About the Contributors

Amelia Cheney is an Assistant Professor in and Program Director for the Instructional Technology program at Appalachian State University, where she has taught in 3D virtual environments since 2006. Prior to joining the faculty, Dr. Cheney had more than thirteen years experience in K-12 education, including serving as a high school teacher and a Chief Technology Officer for two school districts. She is a Board member of the Applied Research in Virtual Worlds (ARVEL), SIG of the American Educational Research Association (AERA), as well as Past-President and current Board member of the North Carolina Technology in Education Society (NCTIES). Dr. Cheney also serves on the Technology Committee of the Virtual World Consortium, and as a steering committee member for the International Journal of Web-Based Communities. Her current research is focused on constructivist teaching and learning in virtual environments, particularly issues of community, presence, and the building of relationships.

Robert L. Sanders is an associate professor and program director for the library science program at Appalachian State University. He also currently serves as the assistant chair of the Department of Leadership and Educational Studies. Prior to ASU, Dr. Sanders worked professionally as a teacher, media specialist, administrator, and as an instructional technology consultant. He is the past president of both the Ohio Distance Learning Association and the League of Worlds, an international virtual world collaborative. He is also a Fellow with the Virtual World Consortium, a collaborative research and development effort between Appalachian State University and Clemson University focused on 3D immersive learning environments for teaching and learning. Dr. Sanders’ current research is focused on the use of Action Learning pedagogy in these 3D virtual worlds and the symbiotic relationship that exists in the convergence of these two phenomena as it relates to our understanding of teaching and learning in these virtual environments.

Brock S. Allen, PhD is Emeritus Professor and Co-Director of the Center for Teaching and Learning at San Diego State University. He is recipient of the SDSU Alumni Outstanding Faculty Award. After joining the SDSU Department of Educational Technology in 1982, Allen pioneered instructional uses of multimedia computing and co-founded the SDSU Language Acquisition Resource Center. He has served as President of the Division of Instructional Development of the Association for Educational Communications and Technology and editorial consultant to a variety of journals including Educational Technology Research and Development. Allen has published over 50 articles or chapters on technology-based learning environments, instructional design, usability, outcomes-based assessment, and related
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topics. He has three grown children and lives in a cottage in San Diego with his wife, Emeritus Professor Barbara Allen, and their poodle, Daphne. He frequently bikes to campus and can be seen cycling up or down Montezuma Road in a florescent green jersey.

Susan Balandin trained as a speech pathologist in the UK and has worked as a clinician and academic in the field of lifelong disability for more than 30 years. Having worked at the University of Sydney for many years, she now works in Molde University College, Norway. Her research focus is on adults and their equal participation in the community, including their access and rights to social inclusion, healthcare and hospital services. She has published more than 150 papers, book chapters, and research reports, and currently holds 6 research grants, 2 in Norway and 4 overseas. She is the coeditor of the Journal of Intellectual & Developmental Disability and on many other editorial boards for both communication and disability focused journals.

Eric B. Bauman is a registered nurse and paramedic with a diverse clinical and academic background. He is a Faculty Associate in the Department of Anesthesiology at the University of Wisconsin where he is responsible for simulation-based research and curricula development. His expertise focuses on behavioral practice factors including leadership, team interaction and crisis management. He also developed and maintains the Web-based portal and database Games and Simulation for Healthcare. Dr. Bauman is an advocate for multidisciplinary education and research. He collaborates with the Games+Learning+Society program at the University of Wisconsin-Madison School of Education. Dr. Bauman continues to conduct research, publish, and present in the area of game-based learning and simulation. He has presented at a number of regional, national, and international conferences. His recent work can be found in, Resuscitation, Simulation and Healthcare, and The International Journal of Web-based Communities.

Philippe Bonfils is a lecturer at the Ingemedia Institute of the Université du Sud Toulon-Var in the south of France where he is the director of the “Digital production and immersion” Master’s degree. He is a member of the I3M laboratory where he started researching 3D virtual environments in 2003. He defended a doctoral thesis about the theoretical aspects of communication through avatars in e-learning contexts. Since 2007, his research concerns digital identities and the non-verbal communication aspects of using avatars. He manages research projects with industries (Eurocopter group) and public institutions (Agence nationale de la recherche). He has also facilitated several seminars at the Tecfa unit of the Geneva Faculty of Psychology and Sciences of Education.

