

Dazhi Yang, Ph.D.

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Educational Preparation

Purdue University, West Lafayette, Indiana

Postdoctoral Training in Engineering Education
Ph.D. in Learning Design and Technology
Graduate Certificate in Applied Statistics
M.S. in Educational Technology

Anqing Normal University, Anhui, China

B.A. in English Education

Professional Experience

2014- Associate Professor
2010- 2014 Assistant Professor
2008- 2010 Postdoctoral Researcher and Instructional Designer
School of Engineering Education, Purdue University, West Lafayette, IN
2002- 2008 Research Assistant, *Department of Curriculum & Instruction, Purdue University, West Lafayette, IN*
2007- 2007 Online Learning Specialist Consultant
Continuing & Distance Education, Purdue University, West Lafayette, IN
2003- 2005 Teaching Assistant
Department of Curriculum & Instruction, Purdue University, West Lafayette, IN

Funded Grants & Contracts

2016 -2019 PI	<i>National Science Foundation</i> “Informal STEM Teaching and Learning Through Infusing Computational Thinking into Science Learning”, \$1,090,312.
2012-2016 PI	<i>National Science Foundation</i> “A Synergistic Approach to Prevent Persistent Misconceptions with First-year Engineering Students”, \$300,000.
2015-2018 Program evaluator	<i>National Science Foundation</i> “REU: Site: Software security”, \$ 324,000.
2015 -2016 PI	<i>Lee Pesky Learning Center</i> “Online Professional Development for Teachers: Every Child Ready for Math”, \$10,000.
2013-2014	<i>Boise State University</i> “Promoting Scholarship of Teaching and Learning Grant”, \$5,000.
2013	<i>Boise State University</i> “Summer Course Design Institute Grant”, \$400.
2013-2014	<i>Boise State University</i> “STEM Station Scholar Grant”, \$250.
2012-2013	<i>Online Teaching Associates, Ltd.</i> “Validity and Reliability Study of the Online Educator Self-Efficacy Scale (OESES) Survey”, \$6000.
2011-2012	<i>Boise State University</i> “STEM Station Scholar Grant”, \$1,000.
2011	<i>National Science Foundation</i> “Developing Ontological Schema Training Methods to Help Students Develop Scientifically Accurate Mental Models of Engineering Concepts”, \$5,000. (Sub Contract from Colorado School of Mines)
2010-2012	<i>Boise State University</i> “New Faculty Research Fund”, \$10,000.
2010	<i>National Science Foundation</i> “AECT Faculty Early Career Symposium”, \$1,500;
2008	<i>National Science Foundation</i> “AECT Advanced Graduate Student Early Career Symposium”, \$1,500
2007	<i>American Educational Research Association</i> “Division C Graduate Student Symposium Travel Grant”, \$300
2006-2007	<i>Purdue Research Foundation (PRF)</i> “Variables that Impact Learning and Motivation to Learn in Online Learning Environments: A Multidisciplinary Approach Investigation”, \$14,715 plus tuition waiver; PI: Jennifer Richardson

Grants Pending

- Collaborative Proposal: Energy Sustainability Remote Laboratory (ESRL) (2017-2022).*
Submitted to the NSF. Co-PI. (Lead PI: Frederick C. Knopf). Request amount: \$309,859.
- Engineering Computational Literacy with Sustainable Curricular Transformation (2017-2020).*
Submitted to the NSF. Co-PI. (PI: Lan Li). Request amount: \$342,128.
- NSF CARRER: The Classroom Engineer (2016 -2021).* Submitted to the NSF. Project evaluator. (PI: Noah Saltzman). Request amount: \$500,000.
- NSF CARRER: Advanced Manufacturing and Interface Engineering of Nanocrystals for Low Cost and Flexible Thermoelectric Applications (2016 -2021).* Submitted to the NSF. Project evaluator. (PI: Yanliang Zhang). Request amount: \$550,000.
- NRT-IGE: Leadership FIRST - Faculty Innovation to Re-envision Student Training (2016-2019).* Submitted to the NSF. Senior personnel & Project evaluator. (PI: Janet Callahan). Request amount: \$500,000.

