Preface

Introduction

Today, e-learning is used in more countries and educational institutions than ever before. Most of the time, the leadership and enthusiasm of a single individual or a group of people have paved the way to use e-learning for delivery of education and training. And of course, everyone in their own enthusiasm, after having jumped into the bandwagon, tries to tread their own path without giving consideration to what paths others have followed, and how others have succeeded or failed. As such, every e-learning venture faces the challenge of sustainability, and the danger of being closed. Today, we have a huge amount of information and literature on the theory and practice of e-learning that can help organizations in all sectors take appropriate decisions on how to implement e-learning in their organizations.

Objectives

The objective of this book is to provide learning opportunities through a set of case studies on implementation of e-learning in different context. It is intended to serve as a guide to all those involved in the design, development, and implementation of e-learning. Literature on e-learning and research literature on e-learning is found in abundance through a simple search on the net. However, this book has been planned with a different concept and in a different manner to give practitioners an insight into the world of e-learning in a case study format. Thus, the book presents a judicious mix of practical experience and research-based information.

Case Study

Case studies are effective instructional tools. These are useful sources of authentic learning that help to analyze situations and enable understanding of issues in context to apply the new learning in other similar situations/contexts. Thus, case studies present realistic situations with a balance of theory and practice. In our case, writing a case study is to faithfully record and reflect on what, when, why, and how an organization has planned, designed, and implemented e-learning. As the book has been conceptualized with the objective of having an understanding into what e-learning practices have been followed by different institutions or organizations, what problems they encountered, or what were the success stories, we have followed a case study framework. To keep the structure of the cases uniform, a framework was designed and provided to all the contributors (see Appendix) so that they may provide their experiences in such manner so that a proper paradigm can be charted out on the basis of their success stories or pitfalls. These case studies will not only serve as a source of stimulation but also bring forward some challenges, which the institutions or organizations have faced. Such challenges and problem areas were tackled keeping in view different pedagogical issues and in response to the learners' requirements. In spite of the guidelines, some of the contributors have followed different presentation styles, and we have accepted these in order to give scope to different ways of presenting the cases. As far as possible, the original style has been retained with required editing. The common thread in these cases is the conscious "reflective thinking" on the part of the authors so far as the e-learning is concerned in their own institution. This is in line of the Schon's "reflection on practice," where the practitioner is asked to think about what they do, how they do, and why they do. The combined learning in this volume is enormous, as we have analyzed in the last section of this book. Individual cases are vivid presentations of the experiential learning of individuals and groups, and are reflective of how others can learn from those experiences.

Overview of the Book

The case studies in the book are organized in three sections: (1) Cases on completely online learning systems; (2) Cases on blended online learning systems; and (3) Cases on resource based online learning systems. In the introduction chapter, we present an overview of the e-learning concept, theory, and practices. It emphasizes how e-learning is perceived and used around the world. As a growing field of knowledge, the term "e-learning" itself has been interchangeably used with Web-based learning, online learning, Internet-based learning, virtual education, and so on. Whatever may be the term used, it is important to note that it is a system based on technology that provides opportunity for both synchronous and asynchronous interaction between the learners and the teachers. Thus, it has a new paradigm of teaching and learning—beyond—the print-based distance education (asynchronous) and tele-learning model of distance education (synchronous). It has the best of both and, therefore, it is a "new generation of distance education" (Mishra, 2001, p. 2). In order to use e-learning effectively, it is essential that a systematic approach is adhered to, and the online courses are planned, designed, and implemented according to sound pedagogical principles.

