Kyungbin Kwon

Assistant Professor, Instructional Systems Technology
School of Education, Indiana University
201 N. Rose Avenue
Bloomington, IN 47405
+1 812-856-8460, kwonkyu@indiana.edu

EDUCATION

University of Missouri, Columbia, Missouri
Major: Information Science and Learning Technologies   Ph.D.   2011
Dissertation: *The effect of Self-explanation and Metacognitive scaffolding on Learning web programming*

Seoul National University, Seoul, South Korea
Major: Educational Method   M.A.   2004
Thesis: *A Study on the Developmental Process of Online Learning Activities*

Seoul National University, Seoul, South Korea
Major: Education   B.A.   1998

PROFESSIONAL EXPERIENCE

Aug. 2014 – present   Assistant Professor, Instructional Systems Technology, Indiana University.
                         Associate Faculty Member, Cognitive Science Program, Indiana University.
Nov. 2010 – July 2014   Instructional Design & E-Learning Specialist, School of Medicine, University of Missouri.
Sep. 2002 – Aug. 2005   Program coordinator, Korea National Open University, Seoul, South Korea.

AWARD

- *Best Paper Award* at the AERA Special Interest Group Instructional Technology (SIG-IT), 2019.
- *Appreciation Award* for supporting the Korean Society for Educational Technology (KSET) as a planner for the 2016 AECT Convention, 2016.
- *Faculty Excellence in Teaching Award* for Outstanding Clinical Curriculum Innovation, University of Missouri, School of Medicine, 2012.

PROFESSIONAL AFFILIATIONS

American Educational Research Association
Association for Educational Communications & Technology

GRANT

External

- *Examining the impact of socially relevant problem-based learning curriculum at the elementary level: Students' CS interest/knowledge and teachers' implementation needs.* Co-PI with Anne Leftwich (PI) and Thomas Brush. Google Computer Science Education Research (CS-ER) program. $101,065, July, 2018- June, 2019.

Internal

- *Computer Science Education Using Block-Based Programming in a Middle School*. PI. Indiana University. Proffitt 2018 Summer Faculty Fellowship. $10,000, 2018.
- *Support Collaborative Learning via Nudging Group Awareness Information*. PI. Indiana University, SOE Learning and Teaching With Technology Challenge Development Grants. $3,000, 2018.
- *Enhance Quality of Collaborative Learning through an Online Group Awareness Tool embedded in CANVAS*. PI. Indiana University. SOE Learning and Teaching With Technology Challenge Development Grants. $4,000, 2015.

Proposal under review

- *Supporting and Sustaining Socially Relevant CS Problem-based Learning Curriculum at the 6th grade Level*. Co-PI with Anne Leftwich (PI). Computer Science for All, National Science Foundation. $498,300, Aug., 2019- Aug., 2022.

PUBLICATIONS

Peer-reviewed Journal Articles:

Kwon, K., Park, S., Shin, S., & Chang, C. (in press). Effects of different types of instructor comments in online discussions. *Distance Education*.

Kwon, K. & Cheon, J. (in press) Exploring problem decomposition and program development through block-based programs. *International Journal of Computer Science Education in Schools*.

Kwon, K., & Song, D., & Sari, A., & Khikmatillaeva, U. (2019). Different Types of Collaborative Problem-Solving Processes in an Online Environment: Solution-oriented versus Problem-oriented. *Journal of Educational Computing Research*. *56*, 1277-1295. doi:10.1177/0735633117740395

Kwon, K., Shin, S. & Park, S. J. (2018). Effects of graphic organizers in online discussions: comparison between instructor-provided and student-generated. *Educational Technology Research and Development*. *66*, 1479-1503. doi:10.1007/s11423-018-9617-7

Kwon, K., Lee, S. J., & Chung, J. (2018). Computational concepts reflected on Scratch programs. *International Journal of Computer Science Education in Schools*, *2*(3). doi:10.21585/ijcses.v2i3.33

Kwon, K., Shin, S., Brush, T. A., Glazewski, K. D., Edelberg, T., Park, S. J., . . . Alangari, H. (2017). Inquiry learning behaviors captured through screencasts in problem-based learning. *Interactive Learning Environments*, *26*, 839-855. doi:10.1080/10494820.2017.1419496

Liu, Y. -H., **Kwon, K.**, & Johnson, L. P. (2018). Exploration of factors in the early collaboration phase affecting virtual groups' overall collaborative learning experiences. *Journal of Educational Computing Research*. *56*, 485-512. doi:10.1177/0735633117715034

