Science Lab