Cases on Completely Online Learning Systems

In Section I, there are 10 cases that discuss the use of online/Web-based/learning management systems (either off-the-shelf product or self-designed systems). Within the Web-based environment, these cases share their experiences and highlight what they did, how they did, and why they did the way they did. Most of these share some practice of program evaluation, and user feedback and critical reflection as lessons learnt. In Chapter I, Alina M. Zapalska and Dallas Brozik argue that the use of WebCT strongly contributes to the effectiveness of distance learning by improving the quality of students' learning in the areas of critical thinking, problem solving, decision making, attention to detail, written communications, and organizational and analytical skills. Ilias Maglogiannis and Kostas Karpouzis in Chapter II present a case study of e-learning implementation in a military training course, and highlight the benefits accrued because of the use of both synchronous and asynchronous technologies. The third case study is by Gunnar Martin, August-Wilhelm Scheer, Oliver Bohl, and Udo Winand from Germany, and showcases a full-fledged online masters program on information systems initially developed in a collaboration model by four universities. While the online programs are useful to the learners, it is also important to enhance the capacity of the tutors by providing appropriate training on needed competencies. In the next case, a team of researchers from New Mexico State University presents their model of teacher preparation to teach online through an online program of staff development. The next case presents another model of collaborative online program development by two universities, one in the U.S. and the other in Africa. In this case, Hilary Wilder shows us the issues related to academic program planning and administrative issues in developing programs for learners with low-tech access. In Chapter VI, Shobhita Jain presents her experience of developing and running India's first social science online program at the Indira Gandhi National Open University. She shares with us how continuous feedback from the learners was useful in improving the functionality of the system developed by the University. This case also presents to us the idea of alternative ways of assessment in online world by using the peer assessment in discussion forum. In order to promote reflective practice, this case also demonstrates the use of online diary (a primitive form of blogging). And when it comes to assessment, it is also a good idea to keep record of the work by the learners online in the form of portfolios. In the next chapter, Madhumita Bhattacharya presents a description and analysis of salient issues related to the development of an integrated e-portfolio application implemented at Massey University to help students track and accumulate evidence of skills developed over their period of study using the online distance education course in the background. Continuing the issue of online professional development, Donna Russell in Chapter VIII presents the experience of an activity-theory-based online learning program (eMINTIS) using a network space technology. This experiential learning model provides us an opportunity to see online learning as a vehicle of change and quality improvements. John Beaumont-Kerridge in the next case in Chapter IX showcases the experience of the use of Internet phone technology for synchronous group based e-learning and reports the experience of both students and tutors, who find the technology as a useful medium to increase communication and provide remedial learning. In the last case of this section, Lucio Teles and Nancy Johnston present the online program on co-operative education. Participants in the pilot project found the online version to be a valuable tool to support co-op students in learning and developing employability skills, including problem defining and solving, planning and goal setting, improved interpersonal communication skills and self-assessment, and peer feedback skills.

Cases on Blended Online Learning Systems

Section II has eight case studies where e-learning has been used in a blended learning scenario as a matter of design and delivery. The cases in this section cover subject areas as diverse as sports management to criminology. In Chapter XI, Alistair Inglis, Matthew Nicholson, and Clare Hanlon describe a case study based program on learning sports management. This case is unique in the sense that it uses the case study approach used in this book as the learning design to deliver the whole program, where learners study materials supplied in CD-ROM, and then interact online and also face-to-face to learn the subject matter content. In the next case, Raffaella Sette presents the complexities of developing a blended course on criminology at the University of Bologna. In Chapter XIII, Jarkko Suhonen and Erkki Sutinen from Finland present the digital learning environment to teach computer science and support the face-to-face teaching. Elspeth McKay in Chapter XIV presents a case study of school level application of online learning in Fiji. It discusses the institutional and national context of the e-learning program offered by a school in Fiji that is accredited by the International Baccalaureate Organization. A zoom-lens approach is taken by the year-5 classroom teacher to encourage her students' experiential learning. She points out that alternative instructional strategies are required when the Internet becomes unstable. Using the chemical engineering subject background, Katia Tannous in Chapter XV exhibits the experience of applying project-based learning methods through online learning, while in Chapter XVI, Mary Griffiths and Michael Griffiths describe how they developed intercultural, pastoral pedagogies suited to contrasting "internationalized" cohorts, despite trends in new "market-driven" universities. They used Michel Foucault's framework of "pastoral" power, as modeled by Ian Hunter in studies of the milieu of the face-to-face English classroom. They emphasize that the development of valuable intercultural skills in the student depends in part on the composition of the "internationalized" student groups themselves, and on their and their teacher's awareness of the formative nature of the software being used. Chapter XVII by K. C. Chu presents the use of scenario-based learning strategy in designing e-learning for vocational education. This online environment provides chances to all students to virtually immerse in a scenario to enhance their learning and knowledge. In Chapter XVIII, Yan Hanbing and Zhu Zhiting from China present their e-workshop model of teacher training to solve problems of time, quality materials, work relationships, and mentoring. They also use e-portfolios, synchronous chat, and community bulletin boards to develop teacher competencies.

