



Nam Ju Kim, Ph.D.

University of Miami
School of Education and Human Development
Department of Teaching and Learning
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Education

Ph.D.	Instructional Technology and Learning Sciences, Utah State University, Logan, UT	2017
M.A.	Instructional Technology, Yonsei University, S. Korea	2007
B.A.	Education/Liberal Arts (Dual Degree), Yonsei University, S. Korea	2005

Academic Appointments

- Assistant Professor, Department of Teaching and Learning, University of Miami. 2017-Present
- Research Scientist, Department of Instructional Technology and Learning Sciences, Utah State University, Logan, UT 2017

Research

Research Interests

- STEM Education/Special Education
- Bayesian Inferences/Mixed Methods Research/Meta-analysis
- Virtual Reality/Augmented Reality/Mixed Reality
- Computer-based Scaffolding with Artificial Intelligence/ Problem-based Learning
- Machine Learning/ Data Mining/ Learning Analytics/Text Mining/ Natural Language Processing

Peer-reviewed Journal Articles

Students' names are underlined.

Kim, N. J., Belland, B. R., Lefler, M., Andreasen, L., Walker, A., & Axelrod, D. (2020) Comparison of computer-based scaffolding targeting individuals versus groups in complex problem solving: Meta-analysis. *Educational Psychology Review*, 32, 415-461. (ISI indexed; 2019 Impact Factor: 5.167 Ranked #1 out of 60 in Psychology, Educational)

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- Giancapro, J. & **Kim, N. J.** (in press). Student Parent Teams: A 10 Year Retrospective Study of an Undergraduate Research Experience, *International Journal of Continuing Engineering Education and Life-Long Learning*
- Kolovou, M. & **Kim, N. J.** (2020). Effects of Implementing an integrative Drama-Inquiry Learning Model in a Science Classroom, *The Journal of Educational Research*, 113(3), 191-203
- Kim, N. J.**, Belland, B. R., & Axelrod, D. (2019). Scaffolding for optimal challenge in K-12 problem-based learning. *Interdisciplinary Journal of Problem-based Learning*, 13(1), 1-23
- Belland, B. R., Gu, J., **Kim, N. J.**, Piland, J., & Weiss, D. M. (2019). Exploring epistemological approaches and beliefs of middle school students in problem-based learning. *Journal of Educational Research*, 112(6), 643-655.
- Belland, B. R., Weiss, D. M., **Kim, N. J.**, Piland, J., & Gu, J. (2019). An examination of credit recovery students' use of computer-based scaffolding in a problem-based, scientific inquiry unit. *International Journal of Science and Mathematics Education*, 17(2), 273-293.
- Kim, N. J.**, Belland, B. R., & Walker, A. E. (2018). Effectiveness of computer-based scaffolding in the context of problem-based learning for STEM education: Bayesian meta-analysis. *Educational Psychology Review*, 30(2), 397-429. **(ISI indexed; 2019 Impact Factor: 5.167 Ranked #1 out of 60 in Psychology, Educational)**
- Kim, K., **Kim, N. J.**, Seo, J., & Kim, S. W. (2018). Utilization of computer pointing game for improving visual perception ability of children with severe intellectual disability. *Journal of the Korea Society of Computer and Information*, 23(4), 41-49.
- Belland, B. R., Walker, A. E., & **Kim, N. J.** (2017). Bayesian network meta-analysis to synthesize the influence of contexts of scaffolding use on cognitive outcomes in STEM education. *Review of Educational Research*, 87(6), 1042-1081. **(ISI indexed; 2019 Impact Factor: 8.327 Ranked #1 out of 263 in Education & Educational Research)**
- Belland, B. R., Walker, A. E., **Kim, N. J.**, & Lefler, M. (2017). Synthesizing results from empirical research on computer-based scaffolding in STEM education: A meta-analysis. *Review of Educational Research*, 87(2), 309-344. **(ISI indexed; 2019 Impact Factor: 8.327 Ranked #1 out of 263 in Education & Educational Research)**
- Belland, B. R., Gu, J., **Kim, N. J.**, & Turner, D. J. (2016). An ethnomethodological perspective on how middle school students addressed a water quality problem. *Educational Technology Research & Development*, 64, 1135–1161. doi:10.1007/s11423-016-9451-8
- Lee, J. E., Recker, M., Choi, H., Hong, W. J., **Kim, N. J.**, Lee, K., ... & Recker, M. (2016). Applying data mining methods to understand user interactions within learning management systems: Approaches and lessons learned. *Journal of Educational Technology Development and Exchange*, 8(2), 99-116.
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- Kim, Y., Smith, D., **Kim, N. J.**, & Chen, T. (2014). Playing with a robot to learn English vocabulary. *Korean-American Educational Researchers Association Research Forum, 1*(2), 3-8.
- Ke, F., Im, T., Xue, X., Xu, X., **Kim, N. J.**, & Lee, S. (2013). The experience of adult facilitators in a virtual-reality-based social interaction program for children with autism: A phenomenological inquiry. *Journal of Special Education, 48*(4), 290-300
- (**Master's Thesis**) Suh, S., Kim, S. W., & **Kim, N. J.** (2010). Effectiveness of MMORPG-based instruction in elementary English education in Korea. *Journal of Computer Assisted Learning, 26*(5), 370-378. doi: 10.1111/j.1365-2729.2010.00353.x.
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Manuscripts Under Review

