Preface

Universities are embracing distance education, yet most are not making the changes necessary to maximize the effectiveness and efficiency of online learning. Historically, universities have designed and built pedagogies, reward systems, organizational structures, procedures, and policies to facilitate face-to-face modes of education. University staff and faculty cling to deep-rooted paradigms, which may have worked well with traditional forms of education, but do not work well for technologically enhanced distance education. The majority of online courses utilize pedagogies developed for customary classroom learning environments. To compensate for the lack of face-to-face interaction, successful remote courses capitalize on innovative, technology-enabled methodologies to facilitate and enhance the student learning experience. Whereas conventional teaching methodologies do not routinely use the power of technology to assist scholarship, not using these methods may compromise remote course quality. By clinging to traditional pedagogies, universities often diminish the potential educational advantages brought by the technologies used for distance education.

Faculty evaluation and promotion processes reward behaviors desirable in conventional educational environments and fail to recognize and support behaviors needed in the online environment. University staff, administration, and faculty are organized to support traditional student populations. Many university policies and procedures rely on face-to-face interactions with students. Institutional systems are designed to meet the needs of face-to-face students. For example, it may be difficult for the distributed students to obtain help with technical problems due to information technology help desks which do not provide the services needed to meet the needs of distance students and faculty and the increased technical demands associated with online learning. Similarly, distance

students may not have access to academic advising and other student support services.

Distance learning is a good example of a student-centered program, because it accommodates the lives and lifestyles of students who have jobs and families, but wish pursue higher education. Distance education allows students a unique opportunity to pursue a college education, live at home, maintain a career and enjoy the convenience of anywhere, anytime learning.

Accomplishing high quality distance education will mean that university administrations, faculty, and other constituents will have to make changes. Making the changes necessary to accommodate effective distance education will be difficult. Carol Twigg, a leader in the distance education field observes:

"Leaders of the old paradigm have a tremendous amount of time and energy invested in using the old rules. Consequently, they are often resistant to change and less likely to look for creative, innovative approaches to new opportunities. In much the same way that Thomas Kuhn (who first called our attention to the idea of paradigm shifts) observed scientists trying to 'save the theory', so too do defenders of the old paradigm focus their efforts on old solutions to new problems."

To succeed in distance education, faculty members must be willing to change their teaching methods and their reward expectations. Universities will need to transform their structures, rewards, and policies to accommodate the needs of distance education programs. In summary, the influx of distance education into the system is forcing universities to rethink their foundations and shift their paradigms.

This book discusses the many challenges presented in the distance education environment, explains needed paradigm changes, portrays innovative approaches for meeting these challenges, and describes the unique opportunities brought by distance education technologies. It shares some of the experiences that universities have undergone or are currently undergoing to take advantage of technology-enabled distance learning.

Organization of the Book

The book is organized into three sections. The first section presents strategies and paradigms for creating successful distance education programs. In this section, the authors use their vast experiences with diverse distance educa-

tional venues to formulate approaches for facilitating optimal learning experiences. These distance education pioneers share valuable insights into how to design methodologies and structures to enhance remote learning. The authors' diverse experiences with distance learning situations enhance the broad perspective that allows a multitude of design strategies for success.

Section I focuses on strategies and paradigms for distance education. In Chapter 1, the authors describe how, designed properly, distance education classes can be as effective, or even more effective, than face-to-face courses. The authors discuss how the tools and technologies used for distance education courses facilitate learning opportunities not possible in the face-to-face classroom. They also describe the many changes required by students, faculty, and the university itself to meet these new challenges. Changes in reward systems, skill sets, and faculty commitment to excellence in teaching necessary for successful paradigm shifts are discussed.

Chapter 2 presents a framework with six levels of design for online and distance programs. This multi-leveled design process is grounded in learning and change theory, as well as instructional design. This chapter provides a set of principles for designing effective and efficient online and distance learning programs.

Chapter 3 describes a low cost approach, *e-moderating*, for developing lectures for new online roles. This chapter considers and explores the knowledge and skills that the best e-moderators have and how they can be recruited, trained and developed.

In Chapter 4, the authors illustrate how respectful partnerships can be developed where communities control how their knowledge is used and retained while tapping into the potential of new technologies and maintaining an appropriate level of quality. They demonstrate the potential of this philosophy by examining two pilot programs for indigenous learners.

