CINDY JONG

Professor, Mathematics Education
University of Kentucky
Department of STEM Education
112 Taylor Educational Building
Lexington, KY 40506
cindy.jong@uky.edu

Education

Ph.D., Boston College Lynch School of Education, *May 2009*
Curriculum and Instruction: Mathematics Education
Dissertation Title: *Linking Teacher Learning to Pupil Learning: A Longitudinal Investigation of how Experiences Shape Teaching Practices in Mathematics*
M.Ed., University of Nevada Las Vegas, *December 2004*
Curriculum and Instruction: Mathematics Education

B.A., University of Nevada Las Vegas, *August 2002*
Elementary Education (K-8 Teaching License & TESL Certification)

Academic Appointments and Work Experience

Professor with Tenure: *June 2023 – Present*
University of Kentucky, College of Education
Department of STEM Education
Co-Chair of Elementary Education Program: *Summer 2017-Present*
UK Center for Equality and Social Justice Faculty Affiliate: *2016-Present*

Associate Professor with Tenure: *May 2016 – June 2023*
University of Kentucky, College of Education
Department of STEM Education
Interim Department Chair: *Fall 2016*

Assistant Professor: *August 2011 – May 2016*
University of Kentucky, College of Education
Department of STEM Education
Courses: SEM 337 Teaching Mathematics for Elementary Education
SEM 604 History of STEM Education
SEM 110 Intro to STEM Education
SEM 620 Equity in STEM Education
SEM 706 Research in STEM Education
Practicum and Student Teaching Supervisor

Assistant Professor: *August 2009 –May 2011*
Virginia Commonwealth University, School of Education
Department of Teaching and Learning, Mathematics Education
Courses: TEDU 522 Teaching Mathematics for Elementary Education
TEDU 651 Leadership for K-8 Mathematics Specialists
Academic Advisor and Intern Supervisor

Research Assistant: *August 2004 –May 2009*
Boston College, Lynch School of Education
Teachers for a New Era, PI: Marilyn Cochran-Smith
Qualitative case studies project: five-year design to study the process of learning to teach from participants' preservice period to year four of full-time teaching
Comparison study: quasi-experimental design to compare teaching practices between matched pairs of graduates from two teacher preparation programs
Longitudinal surveys of teacher candidates and graduates: ongoing surveys from entry, exit, and one to three years out of the teacher education to track change over time; Instrument design, pilot, implementation and measurement in above projects

Research Assistant: *August 2006 –June 2007*
Boston College, Lynch School of Education
National Science Foundation Project, PI: G. Michael Barnett
Implemented Quest Atlantis (science educational video game) in Boston Public Schools; Collected and analyzed data on student learning to examine how to make science accessible for young students in urban schools

Instructor: *August 2006 –December 2008*
Boston College, Lynch School of Education
Math Labs and Mathematics Methods courses (undergraduate and graduate)

Supervisor: *August 2004 –May 2005*
Boston College, Lynch School of Education
Supervised Practicum Students in Boston area schools

Elementary School Teacher: *August 2002 –August 2004*
Mountain View Elementary School, 2nd grade
Clark County School District: Las Vegas, NV

Peer-Reviewed Publications

(1,750 Citations on Google Scholar as of September 2023)
http://scholar.google.com/citations?hl=en&user=GwWJ2GkAAAAJ
* Indicates publication with undergraduate student.
+ Indicates publication with graduate student.

Jong, C. Hodges, T.E., and Zhou, H. (2023). Teaching mathematics for social justice beliefs scale: Psychometrics and practices in teacher education. Special Issue on Mathematical Views in the *International Journal of Mathematical Education in Science and Technology*. +

Thomas, J., Dueber, D., Fisher, M.H., **Jong**, C., & Schack, E.O. (2022). Professional Noticing Coherence: Exploring Relationships between Component Processes. *Mathematical Thinking and Learning,* 1-19. +

Jong, C., Schack, E.O., Thomas, J., Fisher, M.H., & Dueber, D. (2021). What role does professional noticing play? Examining connections with affect and mathematical knowledge for teaching among preservice teachers*. ZDM Mathematics Education,* 53(1), 151-164. +

