

BRETT E. SHELTON
Department of Educational Technology
Boise State University

Professional Preparation:

University of Washington, Educational Technology -- Curriculum and Instruction, Doctor of Philosophy, 2003. Technology Entrepreneurship Certificate -- School of Business, 2003.
Arizona State University, Industrial Management and Supervision -- Interactive Computer Graphics, Master of Technology, 1996.
University of Idaho, Computer Engineering, Bachelor of Science, 1994.

Appointments:

Chair and Associate Professor, Department of Educational Technology, 2013-present, College of Education, Boise State University, Boise, ID.
Associate Professor, Department of Instructional Technology and Learning Sciences, Utah State University, 2010-2013, College of Education and Human Services, Utah State University, Logan, UT.
Assistant Professor, Department of Instructional Technology and Learning Sciences, 2004-2010.

Engineer, Scientific Visualizations

Exponent Failure Analysis, Inc., Farmington Hills, MI. 1996–1999.

Patents:

App No. 12/408,818, U.S. Patent No. US2010/0240459:

“Systems and Methods for Simulation and Regeneration of a Virtual Environment”

Simulation Regeneration of Multiple Scenarios Incorporating Time-based Data as an Instructional Process and Strategy, for Debriefing and After Action Review

Role: Inventor

PENDING #61/445,417, file date 2/22/2012:

“Systems and Methods for Automated Assessment within a Virtual Environment”

Synchronous or Asynchronous Assessment Processes across Diverse Geographic Locations, including Standardization of Open-Ended Simulation Scenarios

Role: Inventor

Book:

Shelton, B. E., & Wiley, D. (Eds.). (2007). The Design and Use of Simulation Computer Games in Education. Rotterdam, The Netherlands: Sense Publishers.

Selected Relevant Publications:

Leary, H., Walker, A., Shelton, B. E., & Fitt, M. (in press). Exploring the relationships between tutor background, tutor training and student learning: A problem based learning meta-analysis. International Journal of Problem Based Learning.

Campbell, T., Longhurst, M., Duffy, A. M., Wolf, P., & Shelton, B. E. (in press). Science teaching orientations and technology-enhanced tools for student learning. Research in Science Education. DOI 10.1007/s11165-012-9342-x

Campbell, T., Dowdle, G., Shelton, B. E., Olsen, J., Longhurst, M., & Beckett, H. (2013). Gaming as a platform for developing science practices. Science Activities: Classroom Projects and Curriculum Ideas, 50(3), 90-98.

Olsen, J., Shelton, B. E., & Campbell, T. (2012). S'cape from formality: Embedded and automatic assessments within simulation games. Proceedings of the Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC) 2012, 11 pages.

Shelton, B. E., Parlin, M. A., Jump, V., & Rowan, L. (2012). Iterative technology-based design with deaf/hard of hearing populations: Working with teachers to build a better educational game. Proceedings of the International Conference of the Learning Sciences (ICLS 2012), Sydney, Australia, 2 pages.

Shelton, B. E., & Parlin, M. A. (2012). Taking activity-goal alignment into open-ended environments: Assessment and automation. In D. Ifenthaler, D. Eseryel, & X. Ge (Eds.), Assessment in Game-based Learning: Foundations, Innovations, and Perspectives. Springer: New York, 105-122.

Lee, V. R., Shelton, B. E., Walker, A., Caswell, T., & Jensen, M. (2012). ReTweeting History: Exploring the intersection of microblogging and problem-based learning for historical reenactments. In K. Seo, D. Pellegrino & C. Engelhard (Eds.), Designing Problem-Driven Instruction Using Online Social Media. Charlotte, NC: Information Age Publishing, 23-40.

Stowell, T., Scoresby, J., Coates, C., M. Capell, & Shelton, B. E. (2011). Leveraging open source technology for 3D game engine development. In R. Ferdig (ed.), Discoveries in Gaming and Computer-Mediated Simulations: New Interdisciplinary Applications. IGI Global: Hershey, PA, 78-109.