Section II focuses on instructional, course development and quality issues. Moving from traditional classroom to online and distance learning programs takes innovation and careful planning. The authors in this section suggest indicators and strategies for maintaining quality throughout the design and implementation process.

Chapter 5 discusses the fundamental changes necessary for instructors to make distance learning more effective and appropriate for a growing audience. The authors present the areas of competence important for distance teaching, such as course planning and organization, verbal and nonverbal presentation skills, and questioning strategies. They also provide practical guidelines and examples for designing online courses.

Chapter 6 adapts systems theory to distance education. Using an educational process model, the authors examine inputs, process and outputs that lead to a list of best practices for tackling the virtual classroom. Internal and external

assessment guidelines help direct successful outputs in the distance learning process.

Chapter 7 identifies key components of distance education satisfaction based on previous research by comparing traditional and distance education environments. The authors administer a questionnaire based on these components to 341 MBA distance students and factor the results into five constructs that correlate well with the satisfaction ratings of the subjects.

Chapter 8 acknowledges the challenges surrounding assessment techniques in online education at the higher education level. It asks specifically, "How do we know our online students are learning?" To answer this question with confidence, various strategies ranging from participation techniques to online group work, peer and self-assessment, as well as journals and portfolios, are described.

In Chapter 9, the authors describe a comparison between two sections of a graduate programming class, where one is an on-campus class and the other a distance class. Differences in perceived test performance were found between sections. Possible causes, implications, and suggestions for future research are explored.

In Chapter 10 the authors contend that conventional electronic learning materials are only suitable for a small target audience and cover only a few learning styles. They provide examples of the development of high quality and economically sensible distance learning materials. After discussion and evaluation of conventional materials, the authors guide the readers through the development of online study materials using modular construction. Necessary consideration of multiple interests and learning styles are discussed.

Chapter 11 looks at the effect of cultural differences on e-mail usage. Differences in use of technology-enabled communication can have large implications in the distance learning process. The authors examine how students from Collectivist versus Individualistic cultures utilize e-mail communication in distance education courses and the challenges these differences present.

Section III examines a variety of issues and strategies for building successful distance learning programs and the organizations that support them. The authors in this section discuss changes from conventional thought concerning funding, building and delivery for online programs. Starting small, building fast, innovative technology use, cost-oriented benefits, and return on investment are all issues discussed.

In Chapter 12 the author suggests a variation from the traditional approach for packaging and delivering Internet education. One strategy is to look beyond the "class" delivery approach. The premise for this strategy is the belief that the greatest strength of the Internet for education may lie in delivery of class "components," not classes, themselves. Online components can be used, not to replace, but to supplement and add value to the traditional class experience. This

strategy proposes that the universities provide, sponsor, administer and maintain an automated online portal to post and sell faculty created material.

Chapter 13 identifies ways in which institutions can maximize their return on investment for distance education offerings through the appropriate and timely re-purposing of the online content for different markets. A transformative income generation (TIG) model is suggested as a means of generating additional revenue by leveraging existing assets. Targeted application of this model is used to maximize return on investment for online distance education development.

Chapter 14 examines two common approaches that higher education institutions pursue when implementing online learning programs and provides the rationale for their success or failure. The authors define, propose, and categorize a set of eight key elements of a successful online learning program implementation in an era of decreased funding. The chapter also contains a case study involving the development of a successful self-funding online learning program in the college of business administration at a southeastern state university.

Chapter 15 describes an inter-university education network and the expected effects of co-operational activities. This chapter focuses on both cost-oriented and market-oriented benefits of the education network WINFO*Line*. Additional cost and market advantages of WINFO*Line* are discussed also. The authors initiate further discussions by looking at some problems and questions about managing open education networks in a co-operational environment.

Chapter 16 presents the results from an empirical study that show students perceive a face-to-face course supported by a web site to be useful in enhancing their academic performance. Almost all the students made use of the classroom lectures and web site resources, without feeling the need to stay away from lectures. Since learning can now be done synchronously or asynchronously, individually or collaboratively, at any time or place through the use of technology, the task of incorporating technology judiciously into the learning environment becomes a new challenge. A plethora of opportunities exist and those choices come with varying degrees of challenge and success.

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