Thomas, J., Marzilli, T., Sawyer, B., **Jong**, C., Schack, E.O., & Fisher, M.H. (2020). Investigating the Manifestations of Bias in Professional Noticing of Mathematical Thinking among Preservice Teachers. *Journal of Mathematics Education at Teachers College, (11)*1, 1-11. *

Thomas, J., Dueber, D., Fisher, M., **Jong**, C., & Schack, E.O. (2020) Professional Noticing into Practice: An Examination of Inservice Teachers' Conceptions and Enactment. *Investigations in Mathematics Learning*, 12(2), 110-123. +

Farmer, R., Greene, N., Perry, K., & **Jong**, C., (2019). Environmental explorations: Integrating project-based learning and civic engagement through an afterschool program. *Journal of Educational Research and Practice, 9*(1), 423-435. *

Fisher, M. H., Thomas, J., **Jong**, C., Schack, E. O., & Dueber, D. (2019). Comparing preservice teachers' professional noticing skills in elementary mathematics classrooms. *School Science and Mathematics*, 1-8. +

Slayton, B., Salazar Velez, S., **Jong**, C., & Perry, K. (2018). Community super investigators (CSI) Club: Mathematics and literacy in action. *Journal of Mathematics Instruction at Teachers College, 9*(2), 37-43. *

Fisher, M.H., Thomas, J., Schack, E.O, **Jong**, C., & Tassel, J. (2018). Noticing numeracy now!: Examining changes in preservice teachers' noticing, knowledge, and attitudes. *Mathematics Education Research Journal,* 30(2).

Thomas, J., **Jong**, C., Fisher, M.H., & Schack, E.O. (2017). Noticing and Knowledge: Exploring Theoretical Connections between Professional Noticing and Mathematical Knowledge for Teaching. *The Mathematics Educator*, 26 (2), 3-25.

Mohr-Schroeder, M. J., Jackson, C., Cavalcanti, M., **Jong**, C., Schroeder, D.C., & Speler, L. G. (2017). Parents' attitudes toward mathematics and the influence on their students' attitudes toward mathematics: A quantitative study. *School Science and Mathematics*, *117*(5), 214-222. *+

Jong, C., Thomas, J. N., Fisher, M. H., Schack, E. O., Davis, M. A., & Bickett, M. E. (2017). Decimal dilemmas: Interpreting and addressing misconceptions. *Ohio Journal of School Mathematics*, *75*(1). *

Jackson, C., & **Jong**, C. (2017). Reading and reflecting: Preservice teachers' conceptions about teaching mathematics for equity. *Mathematics Teacher Education and Development*, 19(1).

Jong, C. & Jackson, C. (2016). Teaching mathematics for social justice: Examining preservice teachers' conceptions. *Journal of Mathematics Education at Teachers College*, 7(1), 27-34.

Jong, C. (2016). Linking reform-oriented experiences to teacher identity: The case of an elementary mathematics teacher. *The Journal of Educational Research,* 109(3), 296-310.

Jong, C., Dowty, H., Hume, B., & Miller, M. (2016). Integrating alternative algorithms: Possibilities and practices. *Ohio Journal of School Mathematics*, 73, 4-9. *+

Roark, R., Cummane, P., Crawford, B. F., **Jong**, C. & Fisher, M. H. (2016). Preservice elementary teachers' perceptions of factors that influence mathematics teaching effectiveness. *Virginia Mathematics Teacher*. *

Barnatt, J., Terrell, D.G., D'Souza, L., **Jong**, C., Cochran-Smith, M., Mitchell, K., Gleeson, A., McQuillan, P., & Shakman, K. (2016). Interpreting early career trajectories. *Educational Policy, 1-40*.

Thomas, J., Fisher, M. H., **Jong**, C**,** Schack, E. O., & Krause, L.R. & Kasten, S. (2015). Professional noticing: Learning to teach responsively. *Mathematics Teaching in the Middle School*, 21(4), 238-243.

Jong, C., & Hodges, T.E. (2015). Assessing attitudes toward mathematics across teacher education contexts. *Journal of Mathematics Teacher Education*, 18(5), 407-425.