Mats Deutschmann, PhD, is Associate Professor in Language Didactics at the Department of Language Studies, Umeå University, Sweden. He has over ten years' experience in the field of online language learning and over the past five years, he has worked extensively in virtual worlds. His research includes didactic design for collaborative language learning in online contexts, the language pragmatics of online education, and the use of innovative technology for raising engagement and active participation. He is currently involved in a number of international telecollaborative projects, some of which involve the use of virtual worlds in language learning, for example “Access to Virtual and Action Learning live Online” (AVALON), an EU-funded project with the aim of developing new methods for language learning in virtual worlds. He has published extensively in the field and is co-editor of the book “Learning and Teaching in the Virtual World of Second Life,” (2009) eds. Molka-Danielsen, J. & Deutschmann, M., Tapir Academic Press, Trondheim.
Ian Dunwell is a full time researcher at the Serious Games Institute, currently leading the area of games for health. Having obtained his PhD in Computer Science from the University of Hull, he also holds a degree in Physics from Imperial College London, and is an Associate of the Royal College of Science. His research interests lie primarily in the application of an understanding of cognitive processes within virtual environments as a means for providing optimised and effective learning experiences to users, and the use and evaluation of novel HCI interface technologies (such as the NeuroSky and Emotiv headsets) to enable more meaningful and affect-based interactions between humans and machines. In the domain of serious games, he has consulted with a number of leading serious game companies including Blitz Games and PlayGen to design and develop evaluation strategies for serious games such as Patient Rescue, Ward Off Infection, i-Seed and Parent Know-How, and worked extensively with games aimed at reaching difficult demographics as well as changing the affect and motivation of learners.

Joe Essid directs the Writing Center at the University of Richmond, where he teaches courses in writing pedagogy and cyberculture. He is a Richmond native who did his undergraduate work at the University of Virginia, then earned a Master's and PhD at Indiana University. His research interests include technology in the writing-intensive classroom, virtual worlds and their development, and the history of technology. His academic writing has appeared in Computers and Humanities, The Writing Lab Newsletter, and anthologies about technology and writing. He freelances as an editorial writer about energy, localism, transportation, and education for Style Weekly, Eighty One, and RVA. When not being an academic, he can be found keeping bees and learning the trade of an organic farmer.

Sara de Freitas is Director of Research and Professor of Virtual Environments at the Serious Games Institute at the University of Coventry where she leads an applied research team working closely with industry. Sara holds a visiting fellowship at the University of London, is elected Chair of the Lab Group and is a Fellow of the Royal Society of Arts. Voted the Most Influential Woman in Technology 2009 and 2010 by US Fast Company, Sara also chairs the IEEE Serious Games and Virtual Worlds conferences (VS-Games) and is a regular speaker at international conferences. Sara currently holds 12 funded projects, funded through European, regional, and national agencies. Her current research includes multimodal interfaces, experience design, and perceptual modelling in games and virtual worlds. Sara has over 90 publications (reports, journal articles, conference papers and books) in the areas of: pedagogy and e-learning, change management, and serious games and virtual worlds for supporting training and learning.

I. Alex Games is an assistant professor in Telecommunication, Information Studies and Media, and Adjunct in Educational Psychology and Technology at Michigan State University. His research concentrates on the design of learning environments involving designing interactive technologies such as computer games, and their role as learning experiences on children and young adults’ development of thinking, language, and literacy skills necessary in the 21st century. His work as been featured in E-Learning Journal, Learning, Media and Technology, Games and Culture, The International Journal of Web-based Communities, and the Proceedings of the International Conference of the Learning Sciences.

Ning Gu is a lecturer in the School of Architecture and Built Environment at the University of Newcastle, Australia. He researches in the broad areas of design computing, particularly, in generative design systems, virtual worlds, and BIM. Ning is a pioneer of applying leading-edge information technologies in design and learning, and has established an international collaborative design studio using Second
Life. He has also designed and implemented a wide variety of collaborative virtual environments and applied them in his teaching and research in numerous Australian and international tertiary design institutions including the University of Newcastle, University of Sydney, MIT, and Columbia University. He has published extensively in the field of design computing and design education.