- Kim, N. J.**, & Vicentini R. C. (Under review). Enhancing information literacy and argumentation skills through augmented reality technology and computer-based scaffolding for science learning. Manuscript submitted for publication to *International Journal of Science and Mathematics Education*.
- Kim, N. J.** (Under review). Computer-based scaffolding in the context of problem-centered instructional models for STEM education across countries and U.S. states: Meta-analysis and cluster analysis. Manuscript submitted for publication to *Journal of Computer-Assisted Learning*
- Kim, S., & **Kim, N. J.** (Under review). Utilization of TV as an Aid for Value Creation in Future Education. Manuscript submitted for publication to *Journal of the Korea Society of Computer and Information*
- Kim, Y., **Kim, N. J.**, & Belland, B. R. (Under review). Profiling meta-analysis student clusters with scaffolding characteristics. Manuscript submitted for publication to *Contemporary Educational Psychology*.
- Belland, B. R. & **Kim, N. J.** (Under review). The relationship between problem-based learning, epistemic beliefs, and argumentation in middle school science: An exploratory, mixed method study. Manuscript submitted for publication to *Instructional Science*.
- Belland, B. R., & **Kim, N. J.** (Under review). High school students' collaboration and engagement with scaffolding and information as predictors of argumentation skill during problem-based learning. Manuscript submitted for publication to *Learning and Instruction*.
- Jeon, D., Bressel, E., & **Kim, N. J.** (Under review). Comparison of ground reaction forces between novice and experienced ballet dancers performing a second position jump landing. Manuscript submitted for publication to *Journal of Dance Medicine & Science*.
- Belland, B. R., **Kim, N. J.**, & Weiss, D. M. (Under review). A case study investigating high school students' agentic responses to modeling during problem-based learning. Manuscript submitted for publication to *International Journal of Science and Mathematics Education*.
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Conference Proceedings

- Kim, N. J.**, Belland, B. R., & Kim, Y. (2017). Data mining meta-analysis coding to develop smart learning systems that dynamically customize scaffolding. *Proceeding of the 2017 Annual Meeting of Americas Conference on Information Systems (AMCIS)*.
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- Kim, Y., Belland, B. R., & **Kim, N. J.** (2017). Profiling meta-analysis student clusters with scaffolding characteristics. *Proceeding of the Ninth Annual Post-ICIS KrAIS Research Workshop*.
- Belland, B. R., **Kim, N. J.**, Weiss, D. M., & Piland, J. (2017). High school students' collaboration and engagement with scaffolding and information as predictors of argument quality during problem-based learning. *Proceedings of the 2017 Annual Meeting of Computer-supported Collaborative Learning (CSCL)*.
- Kim, N. J.**, Belland, B. R., & Walker, A. E. (2016). Effectiveness of computer-based scaffolding for K-adult students in the context of problem-centered instructional models related to STEM education: Bayesian meta-analysis. *Proceedings of selected research and development presentations at the 2015 Annual Convention of the Association for Educational Communication and Technology* (vol. 1, pp. 109-116). Indianapolis, IN: AECT.
- Belland, B. R., Walker, A. E. **Kim, N. J.**, & Lefler, M. R. (2014). A preliminary meta-analysis on the influence of scaffolding characteristics and study and assessment quality on cognitive outcomes in STEM education. *Proceeding of the Annual Meeting of the Cognitive Science Society* (vol. 36. pp. 3180-3181). Quebec, Canada: COGSCI
- Yuan, M., **Kim, N. J.**, Drake, J. Smith, S., & Lee, V. R. (2014), Examining how students make sense of slow-motion video. *Proceedings of selected research and development presentations at the 2014 Annual Convention of International Society of the Learning Sciences* (pp. 1617-1618). Boulder, CO: ICLS
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Invited Presentations