Jong, C., Hodges, T.E., Royal, K.D., & Welder, R.M. (2015). Instruments to measure preservice elementary teachers' conceptions: An application of the rasch rating scale model. *Educational Research Quarterly*, 39(1), 21-48.

Orrill, C.H., Kim, O., Peters, S.A., Lishka, A.E., **Jong**, C., Sanchez, W.B., Eli, J.A. (2015). Challenges and strategies for assessing specialized knowledge for teaching. *Mathematics Teacher Education and Development* 17 (1), 12-29.

Flanery, B., Roark, R., Cummane, P., Fisher, M.H., **Jong**, C. (2014). Using Professional Noticing in Elementary School Mathematics. *Virginia Mathematics Teacher*, 41, (1), 21-23. *

Hodges, T. E., & **Jong**, C. (2014). School-based communities of practice as mechanisms for standards-based mathematics curriculum implementation, *Journal of Education*, 194 (2), 25-34.

Fisher, M. H., Schack, E. O., Thomas, J., **Jong**, C., Eisenhardt, S., Tassell, J., & Yoder, M. (2014). Examining the Relationship Between Preservice Elementary Teachers' Attitudes Toward Mathematics and Professional Noticing Capacities. In *Research Trends in Mathematics Teacher Education* (pp. 219-237). Springer International Publishing.

Jong, C., & Magruder, R.L. (2014). Beyond cookies: Understanding various division models. *Teaching Children Mathematics*, 20 (6), 367-373. +

Jong, C., & Hodges, T.E. (2013). The influence of elementary preservice teachers' mathematics experiences on their attitudes towards teaching and learning mathematics. *International Electronic Journal of Mathematics Education,* 8 (2-3), 100-122.

Cochran-Smith, M., McQuillan, P., Mitchell, K., Terrell, D.G., Barnatt, J., D'Souza, L., **Jong**, C., Shakman, K., Lam, K., & Gleeson, A. (2012). A longitudinal study of teaching practice and early career decisions: A cautionary tale. *American Educational Research Journal*, 49 (5), 844-880.

Mitescu, E.N., Pedulla, J.J., **Jong**, C., Canady, M.A., & Cochran-Smith, M. (2011). Measuring Practices of Teaching for Social Justice in Elementary Mathematics Classrooms. *Educational Research Quarterly,* 34 (3), 15-39.

Jong, C., Pedulla, J.J., Mitescu, E.N., Salomon-Fernandez, Y., & Cochran-Smith, M. (2010). Exploring the link between reformed teaching practices and pupil learning in elementary school mathematics. *School Science and Mathematics Journal*. 110 (6), 309-326.

Cochran-Smith, M., & the **Boston College Evidence Team**. (2009). "Re-culturing" teacher education: Evidence, inquiry, and action. Journal of Teacher Education. 60 (5), 458-468.

McQuillan, P., **Jong**, C., D'Souza, L., Mitchell, K., Lam, K., Shakman, K., et al. (2009). Pieces that matter in teacher education: The synergy of social justice, inquiry-into-practice, and meeting the needs of diverse learners. *Asian Journal of Educational Research & Synergy*, 1(2), 47-65.

Cochran-Smith, M., Shakman, K, **Jong**, C., Terrell, D., Barnatt, J., & McQuillan, P. (2009). Good and just teaching: The case for social justice in teacher education. *American Journal of Education,* 15 (3), 347-377.

Editorships

Jong, C & Fisher, M.H. (expected 2023). Special Issue on Critical Spaces in Mathematics and Science Teacher Noticing in *School Science and Mathematics Journal.*

Fisher, M.H., & Jong, C. (expected 2023). Special Issue on Mathematics and Science Teacher Noticing: Conceptual Explorations and Empirical Connections in *School Science and Mathematics Journal.*

Peer-Reviewed Book Chapters

Jong, C., Thomas, J., Mask, W., Fisher, M.H., & Schack. E.O. (2022). Analytical processes for measuring equitable noticing in mathematics/Procesos analyticos para medir la mirada professional y equidad en matematicas. Paper accepted for proceedings of the 44th Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Nashville, TN. +

Thomas, J., Mask, W., Schack. E.O., Fisher, M.H., & **Jong**. C. (2022). Deciding quality: Lenses, challenges, and opportunities. Paper accepted for proceedings of the 44th Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Nashville, TN. +

Jong, C., Fisher, M.H., Thomas, J., Schack. E.O., & Mask, W. (2021). Conceptualizing mathematics modules that integrate professional noticing and equity. In Olanoff, D., Johnson, K., & Spitzer, S. M. (Eds). Productive Struggle: Persevering through Challenges: Proceedings of the forty-third annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Philadelphia, PA.

