# Kun Huang, Ph.D.

Assistant Professor
Department of Curriculum & Instruction
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### **EDUCATION**

- Ph.D., Instructional Psychology and Technology, University of Oklahoma, 2011.
- M. Ed., Instructional Technology, University of Virginia, 2002.
- B. E., Inorganic and Non-metal Materials, East China University of Science & Technology, China, 1993.

## **RESEARCH INTERESTS**

- Design, development, implementation, and investigation of engaging technology-supported learning environments
- Motivation, beliefs, and self-regulation in problem solving, collaborative learning, and online learning
- Simulations and games in STEM education

Preparing teachers and pre-service teachers for teaching and technology integration

## **EMPLOYMENT**

2018-present	Assistant Professor. Department of Curriculum & Instruction, University of Kentucky.
2013-2018	Assistant Professor, Information Technology Services Program Co- coordinator. Department of Instructional Systems & Workforce Development, Mississippi State University.
2010 – 2013	Instructional Designer. Center for Learning & Development, The University of North Texas Health Science Center.
2007 – 2010	Instructional Design Specialist. College of Nursing, The University of Oklahoma Health Science Center.
Summer 2005 – Fall 2006	Graduate Teaching Assistant. Department of Educational Psychology, The University of Oklahoma.

Fall 2004 - Fall 2006	Graduate Research Assistant. Department of Educational Psychology, The University of Oklahoma.
Summer 2005	Instructional Design and Media Specialist. Advanced Academics, Inc., Norman, Oklahoma.
Summer 2001 – Summer 2002	Graduate Assistant. Multicultural Library & Alderman Library, The University of Virginia.
Fall 1995 – Summer 2000	Instructor. Department of Applied Chemistry, Jiangxi Science & Technology Normal University, China.

### **PUBLICATIONS & PRESENTATIONS**

#### **Refereed Journal Articles**

- <u>Huang, K.</u>, Ge, X., Law, V., Hu, L., & Chen, Y. (in press). Exploring patterns in undergraduate students' information problem solving: A cross-case comparison study. *Knowledge Management & E-Learning*.
- Chen, C. H., & <u>Huang, K.</u> (in press). Inquiry-enhanced digital game-based learning: Effects on secondary students' conceptual understanding in science, game performance, and behavioral patterns. *The Asia-Pacific Education Researcher*.
- Chen, C. H., Law, V., & <u>Huang, K.</u> (2019). The roles of engagement and competition on learners' performance and motivation in game-based science learning. *Educational Technology Research & Development*, 67(4), 1003-1024.
- <u>Huang, K.</u> (2019). Design and investigation of cooperative, scaffolded wiki learning activities in an online graduate-level course. *International Journal of Educational Technology in Higher Education*, *16*(11). Doi:10.1186/s41239-019-0141-6
- <u>Huang, K.</u>, Law, V., & Lee, S. J. (2019). The role of learners' epistemic beliefs in an online community of inquiry. *British Journal of Educational Technology*, *50*(4), 1882-1895.
- Huang, K., & Law, V. (2018). Learners' engagement online in peer help. *American Journal of Distance Education*, 32(3), 177-189.
- Lee, S. J., & <u>Huang, K.</u> (2018). Online interactions and social presence in online learning. *Journal of Interactive Learning Research*, 29(1), 113-128.
- <u>Huang, K.,</u> Ge, X., & Law, V. (2017). Learners' deep and surface processing of instructor's feedback in an online course. *Educational Technology & Society*, 20(4), 247-260.
- <u>Huang, K.</u>, Ge, X., & Eseryel, D. (2017). Metaconceptually-enhanced simulation-based inquiry learning: Effects on 8<sup>th</sup> grade students' conceptual change and science epistemic beliefs. *Educational Technology Research and Development*, 65(1), 75-100.
- Ge, X., Law, V., & Huang, K. (2016). Detangling the interrelationships between self-

- regulation and ill-structured problem solving in PBL. *Interdisciplinary Journal of Problem-based Learning*, 10(2).
- Beriswill, J. E., Bracey, P. S., Sherman-Morris, K., <u>Huang, K.</u>, & Lee, S. J. (2016). Professional development for promoting 21<sup>st</sup> century skills and common core state standards in foreign language and social studies classrooms. *TechTrends*, 60 (1), 77-84.
- Huang, K., Chen, C. H., Wu, W. S., & Chen, W. Y. (2015). Interactivity of question prompts and feedback on secondary students' science knowledge acquisition and cognitive load. *Educational Technology & Society*, 18 (4), 159-171.
- Chen, C. H., & <u>Huang, K.</u> (2014). The effects of response modes and cues on language learning, cognitive load and self-efficacy beliefs in web-based learning. *Journal of Educational Multimedia and Hypermedia*, 23(1), 5-22.
- Xie, K., & <u>Huang, K.</u> (2014). The role of beliefs and motivation in asynchronous online learning in college-level classes. *Journal of Educational Computing Research*, 50(3), 317-343.
- <u>Huang, K.</u>, Lubin, I., & Ge, X. (2011). Situated learning in an educational technology course for pre-service teachers. *Teaching and Teacher Education*, 27(8), 1200-1212.
- Ge, X., <u>Huang, K.</u>, & Dong, Y. (2010). An investigation of an open-source software development environment in a software engineering graduate course. *Interdisciplinary Journal of Problem-based Learning*, *4*(2), 94-120.
- <u>Huang, K.</u>, Dong, Y., & Ge, X. (2006). From, by, and for the OSSD: Software engineering education using open source software approach and ideal. *Innovate: Journal of Online Education*, *3*(1).

