



KATHLEEN P. KING

TECHNOLOGY AND INNOVATION IN ADULT LEARNING

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PRAISE FOR TECHNOLOGY AND INNOVATION IN ADULT LEARNING

"If you teach adults and are thinking about, or are currently using digital tools with your learners, this book is for you. King has done it again!"

—Kathy Peno, Professor of Education, Adult Education Coordinator,
Adult Education Master's Program, University of Rhode Island

"The digital age meets adult learning—a timely and necessary read for those who wish to strengthen the scholarship and practice around educational technology and distance education."

—Tonette S. Rocco, Florida International University

"Uniquely integrating adult learning and technology for global and digital learners, *Technology and Innovation in Adult Learning* is a timely, comprehensive, theory-based and strategy-rich book. King's distinctive expertise and years of research and teaching in both adult learning and technology fields provides readers not only with a wide angle to view a new vista of applying learning theories for adult lifelong learning needs, but also with applicable use of instructional technology tools and examples. It is a must-have reference book for anyone who works with adult learners in formal, informal, and non-formal learning environments."

—Qi Sun, Associate Professor, Program Coordinator of Adult Learning & Adult Education,
and Coeditor, *Adult Education Quarterly* (AEQ), The University of Tennessee, Knoxville

"Anyone who wants to achieve and sustain the competitive advantage, and 'happens to' have a smartphone or tablet or laptop or computer, should read this book."

—Tian Xie, Department of Psychology, Wuhan University, China

“Kathleen P. King continues to surprise and delight me as she adds even more insights into adult education in this modern world. She has the unique ability to first and foremost capture the practical opportunities and challenges of educating adults, informed by immense personal knowledge, experience and understanding. I felt affirmed as a professional and challenged to further strive, to grow and to excel as an adult educator.”

—Shirley Reushle, Honorary Associate Professor,
University of Southern Queensland

“King delivers an easy-to-read, innovative book which blends vital technology skills with adult learning principles into a practical and universal approach for practitioners and researchers for now and in the future. A must-have book for practitioners.”

—Wayne B. James, Professor, University of South Florida

“This book enriches and enlarges the field of adult learning. With cutting-edge research, this book inspires readers to probe the paradigm shift of how technology has changed and reshaped human beings' lives, relationships, and learning.”

—Pi-Chi Han, National Kaohsiung Normal University, Taiwan

CONTENTS

To Karen E.,

You are a brilliant example of a lifelong learner who critically examines technology. Thank you for your unwavering support, care, and wisdom. You make my life rich, exciting, and filled with love.

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PREFACE

In the digital age, adults are engaged in learning as ubiquitously as technology is available. Yet, this fact is one of the best-hidden secrets because of society's general lack of understanding, recognition, and awareness of adult learning. Although adult education is accustomed to being considered marginal by many policy makers, administrators, and funders, compared to P-12 education, the digital age provides a tremendous opportunity to change that experience.

This book provides a compelling read, easily accessible discussion, and abundant resources and strategies for educators and learners interested in adult learning and technology. In addition, it was written to accommodate the needs of readers across all levels of technology expertise. This approach enables everyone to become versed in the unique discussions of the sectors in which technology and adult learning intersect.

Adult learning experts and learners will discover that this book provides the foundation to understand and vitally contribute to 21st-century instructional innovation related to technology. Many examples are provided to reflect on the possibilities of transforming one's own practice and also to apply those transformations across different areas of instruction, professional development, research, and knowledge-building agendas, goals, and projects.

This book also offers a great opportunity to change the landscape of technology based on adult learning design. As readers gain understanding and experience in this area, they can contribute to initiatives that customarily are designed by people untrained, or minimally trained, in adult learning. From the distance learning efforts of educational institutions and corporations to online gaming, learning management systems (LMSs), YouTube, virtual reality, instructional television, podcasts, videocasts, blogs, and wikis, scores of venues and technologies are being used to develop adult learning materials with little vision of the connections to adult learning research, principles, or strategies. This book prepares readers to do the following:

- Incorporate adult learning concepts into instructional technology design.
- Identify opportunities and critical issues for adult learning in the midst of 21st-century's ongoing technology innovation revolution.
- Understand emergent technology issues and trends through examples related to formal and informal learning and real-life contexts.
- Contribute to the application of adult learning across its many settings and contexts.

- o Converse as professionals knowledgeable about adult learning with technology experts.
- o Use adult learning as a foundation to advance the knowledge base and research agenda of technology innovation.

This book accomplishes these objectives, but it also prepares adult learning professionals to pose additional questions and shape the future of learning in the digital age.

Authors always have to define the scope of their work. In that vein, it is helpful to recognize what this book can and cannot provide. First, important characteristics of this book emerge from the need for the field of practice to (1) have literature written in accessible language and style for educated adults and (2) employ examples to illustrate concepts. Therefore, it will not provide bleeding-edge technology-jargon-laden discussions of hot, new trends for technology aficionados (“techies”). Second, instead of solely focusing on the instructional applications of technology, this book examines the use of technology in learning, classroom applications, as well as its opportunities and future.