Jong, C., Priddie, C., Roberts, T., Museus, S.D. (2020). Race-related factors in STEM: A review of research on educational experiences and outcomes for racial and ethnic minorities. In C.C. Johnson, M. Mohr-Schroeder, T. Moore, L. Bryan, & L. English (Eds), *Handbook of Research in STEM Education*, Routledge. +

Thomas, J., Marzilli, T, Sawyer, B., **Jong**, C., & Fisher, M.H. (2020). Manifestations of bias within preservice teachers professional noticing of children's mathematical thinking. In A.I. Sacristán, J.C. Cortés-Zavala & P.M. Ruiz-Arias, (Eds.). Mathematics Education Across Cultures: Proceedings of the 42nd Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Mexico (pp. 1429 – 1433). *

Lavery, M.R., **Jong**, C., Krupa, E., & Bostic, J. (2019). Developing an assessment with validity in mind. In J. Bostic, E. Krupa & J. Shih (Eds.), *Assessment in Mathematics Education Contexts: Theoretical Frameworks and New Directions*. New York, NY: Routledge.

Jong, C., Thomas, J., Schack, E.O., Fisher, M.H., & Dueber, D. (2019). What role does professional noticing play? Exploring connections to affect and pedagogical content knowledge. In S. Otten, A.G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds), *Proceedings of the forty-first annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, St Louis, MO: University of Missouri. +

Fisher, M.H., Thomas, J., **Jong**, C., Schack, E.O., & Dueber, D. (2018). Professional noticing in complex mathematical contexts: Examining preservice teachers' changes in performance. In T.E. Hodges, G. J. Roy, & A. M. Tyminski, (Eds.), *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 655-662). Greenville, SC: University of South Carolina & Clemson University. +

Jong, C., & Hodges, T. E. (2017). Studying preservice teachers' beliefs about teaching mathematics for social justice over time. In E. Galindo & J. Newton, (Eds.), *Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 981-984). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators.

Jong, C. (2017). Extending equitable teaching practices in teacher noticing: Commentary. In Schack, E. O., Fisher, M. H., & Wilhelm, J.A. (Eds.). *Teacher Noticing: Bridging and Broadening Perspectives, Contexts, and Frameworks* (pp. 207-214). New York, NY: Springer.

Fisher, M.H., Schack, E.O, **Jong**, C., & Thomas, J., (2017). Noticing preservice teachers' attitudes toward mathematics: Comparing traditional and technology-mediated approaches. In E. Galindo & J. Newton, (Eds.), Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 941-944). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators.

Schack, E. O., Fisher, M. H., **Jong**, C., & Thomas, J. (2015). Flowcharts to evaluate responses to video-based professional noticing assessments. In Bartell, T. G., Bieda, K. N., Putnam, R. T., Bradfield, K., & Dominguez, H. (Eds.). *Proceedings of the 37th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 1314-1317). East Lansing, MI: Michigan State University.

Hodges, T. E., & **Jong**, C. (2015). Site-based mathematics methods coursework: The development of attitudes and theory-practice connections. In Bartell, T. G., Bieda, K. N., Putnam, R. T., Bradfield, K., & Dominguez, H. (Eds.). *Proceedings of* the *37th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 900-903). East Lansing, MI: Michigan State University.

Ma, X., **Jong**, C., & Yuan, J. (2013). Exploring reasons for the east asian success in pisa. In H.D. Meyer and A. Benavot (Eds.), PISA, power, and policy: The emergence of global educational governance (pp. 225-245). Oxford, United Kingdom: Symposium Books.