- Kim, N. J.** (2020, June). U.S. University's Online Learning and AI-based Learning Support System, Center for Teaching and Learning, Sungkyunkwan University, South Korea.
- Kim, N. J.** (2019, April). Learner-centered scaffolding system. Edtech Café, Distance Learning Institute, University of Miami.
- Kim, N. J.** (2018, February). Can Artificial Intelligence solve the teacher workload problem? School of Education and Human Development Research Colloquium, University of Miami.
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Refereed Presentations

- Kim, N. J.**, Timpilis, D., & Vincentini, C. (accepted). Artificial Intelligence-based Learner's Motivation Detection in Problem-Based Learning (PBL). Paper accepted at 2020 Annual Meeting of the Association for Educational Communications and Technology, Jacksonville, FL.
- Vincentini, C., **Kim, N. J.**, & Boa Sorte, P. (accepted). Using Artificial Intelligence Scaffolding to Support Doctoral Students' Dissertation Writing. Paper accepted at 2020 Annual Meeting of the Association for Educational Communications and Technology, Jacksonville, FL.
- Kolovou, M., & **Kim, N. J.**, (accepted). Integrated Drama-Inquiry Learning Model in Science Education. Paper accepted at 2020 Annual Meeting of the Association for Educational Communications and Technology, Jacksonville, FL.
- Kolovou, M., & **Kim, N. J.**, (accepted). Effects of combining Inquiry-based learning with Drama-Based Techniques on Motivation. Paper accepted at the American Educational Research Association 2020 Annual Convention, San Francisco, CA.
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- Kim, N. J., & Vicentini, C. R.** (2019, October). Educational use of Internet Protocol Television. Paper presented at the 2019 Annual Meeting of the Association for Educational Communications and Technology, Las Vegas, NV.
- Vicentini, C. R., & Kim, N. J.** (2019, October). English as a foreign language tutoring online: Analyzing metacognitive skills and instructional scaffolding. Paper presented at the 2019 Annual Meeting of the Association for Educational Communications and Technology, Las Vegas, NV.
- Kim, N. J., Walker, A., Belland, B., & Lefler, M.** (2019, April). An informed synthesis of experimental and quasi-experimental computer-based scaffolding research. Paper presented at the American Educational Research Association 2019 Annual Convention, Toronto, Canada.
- Kim, N. J.** (2019, April). Improving high school students' information literacy and argumentation skills through scaffolding in problem-based learning. Paper presented at the American Educational Research Association 2019 Annual Convention, Toronto, Canada.
- Belland, B. R., Kim, Y., & Kim, N. J.** (2018, July). Data-driven design of computer-based scaffolding through the use of learning analytics. Paper presented at the 2018 International Symposium on Teaching, Education, and Learning, Seoul, Korea.
- Kim, N. J., & Jeon, D.** (2018, April). Effectiveness of computer-based scaffolding in the context of Problem-based Learning: Bayesian Meta-analysis. Paper presented at the American Educational Research Association 2018 Annual Convention, New York City, NY.
- Kim, N. J., Belland, B. R., & Kim, Y.** (2018, April). Clustering the relationship between scaffolding and students' characteristics through data mining. Paper presented at the American Educational Research Association 2018 Annual Convention, New York City, NY.
- Kim, Y., Belland, B. R., & Kim, N. J.** (2017, December). Profiling meta-analysis students clusters with scaffolding characteristics. Paper presented at the Ninth Annual Post-ICIS KrAIS Research Workshop 2017, Seoul, South Korea.
- Kim, N. J., Belland, B. R., & Kim, Y.** (2017, August). Data mining meta-analysis coding to develop smart learning systems that dynamically customize scaffolding. Paper presented at the Americas Conference on Information Systems 2017 Annual Convention, Boston, MA.
- Belland, B. R., Kim, N. J., Weiss, D., & Piland, J.** (2017, June). High school students' collaboration and engagement with scaffolding and information as predictors of argumentation skills during problem-based learning. Paper presented at the 12th International Conference on Computer Supported Collaborative Learning, Philadelphia, PA.
- Belland, B. R., Kim, N. J., Weiss, D. M., & Piland, J.** (2017, May). Impact of using a generic argumentation scaffold in two successive PBL units on different topics. Paper presented at the 2017 Annual Meeting of the American Educational Research Association, San Antonio, TX.