Grants not Funded

- Wang, S. (PI), Yang, D., Shelton, B. E. (2015). *Connecting the STEM+C Dots: Integrating Computational Thinking in Informal STEM Learning.* Submitted to the NSF.
- Shelton, B. E. (PI), Hung, J.-l., Yang, D. (2015). *Leveraging Idaho Educational Data to Predict Student Success for Careers in STEM.* Submitted to the Idaho State Department of Education.
- Shelton, B. E. (PI), Hung, J.-l., Yang, D. (2015). *Idaho Educational Data to Identify At-risk Students and to Predict Student Success Factors.* Submitted to the Idaho State Department of Education.
- Callahan, J. (PI), Llewellyn, D., Estrada, D., Pera, S., Conley, Q., Yang, D. *NRT-IGE: Graduate Learning Innovation and Demonstration of Evidence-Based Reform (GLIDER) (2015).* Submitted to the NSF.
- Wingett, D. G. (PI), Albig, A., Hill, G. C., Hubbard, M., Neupert, K., Punnoose, A., Blackman, H., Lindquist, E., Yang, D. (2014). *Broadening Experiences in Scientific Training in an Interdisciplinary Biomolecular Sciences Doctoral Training Program.* Submitted to the NIH.
- Yang, D. (PI). (2013). *CAREER: Seizing the Opportunity for STEM Education - An Investigation of eLearning Strategies and Online Course Design Techniques for STEM Disciplines.* Submitted to the NSF.
- Baek, Y. (PI), Yang, D., Hsu, Y., Ching, Y., & Matson, S. (2011). *EarthQuest MSEG: Intrinsically Motivating Mobile Science Educational Game for Scientific Inquiry.* Institute of Education Sciences (IES). \$1,174,504.
- Yang, D. (PI), Dawley, L., & Rice, K. (2011). *Increasing competencies in online teaching using quest-based learning.* The 4th Annual Digital Media and Learning Competition: Badges for Lifelong Learning- Stage 1. MacArthur Foundation.
- Hung, J (PI). L., Yang, D., & Rice, K. (2011). *State-wide Teacher Evaluation Training,* Idaho State Department of Education. \$32,000.
- Yang, D. (2011) (PI). *Teaching Statistics Online? Videos Can Help.* Arts and Humanities Institute at Boise State University. \$1,550.

- Yang, D. (PI), & Qu, L. (2011). *Confronting the STEM Challenge: A Model Selection Strategy for Identifying Key Predictors*. American Educational Research Association (AERA). \$30,000.
- Yang, D. (2009) (PI). *Developing Process Thinking Systems: An examination of Introducing Difficult Engineering Science Concepts Using a Process Thinking Approach*. Spencer Postdoctoral Fellowship, National Academy of Education. \$50,000.

Journal Publications

- Yang, D. (Under review). Using educational technology within an integrated STEM approach for engineering education. *International Journal of STEM Education*.
- Gao, F., Li, L., Darr, K., & Yang, D. (Under review). Enriching classroom learning through a microblogging-supported activity. *Educational Technology Research & Development*.
- Yang, D., Snelson, C., & Baldwin, S. (In press). Persistence factors revealed: Students' reflections on completing a fully online program. *Distance Education*, 38(1).
- Yang, D., & Spears, C. (In press). The effects of faculty status, faculty gender, field of study, and class size on the use of Blogs, Wikis, and Discussion Boards. *International Journal of Information and Communication Technology Education*, 13(2), 58-65.
- Ching, Y-H., Yang, D., Baek, Y., & Baldwin, S. (In press). Enhancing graduate students' reflection in e-portfolios using the TPACK framework. *Australasian Journal of Educational Technology*.
- Hung, J. L., & Yang, D. (2015). The validation of a research-based tool for assessing the effectiveness of online professional development programs. *Journal of Educational Technology Development and Exchange*, 8(1), 17-38.
- Nadelson, L. S., Cornell, K., Jorcyk, C., Matson, S., Smith, M. J., & Yang, D. (2015). What good is it for me? Development and validation of the individual science usefulness survey-the SUS. *Journal of Higher Education Theory and Practice*, 15(3), 65-76.
- Nadelson, L., Jorcyk, C., Yang, D., Cornell, K., Smith, M. J., Matson, S., & Husting, V. (2014). I just don't trust them: The development and validation of an assessment instrument to measure trust in science and scientists. *School Science and Mathematics*, 114(2), 76-86.
- Yang, D., Streveler, R. A., Miller, R. L., Slotta, J., Matusovich, H., & Magana, A. (2012). Using computer-based online learning modules to promote conceptual change: Helping students understand difficult concepts in thermal and transport science. *International Journal of Engineering Education*, 28(3), 686-700.
- Miller, R. L., Streveler, R. A., Yang, D., & Santiago Román, A. I. (2011). Identifying and repairing student misconceptions in thermal and transport science: Concept inventories and schema training studies. *Chemical Engineering Education*, 45(3), 203-210.
- Olesova, L., Yang, D., & Richardson, J. C. (2011). Cross-cultural differences in undergraduate students' perceptions of online barriers. *Journal of Asynchronous Learning Networks*, 15(3), 68-80.
- Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2011). The development of a content analysis model for assessing students' cognitive learning in asynchronous online discussions. *Educational Technology Research & Development*. 59, 43-70.

