About the Contributors

**Shannon Kennedy-Clark** has been working in education for 20 years. She has worked in a diverse range of education environments both in Australia and overseas. She is currently the Head of Learning and Teaching at the Australian Film, Television, and Radio School. Shannon has a research background in computer-supported collaborative learning, applied linguistics, education, and research methods. She is currently involved in a range of projects on academic literacy, pre-service teacher education, and discourse analysis.

**Kristina Everett** is currently a Senior Lecturer in the Learning and Teaching Centre of Australian Catholic University, specializing in assessment policy and professional development. Previously, she worked as the coordinator of all Indigenous Studies programs at Macquarie University, Sydney, Australia, focusing on issues of social inclusion and social justice in global indigenous contexts, and piloting the Daruganora program. This inclusive, research-led teaching program aimed to address the under-representation of indigenous students and students from low socio-economic backgrounds by developing ongoing relationships with low SES schools. She has been a visiting scholar and continues to collaborate with researchers at the Centre d’Estudis Australians at Universitat de Barcelona.

**Penny Wheeler** is a Lecturer in the Learning and Teaching Centre at Australian Catholic University, Canberra, where she works in academic development, specializing in learning design, English language development in the curriculum, and capacity building in online teaching and resource development. She has many years of experience in public communication and workplace training, having worked as a government publisher and manager for agricultural and environmental communication campaigns, and has interests in informal learning, computer-supported collaborative learning, and communication. She is a graduate of the University of Sydney, where she tutored in English literature, language, and linguistics, and of the University of Technology, Sydney, where she studied eLearning. She has been interested in learning and teaching in virtual worlds since the text-only MOOs (Multi-user-dungeon, Object Oriented) of the 1990s.
About the Contributors

* * *

**Trudy Ambler** is the Associate Dean (Quality and Standards) for the Faculty of Arts at Macquarie University, Sydney, Australia, where her work has included a federally funded Promoting Excellence in Learning and Teaching project, the coordination of an Assessment Mentor Group, support for the Bachelor of Teaching (Early Childhood Services) degree and work focused on peer learning in the context of higher education. In 2008, she worked on the Macquarie University research project “Indigenous students’ experiences of support for learning.” She worked for many years in school education as a teacher, principal, and commonwealth programs advisor. Trudy’s research has focused on exploring opportunities for professional learning in the day-to-day work of primary school teachers, as well as teacher knowledge; women and teaching; narrative; autobiographical inquiry; oral histories; reflective practice; learning spaces and places; and conceptions of teaching.

**Kate Anderson** is currently undertaking her EdD in the Faculty of Education and Social Work at the University of Sydney, Australia. She worked with her colleagues and her doctoral supervisor Louise Sutherland on the iScience project established in 2007 as part of a Australian School Innovation in Science, Technology, and Mathematics (ASISTM) grant program, providing high school students with an opportunity to develop their inquiry skills and giving pre-service teachers a firsthand experience of leading a small group of students through an open inquiry project. She was a Pedagogy Officer on the Australian Teaching Teachers for the Future Project. Prior to these roles, Kate was the Head of Science at Moriah College in Sydney and she has taught science for over a decade. Her research interests include inquiry-based learning, pre-service teacher education, ICT competency and TPACK (Technological Pedagogical Content Knowledge), video annotations, and the use of virtual worlds in teacher training.

**Yvette Blount** is a lecturer in the Department of Accounting and Corporate Governance at Macquarie University, Sydney, Australia, where her teaching includes the real world contexts of information systems. Before joining Macquarie in 2005, Yvette worked in senior and consulting roles in the banking and IT industries. She is the Research Coordinator for the Australian Anywhere Working Research Network. Her research program utilizes multidisciplinary approaches in investigating organizational information systems. Yvette’s areas of expertise include telework and its links to sustainable competitive advantage through enhanced service quality, and the implications for employee management in implementing new technologies in the service sector. Other research areas include information systems theory and technologies in learning and teaching.
About the Contributors

Yvonne Breyer is the Director, Learning and Teaching of the Faculty of Business and Economics at Macquarie University. She is interested in the implementation and use of technology in higher education. She previously worked in the Learning & Teaching team for Macquarie’s Faculty of Arts, where she contributed to redesigning the Big History unit for online delivery, and then managed the Big History MOOC project. Her background is in corpus linguistics and teacher education: she has taught in this area and also in International Studies (German). Yvonne is the author of *Corpora in Language Teaching and Learning: Potential, Evaluation, Challenges* (2011).

