Donggil Song Assistant Professor Department of Computer Science College of Sciences Sam Houston State University

## Degrees Earned

Ph.D. in Instructional Systems Technology, Indiana University, 2015

M.S. in Computer Science, Seoul National University, 2010

B.A. in Religious Studies, Seoul National University, 2007

# **Peer-Review Publications**

# Articles

**Song, D.** (in press). Learning Analytics as an educational research approach. International Journal of Multiple Research Approaches.

**Song, D.**, Oh, E., & Glazewski, K. (2017). Student-generated questioning activity in second language courses using a customized personal response system: A case study. *Educational Technology Research and Development*, *65*(6), 1425-1449. doi:10.1007/s11423-017-9520-7

**Song, D.** (2017). Designing a teachable agent system for mathematics learning. *Contemporary Educational Technology, 8*(2), 176-190.

**Song, D.**, & Oh, E. (2017). The effects of retrieval with different cues on second language vocabulary learning. *The Journal of Language Teaching and Learning*, *7*(1), 30-42.

Kwon, K., **Song, D.**, Sari, A., & Khikmatillaeva, U. (2017). Different types of collaborative problem-solving processes in an online environment: Solution oriented versus problem oriented. *Journal of Educational Computing Research*. Advance online publication. doi:10.1177/0735633117740395

**Song, D.** (2016). Student-generated questioning and quality questions: A literature review. Research *Journal of Educational Studies and Review, 2*(5), 58-70.

**Song, D.**, & Bonk, C. (2016). Motivational factors in self-directed informal learning from online learning resources. *Cogent Education*. Advance online publication.

**Song, D.**, & Oh, E. (2016). Design and development of a mobile app-based personal response system. *Journal of Educational Technology Systems*, 44(3), 346-161.

**Song, D.** (2016). Expertise reversal effect and sequencing of learning tasks in online English as a second language learning environment. *Interactive Learning Environments, 24*(3). 423-437.

**Song, D.**, Karimi, A., & Kim, P. (2015). A Remotely Operated Science Experiment (ROSE) framework for under-resourced schools. *Interactive Learning Environments*. Advance online publication.

Kim, P., Suh, E., & **\*Song, D.** (2015). Development of a design-based learning curriculum through design-based research for a technology-enabled science classroom. *Educational Technology Research and Development*. Advance online publication. **\***Corresponding author.

**Song, D.**, & Lee, J. (2014). Has Web 2.0 revitalized informal learning?: The relationship between the levels of Web 2.0 and informal learning websites. *Journal of Computer Assisted Learning, 30*(6), 511-533.

**Song, D.**, & Oh, E. (2011). Learning styles based on the different cultural background of KFL learners in online learning. *Multimedia-Assisted Language Learning*, *14*(3), 133-154.

## **Book Chapters**

**Song, D.**, & Kim, P. (2015). A mobile science laboratory with Remotely Operated Science Experiment (ROSE). In H. Crompton & J. Traxler (Eds.), *Mobile learning and STEM: Case studies in practice* (pp. 150-161). New York, NY: Routledge.

**Song, D.**, & Kim, P. (2015). Inquiry-based mobilized math classroom with SMILE. In H. Crompton & J. Traxler (Eds.), *Mobilizing mathematics: Case studies of mobile learning being used in mathematics education* (pp. 33-46). New York, NY: Routledge.

**Song, D.** (2014). A framework for mobile learning app design: DCALE. In C. Miller & A. Doering (Eds.), *The new landscape of mobile learning: Redesigning education in an app-based world* (pp. 120-137). New York, NY: Routledge.

#### **Conference Proceedings, Presentations, & Workshops**

**Song, D.**, Oh, E., & Hong, H. (2018, January). *Learner participation in online graduate courses: System access and discussion quantity/quality*. Presented at the 2018 International Conference on Technology in Education. Orlando, Florida.