- Yang, D., Olesova, L., & Richardson, J. C. (2010). Cultural differences on learner participation, communication, and learning in an online environment. *Journal of Educational Computing Research*, 43(2), 165-182.
- Yang, D., & Richardson, J. C. (2008). Students' online interaction styles: Can they change? *Journal of Educational Technology Development and Exchange*, 1(1), 1-12.
- Richardson, J. C., Ertmer, P., Aagard, H., Ottenbreit, A., Yang, D., & Mack, N. C-G. (2008). Factors influencing teachers' implementation of digital age literacy skills and strategies. *Teacher Education and Practice*, 20(3), 239-262.
- York, C., Yang, D., & Dark, M. (2007). Transitioning from face-to-face to online instruction: How to increase presence and cognitive / social interaction in an online information security risk assessment class. *International Journal of Information and Communications Technology Education*, 3(2), 42-52.

Peer-reviewed Book Chapters

- Yang, D., & Rice, K. (2014). Boise State's journey to a K-12 Online Teaching Endorsement program: A case study. In Clark, T., & Barbour, M. K.'s *Online and Distance Education in Schools: Global Perspectives on Policy and Practice*. Sterling, VA: Stylus Publishing.
- Rice, K. & Yang, D. (2013). Boise State University and Idaho Digital Learning Academy. In K. Kennedy & L. Archambault, (Eds.), *Partnering for success: A 21st century model for teacher preparation*. Washington D. C.: International Association for K-12 Online Learning.
- Huang, W. D., & Yang, D. (2011). Empowering digital learners: a self-managing learning process framework for digital game-based learning system (DGBLS). In H. Wang's *Interactivity in E-Learning: Case Studies and Frameworks* (pp. 210-229). doi:10.4018/978-1-61350-441-3
- Yang, D., & Richardson, J. C. (2010). Online interaction styles: Adapting to active interaction styles. In H. Yang & S. Yuan's (Eds.) *Handbook of Research on Practices and Outcomes in E-learning: Issues and Trends* (pp. 138-149). Hershey: PA. Information Science Reference.
- Yang, D., & Richardson, J. C. (2009). Designing and developing online and distance courses. In P. Rogers et al., (Eds.) *Encyclopedia of Online and Distance Learning* (2nd ed) (pp. 555-561). Hershey, NY: Information Science Reference.
- York, C. S., Yang, D., & Dark, M. (2008). Transitioning from face-to-face to online instruction: How to increase presence and cognitive / social interaction in an online information security risk assessment class. In J. Gutierrez's *Selected Readings on Telecommunications and Networking* (pp.405-415). Hershey: NY. Information Science Reference.

Peer-reviewed Conference Proceedings

- Yang, D., Nadelson, L. S., & Hardy, K. K., (2015). Are they simply interested? An exploration of engineering students' most favorite class. *Proceedings of 2015 Frontier in Education (FIE) Conference*, El Paso, TX.
- Nadelson, L. S., & Hardy, K. K., Yang, D. (2015). I like therefore I learn! Engineering student motivation to learn in their least and most favorite courses. *Proceedings of 2015 American Society for Engineering Education (ASEE) Annual Conference and*

- Exposition, Seattle, WA. (Nominated for ERM's Best Paper Award.)*
- Yang, D. (2014). The use of educational technology within an integrated approach for engineering education. *Proceedings of 2014 Frontier in Education (FIE) Conference, Madrid, Spain.*
- Webb, J., Yang, D., & Senocak, I. (2014). Interactive molecular-level descriptions in engineering educational simulations. *Proceedings of 2014 American Society for Engineering Education Annual Conference and Exposition (ASEE), Indianapolis, IN.*
- Pawley, A. L., Carberry, A. R., Cardella, M. E., Carnasciali, M., Daly, S. R., Gorlewicz, J. L., Herman, G. L., Hynes, M. M., Jordan, S. S., Kellam, N. N., Lande, M., Verleger, M., A. Yang, D. (alphabetical). (2014). The PEER Collaborative: Supporting engineering education research faculty with near-peer mentoring unconference workshops. *Proceedings of 2014 American Society for Engineering Education (ASEE) Annual Conference and Exposition, Indianapolis, IN.*
- Yang, D. (2013). Instructional strategies for teaching science online. *Proceedings of 2013 Frontier in Education (FIE) Conference, Oklahoma City, OK.*
- Yang, D., & Miller, R. (2013). Prevent persistent misconceptions with first-year engineering students. *Proceedings of 2013 Frontier in Education (FIE) Conference, Oklahoma City, OK.*
- Yang, D., & Senocak, I. (2013). The search for strategies to prevent persistent misconceptions. *Proceedings of 2013 American Society for Engineering Education (ASEE) Annual Conference, Atlanta, GA.*
- Santiago-Román, A. I., Ponce, A., Yang, D., Magana, A., Streveler, R. A., & Miller, R. (2012). A cross-cultural comparison study: The effectiveness of Schema Training modules among Hispanic students. *Proceedings of 2012 Frontier in Education (FIE) Annual Conference, Seattle, WA.*
- Yang, D., Streveler, R. A., & Miller R. L. (2012). What do undergraduate engineering students think about teaching and learning engineering online? *Proceedings of 2012 2nd International Conference on Economic, Education and Management (ICEEM 2012) (pp. 513 -518). Hong Kong Education Society, Hong Kong.*
- Yang, D., Santiago, A. Streveler, R. A., Miller, R. L, Slotta, J., & Chi, M. (2010). Repairing student misconceptions using ontology training: A study with junior and senior undergraduate engineering students. *Proceedings of 2010 American Society for Engineering Education (ASEE) Annual Conference, Louisville, KY.*
- Miller, R. L., Streveler, R. A., Yang, D., & Santiago, A. (2009). Identifying and repairing students' misconceptions in thermal and transport science. *Proceedings of the 2009 American Institute of Chemical Engineers (AIChE) Annual Meeting, Nashville, TN.*
- Yang, D., Streveler, R. A., Miller, R. L, & Santiago, A. (2009). Repairing misconceptions: A case study with advanced engineering students on their use of schema training modules. *Proceedings of 2009 American Society for Engineering Education (ASEE) Annual Conference, Austin, TX.*
- Ertmer, P., Gedik, N., Richardson, J., Yang, D., & Newby, T. (2008). Undergraduate students' perceptions of the value of online discussions: A comparison between education and engineering students. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 366-371). Chesapeake, VA: AACE.

