Preface

Books that focus on the technology applications of distance education are quickly outdated. This book is different because it focuses on learner-centered instructional design and sound principles of adult learning. It is our belief that it is not the media but the method that makes a difference in effective instruction delivered at a distance.

This book was written for those (1) in higher education settings serving as teachers or instructors, instructional designers, media professionals, and/or administrative leaders; (2) in corporate or industry settings, including the military and other government organizations that provide professional or organization development; and (3) students or lifelong learners seeking to join the profession or to increase understanding of the field of distance education. A broad reach, you might think, but are we really that different? We like and defend the idea of "inclusivity"—all of us learning together about the field of distance education.

From research to practice is the purpose of this book. The book is written for those who do not have a background in "teaching and learning"; therefore, we provide the theoretical and philosophical basis for designing instruction in general and then add the components that make teaching or training at a distance unique and special.

We include current research studies to serve as a theoretical foundation and provide numerous practical guidelines and examples for reflection and elaboration. You will find additional reading links, case studies, or content applications within boxed information in the chapters. These boxed areas include activities or questions for *Thought and Reflection* that can be used as an

individual exercise to take a break from the reading and think about how you would respond. Instructors may want to use these boxed activities for course activities as well. There are *Internet Connection* boxes with links to additional reading or examples of the principles being addressed in the chapter. Every chapter concludes with an *Application Exercise*. If you participate in these exercises, you will develop a lesson at a distance—a skill set that can be transferred to an entire course or training program.

The book is divided into six sections: Foundations of Instruction and Learning at a Distance, Adult Learning Theory, Systematic Instructional Design, Technology Knowledge and Skills, Administrative Issues, and Future Directions.

Section I provides the foundation for distance instruction and learning. Chapter I is an introduction to designing and delivering courses and programs at a distance. We define and describe the concept of benchmarking competencies for distance education professionals and learners based upon prior research studies conducted by the authors. The framework introduced in this chapter for best practices will be included throughout the book to guide practitioners and promote learning.

The theme for Chapter II is critical issues for educators and trainers engaged in distance education programs. Distance education as an innovation sets the stage. We introduce globalization as a powerful concept and moving force that affects decision making related to instructional development and delivery at a distance. The need to provide accessible knowledge and learning objects worldwide is imminent. This chapter also highlights the "No Significant Difference Phenomenon" and some research examples in regard to good instructional practices.

Chapter III focuses on the philosophical foundations of learning theory or models of learning. Concepts of behaviorism, cognitive information processing, and situated cognition/social learning theory are emphasized. An understanding of theoretical models of learning is essential for the design and delivery of instruction at a distance.

Section II of the book focuses on the use of adult learning theory (andragogy). Incorporating adult learning principles into the design and delivery of distance courses will result in more meaningful learning. Chapter IV includes a review of adult learning principles and learner differences that can impact learner engagement and ultimate success in a distance course. Andragogy provides various definitions and assumptions about adult learners that guide and direct the instructional design process. Age and generation, Kolb's learning style inventory, cognitive styles and controls, and multiple intelligences are some of the learner differences or characteristics that are discussed.

Chapter V concentrates on principles for engaging learners and fostering self-directedness. Additional explanations on characteristics of learners, including temperament/personality, gender, attrition rate, responsibility, interactions/engagement, and quality, set the stage for the notion of self-directed learning and the roles of educators and learners in this process. This section of the book will help instructors foster deeper and more meaningful learning by taking into account a learner's unique background, experiences, knowledge, skills, abilities, self-directedness, and/or personal learning styles and values.

Section III of the book emphasizes systematic instructional design. Chapters in this section incorporate writing instructional objectives, techniques for gaining attention and motivating learners, strategies for engaging the learner actively, and methods for assessing learning authentically. Chapter VI provides an overview of the instructional design process. The focus is on student-centered, rather than instructor-centered, design. We explore the ADDIE model as a template and provide scaffolding for you to create your own design.

The focus of Chapter VII is writing instructional objectives. It is a bit like learning the ABCs. Objective writing is "literacy" in relation to the instructional design process. The focus is on student-centered, rather than instructor-centered, design. We will provide a template and mention the use of concept mapping as a strategy to create your own design.

Gagné's first event for instruction is gaining attention. Why is that important? Chapter VIII explores the use of icebreakers and openers as a first step in creating an active learning environment. Audience assessment, building rapport, review of previous content, and advanced organizers are just a few reasons to incorporate icebreakers and openers into every instructional sequence. Learning is a social process. We need interaction with others (instructor and learners) in addition to the course content. When the learner is actively engaged, retention is enhanced and satisfaction increases.

If the objective is written correctly, then measuring outcomes is much easier. Assessment should be a continuous process. Questioning techniques through mediated communication (e-mail, threaded discussion, chat) provide an indication of confusion or understanding, allowing the instructor to make changes in delivery. Traditional testing for verification and the challenges it can pose for distance education are included in Chapter IX, along with the use of rubrics and authentic assessment techniques to measure whether the instructional objectives have been met.

Section IV addresses technology knowledge and skills. Of particular importance is the need for instructors and designers to understand access variability with bandwidth and different software requirements. Moreover, instruction

must be designed for multiplatform use and for future technology development.

Chapter X discusses potential delivery technologies to bridge the distance between and among learners and instructors. Examples include print, audio, audio and video, and computer tools. Chapter XI introduces the multimedia tools, including graphic design balance and purpose, audio, streaming media, animation, and simulation.

Section V of the book covers administrative and management issues. For most instructional leaders, this issue is not only foreign, but likely an area that causes great consternation! It is critical for instructors and learners, as well as instructional designers, to be aware of these important issues so that the course or program will run smoothly.

Chapter XII addresses the major concepts that instructors, learners, and administrators need to know when delivering training at a distance. These issues cover aspects of learner support services, technical support, copyright concerns, and institutional models for rewarding and recognizing instructors. Budget and funding models, such as categories of cost and income, funding strategies, staffing issues, creating collaborative partnerships, and operational procedures, are discussed in this chapter.

Evaluation is an area that most would agree is necessary for program planning and delivery; however, it is also one of the most neglected. Chapter XIII explores programmatic and course evaluation, providing numerous examples of various types of evaluation.

Section VI concludes the book and provides points for reflection and future directions. Distance education has evolved from correspondence schools of the 1800s to delivery of training via desktop videoconferencing and the Internet today. But what does the future hold for this field? What will be some of the major changes in distance education 10, 20, or even 50 years from now?

We chose in Chapter XIV to emphasize educational and technological trends that could impact distance learning. We also include some visions for the future of distance education from the perspective of the learner, university faculty, and an international training and development specialist. We must all remember that as professionals in the field, we will have an impact on what the future will be like. But this assumes that we will stay current and constantly look for ways to expand our reach and promote global learning. Please join us on this journey!