About the Contributors

**Haomin Wang** is an Associate Professor in the College of Education and Manager of Instructional Technology at Dakota State University. His research interests include media attributes, system affordances, interactivity in e-learning, instructional hypermedia, and database support for Web-based educational applications. He has co-authored *Designing and Developing Web-based Instruction* published by Pearson Education in 2006 and published a number of book chapters and journal articles. He has presented regularly at national and international conferences, and has conducted numerous seminars, panel discussions, and workshops on instructional technology and e-learning.

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**Michelle Aubrecht** has been a Graduate Student at Ohio State University in the Art Education Department. She studied game-based learning, and game design. Her thesis work focused on how to support teachers in using games, specifically, Gamestar Mechanic, in an elementary art classroom. While a graduate student, she has been a Graduate Assistant at OSU’s Digital Union, which supports faculty, staff, and students in using technology in the classroom. She has been the Digital Union’s specialist in game-based learning for the past two years, where she has coordinated, grown, and facilitated a monthly brown bag group, taught workshops, and given and invited others to give presentations about game-based learning. She has written blog articles, taught workshops, and created a game-based learning wiki. Her current research is about how to support teachers in using video games in the classroom by making short, training videos for specific games.

**Sheila Bonnand** is currently a Reference Librarian/Assistant Professor at Montana State University in Bozeman, Montana. Her liaison responsibilities include the departments of computer sciences, earth sciences, mathematics, modern languages, and physics and overseeing the library’s juvenile collection. She holds a Master’s Degree in Library and Information Science from the University of Arizona and a Master’s Degree in Education from the University of Montana as well as an undergraduate degree in Botany/Biology Teaching. Before moving into academic librarianship, she worked as a community educator, a high school teacher and school librarian. Her research interests include information literacy, especially as it applies to distance and online education, and intellectual freedom issues. She has been involved in a project using web conferencing software for instruction for the past two years.

**Terri Edwards Bubb**, EdD, recently graduated from the University of Houston in Houston, Texas with a doctorate in Curriculum and Instruction with special emphasis in Instructional Technology. Dr.
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Bubb is currently an Adjunct Professor with the University of Houston – Clear Lake facilitating Instructional Technology graduate students. Dr. Bubb’s research interests focus in the area of creating engaging and stimulating learning environments within an online setting. Dr. Bubb may be contacted through her email address at tebubb@comcast.net.

Ann Leslie Claesson, PhD, BSN, a former health care executive and online faculty member for Capella University, has been in healthcare for over twenty years. Positions held include CEO of a consulting firm, Cardiovascular Service Line Director, Principal Investigator, Director of Clinical Education Department, Level I Trauma Program manager, and ICU staff nurse. Her experience includes 16 years of medical-surgical (14 years Cardiovascular, 5 years Oncology), 20 years management (13 years clinical, 8 years academic/training, 5 years surgical practice), 15 years research (13 years clinical, 8 year academic) and 5 years of pharmaceutical industry experience. Areas of expertise: development and analysis of healthcare delivery systems, clinical service optimization, organizational theory and management, public health and not-for-profit health systems management, staff mentoring/education, medical writing and clinical/outcomes research.

Jody Clarke-Midura is a Research Associate at the Harvard Graduate School of Education where she leads the Virtual Assessment Research Group. Her research bridges numerous areas: learning and assessment in virtual environments, issues of scale, and mixed methods research. She has participated in an access working group and research paper on technology enabled assessment and accessibility published in *The Journal of Technology, Learning and Assessment* (JTLA). Her most recent work on assessment is featured in the *Journal of Research on Technology in Education* and in volume she co-editing entitled, “Technology Based Assessment for 21st Century Skills: Theoretical and Practical Implications from Modern Research,” published by Springer-Verlag. She holds a Master’s in Technology in Education and a doctorate in Learning & Teaching from the Harvard Graduate School of Education.

Jillianne Code is an Assistant Professor of Educational Technology at the University of Victoria, BC, Canada and Co-Director of the Technology Integration and Evaluation (TIE) Research Lab. She recently completed a post-doctoral fellowship at the Harvard Graduate School of Education. Her research combines several areas including: the role of agency in learning, learning environments and social networks, and measurement methods in educational research. Jillianne has been recognized by the American Educational Research Association with a Graduate Student Research award based on her work using item response theory to validate psychological inventories. Her most recent work is being featured in the “Handbook of Research on Social Software and Developing Community Ontologies” and “Handbook of Research on Effective Electronic Gaming in Education.”