Andrew Cram is currently the Manager, eLearning Technologies & Projects at Navitas Professional. He has extensive experience across a range of learning technologies, as well as serious games and virtual worlds, including e-portfolios, Web conferencing, social learning networks, mobile and augmented reality technologies. His core interest in using information systems technology to support learning stems from his earlier work with an online mathematics learning system: he contributed to that project in the areas of learning design, usability, and accessibility. His doctoral research applied activity theory and investigated the idea of affordances in virtual environments to simulate social situations that involve difficult problems such as ethical dilemmas.

Deborah Davis is Professor and Clinical Chair, Midwifery, University of Canberra and ACT Government Health Directorate, Australia. She has worked as a privately practicing midwife in Australia and New Zealand, providing care to women choosing both home and hospital births. She has many years’ experience teaching in undergraduate and postgraduate midwifery programs, including the supervision of higher degree by research students, and is active in the profession of midwifery. She has served as Director on the National Board of the Australian College of Midwives since 2011. Deborah’s research interests cohere around central themes of wellness, physiological birth, and midwifery-led care. She is particularly interested in place of birth and how the environment impacts on the practice of midwifery and the experiences and outcomes of women and their supporters and continuity of midwifery-led care.
About the Contributors

Sue Gregory is currently a Senior Lecturer in ICT in the School of Education at the University of New England, Armidale, Australia. She teaches pre-service and postgraduate education students how to incorporate technology into their teaching, and has been using Second Life to expose on-campus and distance students to the learning opportunities of virtual worlds since 2007. Sue has been involved with many national and university projects on creating learning spaces in virtual worlds, most recently leading a federally funded Office for Learning & Teaching project, “VirtualPREX: Innovative Assessment Using a 3D Virtual World with Pre-Service Teachers.” She received an OLT citation for “innovative adaptation and expansion of virtual world technology to enhance learning and teaching in education and across disciplines.” Her doctoral research explored adults learning in a virtual world: “Exploring Authentic Learning Activities for Enhanced Learning Outcomes: Adult Learners and their Perceptions of Learning in a Virtual World.”

Aaron Griffiths has worked in online education for the past 13 years, specializing in the design, development, and implementation of immersive, interactive content, across multiple fields of study. Since 2006, he has directed his attention to the potential of virtual world environments for learning and was a major instigator of a New Zealand, Tertiary Education Commission-funded project that aimed to delineate and demonstrate the educational strengths or otherwise of learning in a virtual world. Aaron works freelance as F/Xual Education Services, applying his talents as an educator, graphic designer, programmer, and 3D artist to the development of virtual world environments for education. He also co-lectures on the Nelson Marlborough Institute of Technology BA paper, Multiuser Virtual Environments. In tandem with his freelance work, he is currently reading for an MA Education in Virtual Worlds with the University of the West of England.

Ning Gu is a senior lecturer in the School of Architecture and Built Environment at the University of Newcastle, Australia. He is a widely published scholar of architectural and design computing, and is particularly interested in collaborative design, generative design, and virtual worlds: he 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, the University of Sydney, MIT, and Columbia University. His research interests include virtual environments, generative design systems, computational design analysis, computer-supported collaborative design, and Building Information Modelling (BIM). Specific projects include computational design analysis of 20th century canonical buildings and industry adoption of BIM supported by major competitive research funding schemes in Australia.
About the Contributors

Leman Figen Gul is an associate professor at the Architecture Program at the TOBB University of Economics and Technology, Ankara. Dr. Gul’s work is featured in design studies and design education. Her research interests include investigating parametric design and fabrication, design cognition in virtual worlds, design teaching in virtual environments, human-computer interactions, and computer-supported cooperative work. She received her BArch (1993) and her MUCOn (1986) 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 at the International University of Sarajevo, a lecturer and tutor at the University of Sydney, and a research fellow at the University of Newcastle (Australia) before joining the TOBB University of Economics and Technology in 2011.

Elaine Huber works in the Learning and Teaching Centre at Macquarie University as Head of Educational Design and Support. She has been teaching adults and designing curriculum for 20 years, with a move to the higher education sector in 2004. Elaine has a passion for blending technology with learning to create a rich student experience and she values the importance of supporting the teacher in up-skilling. Her research interests have focused on educational technologies in learning and teaching, most specifically on virtual learning environments, collaboration tools, social media for building communication, and online marking and submission to aid the efficiency of assessment practice. Her other area of research and interest is the design and implementation of professional development programs. She also coordinates the Faculty Partnership Program, a program which reframes professional development through a partnership model underpinned by an authentic professional learning approach and incorporating elements of design-based research and communities of practice.