- Yang, D., Olesova, L., & Richardson, J. (2008). The impact of cross-cultural differences on learner participation and communication in asynchronous discussions. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 825-829). Chesapeake, VA: AACE.
- Olesova, L., Yang, D., & Richardson, J. (2008). The impact of barriers on the quality of students' postings in asynchronous discussions: A Case Study. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 593-600). Chesapeake, VA: AACE.
- Yang, D., & Richardson, J. C. (2007). Students' online interaction styles and individual online learning preferences. *Proceedings of the Association for Educational Communications and Technology (AECT) Annual Conference 2007* (pp.367-371). Anaheim, CA.
- Yang, D. (2007). Designing an online course: What does it take? *Proceedings of the Association for Educational Communications and Technology (AECT) 2007* (pp.372-373). Anaheim, CA.
- Yang, D., & Richardson, J. C. (2006). A model for generating discipline-based guidelines for developing and delivering online courses. *Proceedings of the Association for the Advancement of Computing in Education (AACE)'s E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, 1533-1538.
- Yang, D. (2006). Using Web-based resources to enhance teaching and learning. *Proceedings of the Association for the Advancement of Computing in Education (AACE)'s E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, 1797-1800.
- Yang, D., & Dark, M. (2005). A service learning project of information security risk assessment for k12 school corporations. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2005* (pp. 1672-1677). Chesapeake, VA: AACE.

Technical Reports

- Yang, D., & Hung, J. L. (2012). *Validity and reliability study of the online educator Self-Efficacy Scale (OESES) Survey*. Submitted to Online Teaching Associates (OTA).
- Richardson, J. C., Alsup, J., Rose, M., Eckert, L. S., & Yang, D. (2004). *Exploring the intersection of teacher practices, online literacy learning, and information security*. The Center for Education and Research in Information Assurance and Security (CERIAS), Purdue University. Available at https://www.cerias.purdue.edu/tools_and_resources/bibtex_archive/archive/2004-29.pdf
- Rose, M., & Yang, D. (2004). *Keeping information safe: An exploration of teacher practice and perceptions in K-12 schools*. The Center for Education and Research in Information Assurance and Security (CERIAS), Purdue University. Available at https://www.cerias.purdue.edu/tools_and_resources/bibtex_archive/archive/2004-28.pdf

Conference Papers

- Yang, D. (2014). *Students' feedback and perspectives of effective instructional strategies in an online statistics course*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Philadelphia, PA.
- Yang, D., & Senocak, I. (2015, May). Another way of thinking toward difficult engineering and science concepts. Paper presented at the 5th Conference on Creative Education (CCE 2015) in Beijing, China.
- Yang, D., Trespalacios, J., & Davis, K. (2015, May). An exploration of college students' problems with construction-related math skills. Paper presented at the 5th Conference on Creative Education (CCE 2015) in Beijing, China.
- Yang, D., Hung, J-L., & Blomeyer, B. (2013). *The validation of a research-based tool for assessing the effectiveness of online professional development programs*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Francisco, CA.
- Yang, D., Ching, Y., & Rice, K. (2012). *An exploration of learning theories and emerging theories of educational technology on teachers' use of technology in classrooms*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Vancouver, Canada.
- Yang, D., Barrett, N., Magana, A., Streveler, R., Miller, R., & Santiago, A. (2011). *Teaching difficult engineering concepts in the language of emergent processes*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New Orleans, LA.
- Yang, D., Streveler, R. A., & Miller, R. L. (2010). *Can instruction reinforce misconceptions? Preliminary evidence from a study with advanced engineering students*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Denver, CO.
- Olesova, L., Yang, D., & Richardson, J. C. (2010). *Cross-cultural differences in undergraduate students' perceptions of online barriers: A mixed methods study*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Denver, CO.
- Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2009). *A Mixed methods approach to develop a content analysis model for assessing students' cognitive learning in asynchronous online discussions*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Louisville, KY. (*AECT Featured Research Presentation Paper.*)
- Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2009). *The development of a content analysis model for assessing students' cognitive learning in asynchronous online discussions*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA. (*AERA SIG-IT Young Researcher Award Paper.*)
- Yang, D., Olesova, L., & Richardson, J. C. (2009). *Cultural differences on learner participation, communication, and learning in an online environment*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA.

