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November – 2004

## ***Book Review – Online Education and Learning Management Systems: Global e-learning in a Scandinavian perspective***

**Editor:** Morten Flate Paulsen (2003). *Online Education and Learning Management Systems: Global e-learning in a Scandinavian perspective*. 337 pages, softcover. Oslo: NKI Forlaget. ISBN: 8 2562 5894 2

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Morten Flate Paulsen has been working in the field of distance and online education for many years. During the last 15 to 20 years, the author has been particularly active in developing online education projects, and is considered a pioneer in this field. The author brings this book his rich background in e-learning, much of which was gained while working at the NKI College at Bekkestua, Oslo, Norway. The book captures his experiences, discusses major developments in online education, and provides illustrative examples from the author's Scandinavian and international research. Paulsen also invited other Scandinavian-based pioneers, Søren Nipper (Denmark) and Carl Holmberg (Sweden), to contribute their personal experiences grounded within their particular national contexts. Paulsen has adopted an original approach with his book, one that mixes a theoretical framework, anecdotes, with personal experiences. This approach makes the book really "interesting and enjoyable" as the outside back cover says, an assertion that I fully agree is true. I also located three online reviews written on Dr. Paulsen's book: one by Desmond Keegan (Dublin, Ireland)<sup>1</sup> who considers it is a major book; another by Christian Dalsgaard (Aarhus, Denmark)<sup>2</sup> who maintains "The book provides an important promotion of Nordic online education and a significant contribution to the international field;" and Kjell Å Bringsrud (Oslo, Norway)<sup>3</sup> who highly recommends it. After reading the book, I too agree with these previous reviewers that Paulsen's book will be of great interest for: "students, teachers, course designers, administrators, decision makers and educational officers in public and private sectors" (p. 17). My only concern is that researchers seem to have been neglected in the book's target audience – but perhaps this editorial viewpoint may also be interpreted as an indicator of the pragmatic, practice-oriented approach developed by the author in compiling and writing this book.

Professor Paulsen's book is comprised of four parts:

1. Online Education, Teaching and Learning
2. Commercial and Self-Developed LMS
3. Global e-Learning in a Nordic perspective
4. Trends and Future Developments

## **Part One – Online Education, Teaching and Learning**

Part One examines pedagogical issues, and introduces and discusses the main theoretical views, concepts, terms, and methods used in the field. Since most of these terms and concepts are vague and without clear or explicit definition, this book may be viewed as a good attempt at providing readers a systematic understanding of the online education field. The author presents and discusses several issues related to an online educational system: the tutor's functions and roles, facilitation techniques, assignments, assessment, grading, motivation and problems encountered by teachers and students online, along with the pragmatic realities of increased workload for those teaching online, and how to best to manage this workload. Organizational, social, and cognitive aspects are also taken into account and valuable recommendations are offered.

Four classifications that outline “Online Teaching Methods” provide the book a thread of coherence that binds together the various chapters. The methods are organized according the four communication paradigms used in computer-mediated communication” (p. 92). According to this classification, “teaching methods” are: 1) the online resource paradigm (one-online); 2) the email paradigm (one-to-one); 3) the bulletin board paradigm (one-to-many); and 4) the conferencing paradigm (many-to-many). The author then goes on to distinguish two other categories: “teaching techniques” and “teaching devices.” In this context, Paulsen defines a teaching technique as a “. . . manner of accomplishing teaching objectives. The “teaching techniques” of online database, interviews, correspondence studies, lectures, debates, discussions, etc., are presented and discussed in detail in the chapter “Online Teaching Techniques” (p. 85 – 131). This chapter, which includes references to the literature of notable academics such as Harasim, Rekkedal, Paulsen and Kaye, reports the experiences of 150 online teachers interviewed on their teaching techniques.

