

Handbook of Design in Educational Technology. 2013. Edited by Rosemary Luckin, Sadhana Puntambekar, Peter Goodyear, Barbara Grabowski, Joshua Underwood & Niall Winters, Routledge, Publisher. 500 pages. ISBN-13: 978-0-415-80734-0

Reviewed by Ewa Wasniewski

Introduction

The *Handbook of Design in Educational Technology*, edited by Luckin, Puntambekar, Goodyear, Grabowski, Underwood, and Winters (2013) provides a current pulse check of the different approaches in designing, implementing and evaluating educational technologies for a variety of educational contexts. Educational or instructional design, as noted in the first chapter by Ertmer, Parisio and Wardak (2013), is a complex balancing act of prioritizing different learning outcomes, expectations, policies, and guidelines, as well as considering the implications of different domains. Designers now need to understand the complex network of people and platforms in order to design the best learning experience. With this moving target, the editors of this book intended to provide a starting point for new designers, evaluators and researchers by introducing them to the complexity of this ever changing field.

Potential Audience

Educational Developers, Curriculum Designers, Instructional Designers, Faculty Developers, innovative Instructors, as well as Educational Psychology Researchers or Program Evaluators; would find many chapters of this book interesting as it would support or enhance their respective areas through implementation of educational technologies. There are a wide range of theoretical frameworks that are explored with suggestions coming from an international author perspective as an attempt to keep up with the fast paced changes occurring in the field of educational technologies.

Scope of Book

Each of the different sections of the book provides a mixture of practice and research based approaches which share contextual applications of educational technologies. Some of the more predominant technologies researched in the book were different Web 2.0 tools, LMS systems, cloud computing, mobile devices, virtual environments and tangible technologies. Additionally, different programs were researched to understand the impact on learning which spanned from assessment software, decision point navigation, interface layouts and progress monitoring systems. The mix of research methodologies used to explore lean towards a more qualitative

perspective as different researchers apply their epistemology to educational design. This truly speaks to and highlights the development of the educational technology field as more practitioners, instructors and educational psychologists investigate the impact of tools on teaching and learning. Second, the emerging theme of a collaborative and multidisciplinary approach is echoed in many of the different chapters. This too is a direct outcome of the boarding perspectives which drives educational technology research within a variety of educational contexts. Finally, the different technologies explored in the different chapters are just that, technology used in that instance. The one key thing that this book does well is share research best practice ideas while illustrating the application and evaluation of a specific context. It is not always possible to generalize the transferability of outcomes from one context to another and most often the chapters identify the need for further research and investigation into emerging technology design.

Content Organization

The content of this book is organized into 4 different parts starting with the foundation, design, implementation and evaluation of design. Each of the parts has an introduction to all of the subsequent chapters in an attempt to flow them together. Even though all of the chapters do fall best into the section they are in, not all of the chapters flow well into each other by switching between opinion based literature reviews to a preliminary or partial research structure. Part 1 *Foundations* attempts to capture the different environments that affect pedagogical decisions and impacts. These chapters attempt to explore the different variables needed to create a supportive learning environment whether face to face or online. Part 2 the *Design Methods* expand on the impact of sound design principles by exploring how transformative learning can create new experiences. Overall, understanding student needs does impacts the design and transferability of learning experiences. As designers, we need to see beyond the one interactive activity to the broader learning experience which is why so many of these chapters call for further research. Part 3 *Implementation* is broken into four different challenges that designers face when creating activities for complex thinking, collaborative interaction, innovative technologies and distance education. As interesting as some of the chapters are in this section, they are very context driven making transferability of lessons learned challenging. The editors ask that the chapters are not seen as stand along, which indicates the challenge of transferring results. Part 4 *Evaluation* was not what I expected as the focus was on understanding complex learning, artifacts, tools and methods of affecting learning through a more case study approach, rather than an evaluation of approaches. The chapters in this section do provide different suggestions on techniques to document learning through assessment and data collection. The editors were able to have most of the chapters follow a similar subheading format, and some chapters are easier to read with the content flowing better within the writing which achieves the overall purpose of the book. “We wanted to design a book that we would want to read and recommend” (Luckin et al., 2013, p.x).

Summary

One key message that is interwoven throughout the book is that even though technologies change our approach into designing the best educational experience transcends the challenges of implementation. This book provides a very broad glimpse into the vast possibilities of design and implementation of educational technologies and due to this multidisciplinary perspective many different contexts and applications are covered. With multiple authors, compiling a collection

such as this is challenging. Some of the chapters are more robust than others with a few leaving me wanting more information. Despite the varying levels of theoretical and methodological underpinning, the book is a great starting point for new developer, instructors or evaluators.

Author

Ewa Wasniewski (MEd., Diploma in Special and Inclusive Ed, BEd & BPE) is a third year PhD student at the University of Alberta in Educational Psychology specializing in Educational Technologies. Over the past five years she has also worked on numerous research projects investigating virtual worlds, assistive technologies, digital literacies, language development, and universal instructional design to name a few. She has also been working at NorQuest College and is now a Faculty Development Advisor embedding best practices into online and technology based learning for instructors from a variety of disciplines. Instructional design is always at the forefront of her development and planning, as evaluation maintains our ongoing ability to stay current and connected to our students and their individual needs.



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