Sabina Hussain has worked for many years in a range of positions in learning and teaching. She is currently employed as Educational Specialist at the Australian Film, Television, and Radio School (AFTRS). In roles prior to this, she was involved in projects in the areas of assessment and evaluation at the University of New South Wales (UNSW) and worked as a Research Fellow at the German Institute for Adult Education where she led a project on adult literacy education. Sabina has a background in literary and cultural studies. She holds a PhD in English Literature with a focus on postcolonialism and has worked in diverse environments including the United Nations and as a language teacher for adults and children. Her research interests lie in the area of global citizenship in the context of higher education, migration, and transnationalism.
**About the Contributors**

**Mi Jeong Kim** is an Assistant Professor of the Department of Housing and Interior Design at Kyung Hee University, Republic of Korea. After studying for her PhD at the Key Centre of Design Computing and Cognition, University of Sydney, she worked as a postdoc in the Department of Engineering Research Support Organization at UC Berkeley. Her PhD work, published in *Human-Computer Interaction*, was one of the ten most cited articles from 2008 to 2010; it was the first study to reveal the differences in cognitive behaviors between tangible user interfaces and graphical user interfaces using protocol analysis in a systematic way. Very widely published, Mi Jeong is leading research projects on augmented reality, design cognition, and smart services in homes. Her research interests include design and evaluation of new interaction techniques, cognitive design studies, smart home studies, computer-supported collaborative design, and information technology in construction.

**Russell Lowe** is Senior Lecturer in Architecture at the University of New South Wales, Sydney, Australia. He joined UNSW Built Environment in February 2007. Prior to this appointment, he lectured in digital media design, architectural drawing, and interior architecture at Victoria University in Wellington, New Zealand. Before joining Victoria University in 2000, Russell studied and taught architecture at Auckland University, New Zealand. In 2000, he was awarded Best Lecturer in the Faculty of Architecture and Design at Victoria University by the postgraduate students association. His research focuses on the repurposing of computer gaming technology to engage with uses and concepts outside the entertainment industry, and he has developed unique insights into opportunities for collaborative thinking that take advantage of the multiple perspectives that computer game environments afford. Russell’s research on architectural space ranges from emergency information coordination to fine art films exhibited worldwide in festivals.

**Katy Lumkin** is Head Teacher, E-Learning at the New South Wales Department of Education and Communities, where she assists teachers in personal professional development, provides training in integrating ICT in the classroom, facilitates learning teams, and works with teachers to develop innovative learning projects. A very experienced visual arts teacher, she has taught students from kindergarten to Year 12. In the higher education sector, she has worked at the Macquarie ICT Innovations Centre, where she worked first as an ICT Educator and then as the 3D Virtual Worlds Project Leader, collaborating with teachers and students to develop, implement, and evaluate 3D virtual worlds. As part of this role, she provided professional learning and support programs for teachers so that they could confidently integrate this new and emerging technology in the classroom and curriculum. Her research has focused on the capacity of 3D virtual worlds to enhance student learning and engagement.
Lina Markauskaite is a Senior Lecturer in the Faculty of Education and Social Work and a member of the CoCo Research Centre at the University of Sydney. Lina’s research includes investigations into students’ and pre-service teachers’ ICT literacy, personal epistemology, and epistemic fluency; ICT-enhanced research methods in the social sciences; and national strategies and policies for ICT in education. Her background is in mathematics (MSc, Vilnius, Lithuania), informatics (PhD, Vilnius, Lithuania), and communications management (MCM, Strathclyde, UK). She has published more than 50 refereed papers. Before moving from Europe to Australia in 2004, she conducted research in schools and wrote extensively for educational practitioners and children. Her latest edited book is *Methodological Choice and Design: Scholarship, Policy, and Practice in Social and Educational Research* (Springer, 2011, with Peter Freebody and Jude Irwin).

Catherine McLoughlin is an associate professor with the Faculty of Education at the Australian Catholic University, Canberra, Australia. She also serves as the coordinator of the Australian Capital Territory branch of the National Centre of Science, Information and Communication Technology, and Mathematics Education for Rural and Regional Australia (SiMERR). With over 20 years’ experience in higher education in Europe, South East Asia, the Middle East, and Australia, she has experience and expertise in a variety of educational settings, with diverse students and across a wide range of cultural contexts. Catherine’s research has focused on e-learning, innovative pedagogy in higher education, curriculum design, and global trends in education and teacher development. Her current research interests include the use of social networking tools to support problem-solving and metacognition in mathematics learning. Catherine teaches research methods at postgraduate level and serves on the editorial board member of a number of leading journals including the *British Journal of Educational Technology*.