The teaching devices used are based on Rapoport's classification that identified the four main paradigms: information retrieval system, email, bulletin board systems (BBS), and computer mediated communication (CMC). However, I also believe this approach also reveals the key weakness of this book: Communication concepts and theory can be extremely valuable in analysing educational mediated communication, but what we still need a very strong link between technology, educational, and communication sciences. Indeed, the framework of reference used by the author depends on both the “technological point of view” and “an empirical approach,” which are subsequently reinforced by “interviews of teachers.” One might argue that several techniques could share different research methods, and that teaching devices could support several techniques and research methods upon which to base their analysis, and that the proposed classification will yield very rich data which in turn will help practitioners, teachers, course designers, etc., arrive at fully informed decisions. However, what is lacking – at least from my perspective as a researcher concerned with conducting research premised on clearly defined research questions, techniques, methods, and analysis – is a better theoretical base that provides an explanation of “why” the choices were adopted and “why” the results were reached. With a more in-depth focus on the cognitive tools used, I believe that this book could have better described, and thus helped readers more clearly understand, and in greater differentiated detail, the cognitive and social role of learning management systems (LMS), and the impact of technological artefacts on the learning process. My demand for a better theoretical framework is not base on a researcher's fantasy world: results teased out a sound theoretical approach to data collection and analysis are essential to both direct practice and identify indicators that will lead to a better evaluation of the learning environment.

## Part Two – Commercial and Self-Developed Systems

Part Two offers readers a broad overview of two European-based projects: CISAER (*Leonardo da Vinci program*) and Web-edu. Based on results of the CISAER program, the author provides recommendations to politicians, educational administrators, and online educators who seek to succeed in the field of online education. The Web-edu project, on the other hand, which aimed to analyze the European experiences with Learning Management System (LMS), yielded a surprising conclusion: the most widely used LMS in Europe were developed in North America (e.g., *Blackboard*, *WebCT*, *FirstClass*, *Lotus Learning Space*), yet the European market is not dominated by American LMS systems. In countries where English is NOT the native language – in this case, the Scandinavian countries – viable local systems have been developed and these LMSs appear to be highly effective and successful.

## Part Three – Global e-Learning in a Nordic Perspective

Part Three's first chapter entitled, "Global e-learning in a Nordic perspective," presents the results and recommendations drawn from the Web-edu project. Based on the Nordic analysis, which comprised part of the Web-edu project, this chapter shows that the Nordic countries – Denmark, Finland, Iceland, Norway, and Sweden – are widely recognized as pioneers and advanced users of ICT. Indeed, the Nordic countries have been actively working for many years now on large-scale national projects aimed at developing technology-based education to better serve its population of approximately 23 million people. Moreover, these efforts have been underpinned by a very real, very strong political will. As such, Part Three offers readers advice, recommendations, and guidelines that could be used to inform our own LMS projects, course creation tools, student and tutor supporting tools, administration, technology, economic issues, evaluation, and the future of LMS systems in general. The main findings outlined in this chapter indicate a clear trend towards implementation of large-scale online education, the effort of the Nordic universities to standardize their national student management systems, and interviewees' opinions that e-learning standards are important to their institutions.

Part Three also comprises chapters focusing on Denmark's experience written by Søren Nipper, and on Sweden's experience by Carl Holmberg. Nipper introduces an interesting debate on "Instructional Design" and "Collaborative Learning," identified as the two main trends in the information and communication technology (ICT) fields. Nipper explains why Collaborative Learning has emerged in the Danish context during the first 10 to 15 years of experimentation – however, astonishingly he says it is "a collaborative programme seems to be much faster and many times less expensive than the development of a computer-based technology/ Web-based technology (CBT/WBT) course" (p. 221) and it is adapted for small groups. Collaborative Learning, on the other hand, in terms of its design, is less effective for the management of learning organisations because it does not embed content creation tools and because "it scales so badly" (pp. 223-224). For these reasons, interest in LMS has grown, particularly in those LMS and content management systems that include tools for online assessment, evaluation and scoring, production and the monitoring of learning activities, and the management of student data. In the Danish context, times are changing and LMS (mainly based on instructional design) are moving out the old-fashioned "Collaborative Learning" model based on computer-mediated communication. This finding raises several very important questions: Whether *Instructional Design* will seize the future of online learning and whether *Collaborative Design* will lose momentum and gradually be confined to a small cosy, privileged academic corner at the periphery of e-learning? (p. 222). Can collaborative learning happen in a large-scale e-learning

system? And more generally: How will universities handle, on one hand, the clash between business rationale, and on the other, pedagogical autonomy and flexibility? (p. 226).