- Kim, N. J., Belland, B. R., Walker, A., & Piland, J.** (2017, April). Computer-based scaffolding in STEM education across countries and the U.S. states: Meta-analysis and cluster analysis. Paper presented at the American Educational Research Association 2017 Annual Convention, San Antonio, TX.
- Piland, J., Kim, N. J., Belland, B. R., & Walker, A.** (2017, April). Effects of computer-based scaffolding in problem-centered approach for engineering education. Paper presented at the American Educational Research Association 2017 Annual Convention, San Antonio, TX.
- Walker, A. Belland, B. R., Kim, N. J. & Lefler, M.** (2017, April). Examining computer based scaffolding research quality through a risk of bias lens. Paper presented at the American Educational Research Association 2017 Annual Convention, San Antonio, TX.
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- Belland, B. R., **Kim, N. J.**, Weiss, D., Gu, J., & Piland, J. (2017, April). Impact of using a generic argumentation scaffold in two successive PBL units on different topics. Paper presented at the American Educational Research Association 2017 Annual Convention, San Antonio, TX.
- Belland, B. R., Walker, A. E., **Kim, N. J.**, & Piland, J. (2016, December). New directions for development of and research on computer-based scaffolding emanating from meta-analyses of scaffolding. Paper presented at the 2016 Asia History, Philosophy, and Science Teaching Group (HPST) Conference, Busan, South Korea.
- Kim, N. J.** (2016, October). Bayesian meta-analysis of effects on several forms of computer-based scaffolding in problem-based learning. Paper presented at the 2016 Meeting of the Association for Educational Communications and Technology, Las Vegas, NV.
- Kim, N. J.**, Belland, B. R., & Walker, A. E. (2016, October). Suggestion of machine learning systems for computer-based scaffolding. Paper presented at 2016 Meeting of the Association for Educational Communications and Technology, Las Vegas, NV.
- Kim, N. J.** (2016, April). Computer-based scaffolding systems using Artificial Intelligence. Poster session at the 2016 Student Research Symposium, Utah State University, Logan, UT.
- Kim, N. J.** (2016, April). Enhancing high school students' information literacy through computer-based scaffolding in problem-based learning for science learning. Paper presented at the American Educational Research Association 2016 Annual Convention, Washington, DC.
- Belland, B. R., **Kim, N. J.**, Walker, A. E., Lefler, M., Whitney, B. M., & Andreasen, L. (2016, April). Using network meta-analysis to synthesize research on computer-based scaffolding in STEM education. Paper presented at the American Educational Research Association 2016 Annual Convention, Washington, DC.
- Andreasen, L., **Kim, N. J.**, Lefler, M., Belland, B. R., & Walker, A. E. (2016, April). Meta-analysis comparison of effectiveness of computer-based scaffolding in complex problem solving: Individual vs group delivery. Paper presented at the American Educational Research Association 2016 Annual Convention, Washington, DC.
- Choi, H., Hong, W. J., **Kim, N. J.**, Lee, J. E., Lee, K., Lefler, M., Louviere, J., Recker, M., M., & Walker, A. E. (2016, April). Applying data mining methods to understand user interactions within learning management systems: Approaches and lessons learned. Round table session at the American Educational Research Association 2016 Annual Convention, Washington, DC.
- Belland, B. R., Gu, J., Weiss, M., & **Kim, N. J.** (2016, April). An examination of credit recovery students' use of computer-based scaffolding in a problem-based, scientific inquiry unit. Paper presented at the American Educational Research Association 2016 Annual Convention, Washington, DC.
- Andreasen, L., **Kim, N. J.**, Lefler, M., Belland, B. R. & Walker, A. E. (2016, March). Meta-analysis comparison of computer-based scaffolding targeting individuals versus groups in complex problem solving. Paper presented at the 2016 Utah Conference on Undergraduate Research, Salt Lake City, UT.
- Whitney, B. M., Lefler, M., Andreasen, L., Belland, B. R. **Kim, N. J.**, & Walker, A. E. (2016, March). A meta-analysis of computer-based scaffolding in sub-domains of mathematics and science. Paper presented at the 2016 Utah Conference on Undergraduate Research, Salt Lake City, UT.
- Belland, B. R., Walker, A. E. **Kim, N. J.**, & Lefler, M. (2015, November). Meta-analysis results detailing the effectiveness of computer-based scaffolding in problem-centered STEM curricula: Suggestions
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for classroom and school application. Teacher Education Council Featured TALK: Webinar at the Society for Information Technology and Teacher Education.

