# Preface

With the increasing use of a variety of approaches for learning in the information age, learners' preferences are changing from wanting to be taught mostly in lectures or direct training sessions to wanting increased *flexibility.* Learners expect on-demand, anytime/anywhere high-quality learning environments with good support services. They want increased *flexibility* in learning—they want to have more say in what they learn, when they learn, and where and how they learn.

Since 1997 I have studied the critical issues of flexible learning. I have communicated with learners, instructors, administrators, and technical and other support services staff involved in flexible learning, in both academic and corporate settings, all over the world. I have researched flexible learning issues discussed in professional discussion forums, newspapers, magazines, and journals, and I have designed and taught online courses. Also, as the editor of *Web-Based Instruction* (Educational Technology Publications, 1997) and *Web-Based Training* (Educational Technology Publications, 2001), I had the opportunity to work closely on critical flexible learning issues with more than 100 authors worldwide who contributed chapters to these books.

Through these activities, I found that numerous factors help to create a meaningful learning environment, and many of these factors are systemically interrelated and interdependent. A systemic understanding of these factors can help us create meaningful flexible learning environments. I clustered these factors into eight categories: institutional, management, technological, pedagogical, ethical, interface design, resource support, and evaluation. I found these eight categories to be logically comprehensive and empirically the most useful dimensions for a flexible learning environment. With these eight dimensions, I developed *A Framework for Flexible Learning*. The framework is reviewed by researchers and practitioners from various countries: Betty Collis, University of Twente, The Netherlands; Som Naidu, University of Melbourne, Australia; Robin Mason, Open University, England; Ali Ekrem Ozkul, Anadolu University, Turkey; Jianwei Zhang, Tsinghua University, China; Myunghee Kang, Ewha Womans University, Korea; Sanjaya Mishra, Commonwealth Educational Media Center for Asia, India; Alex and Lani Romiszowsky, Brazil; Reynold Macpherson, University of Auckland, New Zealand; Herman Van Der Merwe, South Africa; Jeroen van Merrienboer, Open University of The Netherlands; Charlotte N. (Lani) Gunawardena, University of New Mexico, USA; Walter Wager, Florida State University, USA; Amy Holloway, World Bank, USA; Thomas Reeves, University of Georgia, USA; Janette Hill, University of Georgia, USA; Philip Doughty, Syracuse University, USA; Nada Dabbagh, George Mason University,

USA; Joanne Williams, University of Texas, USA; Zane Berge, University of Maryland, USA; and David Peal, Harvey Singh, and Greg Kearsley in the U.S. I am indebted to them for their insightful comments that truly improved the framework.

I use the *flexible learning framework* as a guide to solicit contributions for this book. I am very fortunate to have researchers and practitioners involved in flexible learning as contributors of this book. As the editor of this book, I took an open and democratic approach to solicit contributions. I sent e-mail messages to potential authors and also cross-posted a message to several listservs soliciting contributions for the book. As a result, I put together this book by incorporating works of talented individuals with unique backgrounds from around the globe. It should also be noted that there may be many significant people involved in doing research in flexible learning who are not included in this book.

The *purpose of this book* is to provide you with a broad understanding of the emerging field of flexible learning from the perspectives of the eight categories of the *flexible learning framework.* Chapters included in this book encompass various critical issues dealing with one or more categories of the flexible learning framework and offer a variety of points of view on these issues. Below, I briefly present each chapter of the book.

In **Chapter I**, entitled *Flexible Learning in an Open and Distributed Environment*, Khan argues for the importance of increased flexibility in learning, and introduce *A Framework for Flexible Learning* to help us think through every aspect of what we are doing during the steps of the planning, designing, developing, implementing, managing, and evaluating of flexible learning materials.

Spiro, Collins, and Ramchandran (**Chapter II**, *Modes of Openness and Flexibility in Cognitive Flexibility Hypertext Learning Environments*) talk about characteristics of cognitive flexibility hypertext learning environments (CFHs) and present various modes of openness in CFHs based on cognitive flexibility theory (CFT). They believe that all kinds of openness built into CFHs are intended to shift habits of mind from the relatively closed to the more open, as well as to build specific content knowledge that has various forms of openness.

Herrington, Oliver and Herrington (**Chapter III**, *Authentic Learning on the Web: Guidelines for Course Design*) propose nine critical characteristics of learning as a framework for the design of more authentic learning environments on the Web. The elements are based on situated learning theory and other compatible research, with particular emphasis on computer and Web-based applications.

Fisher, Coleman, Sparks, and Plett (**Chapter IV**, *Designing Community Learning in Web-Based Environments*) review several strategies for creating effective collaboration and community in online environments. They provide examples and models with the goal of preparing others to design and teach effectively in collaborative Web-based environments.

