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# Preface

The field of human performance technology emerged from its parent field of instructional technology, based on the realization that instruction could not be a cost-effective solution to *all* performance problems. Because of this historical relationship between the two fields and the fact that they are built on similar operational principles such as systematic and systemic approaches to solving problems, one good way to learn about the two related fields is to study their historical and theoretical foundations. That's how we, the Department of Instructional and Performance Technology at Boise State University, educate our students in the first semester of their master's degree and certificate programs.

I started teaching a *Foundations of Instructional and Performance Technology* course at Boise State University in the fall of 1996. As the title of the course implies, the main goal of the course is to help new students successfully build foundational knowledge about the fields of instructional technology and human performance technology. While teaching the course, I was constantly looking for a textbook that would help students gain a good understanding about the historical and theoretical foundations of the two related fields. I was not successful in finding a textbook that could serve the purpose, and the only available option was to provide students with a collection of published articles and book chapters. However, students had difficulty making connections among some of the articles written by different authors due to the incongruent format and tone of voice. I spent a considerable amount of time helping students synthesize the overall implications of the historical events that happened during the development of the fields, by combining information from different sources. After doing so for ten years, I realized that my lecture notes became thick enough to be converted to a book! I finally decided to publish this book in order to provide students with an overview of the development of foundational principles and practices of the fields of instructional technology and human performance technology in a coherent voice. The intended audience for this book includes students who are studying instructional technology, human performance technology, human resource development, and related subjects.

There are eleven chapters in this book, and the themes of the chapters progress from the focus of instructional technology to the focus of human performance technology. Chapter 1 provides definitions of instructional technology and several important terms. Chapter 2 provides an overview of the development of the foundational principles of human learning and teaching, and systematic instructional design processes, by introducing the works of several important theorists such as E. L. Thorndike, Ralph Tyler, B.F. Skinner, and Benjamin Bloom. Chapter 3 reviews several individuals' contributions to the development of instructional theories and systematic instructional design processes, including the works of Robert Gagné, Robert Mager, Walter Dick and Lou Carey, and John Keller. Chapter 4 introduces systematic and systemic approaches to evaluating the effectiveness of training programs, using Donald Kirkpatrick's four-level model of

evaluation. Chapter 5 describes the primary structure of instructional systems development processes such as the ADDIE model, and explains the meaning of the term *training needs assessment* from a historical perspective to illustrate a paradigm shift from training-focus to performance-focus.

Beginning with Chapter 6, the focus shifts to human performance technology. Chapter 6 clarifies the difference between behavior and performance, and introduces human performance technology as a field of study. Chapter 7 provides an overview of Thomas Gilbert's leisurely theorems including the concepts of worthy performance, potential for improving performance, and the behavior engineering model. Chapter 8 describes the process of front-end analysis as Joe Harless defines it. Chapter 9 provides an overview of Roger Kaufman's organizational elements model, which identifies five elements of a system and the interrelationships among them. Chapter 10 provides an overview of several theories and studies derived from the field of industrial and organizational psychology and the field of social psychology, such as Frederick Taylor's scientific management theory, the Hawthorne studies, Kurt Lewin's field theory, and Frederick Herzberg's motivation-hygiene theory. These theories and research findings have a substantial impact on, and implications for, current human performance technology practice in regard to understanding human behavior and improving performance in work environments. Then Chapter 11 provides a summary of the historical and theoretical relationship between the field of instructional technology and the field of human performance technology.

This book certainly does not cover an exhaustive list of topics necessary to build complete foundations of the fields of instructional technology and human performance technology. The topics included in this book were chosen for students who are fairly new to the fields, and they intend to help them build the initial layers of theoretical and historical foundations within a semester-long period of time. Instructors who adopt this book as a textbook for their courses may assign each chapter along with several related articles as weekly reading assignments. They may choose additional weekly reading assignments from the list of references provided at the end of each chapter. It is also recommended that instructors assign students small real-life projects to reinforce their knowledge of the foundational principles of instructional design and performance improvement that they gained from the reading assignments.

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