- Kim, N. J.** & Belland, B. R. (2015, November). Effectiveness of computer-based scaffolding in problem-centered instructional models for STEM education: Bayesian meta-analysis. Paper presented at the 2015 Meeting of the Association for Educational Communications and Technology, Indianapolis, IN.
- Belland, B. R., Gu, J., **Kim, N. J.**, & Weiss, M. (2015, April). The relationship between problem-based learning, epistemic beliefs, and argumentation in middle school science. Paper presented at the American Educational Research Association Annual Convention, Chicago, IL.
- Belland, B. R., Walker, A., **Kim, N. J.**, & Lefler, M. (2015, April). Synthesizing results from empirical research on computer-based scaffolding in STEM education: A meta-analysis. Paper presented at the American Educational Research Association 2015 Annual Convention, Chicago, IL.
- Gu, J., Belland, B. R., **Kim, N. J.**, & Weiss, M. (2015, April). Middle school students' science interest and epistemic beliefs in a technology enhanced, problem-based, scientific inquiry unit. Paper presented at the American Educational Research Association Annual Convention, Chicago, IL.
- Kim, N. J.** & Belland, B. R. (2014, November). Optimal challenge in problem-based learning. Paper presented at the Association for Educational Communications and Technology Annual Convention, Jacksonville, FL.
- Lefler, M., Belland, B., Walker, A., & **Kim, N. J.** (2014, November). From the ground up: A comprehensive theoretical framework of computer-based scaffolding. Paper presented at the Association for Educational Communication and Technology Annual Convention, Jacksonville, FL.
- Belland, B. R., Walker, A. E., **Kim, N. J.**, & Lefler, M. R. (2014, July). A preliminary meta-analysis on the influence of scaffolding characteristics and study and assessment quality on cognitive outcomes in STEM education. Poster presented at the 2014 Annual Meeting of the Cognitive Science Society, Québec City, Québec, Canada.
- Yuan, M., **Kim, N. J.**, Drake, J., Smith, S., & Lee, V. (2014, June). Examining how students make sense of slow-motion video. Paper presented at the 2014 meeting of the International Conference of the Learning Sciences, Boulder, CO.
- Belland, B., Gu, J., Turner, J., **Kim, N. J.**, & Weiss, M. (2014, April). How middle school students investigated water quality, evaluated evidence, and constructed arguments: An ethnomethodological study. Paper presented at the American Educational Research Association 2014 Annual Convention, Philadelphia, PA.
- Ke, F., Im, T., Xue, X., Xu, X., Lee, S., & **Kim, N. J.** (2013, April). Facilitating social interactions in a virtual world for children with autism. Paper presented at the American Educational Research Association 2013 Annual Convention, San Francisco, CA.
- Kim, Y., Gulz, A., Silvervarg, Y., Haake, M., Chen, T., & Kim, N. J. (2013, April). The effect of the visual gender of an embodied agent: A cross-cultural comparison. Paper presented at the American Educational Research Association 2013 Annual Convention, San Francisco, CA.
- Kim, S. W., **Kim, N. J.**, & Lee, M. G. (2006, October). Effects of educational games. Paper presented at the International Conference of the Institute for Educational Research, Yonsei University, Seoul, S. Korea.
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Funded Projects

Principal Investigator

Artificial Intelligent-based Motivation Indicator in Online Learning Environments

- Foundation Name Blinded as Requested (\$100,000)
- Budget: \$100,000
- Funding Period: July 2020 ~ June 2021

Principal Investigator

Artificial Intelligent-adapted Learning System.