Han, A., **Kwon, K.** (2018). Students' perception of extracurricular activities: A case study. *Journal of Advances in Education Research*. *3*, 131-141. doi:10.22606/jaer.2018.33002

Kwon, K., & Park, S. J. (2017). Effects of discussion representation: Comparisons between interaction and topic diagrams. *Instructional Science*, *45*, 469-491. doi:10.1007/s11251-017-9412-6

Khlaif, Z., Nadiruzzaman, H., & **Kwon, K.** (2017). Types of interaction in online discussion forums: A case study. *Journal of Educational Issues*, 3(1), 155-169. doi:10.5296/jei.v3i1.10975

Kwon, K. (2017). Novice programmer's misconception of programming reflected on problem-solving plans. *International Journal of Computer Science Education in Schools*, 1(4). 14-24. doi:10.21585/ijcses.v1i4.19

Kwon, K., DiSilvestro, F. R., & Treff, M. E. (Fall 2016/Winter 2017). Online graduate course evaluation from both students' and peer instructors' perspectives utilizing Quality Matters. *Internet Learning*, 5(1), 7-16. doi:10.18278/il.5.1.2

Kwon, K., Saporova, D. & Hoffman, K. (2015). Online lecture capturing system: Expected and actual effects of implementation in a problem-based learning medical curriculum. *Medical Teacher*, *37*, 578-584. doi:10.3109/0142159X.2014.956060

Kwon, K., Liu, Y., & Johnson, L. (2014). Group regulation and social-emotional interactions observed in computer supported collaborative learning: Comparison between good vs. poor collaborators. *Computers & Education, 78, 185-200*. doi:10.1016/j.compedu.2014.06.004

Kwon, K., Hong, R., & Laffey, J. (2013). The educational impact of metacognitive group coordination in computer-supported collaborative learning. *Computers in Human Behavior,* 29, 1271-1281. doi:10.1016/j.chb.2013.01.003

Moore, J. L., Dickson-Deane, C., Galyen, K., Kumalasari, C., & **Kwon, K**. (2012). The ZONE learning community: Gaining knowledge through mentoring. *First Monday*, 17(9). doi:10.5210/fm.v0i0.3748

Kwon, K., & Jonassen, D. (2011). The influence of reflective self-explanations on problem-solving performance. *Journal of educational computing research, 44*, 243-259. doi:10.2190/EC.44.3.a

Kwon, K., Kumalasari, C. D., & Howland, J. L. (2011). Self-explanation prompts on problem-solving performance in an interactive learning environment. *Journal of Interactive Online Learning, 10*, 96-112. doi:10.18848/1447-9494/CGP/v17i02/46899

Kwon, K., Han, D., Bang, E., & Armstrong, S. (2010). Feelings of Isolation and Coping Mechanism in Online Learning Environments: A Case Study of Asian International Students. *The International Journal of Learning, 17*, 343-356. doi:10.18848/1447-9494/CGP/v17i02/46899

Song, S., & **Kwon, K**. (2006). The role of center for teaching and learning for higher education: From cases of USA. *Korean Journal of Educational Technology*, 22(3), 167-185. Retrieved from https://www.kset.or.kr

Book Chapter:

Frick, T., Dagli, C., **Kwon, K.**, & Tomita, K. (2018). Indiana University Plagiarism Tutorials and Tests: 14 Years of Worldwide Learning Online. In B. Hokanson, G. Clinton, & K. Kaminski (Eds.), *Educational Technology and Narrative: Story and Instructional Design* (pp. 191-205). Cham: Springer International Publishing.

Other publication:

Cho, Y., Boling, E., & **Kwon, K.** (2017). Improving Human Learning and Performance at Indiana University. *Performance Improvement*, 56(3), 34-44. doi:10.1002/pfi.21695

Under review:

Kwon, K., Ottenbreit-Leftwich, A. T., Sari, A., Khlaif, Z., Zhu, M., Nadir, H.& Gok, F. (revise-and-resubmits). Teachers' Self-efficacy Matters: Mobile Computing Device Integration in Middle Schools. *TechTrends*.

Kwon, K. (revise-and-resubmits). Student-generated awareness information in a group awareness tool: What does it reveal? *Educational Technology Research and Development*.

Bae, H. & **Kwon, K**. (Under review). Developing Metacognitive Skills through Class Activities: What Makes Students Use Metacognitive Skills? *The Asia-Pacific Education Researcher*.