### **Non-refereed Journal Articles**

Ge, X., Lourdes, P., & <u>Huang, K.</u> (2015). Toward advancement of problem-based learning research and practice in health professions education: Motivating learners, facilitating processes, and supporting with technology. *Interdisciplinary Journal of Problem-based Learning*, *9*(1), 1-8.

## **Book Chapters**

- Ge, X., Law, V., & <u>Huang, K.</u> (accepted). Ill-structured problem solving in technology-supported learning environments. In M. J. Bishop, E. Boling, J. Elen, & V. Svihla (Eds.), *Handbook of Research in Educational Communications and Technology (5<sup>th</sup> ed.)*. Association for Educational Communications and Technology & Springer Publishing.
- <u>Huang, K.</u>, & Ge, X. (accepted). Deep and surface learning in ill-structured problem solving. In M. Spector (Ed.). *Educational Technology section of Routledge Encyclopedia of Education*.
- Yu, C., <u>Huang, K.</u>, & Posadas, G. (2019). Pedagogical issues and challenges for cross-cultural online instruction. In J. Keengwe & K. Kungu (Eds.), *Handbook of Research on Cross-Cultural Online Learning in Higher Education* (pp.384-406). Hershey, PA: IGI

Global.

- Ge, X., & <u>Huang, K.</u> (2019). Lindsey Jenkins: Piloting case-based learning in a blended learning nursing curriculum. In P., Ertmer, J. Quinn, & K. Glazewski (Eds.), *The I.D. Casebook: Case studies in Instructional Design* (5<sup>th</sup> ed.). New York: Routledge.
- Ge, X., Wang, Q., <u>Huang, K.</u>, Law, V., & Thomas, D. (2017). Designing simulated learning environments and facilitating authentic learning experiences in medical education. In J. Stefaniak (Ed.), *Advancing medical education through strategic instructional design* (pp.77-100). Hershey, PA: IGI Global.
- <u>Huang, K.</u>, Lee, S. J., & Dugan, A. (2016). Leveraging teaching presence in online courses: Strategies, technology, and student perspectives. In S. D'Agustino (Ed.), *Creating teaching immediacy in online learning environments*. Hershey, PA: IGI Global.
- Ge, X., & <u>Huang, K.</u> (2013). Lindsey Jenkins: Piloting case-based learning in a blended learning nursing curriculum. In P., Ertmer, J. Quinn, & K. Glazewski (Eds.), *The I.D. Casebook: Case studies in Instructional Design* (4<sup>th</sup> ed.). NJ: Prentice Hall.
- Ge, X., Law, V., & <u>Huang, K.</u> (2012). Diagnosis, supporting, and fading: A scaffolding design framework for adaptive e-learning systems. In H. Wang (Ed.), *Interactivity in E-Learning: Case Studies and Frameworks* (pp.116-142). Hershey, PA: IGI Global.

## **Invited Book Review**

<u>Huang, K.</u> (2012). Book review: Problem-based learning in clinical education: The next generation. *Interdisciplinary Journal of Problem-based Learning*, 6(2), 126-128.

### **Refereed Conference Publications**

- Huang, K., Law, V., & Ge, X. (2016). How do learners with different epistemic beliefs and needs for closure approach instructor's feedback in project-based learning? In Looi, C. K., Polman, J. L., Cress, U., and Reimann, P. (Eds.), Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016 (pp. 1259-1260), June 20-24, 2016, Singapore. International Society of the Learning Sciences (ISBN: 978-0-9903550-8-3).
- Bracey, P., Lee, S. J., <u>Huang, K.</u>, Beriswill, J. & Sherman-Morris, K. (2015). Enhancing technology integration in Mississippi foreign language and social studies classrooms. In D. Slykhuis & G. Marks (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2015* (pp. 2894-2895). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- Bracey, P., Lee, S. J., <u>Huang, K.</u>, Beriswill, J. & Sherman-Morris, K. (2015). Integrating global academic essentials: Common Core, 21st century skills, and technology. In D. Slykhuis & G. Marks (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2015* (pp. 2896-2900). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- <u>Huang, K.</u> & Lee, S. J. (2014). Self-regulation: Broad scene and close-up views in an online class. In M. Searson & M. Ochoa (Eds.), *Proceedings of World Conference on E-*