Murphy, Gazi, and Cifuentes (**Chapter V**, *Intercultural Collaborative Project-Based Learning in Online Environments*) address the question, "How can we overcome potential cultural discontinuities in online collaborative project-based learning environments?" They identify differing worldviews, communication practices, and technological issues that can present barriers that frequently arise in intercultural online courses. In this chapter, they present a model for a polycentric culture that minimizes differences

among individuals in terms of their worldviews, communication practices, and technological issues.

Dennen and Bonk (**Chapter VI**, *We'll Leave the Light on for You: Keeping Learners Motivated in Online Courses*) focus on 10 key elements for motivating online learners. Each element is discussed separately, along with corresponding course activities that can be used to address that element. They also provide a few useful examples and ideas that can be adopted and adapted by online instructors in higher education as well as business learning environments.

Barclay (**Chapter VII**, *Humanizing Learning-at-Distance: Best Practice Guidelines for Synchronous Instructors*) presents a set of guidelines that raises awareness of best-practices that novice and seasoned synchronous instructors may use to foster successful live online learning environments.

Nissley (**Chapter VIII**, *Storytelling as a Web-Based Workplace Learning Pedagogy*) describes the evolution of storytelling in the workplace—from a face-to-face learning pedagogy to the use of storytelling as a flexible learning pedagogy.

Tan and Subramaniam (**Chapter IX**, *Use of Virtual Exhibits for Promoting Science Learning on the Webs of Science Centers*) discuss how virtual exhibits provide useful instructional support for exploring scientific concepts through inquiry. The creation of dynamic learning environments for experimentation through technological mediation as well as the fostering of endogenous play elements in the learning process are effective strategies for engaging visitors. They stress that this motivates visitors to strive towards acquisition of new skills and knowledge, thus opening up enhanced possibilities for knowledge transfer in cyberspace.

Witfelt (**Chapter X**, *Flexible Learning—Onsite!*) takes a different approach to flexible learning and how technologies from distributed, flexible learning can be used in everyday university teaching and learning—onsite learning. Onsite learning is characterized not by virtual and distributed processes, but by actual presence of the students.

Kurubacak and Yuzer (**Chapter XI**, *Asynchronous Content Design for Flexible Learning: The Macro and Micro Level of Frameworks to Share Knowledge Online Between Professionals and Community*) discuss design principles, ethics, and pitfalls of asynchronous content in e-learning systems. They introduce macro- and micro-level frameworks that provide useful assessment methods and techniques for e-learning providers and producers to improve their understandings about the cutting-edge technology applications into asynchronous milieu.

Baker and Tonkin (**Chapter XII**, *Online Faculty Proficiency and Peer Coaching*) share a case study of peer observation and coaching activities in their institution as an accepted means of generating data for assessing teaching for online instruction. The peer coaching cycle used consists of three stages: a planning conference, instructional observation, and a reflecting conference.

Payne (**Chapter XIII**, *What Do They Learn?*) stresses that the results of transcript analysis can be the recognition of the impacts of the various "inputs" on learning outcomes and can be a useful tool for achieving greater teaching effectiveness.

Gayeski (**Chapter XIV**, *Mobile Learning Technologies*) rationalizes the need and significance of mobile technologies in flexible learning. She discusses how college cam-

puses are quickly adopting wireless networks to make instruction, collaboration, and scheduling available at a lower cost per delivery medium and networking than conventional desktop computers and wired campuses.

Caladine and Yecies (**Chapter XV**, *Strategies for Sharing the ReMoTe: Changing the Nature of Online Collaboration*) offer a rich case study of a project that takes online interactions beyond the limits imposed by recent Web technology. They discuss the delivery and evaluation of ReMoTe, a Web-based virtual group workspace that facilitates learning activities between learners at a distance.

Mittal, Pagalthivarthi, and Altman (**Chapter XVI**, *Integrating Multimedia Cues in E-learning Documents for Enhanced Learning*) present a user-centric approach to e-learning where students can organize, analyze, share, and discuss their insights, experiments, and results more easily and in a more effective manner. The approach presented in the chapter utilizes the lecture slides and video content to index the lecture material into semantic labels, such as Discussion, Example, and Definition.

Uden (**Chapter XVII**, *Interface Design for Web Learning*) promotes that high usability in Web based learning help users to use the interface more intuitively. She discusses the Web user object modeling method to guide designers to develop Web learning applications that have high usability.

Lohr, Falvo, Hunt, and Johnson (**Chapter XVIII**, *Improving the Usability of Distance Learning Through Template Modification*) examine the interactions of instructors and students with a widely used distance learning authoring system. She reports that the instructors identified the authoring system's potential to be modified to improve student navigation and access to instructional content.