**Leman Figen Gul** is an associate professor at the Architecture Program at the International University of Sarajevo. Dr. Gul’s work is featured with design studies and design education. Her research interests include investigating design cognition in virtual worlds, design teaching, human-computer interactions and computer-supported cooperative work. She received her BArch (1993) and her MUCon (1996) in the Urban Conservation Program at the Mimar Sinan University in Istanbul and MDes (2003) in Digital Media and PhD (2007) in Architecture at the University of Sydney. She was a lecturer and tutor at the University of Sydney, and a research fellow at the University of Newcastle (Australia) before joining the International University of Sarajevo in 2009.

**Alen Hajnal** is an Assistant Professor of Psychology at the University of Southern Mississippi. His research spans sensory processes, perception, and action within the theoretical framework of embodied cognition. Dr. Hajnal earned his PhD in experimental psychology from the University of Connecticut. He regularly publishes his work in some of the top empirical journals in psychology including his recent publications in the Journal of Experimental Psychology: Human Perception and Performance, Attention, Perception & Psychophysics, Acta Psychologica, Experimental Brain Research. Dr. Hajnal has an active research laboratory with state-of-the-art motion tracking and computing equipment, and employs graduate and undergraduate students as research assistants. He has recently been nominated for the USM Faculty Senate Junior Faculty Research Award.

**Barbara Howard**’s K-12 experience includes classroom teaching and administration at the school and district levels. As Project Director for SERVE, the Regional Education Laboratory for the Southeastern United States, she conducted research and development in personnel evaluation and educational leadership. She is an Associate Member of the Joint Committee for Standards in Educational Evaluation and served as Task Force Chair for the revision of the Personnel Evaluation Standards, 2nd Ed. (2008). She is currently serving on the Task Force for the revision of the Student Evaluation Standards issued by the Joint Committee. She is the President of the Consortium for Research on Educational Accountability and Teacher Evaluation (CREATE). Currently, she is an Assistant Professor in School Administration in the Department of Leadership and Educational Studies at Appalachian State University, Boone, North Carolina.

**Bob King** tries to take a balanced approach to life and academic work, which for him means an approach that explicitly uses and combines creative and cognitive processes. His background includes a bachelor's degree in Philosophy from UC Santa Barbara, a master's degree in Painting and Drawing from UCLA, and a doctoral degree in the Social and Philosophical Foundations of Education from UNC Greensboro. His doctoral dissertation focused on the dynamics of electronically-mediated conversation, and was written in the form of an extended email exchange with a writing partner. He is currently a member of the Liberal Arts faculty at the University of North Carolina School of the Arts, where he teaches Media Studies courses including a required course for first-year students entitled Digital Media for the Artist, and a variety of electives.
Sabine Lawless-Relji is a doctoral graduate from San Diego State University and the University of San Diego. Sabine is the communication officer for Applied Research in Virtual Environments for Learning (ARVEL), an AERA special interest group (http://www.arvelsig.com). She administers ARVEL’s headquarter in Second Life, curates live events and archives 3D exhibits on research in VWs for learning. Sabine created the Center for Social Presence in SL to train colleagues on teaching presence in 3D distance education. She also worked with Alelo Inc, in their VW-simulation tactical language and culture training systems for the French unit. Prior to her doctoral studies, Sabine created ESL courses for a new private school and workshops for the TESOL educators on Web-based tools to augment the lingual, cultural, and academic impact of the programs. Her research interests are teaching-presence in virtual environments, 3D VW teaching and global variables, and education in VWs on mobile technology.

Kenneth Y. T. Lim is an Assistant Professor in the Learning Sciences, at the National Institute of Education, Nanyang Technological University in Singapore. His doctoral research was in adolescent spatial cognition, and his current research interests are in the pedagogical affordances of fictive worlds and virtual environments. To this end, he has conceptualized the Six Learnings framework as a taxonomic means to critically understand and evaluate the diversity of learning interventions in such worlds and environments. He presently consults with the Ministry of Education in Singapore on the design of such interventions and the building of teacher-capacity to enact, de-construct, and re-interpret them.

Nita Matzen, Ed.D. is an Assistant Professor of Library Science at Appalachian State University and the Principal Investigator of STEM and ICT Instructional Worlds: The 3D Experience (STEM-ICT 3D), a National Science Foundation ITEST Project. Dr. Matzen uses 3D virtual immersive technology in the graduate courses that she teaches and has been actively involved in the study of the pedagogy used in virtual environments including the development of an instructional framework known as Presence Pedagogy.