- Learning in Corporate, Government, Healthcare, and Higher Education 2014 (pp. 874-879). Chesapeake, VA: AACE.
- Lee, S. J. & <u>Huang, K.</u> (2014). Establishing and sustaining a community of inquiry in a technology-rich online class. In M. Searson & M. Ochoa (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2014* (pp. 1139-1144).
- Tshuma, L., <u>Huang, K.</u>, Kominski, C., & Lemke, H. (2014). Reducing diagnostic errors through clinical reasoning training: A novel integrated approach. *The Journal of Physician Assistant Education*, 25(1), pp.27-28. (Poster Abstract)
- Huang, K., Collins, V., & Savi, C. (2012). Promoting faculty competence in teaching with technology in medical and health science education. In P. Resta (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* 2012 (pp.2326-2331). Chesapeake, VA: AACE.
- Huang, K., Ge, X., & Lubin, I. (2009). Problem solving in situated learning environment in an educational technology course. In I. Gibson et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2009* (pp. 3416-3422). Chesapeake, VA: AACE.
- Huang, K., & Finkelman, A. (2008). Teaching evidence-based practice and research: An interactive learning object for nursing students. In C. Bonk et al. (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* 2008 (pp. 1646-1651). Chesapeake, VA: AACE.
- Ge, X., Dong, Y., & <u>Huang, K.</u> (2007). An exploratory study of the open source software environment in a software engineering graduate course. In C. Montgomerie & J. Seale (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications* 2007 (pp. 2024-2031). Chesapeake, VA: AACE.
- Ge, X., Dong, Y., & <u>Huang, K.</u> (2006). Shared knowledge construction process in an open-source software development community: An investigation of the Gallery community. S. A. Barab, K. E. Hay, N. B. Songer, D. T. Hickey (Eds.), *Proceedings of the 2006 International Conference of the Learning Sciences* (pp. 189-195), June 27-July 1, 2006, Bloomington, IN. The International Society of the Learning Sciences. Routledge. (ISBN: 978-0-8058-6174-7)
- Bowers, B., Ge, X., & <u>Huang, K.</u> (2006). An interdisciplinary collaborative model of web course enhancement between the department of educational psychology and the college of nursing in a university setting. In E. Pearson & P. Bohman (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications* 2006 (pp. 1167-1169). Chesapeake, VA: AACE.

### **International and National Conference Presentations**

<u>Huang, K.</u>, Chen, Y., Hu, L., Ge, X., & Law, V. (2019). *Exploring patterns in undergraduate students' information problem solving: A cross-case comparisons analysis*. Paper presented at the 2019 annual meeting of the Association of Educational Communications and Technology, Las Vegas, NV.

- Greenhalph, S., <u>Huang, K.</u>, Rosenberg, J. (2019). *Understanding gaming communities and exploring learning opportunities: A computational grounded theory approach*. Paper presented at the 2019 annual meeting of the Association of Educational Communications and Technology, Las Vegas, NV.
- Lee, S. J., Bracey, P., <u>Huang, K.</u>, Beriswill, J. (2019). *Professional development teacher institute for integrating standards, 21st-century skills, and technology*. Paper presented at the 2019 annual meeting of the Association of Educational Communications and Technology, Las Vegas, NV.
- Yu, C., <u>Huang, K.</u>, & Posadas, G. (2019). Pedagogical issues and challenges for crosscultural online instruction. Paper presented at the 2019 annual meeting of the Association of Educational Communications and Technology, Las Vegas, NV.
- <u>Huang, K.</u>, Bracey, P., Lee, S. J., & Beriswill, J. (2019). *Technology integration status and perceptions: Perspectives of teachers from economically disadvantaged schools*. Paper presented at the 2019 annual meeting of the Chinese American Educational Research & Development Association, Toronto, Canada.
- <u>Huang, K.</u>, & Law, V. (2018). *Learners' engagement in peer help in an online technology course*. Paper presented at the 2018 annual meeting of the Association for Educational Communications and Technology, Kansas City, MO.
- Law, V., & <u>Huang, K.</u> (2018). *Online learners' peer help: Roles of help-seeking tendencies and epistemic beliefs*. Paper presented at the 2018 annual meeting of the American Educational Research Association, New York City, NY.
- Huang, K., Posadas, G., Gallo, K., Doss, M., & Nowlin, T. (2017). Design and investigation of cooperative, scaffolded wiki learning activities in an online graduate-level course.
   Paper presented at the 2017 annual meeting of the Association of Educational Communications and Technology, Jacksonville, FL.
- Yu, C., Chien, S-Y, Yu, W-C, & <u>Huang, K.</u> (2017). *Visiting technological pedagogical and content knowledge (TPACK): Issues and challenges in teaching and learning*. Poster presented at the 2017 annual meeting of the Association of Educational Communications and Technology, Jacksonville, FL.
- Huang, K., Ge, X., & Law, V. (2017, April). Learners' deep and surface processing of instructor's feedback: Motivational and epistemological perspectives. Poster presented at the 2017 annual meeting of the American Educational Research Association, San Antonio, TX.
- <u>Huang, K.</u>, Law, V., Ge, X., & Yu, C. (2017, April). *The role of epistemic beliefs in the process of solving an information problem.* Paper presented at the 2017 annual meeting of the American Educational Research Association, San Antonio, TX.
- <u>Huang, K.</u>, Law, V., & Ge, X. (2016, June). *How do learners with different epistemic beliefs* and needs for closure approach instructor's feedback in project-based learning? Poster presented at the International Conference of the Learning Sciences (ICLS), Singapore.
- <u>Huang, K.</u>, Law, V., & Lee, S. J. (2016, October). *Examining the relationship between learners' epistemic beliefs and perceptions of online learning*. Paper presented at the annual meeting of the Association for Educational Communications and Technology,