- Yang, D., Huang, W. D., & Richardson, J. C. (2008). *The change of individual learning preferences in computer-mediated conferences*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New York, NY.
- Dark, M., York, C., Yang, D., Popescu, V., & Nita-Rotaru, C. (2008). *A pilot study on the design effectiveness of a new distance learning system*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New York, NY.
- Yang, D., & Rose, M. (2004). *Keeping information safe: An exploration of teacher practice and perceptions in K-12 school*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA.

Conference Presentations - National & International

- Yang, D., & Skelcher, S. (2016, October). *What made it successful? Students' experience and feedback on an online thermodynamics class*. To be presented at the Association for Educational Communications & Technology (AECT) Annual Meeting, Las Vegas, NV.
- Yang, D., Baldwin, S., Snelson, C. (2016, April). *Persistence factors revealed: students' reflections on completing a fully online master's program*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Washington, DC.
- Ching, Y., Yang, D., & Baek, Y. (2015, November). *Enhancing student reflections in e-portfolios using the TPACK framework*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Indianapolis, IN.
- Yang, D., Nadelson, L. S., & Hardy, K. K., (2015, October). *Are they simply interested? An exploration of engineering students' most favorite class*. Paper presented at the Annual Meeting of the Frontiers in Education (FIE), El Paso, TX.
- Nadelson, L. S., Hardy, K. K., & Yang, D., (2015, June). *I like therefore I learn! Engineering student motivation to learn in their least and most favorite courses*. Paper presented at the American Society for Engineering Education (ASEE) Annual Conference and Exposition, Seattle, WA.
- Yang, D., & Senocak, I. (2015, May). *Another way of thinking toward difficult engineering and science concepts*. Paper presented at the 5th Conference on Creative Education (CCE 2015) in Beijing, China.
- Yang, D., Trespalacios, J., & Davis, K. (2015, May). *An exploration of college students' problems with construction-related math skills*. Paper presented at the 5th Conference on Creative Education (CCE 2015) in Beijing, China.
- Webb, J., Yang, D., & Senocak, I. (2014, June). *Interactive molecular-level descriptions in engineering educational simulations*. Paper presented at the American Society for Engineering Education Annual Conference and Exposition, Indianapolis, IN.
- Pawley, A. L., Carberry, A. R., Cardella, M. E., Carnasciali, M., Daly, S. R., Gorlewicz, J. L., Herman, G. L., Hynes, M. M., Jordan, S. S., Kellam, N. N., Lande, M., Verleger, M., A., Yang, D. (alphabetical). (2014, June). *The PEER Collaborative: Supporting engineering education research faculty with near-peer mentoring unconference workshops*. Paper presented at the American Society for Engineering Education (ASEE) Annual Conference and Exposition, Indianapolis, IN.