Lee, S. & **Kwon, K.** (Under review). Students' perceptions of peer assessment for group work as a facilitating and assessment strategy in online and face-toface classes. *Assessment and Evaluation in Higher Education*.

Bae, H., Glazewski, K., Brush, T., & **Kwon, K.** (Under review). Fostering Transfer of Responsibility in the Middle School PBL Classroom An Investigation of Soft Scaffolding. *Instructional Science*.

Nadir, H., Glazewski, K, Brush, T. A., & **Kwon, K.** (Under review). When middle school children engage in making: Understanding the roles of scaffolding for troubleshooting to support their inquiry learning. *Journal of Child-Computer Interaction*.

Peer-reviewed Conference Proceedings:

Kwon, K., Park, S., Shin, S., & Chang, C. (2019). Three types of instructor facilitation in online discussion. *Proceedings of Annual Conference of the American Educational Research Association (AERA).* Toronto, Canada.

Nadir, H., Glazewski, K. D., Brush, T., & **Kwon, K.** (2019). When middle school kids make: Understanding the roles of scaffolding for troubleshooting to support inquiry. *Proceedings of Annual Conference of the American Educational Research Association (AERA).* Toronto, Canada.

Brush, T., Ottenbreit-Leftwich, A., **Kwon, K.**, & Karlin, M. (2019). Implementing socially relevant problem-based computer science curriculum at the elementary level: Students' computer science knowledge and teachers' implementation needs. *Proceedings of the 30th annual conference of the Society for Information Technology and Teacher Education (SITE)*. Las Vegas, Nevada.

Bae, H., Glazewski, K., Brush, T., & **Kwon, K.** (2018). Fostering transfer of responsibility in the middle school problem-based learning classroom: An investigation of dialogic scaffolds. *Proceedings of Annual Conference of the American Educational Research Association (AERA).* New York, NY.

Kwon, K. (2017). Student's evaluations of group process via a group awareness tool. In J. Johnston (Ed.), *Proceedings of EdMedia 2017* (pp. 440-445). Washington, DC: Association for the Advancement of Computing in Education (AACE). Retrieved January 3, 2018 from https://www.learntechlib.org/p/178344/.

Kwon, K., Liu, Y., & Johnson, L. (2015). Factors that influence learner's perception of group process within a computer supported collaborative learning environment. *Preceedings of Annual Conference of the American Educational Research Association (AERA).* Chicago, IL.

Kwon, K., & Hong, R. (2012). Group awareness support in promoting online collaborative learning. *Preceedings of Annual Conference of the Ed-Media.* Denver, CO.

Kwon, K., & Graber, G. (2010). Facilitating constructive online discussion using graphical representation. *Preceedings of Annual Conference of the American Educational Research Association (AERA).* Denver, CO.

Kwon, K., Kumalasari, C., & Howland, J. (2010). Effects of self-explanation strategies on learning troubleshooting. *Preceedings of Annual Conference of the American Educational Research Association (AERA).* Denver, CO.

Jonassen, D.H., Cho, Y.H., Easter, M., Henry, H., & **Kwon, K.** (2010). Eliciting counterarguments in ethics problems. *Preceedings of Annual Conference of the American Educational Research Association (AERA).* Denver, CO.

Kwon, K. & Moore, J. L. (2009). Constructing programming concept and detecting misconception with self-explanation. *Preceedings of the Annual Conference of the Association for Educational Communications and Technology(AECT).* Louisville, KY.

Jonassen, D.H., Cho, Y.H., **Kwon, K.**, Henry, H., & Easter, M. (2009). Facilitating argumentation in ill-structured problem solving. *Paper presented at the biennial conference of the European Association for Research on Learning and Instruction,* Amsterdam, Netherlands.

Kwon, K., & Liu, P. (2009). Effective metacognition in cooperative learning: A case study. *Preceedings of Annual Conference of the American Educational Research Association (AERA).* San Diego, CA.

Jonassen, D.H., Cho, Y.H., Easter, M., Henry, H., **Kwon, K**, & Shen, D. (2009). Evaluating vs. constructing arguments. *Preceedings of Annual Conference of the American Educational Research Association (AERA).* San Diego, CA.

Galyen, K., Kumalasari, C., & **Kwon, K**. (2008). The Digital Media ZONE: A model for online digital media instruction. *Preceedings of Annual Conference of the E-Learn.* Las Vegas, NV.

Kwon, K., & Cho, K. (2008). Focus of peer comments and its effect on writing. *Preceedings of Annual Conference of the American Educational Research Association (AERA).* New York, NY.