Terry McClannon is an Assistant Professor in the Department of Leadership and Educational Studies at Appalachian State University, where he teaches in the Instructional Technology program. Prior to this position, Dr. McClannon worked professionally as a Director of Technology and Facilities, administrator, and instructional technology consultant. He is currently a Fellow with the Carolinas Virtual World Consortium, a collaborative research and development effort between Appalachian State University and Clemson University focused 3D immersive learning environments for teaching and learning. Dr. McClannon’s current research is focused on the use of Universal Design for Learning, instructional technology integration, and 3D immersive learning environments in educational environments.

Shailey Minocha, PhD, is a Reader in Computing in the Department of Computing at The Open University, UK. The focus of her research has been to understand users' interactions with technology and investigating the socio-technical contexts in which computer systems operate. Shailey’s research and consultancy activities have led to insights into factors that affect usability, user experience, and user adoption of technology-enabled systems. Her recent research projects have involved investigating the role of social software and 3D virtual worlds in training and skills development with a particular attention to the virtual team-working, socialisation, collaborative learning and community-building capabilities of these tools. Shailey’s website has details of her activities and publications http://mcs.open.ac.uk/sm577.
Judith Molka-Danielsen, PhD is Associate Professor at Molde University College in Norway. She was research representative for project “Lifelong Learning in a Virtual Society” from “Norgesuniversitetet” (NUV, 2006, 2007). Her activities included establishing sim design, course design and project evaluation. Project outcomes included the development of a virtual space that has been used in university-accredited courses and the book “Learning and Teaching in the Virtual World of Second Life”, (2009) eds. Molka-Danielsen, J. & Deutschmann, M., Tapir Academic Press, Trondheim. Molka-Danielsen has over 20 published articles related to virtual worlds since 2007. She is partner representative in projects: EU EAC/EA Lifelong Learning Program, “Access to Virtual and Action Learning live Online” (AVA-LON); in “Using ICT to promote flexible lifelong learning in communication, health and disability”, (NUV, 2009-2010); and in newly funded project by the Norwegian Research Council (2010-2012) that further examines benefits of virtual worlds for people with lifelong disability.

Louise Ochoa, MLIS, MSIT is a Distance Learning Reference Librarian at Appalachian State University in Boone, North Carolina. She earned her MLIS from Wayne State University and holds an MS in Instructional Technology from East Carolina University. Her interests include exploring innovative uses of technology for library instruction, particularly the use of virtual communities such as the AETZone.

Luisa Panichi has a BA (Monash, Australia) where she read Russian, Spanish and Politics and is a Dottore in Lingue e Letterature Straniere (Pisa, Italy) with a dissertation on face-to-face Tandem learning. She has taught foreign languages at tertiary level for 20 years and has been involved in online language education since 2007. She has published in the field of Learner Autonomy, Language Awareness and Computer Mediated Communication and CALL (Computer Assisted Language Learning). She holds a full time position as an EFL (English as a Foreign Language) lecturer at the Language Centre of the University of Pisa, Italy. She is currently local project leader for the EU funded educational project AVALON (Access to Virtual and Action Learning live ONline) which explores the use of virtual worlds in language education. Since 2004 she has been the Honorary Secretary for the Association for Language Awareness, a UK registered educational charity.

Geraldine (Gerí) Purpur, MLIS is a member of the Distance Learning Library Services Team at the Belk Library, Appalachian State University (ASU). Her library experience includes reference service and library instruction for on- and off-campus students. She has been a virtual librarian in the AETZone since 2004 and is involved in projects focusing on alternative methods for delivering library services via technology to students and faculty enrolled and teaching in the distance education program at ASU.

Genaro Rebolledo-Mendez is a full time researcher at the Faculty of Informatics, University of Veracruz Mexico. He has been a researcher at Serious Games Institute, the University of Coventry, a Research Fellow at the London Knowledge Lab, University of London and the IDEAS Lab, Sussex University. Genaro’s interest is the design and evaluation of educational technology that adapts sensitively to affective and cognitive differences among students. To do so, he studies how cognitive and affective differences impact students’ behaviour while interacting with educational technology and how, in turn, technology impacts students’ learning. To that end, he uses techniques from Artificial Intelligence, Computer Science, Education, and Psychology.
Ahmad John Reeves, PhD is a Research Fellow in the Department of Computing at The Open University, UK. Ahmad received a BSc from City University London in Computer Science, and an MSc from Queen Mary, University of London in Advanced Methods in Computer Science. His PhD (also at Queen Mary) was entitled ‘Modelling Participation in Virtual Environments’ and examined long-term use of a text-based Virtual Environment community. His post-doctoral research position at the University of Bath focussed on the role of identity in the design of Computer Mediated Communication (CMC) systems. He also taught Human Computer Interaction at King Saud University, Saudi Arabia. His research interests include the use of linguistic models of participation to better understand what happens between people who interact through collaborative technologies, and how “designed structures” are appropriated by the communities that form within them.