- Department of Development, School of Education and Human Development, University of Miami
- Budget: \$50,000
- Funding Period: Jan 2018 ~ December 2020

Principal Investigator

The Use of Advanced Augmented Reality in Engineering Mechanics Education

- Provost Research Award Grant, University of Miami
- Budget: \$20,000
- Funding Period: May 2020 ~ April 2021

Co-Principal Investigator

Revealing the Anatomy of Engineering Structures Using Augmented Reality

- Magic Leap, Inc
- Budget: \$10,000
- Funding Period: Jan 2020 ~ August 2020

Co-Principal Investigator

Collaborative Research: Estimating the Socio-Economic Burden of Parkinson's Disease using Data Driven Agent-based Modeling Approach.

- Internal Grant from the School of Education and Human Development, University of Miami
- Budget: \$15,000
- Funding Period: May 2019 ~ April 2020

2017 ~ (University of Miami)

~2017 (Utah State University)

Research Scientist/Research Assistant

Impact of Scaffolding Characteristics and Study Quality on Learner Outcomes in STEM Education: A Meta-analysis.

- National Science Foundation (REESE Program).
- PI: Dr. Brian Belland
- Funding Period: Aug 2013 ~ August 2017

Research Scientist/Research Assistant

Supporting Middle School Students' Construction of Evidence-based Arguments

- National Science Foundation (DRK12 Track).
- PI: Dr. Brian Belland
- Funding Period: Aug 2013 ~ August 2017

Research Assistant

Computer-based Individualized and Customized Supports for K-12 Students: The Development of Machine Learning Systems.

- The Seed Program to Advanced Research Collaborations, Utah State University.
- PI: Dr. Brian Belland
- Funding Period: Aug 2013 ~ Aug 2017

Research Assistant

Canvalytics Research at Utah State University: Analyzing Usage Data from Interactions with the Canvas Learning Management System.

- The Seed Program to Advanced Research Collaborations, Utah State University.
- PI: Dr. Andrew Walker
- Funding Period: Aug 2014 ~ Jan 2016

Research Assistant

Smart Robot Application Development Project.

- SK Telecom Corporation, S. Korea.
- PI: Dr. Yanghee Kim
- Funding Period: Jan 2013 ~ May 2013

Research Assistant

CAREER: The Physical Activities Data Project.

- National Science Foundation (DRL-1054280).
- PI: Dr. Victor Lee
- Funding Period: Aug 2012 ~ Dec 2012

2012 ~ (in U.S.A)

~2017 (in South Korea)

Research Assistant

Implementation Plans for Internet College Entrance Educational Program.

- Gangnam district office, Seoul, S. Korea.
- PI: Dr. Myung Geun Lee
- Funding Period: Jan ~ Dec 2008

Research Assistant

A Study of Effectiveness of Educational Game.

- EbriSoft Corporation, Seoul, S. Korea.
- PI: Dr. Myung Geun Lee
- Funding Period: Jan ~ Dec 2007

Research Assistant

Curriculum and Learning Material Development for Regional Innovation.

- Korea Productivity Center, Seoul, S. Korea.
- PI: Dr. Myung Geun Lee
- Funding Period: Jan ~ Dec 2006

Research Assistant

Design of User Interface for Optimal Web Access of the Visually Impaired.

- HaSang Rehabilitation Center, Seoul, S. Korea.
- PI: Dr. Myung Geun Lee
- Funding Period: Jan ~ Dec 2006

Courses Taught

University of Miami, Coral Gables, FL
Department of Teaching and Learning

- TAL 775 (graduate level) – STEM curriculum and Policy (Format: Face-to-Face, Semester: Fall, 2017)
- TAL 776 (graduate level) – Assessment in STEM (Format: Face-to-Face, Semester: Spring, 2018)
- TAL 704 (graduate level) – Introduction to the Learning Sciences (Format: Face-to-Face, Online, Semester: Spring 2018, 2019, 2000)
- TAL 709 (graduate level) – Design for Formal Learning Environment (Format: Online, Semester: Spring, 2020)
- TAL 772 (graduate level) - Instructional Design and Technology in STEM Education (Format: Face-to-Face, Semester: Fall, 2018)
- TAL 790 (graduate level) – Advanced Topics in Education: Python, Machine Learning, and Artificial Intelligence (Format: Face-to-Face, Semester: Spring, 2019)

Utah State University, Logan, UT
Department of Instructional Technology & Learning Sciences