Shelton, B. E., Satwicz, T. & Caswell, T. (2011). Historical perspectives on games and education from the learning sciences. International Journal of Game-Based Learning 1(3), 84-96.

Shelton, B. E., & Scoresby, J. (2011). Aligning game activity with educational goals: Following a constrained design approach to instructional computer games. Educational Technology Research & Development, 59(1), 113-138. Advance online publication. doi: 10.1007/s11423-010-9175-0

Scoresby, J. & Shelton, B. E. (2011). Visual perspectives within educational computer games: Effects on presence and flow within virtual learning environments. Instructional Science, 39(3), 227-254. Advance online publication. doi: 10.1007/s11251-010-9126-5

Shelton, B. E., Stowell, T., Scoresby, J., Alvarez, M., Capell, M. & Coates, C. (2010). A Frankenstein approach to open-source: The construction of a 3D game engine as meaningful educational process. IEEE Transactions on Learning Technologies, 3(2), 85-90. 03 Feb. 2010. IEEE computer Society Digital Library. IEEE Computer Society, <<http://doi.ieeecomputersociety.org/10.1109/TLT.2010.3>>

Neville, D., & Shelton, B. E. (2010). Literary and historical 3D-DGBL: Design guidelines. Simulation and Gaming. 41(4), 607-629. Full Text (OnlineFirst PDF) available March 25, 2009: <http://sag.sagepub.com/cgi/content/abstract/1046878108330312v1>
doi:10.1177/1046878108330312

Other Relevant Publications:

Neville, D., Shelton, B. E., & McInnis, B. (2009). Cybertext redux: Using DGBL to teach L2 vocabulary, reading, and culture. *Computer Assisted Language Learning*, 22(5), 409-424.

Stowell, T., Scoresby, J., Coates, C., M. Capell, & Shelton, B. E. (2009). A process for utilizing readily available software libraries to create a 3D simulation game. *International Journal of Gaming and Computer-Mediated Simulations*, 1(4), 20-49.

Stowell, T., & Shelton, B. E. (2008). The challenges, frustrations and triumphs of remixing an open source engine for educational games. *TechTrends*, 52(5), 32-37.

Walker, A., & Shelton, B. E. (2008). Problem-based educational games: Connections, prescriptions, and assessment. *Journal of Interactive Learning Research*, 12(4), 663-684.

Hanson, K., & Shelton, B. E. (2008). Challenges of virtual reality design and development faced by educators. *Educational Technology & Society*, 11(1), 118-131.

Shelton, B. E., & Wiley, D. (Eds.). (2007). *The Educational Design and Use of Simulation Computer Games*. Rotterdam, The Netherlands: Sense Publishers.

Contracts and Grants:

Total amount awarded: \$11,114,702

Number of awards: 22

Example:

Cyber-enabled Learning: Digital Natives in Integrated Scientific Inquiry Classrooms, \$434,270 NSF Discovery Research K-12 (NSF 09-602), Co-Principal Investigator, August 2010-July 2015

Recent Honors:

Concept to Company Digital Media Award Finalist 2012, GeePerS by Baxajaunak Technology, L.L.C.

Bill & Melinda Gates Foundation: Conversations on Quality Fellow, part of a select group of university professors, government officials, and industry professionals who participated in a symposium dedicated to improving K-12 online learning, January 24-25, Massachusetts Institute of Technology

Emma Eccles Jones College of Education and Human Services Researcher/Scholar of the Year 2010-2011, nominated on behalf of the Department of Instructional Technology and Learning Sciences, the EEJ CEHS provides teaching, service, and research in a variety of disciplines to improve the teaching/learning transaction wherever it takes place and to increase the effectiveness of services for individuals, families, communities, schools, and organizations.

2011 Utah State University Robins Award Finalist, Researcher/Scholar of the Year

Regional Campus and Distance Education Exemplary Course Award Fall 2011, ITLS 5205/6205 Computer Applications for Instruction and Training, rated top 5 of over 226 courses evaluated

Hearst Foundation: Curriki Fellow, part of a select group of university professors who work with in-service or pre-service teachers to integrate open educational resources into their curriculum and instruction, methodologies or design courses, 2009