- Las Vegas, NV.
- Lee, S. J., & <u>Huang, K.</u> (2016, October). *Social presence in distance education*. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Las Vegas, NV.
- <u>Huang, K.</u>, Law, V., & Lee, S. J. (2016, April). *Role of epistemic beliefs in an online community of inquiry*. Poster presented at the 2016 annual meeting of the American Educational Research Association, Washington, DC.
- Huang, K., Law, V., & Ge, X. (2016, April). *Epistemic beliefs and need for closure: Effects on students' responses to feedback in a problem-based learning environment.* Paper presented at the 2016 annual meeting of the American Educational Research Association, Washington, DC.
- <u>Huang, K.</u>, & Law, V. (2015, November). *Piloting a peer support forum in a fully online technology class*. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Indianapolis, IN.
- Lee, S. J., & <u>Huang, K.</u> (2015, November). *Using digital tools to enhance community of inquiry in an online class*. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Indianapolis, IN.
- Bracey, P., Lee, S. J., <u>Huang, K.</u>, Beriswill, J. & Sherman-Morris, K. (2015, March). *Enhancing technology integration in Mississippi foreign language and social studies classrooms*. Poster presented at the Society for Information Technology & Teacher Education International Conference, Las Vegas, NV.
- Bracey, P., Lee, S. J., <u>Huang, K.</u>, Beriswill, J. & Sherman-Morris, K. (2015, March). Integrating global academic essentials: Common Core, 21st century skills, and technology. Paper presented at the Society for Information Technology & Teacher Education International Conference, Las Vegas, NV.
- Law, V., Ge, X., & <u>Huang, K.</u> (2014, November). *A meta-analysis of the scaffolding effects of question prompts in technology-supported learning environments*. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Jacksonville, FL.
- <u>Huang, K.</u> & Lee, S. J. (2014, October). *Self-regulation: Broad scene and close-up views in an online class*. Poster presented at the World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, New Orleans, LA.
- Lee, S. J. & <u>Huang, K.</u> (2014, October). *Establishing and sustaining a community of inquiry in a technology-rich online class*. Poster presented at the World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, New Orleans, LA.
- Xie, K., <u>Huang, K.</u>, & You, Z. (2013, June). *Influence of epistemological beliefs and motivation on online learning through online discussions*. Paper presented at the 10<sup>th</sup> International Conference on Computer-Supported Collaborative Learning, Madison, Wisconsin.
- Collins, V., & Huang, K. (2013, November). Empowering faculty to promote students'