Who Will Benefit from This Book?

There will be many interested and relevant audiences for this book across the fields of adult learning, instructional technology, and higher education. Such audiences include learners in adult learning degree programs, learners in other programs, faculty members and instructors, researchers, and other professionals.

The primary audience is people who want to create materials for and teach returning adult learners according to comprehensive theories. It especially addresses the needs of faculty members, instructors, and other professionals, such as administrators, directors, faculty developers, and trainers who are already work with adult learners.

Some of these readers may be students enrolled in adult learning, adult education, and higher education master’s and doctoral programs. Course titles may include “Adult Learning, Emergent Technologies,” “21st-Century Learning,” “Nontraditional Student Learning,” “Instructional Technology,” and others.

Other students, graduate and undergraduate, may be enrolled in closely related fields such as (1) human resource development programs that prepare trainers and consultants; (2) instructional technology programs that get ready to work with librarians, P-12 or higher education faculty members; and (3) professional and higher education preparation programs for faculty members, instructors, directors, or other administrators serving adult education and postsecondary (or tertiary) education. These academic programs have various names (lifelong learning, andragogy, social education, adult and professional education, community education, etc.), but often such programs have a course on adult learning and a keen interest in technology.

For example, individual instructors, administrators, and student development personnel may build their understanding of emergent technology, new avenues for adult learning research, and knowledge building through this book. As with some other valuable educational publications, faculty development groups (such as faculty study groups) may read, discuss, and apply the book. Such groups meet one to two times per month and function similar to a workplace book club. Not only do these faculty members desire transfer of learning for innovative instructional practices and peer learning but also they enjoy discussing philosophical and theoretical issues together.

Although the primary audience for this book is academic, in the identified programs most learners are practitioners working with adult learners in many different contexts. As a complement to traditional books on adult learning, this book extends the conversation in new directions for practitioners to reconceptualize (1) their profession, (2) instructional efforts, and (3) future adult learning opportunities.

Overview of the Book

This book is organized according to how the material would be presented logically for a graduate course or study group on this topic.

Part 1: A Foundation for New Learning

The first section of the book provides a vision of how differences in our lives, work, and learning in the 21st century develop urgency for reconsidering the role and opportunities for adult learning.

Chapter 1: The Digital Age Secret for Success: Adult Learning

There are many powerful ways in which technology has pushed adult learning to the forefront of our lives in the 21st century, yet the phenomenon has gone largely unnoticed by most people, including experts in the field. This chapter introduces major influences that technology has on adult lives and how that relates to adult learning, all of which are discussed in separate chapters in Part 2.

Chapter 2: Understanding the Evolution of the Digital Age

How did we arrive at this point at which technology is changing our lives rapidly and providing many demands for adult learning? This discussion discusses details of three major areas of emergent technologies and demands for different ways to think and interact from the perspective of adult learning. Social adoption, political changes, globalization, and cross-culturalism are explained as they relate to the digital age and adult learning. The terminology of technology is also explained in this chapter with vital examples related to adult learning.

Chapter 3: Adult Learning and Living in the Digital Age

Where does adult learning occur in everyday life in the digital age? This chapter not only provides many examples but also integrates adult learning theories and models throughout these discussions. This chapter provides vivid examples of adults learning throughout their daily and work lives, as well as adult learning theories and models.

Chapter 4: Biological Concerns: Development, Aging, and Neuroscience

New developments in neuroscience provide life-changing possibilities for adult learning and adult development. At the same time, how will young and mature adults be affected as they advance in the digital age? This chapter includes examples of applying research findings that provide valuable strategies for designing and facilitating adult learning.

Part 2: Scaffolding Essential Skills for Learning in the Digital Age

This section addresses in detail the essential skills demanded of adults to be successful in their daily lives in the digital age. Each chapter in this section provides scenarios, theories, models, and strategies (which include an individual, workplace, and classroom focus).

Chapter 5: Andragogy Illustrated

Andragogy is the first section discussed in Part 2 aimed at orienting the reader to the literature of adult learning. By discussing andragogy's background and providing examples, this section illustrates the value of using aspects of these principles to understand the roles of adult learners and instructors.

Chapter 6: Motivation's Essential Role

When application drives adults' need to learn, their motivation is a powerful impetus. The chapter's examples and discussion of motivation in learning spans the areas of work, entertainment, relationships, health, and wellness. The different types of motivation are explained as well as how they relate to adult learning. Strategies to cultivate motivation are illustrated through specific resources and examples.

Chapter 7: Critical Thinking and Problem-Solving

In recent years, the workplace and the landscape of our daily lives have changed. Adults in the digital age constantly need to problem-solve multiple systems in order to accomplish their goals. Readers will find not only an extensive discussion that explains the details of and means to cultivate critical thinking and problem-solving but also many examples and strategies.