Cho, K., Schunn, C. D., & **Kwon, K**. (2007). Learning writing by reviewing. *Proceedings of Annual Conference of the Computer-Supported Collaborative Learning (CSCL).* New Jersey.

Invited Presentations:

Evaluation of computational thinking: Reveal students' misconceptions (Oct. 2018). The 4th International Science, Mathematics and Technology Education Conference (ISMTEC). Bangkok, Thailand.

Computer science education using Block-Based Programming in a middle school (Oct. 2018). R&D Internal Grants Poster Session. Indiana University.

Design and development of group awareness tool for online collaborative learning (Jan. 2016). Learning and Teaching with Technology Faculty Showcase. Indiana University.

Professional Presentations:

Kwon, K., & Cheon, J. (2019). After-School Coding Club: What Students Learned and How Teachers Should Teach. *Presented at the Annual Conference of the American Educational Research Association (AERA).* Toronto, Canada.

Bae, H., & **Kwon, K.** (2019). Teachability of Metacognitive Skills: What Makes Students Use Metacognitive Skills? *Presented at the Annual Conference of the American Educational Research Association (AERA).* Toronto, Canada.

Hur, G., & **Kwon, K.** (2018). A Study on the Network Analysis of Research Trends to Scratch Programming for Smart Education: Case of Korea. *Presented at the Annual Conference of the Global Conference on Education and Research (GLCER).* Las Vegas, Nevada.

Kwon, K., Khlaif, Z., Zhu, M., Nadiruzzaman, H., Gok, F., & Sari, A. (2017). Teacher's self-efficacy toward mobile technology matters. *Presented at the Annual Conference of the Association for Educational Communications and Technology (AECT)*. Jacksonville, FL.

Meina, Z., Bae, H., **Kwon, K.**, & Park, J. (2017). The Effect of Instructor Guidance on the Quality of Online Discussion. *Presented at the Annual Conference of the Association for Educational Communications and Technology (AECT)*. Jacksonville, FL.

Bae, H., & **Kwon, K.** (2017). Increasing Students' Implementation of Metacognitive Strategies: What Makes Students Use Metacognitive Strategies? *Presented at the Annual Conference of the Association for Educational Communications and Technology (AECT)*. Jacksonville, FL.

Kwon, K. & Park, S. (2016). Facilitate meaningful discussion through visual representations. *Presented at the Annual Conference of the Association for Educational Communications and Technology (AECT)*. Las Vegas, Nevada.

Kwon, K., Shin, S., Khlaif, Z., Nadiruzzaman, H., Park, S., Edelberg. T., Brush, T. A., & Alangari, H. (2016). Screen-casting inquiry behaviors: What can see through students' mobile devices? *Presented at the Annual Conference of the Korean-American Educational Research Association*. Washington, D.C.

Khlaif, Z., Nadiruzzaman, H., & **Kwon, K.** (2016). An Analysis of Participation and Interaction Patterns in Online Learning Community: A Case Study. *Presented at the Annual Conference of the American Educational Research Association*. Washington, D.C.

Kwon, K. (2015). Practice test as a class activity for pre-service teacher education. *Presented at the Annual Conference of the Association for Educational Communications and Technology (AECT)*. Indianapolis, Indiana.

Liu, Y., Johnson, L., & **Kwon, K.** (2013). A road from the uncertainty to negotiation – Virtual asynchronous collaboration. *Presented at the Annual Conference of the E-Learn.* Victoria, Canada.

Kwon, K., Brown, R., Mudd-Hutcheson, C., Wilden, P., Martin, A., & Clay, R. (2013). Use of Educational Technologies for Medprep programs. *Presented at the Central/Southern Group on Student Affairs annual meeting*. St Louis, MO.

Mudd-Hutchenson, C., Brown, R., **Kwon, K**., Wilden, P., Martin, A., & Clay, R. (2013). Mizzou Medprep- An evolution of a continuum to help prepare individuals to become patient-centered physicians. *Presented at the Central/Southern Group on Student Affairs annual meeting*. St Louis, MO.

Brown, R., **Kwon, K.,** Wilden, P., & Mudd-Hutcheson, C. (2012). Mizzou MedPrep: A New Approach to the Medical School Diversity Pipeline. *Presented at the Central Group on Educational Affairs*. St Louis, MO.

Brown, R., **Kwon, K.,** Wilden, P., Martin, A., & Mudd-Hutcheson, C. (2012). The Mizzou MedPrep Program. *Presented at the Central/Southern Group on Student Affairs annual meeting*. Clearwater, FL.