- higher order thinking. Paper presented at the 2013 Professional and Organizational Development (POD) Conference, Pittsburgh, Pennsylvania.
- Collins, V., & <u>Huang, K.</u> (2013, December). Assessing faculty capacity to teach higher-order thinking. Paper presented at the 2013 SACSCOC Annual Meeting, Atlanta, Georgia.
- Kominski, C., & <u>Huang, K.</u> (2013, December). *Approaches to assessing higher-order thinking*. Paper presented at the 2013 SACSCOC Annual Meeting, Atlanta, Georgia.
- Huang, K., Collins, V., & Savi, C. (2012, March). Promoting faculty competence in teaching with technology in medical and health science education. Paper presented at the Society for Information Technology & Teacher Education International Conference, Austin, TX.
- Collins, V., & <u>Huang, K.</u> (2012, December). *Empowering faculty to promote students'* higher order thinking: A QEP faculty development program that works. Paper presented at the Annual Meeting of the Southern Association of Colleges and Schools Commission on Colleges, Dallas, TX.
- Collins, V., & <u>Huang, K.</u> (2012, October). *Faculty development on teaching with technology: Examining evidence of impact*. Paper to be presented at the Professional and Organizational Development (POD) Conference, Seattle, Washington.
- Huang, K., Ge, X., & Eseryel, D. (2012, April). *Metaconceptually-enhanced simulation-based inquiry learning: Effects on the 8th grade students' conceptual change and science epistemological beliefs.* Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia, Canada.
- Schmitz, L., Collins, V., <u>Huang, K.</u>, & Su, F. (2012, March). *Real time monitoring of student learning in large lecture classes*. Paper presented at the annual meeting of the American Association of Colleges of Osteopathic Medicine, Washington, D.C.
- Collins, V., & <u>Huang, K.</u> (2011, December). *A comprehensive QEP implementation plan targeting higher order thinking*. Paper presented at the Annual Meeting of the Southern Association of Colleges and Schools Commission on Colleges, Orlando, FL.
- Huang, K., Ge, X., & Eseryel, D. (2011, April). *Metaconceptually-enhanced simulation-based inquiry learning: Effects on the 8th grade students' conceptual change and science epistemological beliefs (pilot study)*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana.
- <u>Huang, K.</u>, Ge, X., & Lubin, I. (2009, March). *Problem solving in situated learning environment in an educational technology course*. Paper presented at the Society for Information Technology & Teacher Education International Conference, Charleston, SC.
- Ge, X., <u>Huang, K.,</u> & Dong, Y. (2009, April). Situated learning in an open-source software development environment in a graduate course of software engineering. Paper presented at the 2009 annual meeting of the American Educational Research Association, San Diego, California.
- Ge, X., Huang, K., & Dong, Y. (2009, April). An exploratory study of the OSS environment

- in a graduate course of software engineering. Poster presented at the 2009 annual meeting of the American Educational Research Association, San Diego, California.
- <u>Huang, K.</u>, & Finkelman, A. (2008, November). *Teaching evidence-based practice and research: An interactive learning object for nursing students*. Paper presented at the World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Las Vegas, NV.
- Ge, X., Dong, Y., & <u>Huang, K.</u> (2007, June). An exploratory study of the open source software environment in a software engineering graduate course. Paper presented at the World Conference on *Educational Multimedia*, Hypermedia and Telecommunications, Vancouver, Canada.
- <u>Huang, K.</u>, Ge, X., & Bowers, B. (2006, October) *Virtual Clinic: Simulated ethical decision making in nursing education*. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Dallas, TX.
- Ge, X., <u>Huang, K.</u>, & Lubin, I. (2006, October) *Situated learning in a computer education course for pre-service teachers*. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Dallas, TX.
- Ge, X., Dong, Y., & <u>Huang, K.</u> (2006). Shared knowledge construction process in an open-source software development community: An investigation of the Gallery community. S. A. Barab, K. E. Hay, N. B. Songer, D. T. Hickey (Eds.), *Proceedings of the 2006 International Conference of the Learning Sciences* (pp. 189-195), June 27-July 1, 2006, Bloomington, IN. The International Society of the Learning Sciences. Routledge. (ISBN: 978-0-8058-6174-7)
- Bowers, B., Ge, X., & <u>Huang, K.</u> (2006). An interdisciplinary collaborative model of web course enhancement between the department of educational psychology and the college of nursing in a university setting. In E. Pearson & P. Bohman (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications* 2006 (pp. 1167-1169). Chesapeake, VA: AACE.
- Ge, X., Du, J., Chen, C.H., & <u>Huang, K.</u> (2005, October). *The effects of question prompts in scaffolding ill-structured problem solving in a web-based learning environment.* Paper presented at the annual meeting of the Association for Educational Communications and Technology, Orlando, FL.

### **Regional Conference Presentations**

- Forde, C., Beriswill, J., & <u>Huang, K.</u> (2017). *Researching instructional technologies*. Presented at the 2017 Mississippi State University College of Education Research Forum, April 20, Mississippi State, MS.
- <u>Huang, K.</u> (2014). *Piloting a student engagement tool in a large lecture class*. Paper presented at the 2014 annual conference of Mississippi Educational Computing Association, February 3-5, 2014, Jackson, MS.
- Huang, K., & Moran, M. (2009). Web 2.0 and other e-learning tools: The experience from a nursing school. Paper presented at the second Annual Informatics and E-Learning in Nursing and Health Science Education, July 16-17, 2009, Tulsa, OK.