Chapter 8: Self-Directed Learning Discovered

In the 21st century, self-directed learning (SDL) is one of the most valuable and needed skill sets. Adults can no longer rely on their mandatory (P-12) or college education to suffice for a lifetime. Therefore, it is essential for successful adults to be adept at self-directed

learning across many venues of their lives. Based on the extensive research and literature of this field, this chapter explains what self-direct learning is, how to cultivate it, and strategies for sustaining and applying it in the life and work of adults.

Chapter 9: Required Intercultural Competencies

Another major consequence of the digital age is that our daily scope of life and communication is now global. This chapter explores the consequences of a global life via several facets. It recognizes the new demands for diversity awareness and intercultural effectiveness competency in these contexts. Using research and models as a foundation, this chapter also presents strategies for integrating their principles in face-to-face as well as technology-facilitated communication.

Chapter 10: Transformative Learning Perspectives

Understanding transformative learning theory provides a valuable framework to understand how adults can use coping skills to support the scores of changes embedded in this world of innovative technology. The 21st-century world is changing rapidly and so are societal and work demands, expectations, and taboos. Multiple examples illustrate adult needs, strategies, and journeys as they experience transformative learning in formal and informal situations. Cultivating skills to support the process is a key responsibility for learners and educators of adults.

Part 3: New Vistas in a Digital World

Reaching beyond familiar adult learning discussions, this section considers evolving opportunities of learning. Chapters explore new vistas in the areas of mind, body, and spirit (MBS) connections; e-learning models spanning many technologies; research about technology adoption and use; and emergent technologies for research.

Chapter 11: Mind, Body, and Spirit Connections

Recent adult learning literature has been exploring MBS connections (Hill, 2011; King, 2013; Merriam & Bierema, 2014). Three aspects of the holistic model will be explored: (1) the need for holistic perspectives; (2) the opportunity to leverage MBS connections in adult learning; and (3) technology-facilitated tools to cultivate MBS awareness and learning, wellness, and health support. Examples are provided of how MBS perspectives can be used by learners and educators as well as the breadth of opportunities available through this frame.

Chapter 12: e-Learning Models: Distance, Mobile, Virtual, and Informal Learning

Because adults need to access learning during a wider range of times and delivery modes, technological developments have evolved many forms, including distance, virtual, and mobile learning. In addition to exploring the available technologies, this chapter provides many examples of effective instructional strategies and activities and presents opportunities to

apply adult learning to the design, use, and delivery of distance, mobile, virtual, and informal learning.

Chapter 13: Psychology of Technology Use and Adoption

Roger's (1995) model of diffusion of innovation provided a foundation for understanding technology adoption that many researchers and theorists have built on. In turn, Turkle's (1995) work opened up the field of the psychology of technology. Vital illustrations and discussion of these concepts lead to strategies for implementing new approaches with adult learning.

Chapter 14: Conclusion: Emergent Research Opportunities

In conclusion, the book discusses new opportunities for theory, implementation, and research through an integrated view of different types of adult learning and guidance for research in the digital age through the model of researching of adult learning and innovation (MoRALI). Compelling questions are posed for future exploration.

A New Leader Emerges: Adult Learning in the Digital Age

The information age has tipped the pedagogy-andragogy scales during a time when few people were paying attention. Since it emerged, adult learning and adult education have been marginalized topics; however, recent developments in 21st-century technology make adult learning essential for survival. This book articulates how the continuous, rapid changes and adoption of technology in our personal and professional lives push adult learning to the forefront of adults' need for essential skills. *Technology and Innovation in Adult Learning* builds on Merriam and Bierema's (2014) introduction of this topic by providing additional practical insight, extensive examples, and advanced discussions.

Whether adults are at home or work; conversing with friends, family, or coworkers; or pursuing their daily routines, chances are many of their activities involve accessing technology. In fact, how many of us can remember a time when more than 8 hours passed and we did not check e-mail, text someone, update pictures and status in Facebook, or consult our handheld or online calendars?

The low cost, greater availability, and ease of use of 21st-century technologies have contributed to widespread adoption and dependence on cell phones, smartphones, tablets, laptops, computers, smart televisions, and more. Rather than technology use being relegated to techies only, since the 1990s we have witnessed tremendous popular adoption driven by advancements in user-friendly equipment and interfaces, or as many would say, gadgets and apps.

Constant changes in technology use and adoption provide opportunities for formal and informal teaching and learning and also for research, knowledge, and theory building. This book explores these many new horizons where 21st-century technology intersects with adult learning and creates powerful opportunities. Rather than simply discussing technology trends, this book systematically explains and illustrates how the adult learning field and practice can advance by leveraging these new innovations.

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PART I

A FOUNDATION FOR NEW LEARNING