Jong, C., & Jackson, C. (2013). Examining preservice teachers' conceptions about teaching mathematics for social justice. In Martinez, M. & Castro Superfine, A (Eds.). *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education,* (pp. 789-792). Chicago, IL: University of Illinois at Chicago.

Hodges, T.E., **Jong**, C., & Royal, K.D. (2013). The development of attitudes about mathematics during preservice teacher education. In Martinez, M. & Castro Superfine, A (Eds.). *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education,* (pp. 785-788). Chicago, IL: University of Illinois at Chicago.

Schack, E., Fisher, M., Thomas, J., **Jong**, C., & Eisenhardt, S. (2013) Learning to Professionally Notice: Preservice Elementary Teachers' Attitudes Toward Mathematics in Context. In Martinez, M. & Castro Superfine, A (Eds.). *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education,* (pp. 669-676). Chicago, IL: University of Illinois at Chicago.

Hobson, R.S., **Jong**, C., Dockery, D.J., Hermann, M., & Carter, T.J. (2013). Pilot study: An exploration of the experiences that influence women's interest, pursuit, and continued involvement in STEM careers (Paper #6084). Proceedings of the 120th American Society for Engineering Education. Atlanta, Georgia.

Hodges, T.E., & **Jong**, C. (2012). Exploring changes in preservice teachers' conceptions within the context of mathematics experiences. In Van Zoest, L.R., Lo, J.-J., & Kratky, J.L. (Eds) *Proceedings of the 34rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education,* (709-712). Kalamazoo, MI: Western Michigan University.

Welder, R.M., & **Jong**, C. (2012). Examining connections between mathematical knowledge for teaching and conceptions about mathematics teaching and learning. In Van Zoest, L.R., Lo, J.-J., & Kratky, J.L. (Eds) *Proceedings of the 34rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (773-776). Kalamazoo, MI: Western Michigan University.

Jong, C., & Hodges, T.E. (2011). (Re)shaping elementary preservice teachers' attitudes towards mathematics. In Wiest, L. R., & Lamberg, T. (Eds.) *Proceedings of the 33rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (1304-1312). Reno, NV: University of Nevada, Reno.

Welder, R.M., Hodges, T. E., & **Jong**, C. (2011). Measuring changes in teachers' beliefs, attitudes, and dispositions related to experiences in mathematics. In Wiest, L. R., & Lamberg, T. (Eds.) *Proceedings of the 33rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (2118-2125). Reno, NV: University of Nevada, Reno. ***Equal Authorship**

Other Publications

Jong, C. (2012). Social network theory and educational change: A book review. *Journal of Educational Research*, 105 (2), 1-2.

Salomon-Fernandez, Y., Barnatt, J., & **Jong**, C. (2007). *Achievement gap grant initiatives evaluation: Best practice report.* Evaluation commissioned by: Boston Public Schools Office of Equity, Boston, Ma.

Jong, C. (2006). Kids who think outside the box: Helping your unique child thrive in a cookie-cutter world: A book review. *TEACHING Exceptional Children Plus*, 3(1) Article 4. Retrievable from http://escholarship.bc.edu/education/tecplus/vol3/iss1/art4

National and International Conference Presentations

Jong, C., Thomas, J., Mask, W., Fisher, M.H., & Schack. E.O. (2022, accepted). Analytical processes for measuring equitable noticing in mathematics/Procesos analyticos para medir la mirada professional y equidad en matematicas. Paper to be presented at the 44th Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Nashville, TN.

Thomas, J., Mask, W., Schack. E.O., Fisher, M.H., & **Jong**. C. (2022, accepted). Deciding quality: Lenses, challenges, and opportunities. Paper to be presented at the 44th Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Nashville, TN.

Jong, C., Fisher, M.H., Thomas, J., Schack. E.O., & Mask, W. (2021). Conceptualizing mathematics modules that integrate professional noticing and equity. Paper presented at the 43rd Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Philadelphia, PA.

Thomas, J., Marzilli, T, Sawyer, B., **Jong**, C., & Fisher, M.H. (2020). Manifestations of bias within preservice teachers professional noticing of children's mathematical thinking. Paper presented at the 42nd Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Mexico.