- ITLS 6205 (graduate level)/5205 (undergraduate level) – Computer Application in Instruction & Teaching (Format: Online and Face-to-Face, Semester: Spring 2016); Topics include pedagogical approaches such as technology integration such as assessment (e.g., Qualtrics, Google forms, SurveyMonkey), Content Management (e.g., Canvas, Moodle, Wordpress), and Media Production (e.g., Photoshop, InDesign, Audacity, iMovie)
- ITLS 6870 (graduate level) – Current Issues Seminar (Format: Online, Semester: Spring 2016); Topics include trends, definitions, types of scaffolding, and current controversies
- ITLS 6245 (graduate level)/5245 (undergraduate level) – Interactive Multi-Media Production (Format: Online and Face-to-Face, Semester: Fall 2015); Topics include the usage of advanced software to develop instructional tools such as UNITY (3D game development platform) and Adobe Flash.
- ITLS 6530 (graduate level) – Design and Development Studio (Format: Face-to-Face, Semester: Spring 2013); Topics include the utilization of instructional design in various fields
- ITLS 6540 (graduate level) – Learning Theory (Format: Face-to-Face, Semester: Fall 2012); Topics include differences between the behaviorist, cognitivist, and sociocultural paradigms of learning, the application of those concepts to the design of learning environments.

Yonsei University, South Korea
Department of Education

- EDU4126 (undergraduate level) – Educational Technology media (Format: Face-to-Face, Semester: Spring 2007); Topics include the utilization of computers, learning management systems, and computerized instructional tools

Awards and Academic Honors

The Outstanding Journal Article Award

Research and Theory Division, Association for Educational Communications & Technology	2018
The Outstanding Journal Article Award	
Research and Theory Division, Association for Educational Communications & Technology	2017
Outstanding Graduate – Ph.D.	
Department of Instructional Technology and Learning Science, Utah State University, Logan, UT	2017
Doctoral Student Researcher of the Year (2016-2017)	2017
Department of Instructional Technology and Learning Sciences, Utah State University, Logan, UT	
Scholarship (awarded for academic excellence)	2013 – 2014
Instructional Technology and Learning Sciences, Utah State University, Logan, UT	
The Kelly Foundation Scholarship	2012
Florida State University, Tallahassee, FL	
The Ruby Diamond Fellowship	2011
Florida State University, Tallahassee, FL	
	2004 – 2006
Scholarship (awarded for academic excellence)	
Yonsei University, S. Korea	
Certificate of Recognition	2007
Outstanding Contribution to Education for Guro Citizens Guro District Office, Seoul, S. Korea	
Certificate of Recognition	2007
Outstanding Contribution to Education for Jongro Citizens Jongro District Office, Seoul, S. Korea	

Certifications

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| - Teaching Assistant Certification | 2012 |
| ▪ Level: Excellent | |
| ▪ Research and Graduate Studies, Utah State University | |
| - Teaching Certification | 2011 |
| ▪ Program for Instructional Excellence | |
| ▪ Florida State University, Tallahassee, FL | |
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Professional Memberships

American Educational Research Association (AERA)
 Association for Educational Communication and Technology (AECT)
 International Society of the Learning Sciences (ISLS)
 Association for Information Systems (AIS)
 Professors of Instructional Design & Technology (PIDT)

Service

Teaching and Learning Department

- TAL Review Committee for Outstanding Doctoral Dissertation
- TAL Website Renovation Committee

School of Education and Human Development

- SEHD Research Council

University of Miami

- Blackboard Renovation Member, the office of Planning, Institutional Research, and Assessment
- UM Medical School Curriculum Reform, Counselor
- Online Pivot Assessment Work Team

Nation-wide

- Secretary/Treasurer, SIG problem-based education, AERA (- April, 2018)
 - **Reviewer**
 - Spencer Foundation Grant (2020~)
 - Computers and Education (2020~)
 - Journal of Computer-Assisted Learning (2020~)
 - Frontiers (2020~)
 - Journal of University Teaching and Learning Practice (2020~)
 - American Educational Research Association, SIG Problem-Based Education (2016~)
 - American Educational Research Association, Division C (2016~)
 - Interdisciplinary Journal of Problem-Based Learning (2018~)
 - International Journal of STEM Education (2019~)
 - **Editorial Board Member**
 - Times and Spaces in Education (2020~)
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