Caroline M. Crawford, EdD, is an Associate Professor of Instructional Technology at the University of Houston-Clear Lake in Houston, Texas, United States of America. She earned her doctoral degree from the University of Houston in Houston, Texas, United States of America, in 1998, with specialization areas in Instructional Technology and Curriculum Theory, and began her tenure at the University of Houston-Clear Lake (UHCL) the same year. At this point in Dr. Crawford’s professional career, her main areas of interest focus upon communities of learning and the appropriate and successful integration of technologies into the learning environment; the learning environment may be envisioned as face-to-
face, hybrid, and online (virtual or text-driven) environments. Dr. Crawford may be contacted through her e-mail address, crawford@uhcl.edu.

Chris Dede is the Timothy Wirth Professor of Educational Technology at the Harvard Graduate School of Education. His fundamental interest is the expanded human capabilities for knowledge creation, sharing, and mastery that emerging technologies enable. His teaching models the use of information technology to distribute and orchestrate learning across space, time, and multiple interactive media. His research spans emerging technologies for learning, infusing technology into large-scale educational improvement initiatives, policy formulation and analysis, and leadership in educational innovation. He is currently conducting funded studies to develop and assess learning environments based on modeling and visualization.

Xun Ge is an Associate Professor with the Program of Instructional Psychology and Technology (IPT), Department of Educational Psychology, at the University of Oklahoma. She earned her PhD in Instructional Systems from the Pennsylvania State University in 2001. Dr. Ge has been teaching graduate courses in instructional design and technology, including designing and developing instruction for multimedia learning. Her primary research interest involves designing and developing instructional scaffolds, learning technologies, and open learning environments to support students’ ill-structured problem solving and self-regulated learning. Her other related research includes computer-supported collaborative learning and virtual learning communities. Dr. Ge has published over 30 refereed journal articles, 5 book chapters, and she has given over 80 conference presentations. Dr. Ge has been recognized for her two scholarly awards: “2003 Young Scholar” by Educational Technology and Research & Development, and “2004 Outstanding Journal Article” by Association for Educational Communications and Technology.

Deb Gearhart is the Director of eTROY at Troy University. eTROY provides twenty two of Troy University’s degree programs online, with additional programs coming online Fall 2011. Dr. Gearhart has worked in the field of distance education for 25 years. Previously Deb served as the founding Director of E-Education Services at Dakota State University in Madison, South Dakota and was there for the 11 years. Before joining Dakota State she spent 10 years with the Department of Distance Education at Penn State, now Penn State World Campus. Deb was an Associate Professor for Educational Technology at Dakota State University teaching at both the undergraduate and graduate levels. She has co-authored at textbook entitled “Designing and Developing Web-Based Instruction” and edited another publication titled “Cases on Distance Delivery and Learning Outcomes: Emerging Trends and Programs,” which was released in December 2009. Deb is a master reviewer and trainer for Quality Matters and has done consulting, training, and program review for distance education programs. Dr. Gearhart has earned a BA in Sociology from Indiana University of Pennsylvania. She earned a M.Ed. in Adult Education with a distance education emphasis and an M.P.A. in Public Administration, both from Penn State. Deb completed her Ph.D. program in Education, with a certificate in distance education, from Capella University.

Ruth Xiaoqing Guo is an Associate Professor in the Educational Technology graduate program of the Department of Computer Information Systems at Buffalo State College, State University of New York. Dr. Guo earned a PhD degree in Technology Studies and a Master’s degree in Education from the University of British Columbia, in Vancouver, Canada. Her research interests include integrating
technology into curriculum, digital divide, constructivist pedagogy, video ethnography, multiliteracies, information and communication technology (ICT) literacy, ICT assessment, and teacher education. Dr. Guo has taught courses in teacher education programs at the University of Ottawa (Ottawa, Canada), and at the University of British Columbia (Vancouver, Canada). She also has over 10 years of experience in teaching education courses at Chinese universities. In addition to teaching courses in educational technology to graduate students at Buffalo State College, State University of New York, Dr. Guo is also conducting research projects in this area.