Cases on Resource-Based Online Learning Systems

In Section III, there are five cases analyzing how online resources can be organized, designed, and delivered to optimize learning. Mitchell Weisburgh in Chapter XIX presents a systematic approach to development of an online resource center on pain medicine using the power of a multimedia-based online learning system. This case is a lesson for how to critically look into the issues of scripting, content development, and technology choice. In Chapter XX, Colette Wanless-Sobel analyzes online community problem solving using the power of the Web, particularly through blogging. Colette recognizes that success of the online learning resource is largely due to the intrinsic motivation and cognitive engagement afforded through civic engagement, allowing learners to pursue personally relevant knowl-

edge in familiar milieus. Technology plays a role in increasing intellectual self-esteem and digital literacy by allowing students the opportunity to become bloggers and Web publishers. Patrick J. Fahy and Patrick Cummins in Chapter XXI present a case on an employment readiness online system titled "ESPORT" in Canada. The system assists users with choosing an occupation, assesses their enabling skills in respect to the chosen occupation, identifies and (optionally) remedies skills gaps, and documents in a resume their abilities for prospective employers. They have also developed an e-portfolio as a part of the learning package to record the learning development of individuals. In Chapter XXII, Byung Ro Lim presents the e-learning systems of educational broadcasting system in Korea to prepare students for the Korean College entrance test. The system uses the power of the Web, and delivers video on demand services through satellite-based Internet services through cable TV and direct satellite receivers. In the last case of this book, a team of scholars from the Simon Fraser University presents their e-learning ecosystem model for e-learning based on analyses of their experiences in various cases. Taking cue from biology, where ecosystems are characterized by the interactions and the flow of matter and energy among biotic and abiotic elements, they say that e-learning can also be treated as an ecosystem characterized by the interactions and the flow of information across activities related to learning. They see clearly two sub-systems: instructor and learner in the process, and emphasize the role of faculty development in the e-learning eco-system.

Conclusion

E-learning has gained popularity in all kinds of educational settings (with rich and low access to technology). What is more prominent that the Internet and PC penetration, which is essential to a large extent for e-learning, is increasing all over. E-learning can be treated as those learning activities where computers, networks, and multimedia technologies play pivotal roles. Use of ICT (information and communication technologies) is crucial here to support, deliver, and/or facilitate learning opportunities. Most of the universities across the globe have found this mode of offering instruction quite beneficial and have adopted e-learning either as a single mode or as a complementary mode for delivery of educational services.

In this volume, practitioners of e-learning have brought out different dimensions of adopting e-learning strategies in diverse settings. They have shared their success and failure stories and what solutions they adopted for their problems or challenges faced. We understand that such success or failure factors or solutions may not be applicable to all situations as each e-learning project is unique in itself, because of the target group, social context, and environment of the institution, resources available, and so forth. But certainly these cases do provide learning opportunities for students of educational technology/e-learning, planners, and policy-makers as well to take note of others' experiences critically and design their own e-learning systems. We do not intend to compare one case with the other, to indicate which one is superior or what is not good. It is for the readers to see what they can use and what they would like to avoid. Our intention is to help the readers gain an insight into what makes an effective practice and solution, and thus in the last section we synthesize some of the lessons learned and best practices.

We hope that this volume would provide relevant insights into the practices and approaches of planning and management of e-learning all over the world with cases from Australia, Brazil, Canada, China, Finland, Germany, Greece, Hong Kong, India, Italy, Korea, New Zealand, the U.S., and the UK. We are sure the rich experiences of the contributors of this volume would be beneficial to various stakeholders of e-learning to understand, examine, determine, and select solutions to what, how, why, when, and where e-learning can be best deployed.

Reference

Mishra, S. (2001). *Designing online learning*. Knowledge Series. Vancouver: The Commonwealth of Learning. Retrieved March 24, 2006, from http://www.col.org/Knowledge/pdf/KS_online.pdf