Jong, C., Thomas, J., Schack, E.O., Fisher, M.H., & Dueber, D. (2019). What role does professional noticing play? Exploring connections to affect and pedagogical content knowledge. Paper presented at the Psychology of Mathematics Education – North America Annual Conference. St. Louis, MO.

Thomas, J. N., Brown, D., Reeves, K., **Jong**, C., Fisher, M. H., & Schack, E. O. (2019). *Influence of Perceived Ethnicity and/or Gender on Pre-Service Teachers' Professional Noticing*. American Educational Research Association. Toronto, Canada.

Schack, J., Dueber, D., **Jong**, C., Thomas, J., & Fisher, M.H. (Apr. 2019). Computer-Programmed Decision Trees for Assessing Teacher Noticing. Paper presented at the Annual Meeting of the American Educational Research Association. Toronto, Canada.

Thomas, J., Dueber, D., Fisher, M.H., **Jong**, C., & Schack, E.O. (Apr. 2018). Professional noticing into practice: An examination of inservice teachers' conceptions and enactment. Paper presented at the Annual Meeting of the American Educational Research Association. New York, NY.

Fisher, M.H., Thomas, J., **Jong**, C., Schack, E.O., & Dueber, D. (2018). Professional noticing in complex mathematical contexts: Examining preservice teachers' changes in performance. Psychology of Mathematics Education – North America Annual Conference. Greenville, SC.

Thomas, J., Dueber, D., Fisher, M.H., **Jong**, C., & Schack, E.O. (Apr. 2018). Professional noticing into practice: An examination of inservice teachers' conceptions and enactment. American Educational Research Association. New York, NY.

Fisher, M.H., Davis, M., Thomas, J., **Jong**, C., & Schack, E.O. (Nov. 2017). Analyzing preservice elementary teachers' content knowledge using the TEDS-M assessment. School Science and Mathematics Association (SSMA) Annual Meeting, Lexington, KY.

Fisher, M.H., Thomas, J., **Jong**, C., & Schack, E.O. (Apr. 2017). Decimal operations: Making meaningful moves from misconceptions National Council of Teachers of Mathematics (NCTM) Annual Meeting, San Antonio, TX.

Thomas, J., **Jong**, C., Schack, E.O., Fisher, M.H., & Dueber, D. (Apr. 2017). Developing an adaptable instrument to measure professional noticing skills. National Council of Teachers of Mathematics (NCTM) Research Conference, San Antonio, TX.

Jong, C., & Hodges, T. E. (2017). Studying preservice teachers' beliefs about teaching mathematics for social justice over time. Paper presented at the *39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Indianapolis, IN).

Fisher, M.H., Schack, E.O, **Jong**, C., & Thomas, J., (2017). Noticing preservice teachers' attitudes toward mathematics: Comparing traditional and technology-mediated approaches. Paper presented at the *39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Indianapolis, IN).

Fisher, M. H., **Jong**, C., Thomas, J., Schack, E. O., Association of Mathematics Teacher Educators (AMTE) Annual Conference, "Implementing an online professional noticing module and its effects on attitudes towards mathematics.," (Irvine, CA: January 2016).

Fisher, M. H., Schack, E., Thomas, J., **Jong**, C., International Congress on Mathematical Education, "Changes in Pre-Service Teachers' Attitudes Toward Mathematics: Differences in Traditional and Online Approaches," Poster Session. (Germany: July 2016).

Schack, E. O., Fisher, M. H., **Jong**, C., & Thomas, J. (2015). Flowcharts to evaluate responses to video-based professional noticing assessments. Paper presented at the *37th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (East Lansing, MI).

Hodges, T. E., & **Jong**, C. (2015). Site-based mathematics methods coursework: The development of attitudes and theory-practice connections. Paper presented at the *37th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (East Lansing, MI).

Thomas, T., **Jong**, C., Schack, E. O., Fisher, M. H., Wilhelm, J., Stockero, S. (2015). *Teacher Noticing: Measuring A Hidden Skill of Teaching*. Working Session for the International Group for the Psychology of Mathematics Education (East Lansing, MI).