- Yang, D. (2014, April). *Students' feedback and perspectives of effective instructional strategies in an online statistics course*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Philadelphia, PA.
- Nadelson, L., Jorcyk, C., Yang, D., Cornell, K., Smith, M. J., Matson, S., & Husting, V. (2014, April). *What good is it for me? The development and validation of the individual science usefulness survey – the ISUS*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Philadelphia, PA.
- Yang, D., & Grover, L. (2013, November). *A competency-based evaluation framework for K-12 online education*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Louisville, KY.
- Yang, D. (2013, October). *Instructional strategies for teaching science online*. Paper presented at the Frontier in Education (FIE) Conference, Oklahoma City, OK.
- Yang, D., & Miller, R. (2013, October). *Prevent Persistent misconceptions with first-year engineering students*. Paper presented at the Frontier in Education (FIE) Conference, Oklahoma City, OK.
- Rice, K., & Yang, D. (2013, October). *Idaho's K-12 Online Teaching Endorsement: lessons learned in online teacher preparation*. Paper presented at the Virtual School Symposium (VSS), Orlando, FL.
- Streveler, R.A., Miller, R.L., Perova, N., Pitterson, N., Denick, D., Magaña, A., Santiago Román, A.I., Yang, D., & Fayyaz, F. (2013, August). *Can "emergent" language serve as an indicator of conceptual change?* Paper presented at the bi-annual conference of the European Association for Research in Learning and Instruction (EARLI). Munich, Germany.
- Yang, D., & Senocak, I. (2013, June). *The search for strategies to prevent persistent misconceptions*. Poster presented at 2013 American Society for Engineering Education (ASEE) Annual Conference, Atlanta, GA.
- Yang, D., Hung, J-L., & Blomeyer, B. (2013, May). *The validation of a research-based tool for assessing the effectiveness of online professional development programs*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Francisco, CA.
- Olesova, L. A., Richardson, J. C., & Yang, D. (2012, November). *Role playing and cognitive presence in online discussions*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Louisville, KY.
- Olesova, L. A., & Yang, D. (2012, November). *The relationship of social presence and students use of hotseat in blended learning environments*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Louisville, KY.
- Hung, J-L., Yang, D., & Blomeyer, B. (2012, October). *A new research-based tool for assessing online instructor performance*. Paper presented at the Virtual School Symposium (VSS), New Orleans, MS.
- Santiago A., Ponce, A. Yang, D. Magana, A., Streveler, R. A., & Miller, R. (2012, October). *A cross-cultural comparison study: The effectiveness of Schema Training modules among Hispanic students*. Paper presented at the Frontier in Education (FIE) Conference, Seattle, WA.
- Yang, D., Streveler, R. A., & Miller R. L. (2012, June). *What do undergraduate engineering students think about teaching and learning engineering online?* Paper presented at the

- 2nd International Conference on Economic, Education and Management (ICEEM), Shanghai, China.
- Yang, D., Ching, Y., & Rice, K. (2012, April). *An exploration of learning theories and emerging theories of educational technology on teachers' use of technology in classrooms*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Vancouver, Canada.
- Yang, D. (2011, November). *Which matters? Discussion questions or the assessment of student responses*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Jacksonville, FL.
- Spear, C. E., Gao, Y., Yang, D., & Jorgensen, S. (2011, November). *The influence of organizational shift of mission on faculty's use of technology*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Jacksonville, FL.
- Yang, D., Barrett, N., Magana, A., Streveler, R., Miller, R., & Santiago, A. (2011, April). *Teaching difficult engineering concepts in the language of emergent processes*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New Orleans, LA.
- Yang, D., Santiago, A., Streveler, R. A., Miller, R. L., Slotta, J. D., & Chi, M. M. T. H. (2010, June). *Repairing student misconceptions using ontology training: A study with advanced engineering students*. Paper presented at the American Society for Engineering Education (ASEE) Annual Meeting, Louisville, KY.
- Yang, D., Streveler, R. A., & Miller, R. L. (2010, April). *Can instruction reinforce misconceptions? Preliminary evidence from a study with advanced engineering students*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Denver, CO.
- Olesova, L., Yang, D., & Richardson, J. C. (2010, April). *Cross-cultural differences in undergraduate students' perceptions of online barriers: A mixed methods study*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Denver, CO.
- Miller, R. L., Streveler, R. A., Yang, D., & Santiago, A. (2010, February). *Using schema training to repair student misconceptions in thermal and transport science*. Poster presented at the National Science Foundation (NSF) Engineering Education Awardees Conference, Reston, VA.
- Miller, R. L., Streveler, R. A., Yang, D., & Santiago, A. (2009, November). *Identifying and repairing students' misconceptions in thermal and transport science*. Paper presented at the American Institute of Chemical Engineers (AIChE) Annual Meeting, Nashville, TN.
- Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2009, October). *A Mixed methods approach to develop a content analysis model for assessing students' cognitive learning in asynchronous online discussions*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Louisville, KY. (AECT Featured Research Presentation).
- Yang, D., Streveler, R. A., Miller, R., & Santiago, A. (2009, June). *Repairing misconceptions: A case study with advanced engineering students on their use of schema training modules*. Paper presented at the American Society for Engineering Education (ASEE), Austin, TX.

- Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2009, March). *The development of a content analysis model for assessing students' cognitive learning in asynchronous online discussions*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA. (AERA SIG-IT Young Researcher Award Presentation.)
- Yang, D., Olesova, L., & Richardson, J. C. (2009, March). *Cultural differences on learner participation, communication, and learning in an online environment*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA.
- Richardson, J. C., Ertmer, P., Newby, T., Lehman J., Sadaf, A., Yang, D., et al. (2009, March). *Students' perceptions of various instructional strategies in online discussions*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA.
- Olesova, L., Yang, D., & Richardson, J. C. (2008, November). *Perceived value of online team work by culturally different groups*. Poster presented at the 14th Annual Sloan-C International Conference on Online Learning, Orlando, FL.
- Richardson, J. C., Ertmer, P., Newby, T., Gedik, N., Yang, D., Sadaf, A., Cheng, X. Harris, C. (2008, November). *Online discussion question formats impact on students' perceived and actual learning*. Paper presented at the 14th Annual Sloan-C International Conference on Online Learning, Orlando, FL.
- Yang, D., Huang, W. D., & Richardson, J. C. (2008, March). *The change of individual learning preferences in computer-mediated conferences*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New York, NY.
- Dark, M., York, C., Yang, D., Popescu, V., & Nita-Rotaru, C. (2008, March). *A pilot study on the design effectiveness of a new distance learning system*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New York, NY.
- Yang, D., Olesova, L., & Richardson, J. C. (2008, March). *The impact of cross-cultural differences on learner participation and communication in asynchronous discussions*. Paper presented at the Advancement of Computing in Education (ACE) Society for Information Technology and Teacher Education (SITE) International Conference.
- Olesova, L., Yang, D., & Richardson, J. C. (2008, March). *The impact of barriers on the quality of students' messages in asynchronous discussions*. Paper presented at the Advancement of Computing in Education (ACE) Society for Information Technology and Teacher Education (SITE) International Conference.
- Ertmer, P., Gedik, N., Richardson, J., Yang, D., Newby, T. (2008, March). *Undergraduate students' perceptions of the value of online discussions: a comparison between education and engineering students*. Paper presented at the Advancement of Computing in Education (ACE) Society for Information Technology and Teacher Education (SITE) International Conference.
- Yang, D., & Richardson, J.C. (2007, October). *Students' online interaction styles and individual online learning preferences*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Anaheim, CA.
- Yang, D. (2007, October). *Designing an online course: What does it take?* Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Anaheim, CA.

- Yang, D., & Richardson, J. C. (2006, October). *A model for generating discipline-based guidelines for developing and delivering online courses*. Paper presented at the Association for the Advancement of Computing in Education (AACE)'s E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Honolulu, HA.
- Yang, D. (2006, October). *Using web-based resources to enhance teaching and learning*. Paper presented at Association for the Advancement of Computing in Education (AACE)'s E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Honolulu, HA.
- Yang, D., & Dark, M. (2005, March). *A service learning project of information security assessment of K12 school corporations*. Paper presented at Association for the Advancement of Computing in Education (AACE) Society for Information Technology and Teacher Education (SITE) International Conference, Phoenix, AZ.
- Yang, D., & Rose, M. (2004, April). *Keeping information safe: An exploration of teacher practice and perceptions in K-12 school*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.

Conference Presentations - Local & Regional

- Yang, D., Luy, M., Senocak, I., & Pakala, K. (2015, October). *Eradicating misconceptions in engineering students*. Paper presented at the Annual Conference of the NRMERA, Boise, ID.
- Yang, D., & Senocak, I. (2013, December). *The search for strategies to prevent persistent misconceptions*. Poster presented at Great Ideas in STEM Education Research - Poster Session, Boise State University, Boise, ID.
- Yang, D. (2007, April). *Using online discussion in different classes: Barriers and possible solutions*. Paper presented at the 2007 Teaching and Learning with Technology Conference, West Lafayette, IN.
- Yang, D. (2007, March). *Students' interaction in asynchronous online discussion as a mandatory course requirement*. Paper presented at the First Annual Graduate Student Educational Research Symposium, Purdue University, West Lafayette, IN.
- Richardson, J. C., Ertmer, P.A., Aagard, H., Ottenbreit, A.T., & Yang, D. (2004, October). *Factors that Influence teachers' implementation of digital age literacy skills and strategies*. Paper presented at the Annual Conference of the Mid-Western Educational Research Association, Columbus, OH.

Invited Talks/Presentations

- Yang, D., & Treacy, B., & Ottinger, G. (2013, April). *Online teacher training programs: pedagogy and strategies*. Panel presentation/discussion at the International Association for K-12 Online Learning (iNACOL) Leadership Webinar.
- Yang, D. (2012, October). *Boise State University's K-12 Online Teaching Endorsement Program*. Invited talk at the St. John's University, New York, NY.
- Yang, D. (2012, September). *From the field: Advice from Learning Design & Technology (LDT) graduates*. Panel discussion on the first year's faculty experience, challenges, and transitions in terms of research, teaching and service in academia. Purdue University, West Lafayette, IN.

- Yang, D. (2010, November). *Job Search*. Panel discussion on how to organize yourself for an academic job search at a doctoral level seminar. Purdue University, West Lafayette, IN.
- Yang, D. (2009, March). *Assessing students' learning in asynchronous online discussions*. Invited talk on how to assess students' learning outcomes in online courses to faculty and staff in the School of Engineering and Computer Science. The University of Texas at Dallas, Richardson, TX.