- Hall, B., & <u>Huang, K.</u> (2008). *Computer-assisted instruction in undergraduate health assessment*. Paper presented at the 2<sup>nd</sup> Annual Informatics and E-Learning in Nursing and Health Science Education, July 16-17, 2009, Tulsa, OK.
- Loving, G., & <u>Huang, K.</u> (2007). *Free web-based audioconferencing*. Paper presented at the Oklahoma Distance Learning Association State Conference, November 5-6, 2007, Tulsa, OK.

#### **GRANTS**

# **Grant Proposals Funded**

- Huang, K. Co-PI. (2014-2017). Integrating Global Academic Essentials: Common Core, 21<sup>st</sup> century skills, & Technology (GAETI), a grant funded by the Mississippi Institutions of Higher Learning, Title II, Part A, Improving Teacher Quality State Grants. \$360,000 award. S. J. Lee, Co-PI, K. Morris, Co-Pi, J. Beriswill, Co-PI, and P. Bracey, PI.
- Huang, K. Co-PI. (2016). Graduate Recruitment Assistance Grant, a grant funded by the Mississippi State University Office of Graduate School. \$5,000 award. Scott-Bracey, P., Co-PI, Lee, S.J., Co-PI, Hemingway, A., Co-PI, and C. Forde, PI.
- <u>Huang, K.</u> PI. (2014). Ottilie Schillig Special Teaching Project, a grant funded by the Mississippi State University Office of Provost and Executive Vice President. \$3,000 award.
- Huang, K. Co-PI. (2014). Graduate Recruitment Assistance Grant, a grant funded by the Mississippi State University Office of Graduate School. \$3,000 award. Beriswill, J., Co-PI, Scott-Bracey, P., Co-PI, Earle, M., Co-PI, Lee, S.J., Co-PI, Crawford, A., Co-PI, Ewing, C., Co-PI, and C. Forde, PI.
- <u>Huang, K.</u> Co-PI. (2013). Cross-College Research Grant, a grant funded by the Mississippi State University Office of Research and Economic Development. \$2,000 award. R. M. Clary, Co-PI, R. M. Walker, Co-Pi, and J. Beriswill, PI.

# **External Grant Proposals Submitted**

- Huang, K., Mazur, J., Duncan, S., Hassan, Z., Samaan, M., Chen, J., & Mathos, V. (2019).
   Project Title: Development of an Orthopedic Surgery Virtual Reality Training
   Application with Innovative Haptic Support for Competency-based Training & Assessment. Agency: National Science Foundation (Internal Competition Submission). Amount: \$1,581,600.
- Shermann-Morris, K., <u>Huang, K.</u>, Mercer, A. E., Walker, R. M., & Zhang, S. (2016). Project Title: EI: Integrating Computing and Science with a Computational Toolbox for Tornado Outbreaks. Agency: National Science Foundation. Amount: \$642,558.
- Shermann-Morris, K., <u>Huang, K.</u>, Mercer, A. E., Walker, R. M., & Zhang, S. (2015). Project Title: EI: Integrating Computing and Science with a Computational Toolbox for Tornado Outbreaks. Agency: National Science Foundation. Amount: \$545,281.

Beriswill, J., <u>Huang, K.</u>, Walker, R., Clary, R., & Dyer, J. (2014). Simulated Weather Inquiry Facilitated through Technology. Agency: Institute of Education Sciences. Amount: \$1,482,158.

### **AWARDS AND HONORS**

- Research Award, Office of the Vice President for Research and Economic Development, Mississippi State University, 2017.
- AECT Division of Distance Learning (DDL) Burmeister Outstanding DDL-sponsored AECT Presentation Award, Association of Educational Communications and Technology, 2016.
- National selection to NSF/AECT Early Career Symposium, Division of Research and Theory, Association of Educational Communications and Technology, 2014.
- Outstanding Poster Award, World Conference on E-Learning, 2014.
- POD Innovation Award, Professional and Organizational Development Network in Higher Education, 2012.
- National selection to Division C Graduate Student Seminar, American Educational Research Association, 2009.
- Paul F. Kleine Graduate Scholarship, University of Oklahoma, 2009.
- William B. Ragan Memorial Scholarship, University of Oklahoma, 2006-2008.
- PacifiCorp Design & Development Competition Award, Association of Educational Communications and Technology, 2005.