The Holmberg's chapter presents the Swedish context: policies, experimentations, pilot-projects, results and barriers, and so on. I found Holmberg's chapter interesting because he reminds us of several basic principles that could make innovation and information and communication technology (ICT) in schools sustainable. First of all, Holmberg's focus is not on new technology itself; instead he reminds us that technology should merely contribute to new vision on learning and on *how students actually learn*. He also shows us that the development of ICT on a national level requires a clear policy formulation, financial support, and the technological means to make it happen. Just as significantly, it requires the right mix of human resources to support the national ICT policy. For instance, the Swedish Government allocated €200 million for the four year (1999-2002) project "IT in school." The Swedish project demonstrates that the ways in which schools are organized, and the manner in which learners appear to have to been deeply changed. Following the work of Laurillard, it shows us that we need to completely "rethink" the role of schools, high schools, and universities in terms of online and e-education. Finally, Holmberg reminds us that costs still remains one of the most important barriers. Education needs to be a high quality service; however, we will have to pay.

Part Three concludes with a comparison between Scandinavian and Australian universities. The major difference found between these countries is that in Australia education is considered as an important export industry, while in Sweden and Norway the export of education is not an important market consideration, and thus not an objective of these nations' universities.

## **Part Four – Trends and Future Developments**

Part Four – *Trends and Future Developments* – as its title suggests, presents the main trends and future developments. The author first discusses the results of the Web-edu project. The last question of the questionnaire addresses this issue. Interviewees cited as important the interoperability and integration between all the available online tools, flexibility, standardization, cost-effectiveness, better content management and management, simpler and user-friendlier solutions, etc. Paulson then underlines the major developments in the field during the past decade, and discusses important trends in online education, namely: large-scale online education, standardization, cost-effectiveness, and market constraints, m-learning (mobile learning), and increased bandwidth capacity that will allow for more multimedia abilities, and finally, globalization.

In conclusion, this book provides a clear view of the field of online education and a general framework to help us understand and grasp the main trends taking place in the field, particularly as based on data derived from the Scandinavian context – a perspective little known by the public at large. This approach has merit. From my perspective as a Francophone researcher located in Switzerland, however, I tend to focus more on the theoretical framework and research methods used, and this from this "context" that I express my gut feelings that this book seems to be too "pragmatic" and not targeted towards the needs of researchers. Nonetheless, the results drawn from the European projects are interesting and worth reading. But still, my concern is that the questionnaires and interviews were the only sources. Questionnaires show us what people say about their thoughts and practice; however, as a researcher, I would have been more interested in reading a deeper analysis of their real practice. For example, by comparing and cross-referencing the data (interviews and observations of practice) would have more finely shaded the book's "findings" or perhaps even yielded "different" conclusions altogether. Despite these

shortcomings (at least from my perspective as a researcher), Paulsen's book offers readers a very rich and interesting findings, all of which are bound within a lucid and attractive layout. As such, I will give this book to my students to read this coming term.

### **Endnotes**

1. [http://www.studymentor.com/studymentor/Review\\_by\\_Keegan.htm](http://www.studymentor.com/studymentor/Review_by_Keegan.htm)

2. <http://www.lib.msu.edu/corby/reviews/posted/paulsen.htm>

3. [http://www.eurodl.org/materials/briefs/2004/morten\\_review.htm](http://www.eurodl.org/materials/briefs/2004/morten_review.htm)

