Book Review: Emerging Technologies in Distance Education

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The book is edited by George Veletsianos and published in 2010 by Athabasca University Press, Edmonton, Alberta, Canada. The book has both hardcopy (978-1-897425-76-3) and electronic (978-1-897425-77-0) versions. The total number of pages is 335+xiv.

The editor George Veletsianos contemplates on a broad spectrum of issues about distance education. As he addresses, the main contribution of the book to the field is amalgamating views of authors from eight different countries, yet they represent the true nature of the field which is a colorful blend of researchers from various fields in academia. Naturally, when the subject comes down to the technology, the beauty of these differences flourish.

The contributors from Australia, Canada, Cyprus, Finland, Greece, Israel, the United Kingdom, and the United States touch upon a broad range of subjects, ranging from training educators and designers, the use of wikis in education, engaging teacher and students in global issues such as global climate change. Nevertheless it all bounds up with emerging technologies in distance education.

Part 1

The book is divided into four main parts. The first part, which sets the foundations of emerging technologies in distance education, lays groundwork for the rest of the book. The initial four chapters in this first part of the book explain and guide the reader how one should look at the concept of emerging technologies in education.

Chapter 1, written by George Veletsianos, is about meaning of emerging technologies. The author claims that the chapter serves for two purposes. The meaning of the term “emerging technologies” and what would the understanding of the term will eventually contribute to the technology-enhanced learning. The author claims that the aim of the book is not to dwell on acronyms, and terms such as i-learning, education 3.0, student 2.0. Certainly, he continues “the focus of this book is not to canvass the hope that the next technological advancement will be our holy grail.” The author further states that the true focus of the book is on the often miss-used, haphazardly defined, ill-applied, and all encompassing term of “emerging technologies” in educational context.

What does “emerging technologies” mean? According to Veletsianos, instead of defining the term, one should focus on five distinct characteristic features of the term.

(a) Emerging technologies may or may not be new technologies. Often we transvesly use the words ‘emerging’ and ‘new’. Emerging technologies (ET) may sometimes represent the newer developments (e.g., utizing the motion-sensing capabilities of video game controller) as well as
older ones (e.g., employing open-source learning management system at higher education institutions). The author indicates that newness itself is a problematic argumentation on ET.

(b) **Emerging technologies are evolving organisms that exist in a state of “coming into being.”** Technologies are often in a continuous state of refinement. We frequently add up new feature on existing technologies. This notion of evolivingness of the technology is perhaps the most prominent feature of it. Take the social media tools as an example, Twitter is one of the most popular social media tool and yet just until the couple of years back, there was no such term as “reTweet” in our daily parlance. As the society and its need evolves, so does the technology.

(c) **Emerging technologies go through hype cycle.** We should save ourselves from falling into this trap. Technology of today and tomorrow will solve any problem we might face to or will face in the future. Despite the fact that universities are more prone to use newer teaching learning technologies and technology has had a major impact on tertiary education, one should not forget that due to the organizational, cultural and historical factors, education, as a field of study is resistant to change. So, falling into the trap of indulging ourselves with the dream of seeing technology as our savior is a one big hype itself.

(d) **Emerging technologies are not yet fully researched in a mature way.** Emerging technologies are not fully investigated and we easily blind ourselves with pseudo-benefit of it. We often neglect the fact that many of the technologies are having some form of drawbacks and affordance of technologies is one big question looms on the horizon. Because emerging technologies are not yet fully researched, many surfacing developments are actually nothing more than replica of an existing one.

(e) **Emerging technologies are potentially disruptive but their potential is mostly unfulfilled.** The field of education, due to its nature, is resistant to change. Yet, emerging technologies from time to time challenge it. Open access journals for example, are open to virtually everyone and scholars as well as institutions undertake serious cost to do and publish a research. Despite the fact that open source journals are truly advancement, one may argue that they disrupt the notion of scholarship.

Finally, the author claims in this first chapter that he lays the ground work for coming chapters and for the purpose of the book stated at the very beginning in this review. Veletsianos underlies that despite the technology, we must not forget that we are still the learners. As technology itself, our sense of how we use it is also evolving and this perhaps explain why technology is ever emerging, not the technology itself but our contemplation about how we utilize it, especially in the field of education.

**Chapter 2,** written by Terry Anderson, the scope is to outline established and emerging learning, pedagogical, and educational theories of learning for distance education and its applications. The author argues that the best way to design effective learning activities is enhanced when we operate from theoretical perspectives. Anderson further argues that the new application in the Net era can be best explained from –pre-net era theories perspectives. The author stressed that we are witnessing the birth and refinement of learning theories that work under the assumption of the ubiquitous Net. However, these theories can only be flourished on a fertile soil of traditional thoughts and scholars.
Chapter 3, written by Elizabeth Wellburn and B. J. Eib, is titled “Imagining the Multi-Roles in Web 2.0 Distance Education.” The authors investigate and discuss the impact of emerging technologies on social communication, Web 2.0 tools and environments. Authors’ main goal is to examine the world of learners outside from their formal learning environments. In conclusion, the authors suggest that educators should embrace a multiplicity of roles and, with our students and the general public, recognize and participate in dynamically and collaboratively constructed formal and informal but personalized learning environments.