Workshops Conducted

- Yang, D. (2016, June). *Two kinds of scientific processes and the use of computer simulations to teach emergent scientific processes*. Online workshop for STEM teachers. Boise State University, Boise, ID.
- Campbell, J. P., & Yang, D. (2008, October). *Introduction to SPSS*. Workshop for faculty and graduate students in the College of Education. Purdue University, West Lafayette, IN.
- Yang, D. (2008, May). *Introduction to NVivo 8*. Workshop for faculty and graduate students in the College of Education. Purdue University, West Lafayette, IN.
- Yang, D. (2003, May). *Using Microsoft Word: Common used keyboard shortcuts*. Workshop for faculty and graduate students in the College of Education. Purdue University West Lafayette, IN.
- Yang, D. (2003, April). *Using Microsoft PowerPoint*. Presented workshop to faculty and graduate students in the College of Education. Purdue University, West Lafayette, IN.
- Yang, D. (2002, October). *Introduction to Eportfolio system*. Presented workshop to faculty and graduate students in the College of Education. Purdue University, West Lafayette, IN.

Other Scholarly Activities - Published Multimedia Products (CD –ROMs)

- School English for K-12 Students. (2000). Beijing, China: Tsinghua University Press.
- Learning English Form A to Z. (1999). Beijing, China: Tsinghua University Press.
- Speak English As You Wish II. (1999). Beijing, China: Tsinghua University Press.
- Word Wizard. (1998). Beijing, China: Tsinghua University Press.

Courses Designed

- EDTECH 605: *Project Management in Educational Settings*
- EDTECH 651/562: *Introduction to Statistics for Educational Technology*
- EDTECH 524: *Field Experience in Online Teaching*
- EDCI 575: *Foundations of Distance Education*
- *International Association of Healthcare Central Service Material Management (IAHCSMM)*

Selected University and Community Service

- 2016 - Planning and Coordinating Committee Member for Boise State STEM Outreach Efforts in Conjunction with the 2017 Air Show (Partnering with Gowen Field)
- 2016 - University Interdisciplinary Faculty Mentor for New/Incoming Faculty
- 2016 - Present: Boise State University Faculty Financial Committee Member
- 2016 - Boise State University International Teaching Assistants Orientation Facilitator
- 2015- Present: .Principal, Boise Modern Chinese School (BMCS), Boise, ID, Overseeing all aspects of the BMCS's operations.
- 2015 - 2016: Peer Course Reviewer

- 2014 - 2015: University Program Prioritization Committee/Reviewer
- 2011 - 2015: Boise State University eCampus Quality Matters Peer Review Member
- 2010 - 2011: Boise State University President's Technology & Teaching Task Force Committee Member

Selected Service to the Profession

- Served on Ten National Science Foundation (NSF) Panels
- Served on Idaho STEM Action Center Panel
- Editorial Review Board
 - o *International Journal of Communications & Information Technology Education (IJICTE)*, 2011- Present
 - o *Journal of Educational Technology Development & Exchange (JETDE)*, 2009 - 2010 & 2012
- Conference Discussant/Session Chair or Moderator
 - o AERA Discussant for Division K: Teaching and Teacher Education: Section 8: Teacher Professional Development: Impact on Teacher Practices and Student Learning, 2016
 - o Best Paper Award Committee Member: AERA: SIG- OTL, 2015- 2016
 - o Session Chair: Annual Meeting of the American Educational Research Association (AERA), SIG: IT
 - o Session Chair: Frontier in Education (FIE) Annual Conference, 2013, 2015
 - o Session Chair & Discussant: The 5th Conference on Creative Education (CCE 2015) in Beijing, China, 2015
 - o Moderator: American Society for Engineering Education (ASEE) Annual Conference, 2013, 2016
 - o Facilitator: Association of Educational Communications Technology (AECT) Annual Conference, 2012
 - o AECT Young Researcher Award Review Panel, 2014, 2011

Awards & Honors

- 2015 Co-authored paper nominated for Engineering Research Method (ERM) Division's Best Paper Award, American Society for Engineering Education (ASEE) annual conference.
- 2013 Sloan-C Effective Practice Award, the Sloan Consortium.
- 2012 Faculty Research Recognition, College of Education, Boise State University.
- 2012 Outstanding Practice by a Student(s) of Educational Technology in an International Setting Paper Award by the Association of Educational Communications Technology (AECT) International Convention (I'm the second author of this award paper).
- 2012 Selected as the 2012-2013 University Mobile Learning Scholar, Boise State University.
- 2012 Selected Participant in American Educational Research Association (AERA) Division C New Faculty Mentoring Program.
- 2009 Young Researcher Award from the American Educational Research Association (AERA), Special Interest Group (SIG) of Instructional Technology (IT).
- 2009 Featured Researcher at the Association of Educational Communications Technology (AECT) International Convention.
- 2008 Dean's Doctoral Scholarship Award, College of Education, Purdue University.
- 2007 The Frank B. DeBruicker Graduate Award in Educational Technology, Department of Curriculum and Instruction, Purdue University.