During the last ten years, the Internet and the Wide World Web have fundamentally altered the practice of distance teaching and learning. Nowhere is this fact more evident than in the transformation undergone by single-mode distance universities as they seek to apply the benefits of emerging information communication technology (ICT) infrastructure to their core business, with a view to improving the quality and cost-effectiveness of the learning experience afforded their students.

By the mid 1990s, Canada's Open University®, Athabasca University, was ripe for change.1 Not only was the technological world that had hitherto enabled distance education undergoing radical and rapid change, but so too was the University's political environment, as debt reduction and elimination became the rallying cries of provincial public policy. Moreover, Athabasca University, Alberta's fourth public university, had under-performed during the ten previous years, as evidenced by the fact that in 1994-1995 it suffered from the highest government grant per full-load-equivalent student, the highest tuition fee level amongst the province's public universities, and a dismally low graduation rate. Concerned with this state of affairs, the Government of Alberta announced that it would reduce Athabasca University's base budget by 31 per cent over three years (ten per cent more than the reduction applied to the other universities), and that it expected significant increases in enrolment and cost effectiveness.

Today, this institution has risen to the challenge and serves some 30,000 students per year (a threefold increase over 1995), has more than tripled its graduation rate, commands the lowest tuition fees and per full-load-equivalent student base grant in the province, and, most importantly, enjoys the highest ratings among sister institutions in the biannual, provincially administered learner satisfaction surveys of university graduates.

Several complementary factors have combined to bring about this dramatic change in Athabasca University's institutional performance, but none is more important than the move towards the online delivery of its programs and courses. The direction had been prepared for in the early 1990s as Athabasca University <sup>1</sup>A complete case study of Athabasca University is available at the Web site below. Retrieved January 19, 2004, from http:// www.unesco.org/iiep/vir tualuniversity/index.html <sup>2</sup> (1996, January). Strategic University Plan (pp. 5-6). Retrieved January 19, 2004, from http://www .athabascau.ca/html/info/ sup/sup.htm developed and then launched (1994) its first two Masters level programs (Master of Business Administration and Master of Distance Education), both online degrees and global innovations.

The Strategic University Plan of 1996-1999 assigned primary importance to embracing the electronic environment through:

- the transition from predominantly print-based curricula presented in electronic format, print format or both, depending on the appropriateness of the medium
- the dramatic expansion of computer-mediated communication systems to facilitate the electronic distribution of course materials produced in-house
- e-mail correspondence between students and staff (including mailing of assignments)
- computer-conferencing among students and between students and academic staff
- the provision of library, registry, and other student support services
- access to electronic data bases
- · electronic formative and summative evaluation
- the exploitation of distributed learning systems (e.g., the World Wide Web)
- the provision of assistance to students learning to use systems<sup>2</sup>

This book, authored principally by current and past staff members integral to the implementation of this strategic vision, presents individual practitioners' views of the principal pedagogical and course management opportunities and challenges raised by the move to an online environment. Although grounded in a discussion of online learning theory (itself presented and developed by academics who are engaged daily in developing and delivering electronic courses), it does not seek to be either a complete guide to online course development and delivery, or an all-inclusive account of how they are practiced at Athabasca University. Rather, each chapter synthesizes, from a practitioner view, one component piece of a complex system.

One of the main advantages of digital content is the ease with which it can be adapted and customized. Nowhere is this more true

Theory and Practice of Online Learning

than in its application to online education in general, and at Athabasca University in particular, where three complementary values characterize the organization's different approaches to how work is organized and how learning paths for students are facilitated: customization, openness, and flexibility.

Consequently, and notwithstanding the inevitable standardization around such key issues as quality control, copyright, materials production, library, and non-academic support services (all of which are discussed in this book), considerable variation in operational and educational course development and delivery models is evident across the University's different academic centers. Just as the University supports several learning management systems (see Chapter 4), so too are there various, recognized approaches within Athabasca University to the management and administration of teaching and learning processes. As such, the models and cases presented in this study should be considered as examples of what has worked well given one organization's particular culture, not as prescriptive descriptions of the only way of engaging in effective online education.

There is, however, one common trait that both defines Athabasca University's flexible undergraduate learning model and informs most of this book's content. At the undergraduate level, all five hundred plus courses are delivered in individualized distance learning mode: students start on the first day of any month, progress at their own pace, and submit assignments and sit examinations at times determined by themselves. This flexibility presents tremendous advantages to adult learners who generally also face the demands of both employment and family responsibilities, but it poses particular challenges when administering, designing, or delivering distance education courses. While most of the online advances outlined in this book will often have parallel applications in cohort-based e-classes, the distinction between individualized and group-based distance education is one that the reader is advised to keep in mind.

In keeping with its mission as an open university, Athabasca University is delighted to provide this book under an open source license, thereby removing financial barriers to its accessibility. As its President, I take pride in what our collective staff has accomplished and recognize the particular contribution that this book's authors are making to the global extension of our mission.