Mary Anne Hansen is a Professor and Reference Librarian at Montana State University; she also serves as Distance Education Coordinator for the MSU Library. Her liaison responsibilities include Health and Human Development, Education, Psychology, College Writing, Student Athletics, Office for International Programs, and Residence Life. She also co-coordinates the MSU Library’s annual Tribal College Librarians’ Institute, a week-long professional development experience for librarians from across the globe who serve the research needs of indigenous college students. She holds a Master’s Degree in Library and Information Science from the University of Arizona and a Master’s Degree in Adult and Higher Education with a Counseling support area from the Montana State University as well as an undergraduate degree in Modern Languages Teaching. Her research interests include distance education, information literacy, and information services and issues for Indigenous populations.

David Huang currently holds a tenure-track faculty position at Department of Education Policy, Organization and Leadership at University of Illinois at Urbana-Champaign. His research interests mainly focus on cognitive as well as motivational issues in technology-enhanced learning and performance settings across organizations. In particular he investigates the empirical relationship between cognitive and motivational processing afforded by highly interactive learning environments such as digital game-based learning systems (DGBLS). His current projects also focus on the design differences between genders (and other social variables) in the context of game-enabled learning. Dr. Huang also carries out research projects in the context of online teaching and learning on a regular basis, to promote learner- and instructor-friendly online instructional practices.

Kun Huang is an Instructional Designer at the University of North Texas Health Science Center. She earned her PhD in Instructional Psychology and Technology from the University of Oklahoma and a MEd in Instructional Technology from the University of Virginia. Dr. Huang is an experienced instructional designer who has designed and developed numerous interactive online learning objects to scaffold students’ critical thinking, metacognition, and problem solving. Her research focuses on the development of technology-supported learning environments and their effects on students’ metacognition, knowledge transfer, and epistemological beliefs, particularly in the context of science education. Dr. Huang has published several empirical studies in refereed journals, and she has presented her research and instructional design works at various national and international conferences.

Victor Law is a PhD Candidate with the Department of Educational Psychology at the University of Oklahoma. He received a Bachelor of Science degree in Statistics from San Francisco State University and a Master of Applied Sciences degree from the University of Waterloo. In 1998 he received an MBA from the University of Illinois, Urbana-Champaign, with a concentration in MIS. Mr. Law’s research
interests include scaffolding, self-regulation, ill-structured problem-solving, computer-supported collaborative learning, and game-based learning. He has been conducting studies examining the effect of different scaffolding approaches, including massively multiplayer online games, computer-based simulation, and dynamic modeling, on students’ complex problem-solving learning outcomes. He has presented his research results at prestigious national and international conferences, such as Annual Meeting of the American Educational Research Association, Association for Educational Communications and Technology, and International Conference of Learning Sciences. Recently, he has submitted several manuscripts to national and international journals.

**Denise McDonald**, EdD, is an Associate Professor of Curriculum and Instruction and Program Coordinator of Teacher Education at the University of Houston - Clear Lake. She has taught face-to-face, online, and web-enhanced undergraduate, Master’s, and doctoral courses across a range of content areas including language arts, classroom management, curriculum planning, instructional strategies, critical inquiry, and qualitative research. She has also supervised undergraduate and graduate internships and currently chairs or serves as methodologist on multiple theses and dissertations. Her research interests include exemplary teaching practices, teacher identity formation, transformational learning, reflective pedagogy, and relational pedagogy, specifically explored through qualitative methodology such as ethnography and self study.

**Betül Özkan-Czerkawski** is an Assistant Professor of Educational Technology and program director at the University of Arizona. Prior to that, she served as the faculty coordinator of Instructional Technology at Long Island University (2006-2008) and was an Assistant Professor of Instructional Technology Research at the University of West Georgia (2003-2006). She has presented and published numerous papers on distance education, technology integration strategies, and emerging technology applications. Recently, she was the editor of the book “Free and Open Source Software in E-Learning: Issues, Successes and Challenges.” Dr. Özkan-Czerkawski holds a PhD and a MA in Curriculum and Instruction from Hacettepe University, Ankara, Turkey, and a BA in Italian Philology from Ankara University, Ankara, Turkey. She completed her post-doctoral study at Iowa State University (2001-2003), where she also served as a project manager for a Fulbright Grant.

**Paul Parsons** is a PhD candidate in the Computer Science Department at the University of Western Ontario. His research is in the area of human-information interaction, a convergence of cognitive, information, computer, and learning sciences. His focus is on the design and analysis of interactive information interfaces that can be used to facilitate learning, problem solving, and other knowledge activities. His research has appeared in *Proceedings of the World Conference on Educational Multimedia, Hypermedia and Telecommunications*, the *Journal of Interactive Learning Research*, and other books and journals.