Catherine (Kate) Smyth is a lecturer in HSIE (Human Society and Its Environment) K-6 curriculum and primary curriculum studies in the Faculty of Education and Social Work, at the University of Sydney, Australia. She is an experienced primary teacher who has taught in both government and non-government primary schools in New South Wales (Australia), the Solomon Islands, and Kuwait. She has worked as a project officer with the NSW Department of Education HSIE Curriculum Directorate, where she wrote and developed curriculum materials and teacher professional development workshops in HSIE. Kate curates six Scoop.it sites that focus on digital content for HSIE K-6 and primary history. She is interested in the affordances of technology for learning and professional collaboration, and is constantly inspired and engaged with the professional conversations happening on Twitter.
About the Contributors

Sarah Stewart is currently the Professional Officer at the Australian College of Midwives. Previously, she has worked as online facilitator, mentor, network weaver, and educator. She has extensive experience in the health and education sectors as a clinician (nurse and midwife) and educator (midwifery and adult education), and has brought this understanding to her work in fostering online identity, community development, communication, life-long learning, and connecting with customers and consumers. In her education work, she draws on her knowledge of instructional design, curriculum and program development, e-learning and social media to take innovative approaches to bringing people together in professional and business contexts. Her research includes issues in the use of social media for healthcare practice, professional learning and connecting with customers and clients, and eportfolios for midwifery practice.

Kate Thompson is a researcher at the Centre for Computer-Supported Learning and Cognition (CoCo Research Centre) at the University of Sydney, Australia. Her PhD examined the intersection of learning sciences theory (multiple external representations, computer-supported learning and cognition) with simulation model use about a socio-environmental system. This sparked an interest in user-specific scaffolds and strategies for the interrogation of simulation models. Her background in environmental science has led her to a systems perspective and research on environmental education programs has involved mobile learning as well as virtual worlds, and more recently, learning by design and education for socio-environmental synthesis. She has presented her work at various international conferences in the fields of the learning sciences, education, and system dynamics modeling. Currently, her research focuses on developing methods for visualizing and analyzing collaborative processes using complex datasets, multimodal learning analytics, learning by design, as well as design for learning more generally.

Xiangyu Wang is holding Curtin-Woodside Chair Professor for Oil, Gas & LNG Construction and Project Management and the Co-Director of Australasian Joint Research Centre for Building Information Modelling (BIM). Professor Wang is an internationally recognised leading researcher in the field of Construction IT, BIM, Lean, Productivity, Visualization Technologies, Megaproject Management, and Training, having obtained over USD $ 7 Million research funds and published over 100 peer-reviewed journal articles. He has presented over 20 keynote and plenary speeches at international research and industrial conferences on BIM, construction and project management. He is currently the Editor-in-Chief of Visualization in Engineering which is an international research journal hosted by Springer-Verlag. His work with Woodside Energy Ltd. and other industrial partners, wins numerous awards and has dozens of global media exposures.
Denise Wood is Associate Head of School: Teaching and Learning, School of Communication, International Studies and Languages, University of South Australia, and Adjunct Professor, Faculty of Education, the University of the Western Cape, South Africa. Her research focuses on the use of information and communication technologies to enhance educational outcomes. She is currently leading a $2.97 million research project funded by the Australian Government, Department of Education, which aims to improve the educational and employment outcomes of young people with disabilities, and she has also been the project leader of four Australian Government Office for Learning and Teaching-funded projects focusing on technology-enhanced learning. Denise’s teaching and research has been recognized with several awards including an Australian Learning and Teaching Council Citation for Outstanding Contributions to Student Learning, a SA Great Award, several university teaching and equity awards, and the 2010 Telstra-TJA Christopher Newell Award for Telecommunications and Disability.

Sherman Young is Pro Vice Chancellor Learning, Teaching, and Diversity at Macquarie University, Sydney, Australia. Previously, he was Macquarie’s Associate Dean of Learning and Teaching for the Division of Society, Culture, Media, and Philosophy, an area where he is still active in teaching, supervision, and research. He has a PhD from The University of Queensland, on the topic of Internet content regulation, developed in conjunction with the Key Centre for Media and Cultural Policy and the Australian Broadcasting Authority; an MA (Media, Communications and Law) from Macquarie University; and a BSc in Design Studies from the University of New South Wales. Having started his academic career as a tutor and then lecturer in new media theory and production at Macquarie University in 1998, after working in industry in new media and design, he has pursued research into music and pedagogy as well as the social, cultural, and political impact of the new media technologies. Sherman Young is the author of The Book is Dead, Long Live the Book, published by UNSW Press.