Richard Riedl is Chairman of the Leadership and Educational Studies Department and Professor of Education in Instructional Technology at Appalachian State University in North Carolina. He has a PhD in Curriculum and Instruction from Arizona State University and has taught at Clarke College in Iowa and the University of Alaska Fairbanks. He first began offering online classes in Alaska in 1987 using a combination of phone conferencing and modem-based computer systems. He joined Appalachian State in 1989. In 2000 he and his colleagues in the Instructional Technology program, seeking the most effective online learning environment possible, began working with an early 3D virtual world from Activeworlds and, with this successful experience, moved their entire master’s degree program into this environment, now called AET Zone. His work with 3D immersive environments has been focused on the most effective ways to leverage their capabilities to enhance learning among students of all ages.

Mohd Fairuz Shiratuddin is an Assistant Professor at the School of Construction at the University of Southern Mississippi. He holds a B.Eng in Electrical and Electronics from Northumbria University, UK, a MS in Information Technology from University Utara, Malaysia, a MS in Architecture from Virginia Tech, USA, and a PhD in Environmental Design and Planning, also from Virginia Tech. He has established the Architecture & Construction Visualization Research Lab at Southern Miss. His research areas are Virtual Reality/Virtual Environment, 3D Game Engine, Serious Games and Information Technology; for education, architectural design, and entertainment. He teaches the Virtual Reality I & II, 3D Modeling & Animation I & II, Building Information Modeling and CAD, Electrical and Mechanical Systems courses at the School of Construction. Dr. Shiratuddin has numerous publications in conference proceedings, journals, books, book chapters and reports, particularly in the areas of Virtual Reality/Virtual Environment and 3D Game Engine.

Seng-Chee Tan joined the National Institute of Education, Nanyang Technological University, Singapore, upon graduation with a Ph.D. in Instructional Systems from the Pennsylvania State University in 2000. He has been contributing to education in Singapore as a high school science teacher from 1991 to 1997 and later as an educator in the National Institute of Education. In 2005, he received the Japan Chamber of Commerce & Industry Education Award for his contribution to the Education in Singapore. He is currently an associate professor heading the Learning Sciences and Technologies academic group in the National Institute of Education. His research interests include fostering knowledge building among K-12 students and teachers and technology-based pedagogies. Currently, he is leading a nationwide study evaluating the impact of the third IT Masterplan in Singapore.
**John Tashner** began teaching biology, physical, and earth sciences in middle schools in Norfolk, VA. He has experience as a school administrator, a central office administrator and thirty-five years as a college professor. He has also fifteen years experience developing and administering a program designed for high school students in the area of science hosted at Appalachian State University. For the past twenty years, he has been exploring ways to integrate computer technologies into instruction. During the last ten years John has been a part of a faculty team who are investigating ways to develop and use 3D immersive worlds in instruction, particularly in distance education. Currently, he is a member of the graduate faculty at Appalachian State University and teaches in an instructional technology program with 5 other faculty and over 250 students. John earned a BS in Biology and a MS in Education from Old Dominion University and an Ed.D. in Curriculum and Instruction from the University of Virginia.

**Yin-Mei Wong** obtained her Bachelor Degree from the Edith Cowan University, Australia, in 1990 and Master in Education from the University of Sheffield in 1998. She also obtained her Post-Graduate Diploma in Education from the National Institute of Education, Nanyang Technological University in the same year. She received her PhD (Education) from the Nanyang Technological University in 2009. She is currently a Research Fellow in the Learning Sciences Laboratory, Nanyang Technological University. She was a Chinese language teacher in a few primary schools in Singapore and was working on leveraging technology to enhance the effectiveness of Chinese language learning.

**Anthony Williams** is currently the Head of School in Architecture and Built Environment in at the University of Newcastle. He has worked in the area of Design Education for many years including authoring over 150 publications. Anthony has been active in curriculum Development running workshops in Australia and internationally. He has also worked extensively in Design Cognition considering the ways designers work and collaborate, having lead multiple research projects in the areas.