Powers and Salmon (**Chapter XIX**, *Management of the Learning Space*) argue that the key to a successful distance education experience for both faculty and students is to effectively manage the learning space. They discuss workload management, student management, and time management as three principal issues involved in effective learning space management.

McMahon (**Chapter XX**, *Ethical Issues in Web-Based Learning*) tackles the important issue of ethical issues that arise with online education. She suggests that departments, curriculum committees, and other approval bodies will need to reexamine values, rights, and professional responsibilities specifically in curricular quality control, advising, intellectual property rights, and succession planning.

Kähkönen and Sutinen (**Chapter XXI**, *Moving Toward the Implementation of Contextualized Educational Technology*) argue for various methods and processes related to the design issues, contents, or applied technologies when developing contextual and culturally sensitive e-learning materials. They discuss key areas in the implementation of contextualization, including dialogical learning, community building, and the concept of "ethnocomputing".

Reeves and Hedberg (**Chapter XXII**, *Evaluation Strategies for Open and Distributed Learning Environments*) present a pragmatic philosophy of evaluation that maintains that we should evaluate in order to provide the information that we and other decision makers need to make better decisions about the design and implementation of open and distributed learning environments.

Terrell (**Chapter XXIII**, *Components of Effective Evaluation in Online Learning Environments*) explores evaluation as a critical element to the success of online learning by focusing on four distinct components of effective evaluation: course content, the instructional process, learners, and the online learning environments as an entity unto itself. He provides a model to address the notion that evaluation and assessment should be included as an integral, ongoing part of an online learning management system.

Morgan and Bird (**Chapter XXIV**, *Flexible Assessment: Some Tensions and Solutions*) argue that although flexible teaching and assessment methods offer some alternatives for teachers and students, they clearly require considerable thought and planning. There is a range of tensions operating in both the purposes and processes of flexible assessment that deserve some closer examination. They discuss how many of these tensions arise in our efforts to adopt a flexible approach to assessment, yet deal with the competing interests of institutional policies and culture, and ever increasing workloads.

Bonk, Wisher, and Champagne (**Chapter XXV**, *Toward a Comprehensive Model of E-Learning Evaluation: The Components*) note that evaluating e-learning, or any learning for that matter, is a difficult and highly complex endeavor. They provide eight evaluation considerations that can assist in understanding the impact and effectiveness of an e-learning effort.

Collis and Margaryan (**Chapter XXVI**, *Evaluating Flexible Learning in Terms of Course Quality*) present a model for evaluating the quality of blended courses in the corporate setting. They share the results of the use of the evaluation approach with over 60 blended courses, and discuss the implications and transferability of the evaluation approach.

Harasim (**Chapter XXVII**, *Assessing Online Collaborative Learning: A Theory, Methodology, and Toolset*) focuses especially on the unique opportunities whereby instructors, educators, researchers, and students can analyze and assess learning (conceptual change) in OCL environments and applications—that is, online discussion that progresses from divergent (brainstorming) to convergent (conclusive statements) in such educational activities as group seminars, discussions, debates, case analyses, and/or team projects.

Dimitrova (**Chapter XXVIII**, *Evaluating the Flexibility of Learning Processes in E-Learning Environments*) describes the three main dimensions of flexible learning in online learning environments: location, time, and method flexibility. She presents a checklist outlining evaluation criteria for each dimension for assessing the flexibility of learning processes in e-learning environments.

Khan, Cataldo, Bennett, and Paratore (**Chapter XXIX**, *Obstacles Encountered by Learners, Instructors, Technical Support, and Librarians*) present a compilation of major obstacles encountered by learners, instructors, technical support, and librarians during online learning. In compiling these lists, they communicated with learners, instructors, and technical and library support services staff actively involved in flexible learning all over the world.

Finally, Smith and Khan (**Chapter XXX**, *A Program Satisfaction Survey Instrument for Online Students*) use a program evaluation survey based on the eight dimensions of

the *flexible learning framework* to understand the attitudes of online education students in a particular graduate program and the issues they encounter in online learning implementations. We found that students are capable of evaluating the factors that they have encountered, expressing their level of satisfaction with those factors, and estimating how those factors have impacted their online learning experience.

As you know, like any emerging field, the world of flexible learning is constantly changing and evolving. To keep you up to date with resources, FAQs, strategies, best practice examples, and any change of addresses for chapter-related Web sites and other corrections, I maintain a Web site at http://BooksToRead.com/flexible-learning.

Hopefully, this collection of ideas and issues discussed by international authors will help you understand various aspects of the flexible learning environment and provide valuable guidance in creating flexible learning experiences for your target audience. I would appreciate hearing your comments regarding this book.

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