**Song, D.**, & Rice, M. (2017, November). *A potential use of a conversational agent in online courses: Focusing on learning by teaching*. Presented at the Annual Meeting of the 2017 AECT (Association for Education Communications and Technology) International Convention. Jacksonville, Florida.

**Song, D.**, Oh. E., & Rice, M. (2017, July). Interacting with a conversational agent system for educational purposes in online courses. *Proceedings of the 10th International Conference on Human System Interaction* (HSI) (pp. 78-82). Ulsan, South Korea: IEEE. doi:10.1109/HSI.2017.8005002.

**Song, D.** (2017, July). LMS as a Platform EduTech as a Player. Seminar Presented at the meeting of Education Research Institute at Seoul National University. Seoul, South Korea.

**Song, D.**, & Rice, M. (2017, March). *Developing an intelligent agent for learning by teaching in online courses*. Presented at the 2017 International Conference on Education. San Diego, California.

**Song, D.** (2017, March). *A conversational agent for more interactions through learning-byteaching in online courses*. Presented at the Digital Education Summit 2017, Sam Houston State University. Huntsville, Texas.

**Song, D.**, & Kim, P. (2016, October). *Collaborative music classroom with mobile apps*. Presented at the Annual Meeting of the 2016 AECT (Association for Education Communications and Technology) International Convention. Las Vegas, Nevada.

**Song, D.**, & Oh. E. (2016, July). *Learning analysis of online courses in social sciences*. Presented at the 2016 Annual Symposium on Management and Social Sciences. Seoul, Korea.

**Song, D.** (2016, July). *Future direction of MOOCs platforms & Learning Management Systems (LMS)*. Seminar Presented at the meeting of Smart Education Project sponsored by Samsung and Seoul National University. Seoul, Korea.

**Song, D.** (2016, March). *Case study: Student analysis using Blackboard's Course Reports*. Presented at the 5th Annual SHSU Online Teaching & Learning Conference. Huntsville, Texas.

**Song, D.**, Oh, E., & Lim, C. (2015, November). *The impact of retrieval on second language learning*. Presented at the Annual Meeting of the 2015 AECT (Association for Education Communications and Technology) International Convention. Indianapolis, Indiana.

**Song, D.**, & Glazewski, K. (2015, April). *Student-generated questioning in language education*. Presented at the 2015 AERA (American Educational Research Association) Annual Meeting. Chicago, Illinois.

**Song, D.**, Kim, J., & Kim, P. (2014). *Mobile language learning opportunity for children in Tanzania*. Presented at the Annual Meeting of the 2014 AECT (Association for Education Communications and Technology) International Convention. Jacksonville, Florida.

**Song, D.** (2013, March). *A universally compatible clicker system: Web + Mobile App*. Presented at the 2013 IST (Instructional Systems Technology) Conference. Bloomington, Indiana.

**Song, D.**, Bonk, C. J., & Whiting, J. (2012). *Motivational and self-regulated learning factors of informal and extreme learning*. Presented at the Third Annual Virtual Global Education Conference .

**Song, D.**, Kim, P., & Karimi, A. (2012). Inquiry-based learning environment using mobile devices in math classroom. *Proceedings of the Annual Meeting of the 2012 AECT (Association for Education Communications and Technology) International Convention*, Louisville, Kentucky.

**Song, D.**, Levine, P., Kim, N. (2012). *SMILE (Stanford Mobile Inquiry-based Learning Environment) workshop for student-centered mobile learning experience*. Workshop presented at the Annual Meeting of the 2012 AECT (Association for Education Communications and Technology) International Convention. Louisville, Kentucky.

Kim, P., Kim, N., **Song, D.** (2012, September). *Stanford Mobile Inquiry-based Learning Environment (SMILE) for the Seeds of Empowerment*. Workshop presented at the 2nd International mEducation Alliance Symposium. Washington D.C.