**Felicity Pearson** is a media course developer at Capella University. As one of the first writers assigned to the project, she helps to create the structure and storyline for the Riverbend City simulation. A varied career path which includes teaching writing at the University of Tennessee and serving as an environmental and occupational health technician in the United States Air Force, has contributed to Ms. Pearson’s ability to bridge the subject matter expertise of faculty experts with the creative needs of the storyline.
Aaron Wiatt Powell, PhD, is an alumnus of the University of Georgia and Virginia Tech. He has been an educator for twenty years, ten as an English and writing teacher and ten as an instructional designer and technologist in higher education. He has taught courses on distance education and learning theories for instructional design, in addition to numerous professional development workshops. He is currently working on starting a design and development business with his wife.

Jesse Rosel, MS, is the manager of the course media team at Capella University. Jesse was involved from the very beginning as co-creator and producer of the Riverbend City simulation project. He manages a team of talented writers and designers, simultaneously cheerleading and challenging the team to keep pushing the project to new heights. A background in technology, business, and creative writing has allowed Jesse to manage the relationships between writers, designers, developers, business, and academic stakeholders.

Kamran Sedig is an Associate Professor in the Department of Computer Science and the Faculty of Information and Media Studies at the University of Western Ontario. He investigates how to design computer-based cognitive tools that support knowledge activities in which people work and think with information, such as learning, sensemaking, problem solving, and analytical reasoning. He is particularly interested in human-information interaction in the context of cognitive tools—that is, the design and evaluation of the information interface component of these tools where users interact with representations of information. Examples of the tools that he investigates include learning technologies, information visualization tools, mathematical visualizations, digital libraries as knowledge environments, and digital cognitive games. His research is published in a diverse set of journals, conference proceedings, and books, such as ACM Transactions on Computer-Human Interaction, International Journal of Computers for Mathematical Learning, Computers in Human Behavior, and Interactive Learning Research.

Julia Penn Shaw has integrated a systems view of e-learning through software development and process management at IBM; through her doctorate in developmental learning from the Harvard Graduate School of Education and an MS in system science/computer science; and as Associate Professor and Academic Coordinator at SUNY-Empire State College, Center for Distance Learning. In her current capacity, she has responsibility for curriculum design, course development, and academic delivery of the Human Development program. Her research, teaching, and publication interests include e-learning, the construction of meaning, adolescent/adult learning, and the development of personal wisdom.

Dazhi Yang, PhD is an Assistant Professor in the Department of Educational Technology at Boise State University, Boise, Idaho. Dr. Yang was a postdoctoral researcher and instructional designer in the School of Engineering Education at Purdue University prior to coming to Boise State. She earned both her PhD and Master’s degrees in Educational Technology (now Learning Design and Technology) from Purdue University, West Lafayette, Indiana. Her research interests include computer-assisted learning and instruction, online and distance education, assessment, and evaluation. She also has research interests in STEM education, which consists of repairing and preventing student misconceptions of science and engineering concepts, and conceptual changes.
**Nick Zap** is an Instructional Designer with over 10 years experience in the design and development of educational games, 3D simulations, and online courseware. Nick is a past winner of the WebCT/Blackboard Exemplary Course Project whose goal is to identify and disseminate best practices for designing engaging online courses. His research includes problem solving, cognitive development and self-regulated learning in video game environments. Nick’s most recent work is being featured in the “Handbook of Research on Social Software and Developing Community Ontologies” and “Handbook of Research on Effective Electronic Gaming in Education.” Nick is currently a PhD candidate in Educational Psychology at Simon Fraser University with research focused on the development of a cognitive architecture for multimedia learning.

**Robert Z. Zheng** is an Associate Professor in the Department of Educational Psychology at the University of Utah. His research interests include online instructional design, cognition and multimedia learning, and human-computer interaction. He edited and co-edited several volumes including “Cognitive Effects on Multimedia Learning”; “Online Instructional Modeling: Theories and Practices”; and “Adolescent Online Social Communication and Behavior: Relationship Formation on the Internet.” He has published numerous book chapters and research papers in the areas of multimedia, online learning, and cognition. He has presented extensively at national and international conferences.