Jong, C., D'Souza, L., Terrell, D.G., Barnatt, J., Gleeson, A., & Mitchell, K. (2015). Figured Worlds of Learning to Teach: Identity and Disequilibrium in Early Career Trajectories. Paper presented at the annual meeting of the American Educational Research Organization (Chicago, IL).

Terrell, D.G., Barnatt, J., D'Souza, L., Gleeson, A., & Mitchell, K. & **Jong**, C. (2015). Figured Worlds of Learning to Teach: Interpreting Early Career Trajectories. Paper presented as part of the State and Regional Educational Research Associations Distinguished Paper Session 1 at the annual meeting of the American Educational Research Organization (Chicago, IL).

Jong, C., Schack, E. O., Thomas, J., & Fisher, M. H. (2015). Flowcharts to Assess Professional Noticing: Methods for Coding Open-ended Responses. Paper Presented at the Research Conference of the National Council of Teachers of Mathematics (Boston, MA).

Jong, C. & Hodges, T.E. (2015). Assessing Preservice Teachers' Attitudes towards Mathematics Over Time. Presented at the Annual Conference of the Research Council on Mathematics Learning (Las Vegas, NV).

Fisher, M. H., Schack, E. O., Wilhelm, J., Thomas, T., McNall-Krall, R., **Jong**, C. (2014, July). *Teacher Noticing: A Hidden Skill of Teaching*. Working Session for the International Group for the Psychology of Mathematics Education (Vancouver, British Columbia).

Cummane, T., Flannery, B., Roark, B., Fisher, M. H., & **Jong**, C. (2014). Using Professional Noticing in Elementary School Mathematics. Presented at the National Conference on Undergraduate Research (Lexington, KY).

Schack, E. O., Eisenhardt, S., Fisher, M. H., **Jong**, C., Tassell, J. & Thomas, J. (2014, April). *An Instructional Model to Develop Preservice Teachers Professional Noticing Skills.* Presented at National Council of Teachers of Mathematics, Research Conference (New Orleans, LA).

Fisher, M. H., Thomas, J. Eisenhardt, S., Schack, E. O., **Jong**, C., & Tassell, J. (2014, April). *Correlating Professional noticing and Mathematics Knowledge for Teaching*. Paper Presented at National Council of Teachers of Mathematics, Research Conference (New Orleans, LA).

Jong, C., & Hodges, T.E. (2014, February). *Preservice teachers' conceptions in context: Teaching mathematics for social justice.* Presented at the Annual Conference of the Association of Mathematics Teacher Educators (Irvine, CA).

Jong, C., & Jackson, C. (2013). Examining preservice teachers' conceptions about teaching mathematics for social justice. Paper presented at the *35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Chicago, IL).

Hodges, T.E., **Jong**, C., & Royal, K.D. (2013). The development of attitudes about mathematics during preservice teacher education. Paper presented at the *35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Chicago, IL).

Schack, E., Fisher, M., Thomas, J., **Jong**, C., & Eisenhardt, S. (2013) Learning to Professionally Notice: Preservice Elementary Teachers' Attitudes Toward Mathematics in Context. Paper presented at the *35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Chicago, IL).

Ma, X., **Jong**, C., & Yuan, J. (2013, June). *Using PISA data to investigate East Asian academic success*. Paper presented at the annual Hawaii University International Conference on Education and Technology (Honolulu, HI).

Jong, C., & Hodges, T.E. (2013, April). *Examining Changes in Preservice Teachers' Productive Disposition for Teaching Mathematics within Teacher Education Experiences.* Paper presented the Annual Meeting of the American Educational Research Association (San Francisco, CA).

Jackson, C., & **Jong**, C. (2013, January). Preservice Elementary Teachers' Understandings of Equity in Teaching Mathematics. Presented at the Annual Conference of the Association of Mathematics Teacher Educators (Orlando, FL).

Jong, C. & Welder, R.M. (2013, January). *Exploring Preservice Elementary Teachers' Co-development of Mathematical Knowledge for Teaching and Conceptions about Mathematics*. Presented at the Annual Conference of the Association of Mathematics Teacher Educators (Orlando, FL).

Hodges, T.E., **Jong**, C. (2012). Exploring changes in preservice teachers' conceptions within the context of mathematics experiences. Paper presented at the *34rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Kalamazoo, MI).