### TEACHING EXPERIENCE

## **University of Kentucky**

EDC 544: Use & Integration of Instructional media (graduate & undergraduate, F2F)

EDC 611: Authoring Applications for Technology-Based Instruction (graduate, F2F)

### Mississippi State University

TKT 8693: Multiple Perspectives in Instructional Systems & Technology (graduate, F2F & online)

TKT 8823: Design, Delivery, and Management of Distance Education (graduate, F2F & online)

TKT 8643: Multimedia Design II (graduate, online)

TKT 4763/6763: Digital Tools for 21<sup>st</sup> Century Teaching and Learning (graduate & undergraduate, online)

TKT 4713/6713: Authoring for Instruction (graduate & undergraduate, online)

TKB 4283/6283: Advanced Office Systems (graduate & undergraduate, F2F)

TKB 4563: Introduction to Data Networks (undergraduate, F2F)

TKT 1273: Computer Applications (undergraduate, online)

## University of Oklahoma

Courses Taught Independently

EIPT 3011: Computers as Productivity Tools (undergraduate, F2F)

EIPT 3043: Learning with Educational Technologies (undergraduate, F2F)

#### Courses Facilitated

EIPT 6433: Theories, Pedagogy and Tools for Online Learning (graduate, online)

EIPT 6313: Multimedia Design and Development (graduate, online & F2F)

EIPT 6333: Theory and Practice in Computer-Supported Learning Environments (graduate, F2F)

# **Faculty Development Seminars & Workshop Series**

University of North Texas Health Science Center

First Step in Course Planning: Writing Effective Learning Objectives

Instructional Design & Bloom's Taxonomy

Collaborative and Case-Based Learning

Reflective Exercises: What, Why and How

**Team-Based Learning** 

Engaging Learners in Small and Large Classes

Managing Classroom Incivilities

Using PowerPoint to Enhance Teaching and Learning

Using Blackboard to Enhance Higher Order Thinking

Incorporating Online Components in Face-To-Face Teaching

Creating and Facilitating Online Discussions

Using iClicker for Active Learning

Designing and Teaching Online Courses

Introduction to Online Teaching

University of Oklahoma College of Nursing

Web 2.0 and Education

Designing and Using Learning Objects in Online Courses

## **Guest Speaker** (University of North Texas Health Science Center)

*Teaching with Technology*, School of Public Health, PHET 6321: The Art and Science of Teaching

Use of Videos and Web Resources for Scientific Communications, Graduate School of Biomedical Sciences, BMSC 5310: Scientific Communications

## **Advising**

University of Kentucky

Committee member

• Kimble, J. Department of Curriculum & Instruction (Ed. Sciences??), College of Education, University of Kentucky, 200x?

Chair

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### Co-director, dissertation

*Malone, C.* (In progress). Examining the impact of instructor social presence using audio and video feedback in asynchronous online courses.

*Ball, Kim.* (In progress). An investigation of factors associated with persistence or non-persistence of the third- and fourth-year engineering students.

Walton, A. (In progress). Social media engagement, student participation, and performance.

La Foe, T. (In progress). Using virtual reality simulations to further student understanding and retention.

Major advisor, Ed.S. Theses

*Chandler, J.* Civic Engagement through Workforce Development: The Connection between Communities and Higher Education.

## INSTRUCTIONAL DESIGN AND FACULTY DEVELOPMENT PROJECTS

Reducing risks of vaccine preventable illnesses in children in East Texas. A grant project funded by Pfizer. I designed case-based branch learning activities for online delivery. (2012-2013).

Quality Enhancement Plan (QEP). Part of the reaffirmation process for the SACS accreditation at the University of North Texas Health Science Center. I offered a series of faculty teaching workshops geared toward promoting learners' higher order thinking, worked closely with faculty to select and implement instructional strategies and technologies to facilitate students' higher order thinking, and assessed the effectiveness of the interventions (2010-2013).

Nursing Initiative Promoting Immunization Training (NIP-IT). A web-based curriculum about immunizations and vaccine preventable diseases intended to inform and educate nursing students and nurses nationwide, funded by a cooperative agreement between the University of Oklahoma College of Nursing and the Centers for Disease Control and Prevention. I designed and developed part of the interactive learning objects (2010). <a href="http://www.nip-it.org/">http://www.nip-it.org/</a>

- Open-Source Electronic Health Record (EHR) for Nursing Education in Informatics. A project funded by Health Resources and Services Administration (HRSA) to train nursing students at the University of Oklahoma in the use of OpenVista, an HER system. I designed a set of interactive tutorials that teaches nursing faculty and students how to access OpenVista and how to create clinical notes using OpenVista. (2010). http://nursing.ouhsc.edu/Current\_Students/openvista\_tutorials.htm
- Partners Investing in Nursing's Future: Developing Nurse Leaders. A complete online course funded by the Robert Wood Johnson Foundation and the Northwest Health Foundation. I developed the entire course for the Oklahoma Health Care Workforce Center (2009). <a href="http://www.okhealthcareworkforce.com/Partners/">http://www.okhealthcareworkforce.com/Partners/</a>
- Evidence-Based Practice: An interactive tutorial for Nursing Students. An interactive learning object that teaches nursing students theory and practice on evidence-based nursing practice. I developed the entire tutorial for the OUHSC College of Nursing (2007). http://nursing.ouhsc.edu/CE/EBP\_Interactive\_Tutorial.cfm
- Virtual Clinic. A computer-based simulation that helps nursing students to develop ethical decision making skills. I designed and developed the simulation for the OUHSC College of Nursing (2006).
- Tutorials various instructional materials for undergraduate courses Computer as Productivity Tools and Learning with Educational Technologies. I developed for the Department of Educational Psychology, OU (2005).
- Assessment development for online high school science curriculum. Physical science and biology assessments for web-based high school education. I developed the assessments for Advanced Academics, Inc. (2005).
- Net Frog. An online interactive frog dissection tutorial. I was a member of the design team led by Dr. Mable Kinzie at the University of Virginia. http://frog.edschool.virginia.edu/Frog2/