Kwon, K., Han, D. & Bang, E. (2010). Learning Social Issues by Arguing: Practical Implementation to Sociology Education. *Presented at the Annual Conference of the E-Learn.* Orlando, FL.

Kwon, K., & Liu, P. (2008). Peer Collaboration and Decision Making: What makes collaboration effective? *Presented at the Annual Conference of the Association for Educational Communications and Technology (AECT)*. Orlando, Florida.

Kwon, K., & Henry, H. (2008). Facilitating Argumentation with Tailored Guidance. *Presented at the Annual Conference of the Association for Educational Communications and Technology (AECT)*. Orlando, Florida.

Kwon, K. (2006). Research on the Developmental Process of Online Group Activities. *Presented at the Annual Conference of the Association for Educational Communications and Technology (AECT)*. Dallas, Texas.

TEACHING

Indian University Graduate:

- R511 - Instructional Technology Foundations
- R521 - Instructional Design and Development (*f2f & online*)
- R541 - Instructional Development and Production I
- R547 - Computer-Mediated Learning (*online*)
- R685 - Topical Seminar: Instructional Design for Computer-Supported Collaborative Learning (*online*)

Indian University Undergraduate:

- W220 - Technical Issues: Computer-Based Education

University of Missouri Graduate:

- IS&LT 7370 - Intermediate Web Development (*online*)

Korea National Open University (Seoul, South Korea) Undergraduate:

- Educational Psychology
- Methodology for Adult Education

DISSERTATION COMMITTEE

Indiana University

- Ozgur Ozdemir, Ph.D. Instructional Systems Technology, 2018
- Wenjing Zheng, Ph.D. Special Education, 2017
- Funda Ergulec, Ph.D. Instructional Systems Technology, 2017
- Olgun Sadik, Ph.D. Instructional Systems Technology, 2016
- Suhkyung Shin, Ph.D. Instructional Systems Technology, 2016

PROFESSIONAL SERVICE

Journal reviews:

- Computers & Education (2014, 2015, 2016, 2017, 2018)
- Instructional Science (2017, 2018)
- Journal of Interactive Online Learning (2011)
- Computer Communication & Collaboration (2013)
- The Asia-Pacific Education Researcher (2016)
- International Journal for Educational Media and Technology (2015, 2017)
- Interdisciplinary Journal of Problem-Based Learning (2014, 2016, 2018)
- KEDI Journal of Educational Policy (2017)
- TechTrend (2018)

Conference Reviews:

- American Educational Research Association (AERA)
- Association for Educational Communications and Technology (AECT)
- Global Conference on Education and Research (GLCER)

Other:

- Committee of Korean-American Educational Researchers Association (KAERA) Outstanding Research Paper Award, 2018-present.
- Faculty Affairs Committee, School of Education, Indiana University, 2017-present.
- Learning and Teaching with Technology Committee, Indiana University, 2018-present.
- Research collaborator with Jacobs Educator Award recipient (Leon Tynes), 2019.
- DDL Crystal Award Committee, AECT Division of Distance Learning, 2017.
- Staff Merit Awards Committee, Indiana University, 2014-2017.
- Co-chair, KAERA Conference, 2016-2018.
- Planner, AECT 2016 Convention, 2015-2016.
- Facilitator, Celebration of Teaching Annual Meeting, 2011-2014.
- Discussant, Preparing Future Faculty Conference, Jan. 2015.
- Mentor, TeAchnology Workshop, 2011 and 2013.
- Facilitator, Association for Educational Communications and Technology Annual Meeting, 2008.
- Facilitator, Celebration of Teaching Conference, 2011-2012
- Board Member, Child Development Center, Columbia, MO, Jan. 2007-June 2010.
- Volunteer Teacher, Columbia Korean School, Columbia, MO, Jan. 2006-Dec. 2006.
- Media Mission Director, Columbia Korean Baptist Church, Columbia, MO, Jan. 2006-2014.

CERTIFICATION

- Indiana Computer Education (2015): Indiana CORE Assessments for educator licensure.
- QualityMatters Certified Peer Reviewer (2010): Quality Matters (QM) is a faculty-centered, peer review process that is designed to certify the quality of online and blended courses.
- Cognitive Coaching Seminars® Foundation Training – Days 1-4 (2012): Cognitive Coaching is a model that supports individuals and organizations in becoming self-directed, and in turn, become self-managing, self-monitoring and self-modifying.