Chapter 4, written by Mark J.W. Lee and Catherine McLoughlin, also examines the Web 2.0 and its application in education. The authors conclude that the most important implication of social software for distance education is the new possibilities for extending and enriching the learning experience for various audiences with under different conditions.

Part 2

The second part of the book collects different perspectives and views on learning designs for emerging technologies. The chapters in this part deal with conceptualization of emerging educational technologies from the points of open, social, community-based, and embedded learning environments.

Chapter 5, written by The Learning Technologies Collaborative, is based on the idea that the technology itself is not totally relevant. It is how the technology is designed over to enhance individual learning experience is the key for distance learning. Authors argue that it is the synergy the technology should bring will enhance the learning environment.

Chapter 6, written by Alec Couros, underlines similar qualities of social tools or applications on learning, and taps into the open access to learning tools and materials. The author concludes that the social media movement will result in more enhanced and personalized learning environment.

Chapter 7, written by Beth Perry and Margaret Edward, and the authors argue that creating artistic pedagogical technologies will facilitate more flourishing learning environment. Therefore, individual creativity and sense of being contributing to the learning community will increase. For this reason, utilizing musical, literary, and dramatic element in educational pedagogy is the key to the individual success.

Chapter 8, written by Yiannis Laouris, Gayle Underwood, Romina Laouri, and Aleco Christakis, indicates that structuring dialogue especially among various social strata would determine the success of any educational program. No doubt, this is valid for new teaching and learning technologies as well.

Part 3

The third part of the book addresses social, organizational, and contextual factors in emerging technologies implementations. In this context, personal learning environments, Moodle, Wikis, Web Analytics, and videoconference applications are discussed as new communication and individualization options.
Chapter 9, written by Trey Martindale and Michael Dowdy, focuses on personal learning environments. The authors argue that the concept of personal learning environments need more research as to how we should determine the individual needs and tailor our software to cater individual differences.

Chapter 10, written by Andrew Whitworth and Angela Benson, is about course management systems and their effects on micro level contexts. The authors indicate that micro level individual solutions need to be attached to institutional course management systems. For this, decentralization and individualization are the key elements for successful course management system applications.

Chapter 11, written by Hagit Meishar-Tal, Yoav Yair, and Edna Tal-Elhasid, describes an institutional implementation of wiki technologies in higher education. The example from an Israeli institution constitutes a good example of the successful implementation of the new technology and innovative pedagogies in higher education setting. The authors point out that the wiki technology is flexible, quick, and almost ready-to-go, therefore has more potential in educational environments.

Chapter 12, written by P. Clint Rogers, Mary R. McEwen, and SaraJoy Pond, explains the use of web analytics in distance education tackling the challenge of knowing how students interact with the learning materials. As described, the authors developed a model for measuring and understanding student-material interaction, which will help decisions in distance education.

Chapter 13, written by Richard Caladine, Trish Andrews, Belinda Tynan, Robyn Smyth, and Deborah Vale, encompasses the new communication options in distance education. The authors suggest that video conferencing, enriched with new pedagogical tools, will certainly revolutionize the distance education, in a Renaissance way.

Part 4

The fourth (last) part of the book is on learner-learner, learner-content, and learner-instructor interaction and communication with emerging technologies. As emphasized, such interactions are very important in technology-based learning and the potential of emerging technologies is extremely promising.

Chapter 14, written by Rita Kop, examines how using social media supports communication. The author suggests that the more learner takes the control of his/her learning environment the better will be the communication between the learner, material, and the instructor as major components of the process.

Chapter 15, written by Charles XiaoXue Wang, Brendan Calandra, and Youngjoo Yi, focuses on the effect of multi user virtual environments on language learning. The authors argue using Second Life as a learning environment; Chinese students had a rapid development in their language skills.

Chapter 16, written by Bob Heller and Mike Procter, encompasses using animated pedagogical agents and immersive worlds in learning. The authors of the chapter conclude that these two worlds collide and game-like platforms such as Second Life act as a well amalgamating learning environment for individuals.
Overall, the book makes a number of theoretically important points and provides many good examples from the practice in various areas of education. In this respect, it caters different desires and expectations of educational technologists or instructional designers with regard to finding creative ways of implementing emerging technologies to accommodate a variety of educational needs. The book also deals with cultural aspects as to how distance education should be designed and delivered on the ground of certain cases form different countries. Moreover, the book is easy to read for an international audience so that the readers may benefit greatly from reading it, particularly those who work on application and/or integration of emerging technologies in the field of distance education.

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