#### PROFESSIONAL SERVICES

### At the International or National Level

Editorial Boards

Editorial Board, Educational Technology Research & Development (ETRD). 2019-2022.

Editorial Board, Interdisciplinary Journal of Problem-based Learning (IJPBL). 2014 – 2016.

**Guest Editors** 

Guest Editor with Drs. Xun Ge and Planas Lourdes for Interdisciplinary Journal of Problem-based Learning (IJPBL) for the special issue: "Problem-based Learning in Health Professions Education" (December 2013 – 2015)

Services in Professional Organizations

Communications Chair, Problem-Based Education Special Interest Group, American Educational Research Association (AERA), 2017–2019.

Program Committee, 7<sup>th</sup> International Conference of Educational Innovations through Technology (EITT), The Society of International Chinese in Educational Technology (SICET), 2018.

## Manuscript Reviewer

British Journal of Educational Technology

Computers in Human Behavior

Contemporary Educational Psychology

Educational Technology Research & Development

**Instructional Science** 

Journal of Online Teaching and Learning

Knowledge Management & E-Learning

Interdisciplinary Journal of Problem Based Learning

Teaching and Teacher Education

Full Steam Ahead: Emerging Technologies for STEAM (edited book)

Assessment in Game-based Learning: Foundations, Innovations, and Perspectives (edited book)

Interactivity in E-Learning: Case Studies and Frameworks (edited book)

Curriculum Models for the 21st Century: Using Learning Technologies in Higher Education (edited book)

# Conference Proposal Reviewer

American Educational Research Association (AERA)

Association for Educational Communications & Technology (AECT)

World Conference on Educational media and Technology (EdMedia)

World Conference on E-Learning in Corporate, Government, Healthcare & Higher Education (E-Learn)

Society for Information Technology & Teacher Education (SITE)

International Conference on Computer Supported Education (CSEDU)

International Conference on Cognition and Exploratory Learning in Digital Age (CELDA)

## At the University, College, and Department Level

Graduate funding committee, Department of Curriculum & Instruction, College of Education, University of Kentucky (2018-2019)

Budget surplus subcommittee, Department of Curriculum & Instruction, College of Education, University of Kentucky (2018)

Panel member, Strategies for publishing books and articles, College of Education Research

- Forum, Mississippi State University (2017)
- Scholarship Committee, College of Education, Mississippi State University (2016)
- Faculty Council, College of Education, Mississippi State University (2014-2016)
- Diversity Committee, College of Education, Mississippi State University (2014-2016)
- Conceptual Framework Committee, College of Education, Mississippi State University (2014)
- Doctoral Convocation Committee, Department of Instructional Systems & Workforce Development, College of Education, Mississippi State University (2015)
- Undergraduate Recruitment Committee, Department of Instructional Systems & Workforce Development, College of Education, Mississippi State University (2015)
- Faculty Search Committee, Department of Instructional Systems & Workforce Development, College of Education, Mississippi State University (2015)
- Office Associate Search Committee, Department of Instructional Systems & Workforce Development, College of Education, Mississippi State University (2015)
- Undergraduate Handbook Committee, Department of Instructional Systems & Workforce Development, College of Education, Mississippi State University (2014-2016)
- Appeals Committee, Department of Instructional Systems & Workforce Development, College of Education, Mississippi State University (2016-2017)

#### PROFESSIONAL MEMBERSHIPS

American Educational Research Association (AERA). 2005 – Present
Instructional Technology, Special Interest Group (SIG), American Educational Research
Association. 2009 – Present

Association of Educational Communications and Technology (AECT). 2005 – Present Professional and Organizational Development (POD) Network in Higher Education. 2011 – 2013 International Society of the Learning Sciences (ISLS). 2006 – 2007

#### TECHNICAL SKILLS

Multimedia Software: Adobe Flash, Dreamweaver, Fireworks, Photoshop, Captivate, HTML, Articulate Studio, iMovie, Audacity, Jing, SmartBuilder

Web 2.0 tools: Wiki, Blog, Podcast, Twitter, and a variety of other web 2.0 tools

Learning Management Systems: Blackboard, Desire2Learn, Canvas