Preface

With recent advances in computing technology, virtual worlds and environments are growing rapidly as well as gaining in popularity. Virtual worlds are online computer-simulated environments where users can interact with one another, whether for work or play, in a manner comparable to the real world. Virtual worlds are exemplified by environments such as Second Life, an online 3-D virtual reality world, as well as World of Warcraft (WoW), a massively multiplayer online virtual game. Educators, researchers, corporate trainers, instructional designers, and many others have recently shown great interest in virtual worlds and environments, which they have used increasingly in a variety of contexts: teaching in classrooms, informal learning, distance learning, business, gaming, entertainment, and e-commerce. Virtual worlds allow users to come together to interact, play, learn, do business, conduct classes, do research, and hold conferences in an online environment. Virtual reality technology enables educators and trainers to build virtual learning communities for learners with the goal of helping them solve real-world problems in an experiential setting.

A growing number of educators and researchers have tapped into the educational potential of virtual environments and they contend that virtual worlds will revolutionize education. Virtual worlds are now attracting interest from institutions and organizations as platforms for learning and have become one of the most exciting, dynamic, and yet challenging fields facing us today. What is the history of virtual worlds and environments? Where are we now? What will the future bring? What are the key elements of virtual worlds and environments we need to focus on? Where has progress been made? How will we face and rise to new opportunities and challenges? How do we analyze, design, develop, implement, and evaluate virtual worlds and environments? In order to shed light on these questions, we've taken a comprehensive view and looked at at virtual worlds and environments from historical, conceptual, technical, practical, social, and vocational perspectives. The result is this book, entitled *Handbook of Research on Practices and Outcomes in Virtual Worlds and Environments.*

The *Handbook of Research on Practices and Outcomes in Virtual Worlds and Environments* both introduces theoretical aspects of virtual worlds and environments and disseminates cutting-edge research and first-hand practices on virtual world design, and development. In addition, virtual communities, applications, pedagogical design, strategies, and future trends of virtual worlds and environments are covered. The book is written for broader audiences including educators, e-business managers, trainers, administrators, and researchers working in the area of e-learning or distance learning in various disciplines (e.g. education, corporate training, instructional technology, computer science, library information science, information technology, and workforce development). The book is designed to be used in a flexible manner, and it can be easily adapted to suit a variety of Information Technology or instructional technology related courses, meeting student, instructor, and professional needs. The book can be used as a research reference, a pedagogical and professional guide, or an educational resource in the area of virtual worlds and environments.

The *Handbook of Research on Practices and Outcomes in Virtual Worlds and Environments* goes beyond theoretical insights of virtual worlds and environments. It shares practical aspects of virtual worlds and environments and provides readers with a balanced mix of research, theory, and applications on both innovative virtual reality technologies and future virtual worlds and environments. The book includes a selection of chapters addressing current research, case studies, design and applications, best practices, pedagogical approaches and strategies, related resources and projects related to virtual worlds and environments. The book is organized into five parts: Social, Ethical, and Human Perspectives (Chapters 1-6); Virtual Communities, Applications, and Implications (Chapters 7-14); Strategies and Impacts on Professional Development (Chapters 15-22); Pedagogical Design and Implementations (Chapters 23-31); and Program and Disciplinary Practices (Chapters 32-40). The *Handbook of Research on Practices and Outcomes in Virtual Worlds and Environments* provides not only the latest and most advanced developments of virtual worlds and environments for experienced professionals, but also provides clear and comprehensive information for novice readers. We hope readers will benefit from the work of authors who range from cutting edge researchers to experienced practitioners regarding current research and present and future practices in virtual worlds and environments.

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