Foreword

Today's educators recognize that using innovative practices to disrupt ineffective or antiquated practices is a pathway to improving their future professional practice and that improved practice leads to improved student learning. Yet, even as our understanding of literacy and digital technology integration has evolved over the past decade, many educators continue to rely on ineffective learning constructs exclusively. As such, the central goal of this handbook is to provide options that deter such use even as it provides readers examples of the emerging practices shaping the field today. Specifically, this handbook offers a diverse set of research findings and innovative practices all aimed at assisting educators to effectively apply concepts of literacy and digital technology within their professional practice.

Literacy and digital technology concepts are grounded across disciplines and represent a multifaceted set of educators that includes pre-service and in-service educators along with teacher educators and others interested in the field of teacher preparation. What they and this volume have in common is an interest in understanding the knowledge, skills, and dispositional beliefs (i.e., the quality and nature of their practice) of the field, as well as an understanding of the supporting research and ideas related to the continual improvement of student learning. As such, this volume assists readers to recognize that how we teach and engage with our learners can be continually refined and developed through various actions and interactions intended to provide the highest quality learning.

For example, within the framework of transforming the practice of teaching, chapter 6 (Designing Curricular Games) and Chapter 14 (Understanding Web-Based Peer Assessment) provide research supported insights regarding emerging pedagogies. Likewise, Chapter 5 (Perceptions and New Realities), Chapter 17 (Fostering student deliberations), and Chapter 20 (Countering Neoliberalism) stand out examining the beliefs associated with effective practice. Of equal importance for readers are the chapters reporting on lessons learned from practice. In these chapters a number of lessons learned from the integration of skill-based technologies are shared. These include use of digital research tools (Chapter 3), design thinking (Chapter 4), augmented reality (AR) and artificial intelligence (AI) (Chapter 5), coding (Chapter 12), and digital gamed based learning (Chapter 6). In fact, a quick review of the Table of Contents reveals that transformation of practice is advocated for across a majority of the handbook's chapters.

Given the broad nature of the information contained within, the handbook is appropriate for academicians, educators, administrators, educational software and app developers, instructional technology consultants, researchers, professionals, students, and curriculum and instructional designers. As such, this volume assists readers to consider where we are as a field even as it provides information about where we are going as a field. Directions for future research are revealed for careful readers of many chapters. This handbook is both instructive and timely in nature, offering many ideas related to the application

Foreword

of technology into the field of teacher preparation. In summary, readers will gain valuable insights that can both inform practice and future scholarship interests.

Beverly B. Ray Idaho State University, USA