**Song, D.**, & Lee, J. (2012, March). Has Web 2.0 Revitalized Informal Learning?: Correlation between Web 2.0 Level and Extreme Learning. Presented at the 2012 IST (Instructional Systems Technology) Conference. Bloomington, Indiana.

Whiting, J., Altuwaijri, A., Jung, E., Kim, M., Kim, S., Shin, S., **Song, D.**, Tan, V., Xu, S., Min, M., Wang, T., & Bonk, C. (2012, March). *What's all this talk about extreme learning?: A discussion with the extreme learning team*. Presented at the 2012 IST (Instructional Systems Technology) Conference. Bloomington, Indiana.

**Song, D.**, Karimi, A., & Kim, P. (2011). Toward designing mobile games for visually challenged children. *Proceedings of the IEEE International Conference on e-Education, Entertainment and e-Management* (pp. 234-238), Bali, Indonesia.

#### Work or Professional Experiences

2015 – Present, Assistant Professor, Department of Computer Science, Sam Houston State University.

2010 – Present, Educational Research Manager, Seeds of Empowerment (Non-profit organization, <u>http://www.seedsofempowerment.org</u>).

2013 – 2015, Co-manager, Office of Instructional Consulting, Indiana University.

2012 – 2013, Lab manager, Teaching Technology Lab, Indiana University.

# **Honors and Awards**

Young Researcher Award, AECT (Association for Education Communications and Technology), 2017

Enhancement Research Grant (\$15,000), Sam Houston State University, 2016

International Services Cash Award, Indiana University, 2012

## **Development Competencies**

2017, January. Designed and developed CourseTing (a conversational agent for online/face-toface courses). Available on <u>http://www.courseting.com</u>

2013. Designed and developed EnMIA (voice-based language learning activity support system). Available on Apple App Store: <u>https://itunes.apple.com/us/app/enmia/id754858890?mt=8</u>; and on the Web: <u>http://www.einbrain.com/enmia</u>

2013. Designed and developed Swahili (language learning application). Available on Google Play: <a href="https://play.google.com/store/apps/details?id=com.einbrain.swahili01">https://play.google.com/store/apps/details?id=com.einbrain.swahili01</a>

2012. Designed and developed EnClicker (mobile personal response system). Available on Apple App Store: <a href="https://itunes.apple.com/us/app/co-lor/id549731876?mt=8">https://itunes.apple.com/us/app/co-lor/id549731876?mt=8</a>; on Google Play: <a href="https://play.google.com/store/apps/details?id=com.Einbrain.color">https://itunes.apple.com/us/app/co-lor/id549731876?mt=8</a>; on Google Play: <a href="https://play.google.com/store/apps/details?id=com.Einbrain.color">https://play.google.com/store/apps/details?id=com.Einbrain.color</a>; and on the Web: <a href="https://www.einbrain.com/enclicker">https://www.einbrain.com/enclicker</a>

2011. Developed as a Research Associate. Skewer in Seoul (SiS): Measurement of Blind Children's Executive Function Using Mobile Learning Games, Programmable Open Mobile Internet for Social Cause, Stanford University. Available: http://ldt.stanford.edu/~educ39109/POMI/SIS/

### **Other Competencies**

Educational Research Manager, Seeds of Empowerment, 2010 – present

Managing Editor, International Journal of Multiple Research Approaches, 2016 - present

Editorial Board Member

International Journal of Computing Sciences Research, 2017 – present

International Journal on Integrating Technology in Education, 2015 – present

Consulting Editor, Interdisciplinary Journal of Problem-Based Learning, 2015 – present

# Reviewer

2011 - present

Computers & Education; Computer Assisted Language Learning; Educational Technology Research and Development; Interactive Learning Environments; International Journal for Educational Media and Technology; International Journal on Integrating Technology in Education; Learning: Research and Practice; The Journal of Learning and Teaching Learning; USDA (United States Department of Agriculture) – Small Business Innovation Research