Welder, R.M., **Jong**, C. (2012). Examining connections between mathematical knowledge for teaching and conceptions about mathematics teaching and learning. Paper presented at the *34rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Kalamazoo, MI).

Jong, C. (2012, April). *Order and equivalence: Developing fraction sense through multiple representations.* Presented at the Annual Meeting of the National Council of Teachers of Mathematics (Philadelphia, PA).

Welder, R.M., Hodges, T.E., & **Jong**, C. (2012, April). *Measuring teachers' dispositions, attitudes, and beliefs over time.* Presented at the Research Presession of the National Council of Teachers of Mathematics (Philadelphia, PA).

Jong, C., Hodges, T.E., & Welder, R.M. (2012, April). *Conceptions of mathematics in related contexts: Measuring elementary teachers' development over time.* Paper presented at the Annual Meeting of the American Educational Research Association (Vancouver, Canada).

Jong, C., & Hodges, T.E. (2012, February). *Measuring preservice teachers' dispositions toward teaching mathematics for social justice.* Presented at the Annual Conference of the Association of Mathematics Teacher Educators (Fort Worth, TX).

Hodges, T.E., **Jong**, C., & Welder, R.M. (2012, February). *Relationships between preservice elementary teachers conceptions of mathematics, field experiences, and methods coursework.* Presented at the annual conference of the Association of Mathematics Teacher Educators (Fort Worth, TX).

Jong, C., Hodges, T.E. (2011, October). *(Re)shaping elementary preservice teachers' attitudes towards mathematics*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (Reno, NV).

Welder, R.M., Hodges, T. E., **Jong**, C. (2011, October). *Measuring changes in teachers' beliefs, attitudes, and dispositions related to experiences in mathematics*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (Reno, NV).

McQuillan, P., Cochran-Smith, M., Barnatt, J., D'Souza, L., **Jong**, C., Shakman, K., Terrell, D.G., Lam, K., Gleeson, A., Mitchell, K. (2011, April). *Fit as causal process: Understanding teaching practice and career moves*. Paper presented at the annual meeting of the American Educational Research Association (New Orleans, LA).

Hodges, T., **Jong**, C., & Welder, R.M. (January, 2011). *Elementary teacher candidates: A survey of beliefs, attitudes, and experiences in mathematics.* Poster presented at the STaR Gallery Walk in the annual meeting of the Association of Mathematics Teacher Educators (Irvine, CA).

Edwards, B., Gerberry, C., Hill, C., **Jong**, C., Johnson, D., Vomvoridi-Ivanovic, E., et al. (January, 2011). *How do preservice teachers across contexts and grades make sense of teaching mathematics for social justice?* Poster presented at the STaR Gallery Walk in the annual meeting of the Association of Mathematics Teacher Educators (Irvine, CA).

Cochran-Smith, M., McQuillan, P., **Jong**, C., D'Souza, L., Barnatt, J., Shakman, K., et al. (2010, April). *Who's fit to teach: A longitudinal cross-case analysis of teaching practices and career trajectory.* Paper presented at the annual meeting of the American Educational Research Association (Denver, CO).

Jong, C. (2009, March). *Access to Algebra: Helping Teachers Develop Relational Thinking in K-6 Students.* Gallery Workshop presented at the annual meeting of the National Council of Teachers of Mathematics (Washington, DC).

McQuillan, P., **Jong**, C., D'Souza, L., Mitchell, K., Lam, K., Shakman, K., et al. (2009, April). Pieces that matter in teacher education: The synergy of social justice, inquiry-into-practice, and meeting the needs of diverse learners. Paper presented at the annual meeting of the American Educational Research Association (San Diego, CA).

Jong, C. (2008, April). *Assessing what counts: Opportunities and outcomes in elementary mathematics*. Paper presented at the research presession of the National Council of Teachers of Mathematics (Salt Lake City, UT).

Jong, C. (2008, March). *Deviating from the mean: Reform-oriented teaching and learning in elementary mathematics*. Paper presented at the annual meeting of the American Educational Research Association (New York, NY).

Anderson, J., **Jong**, C. and Barnett, M. (2008, March). *Virtual world, real impact: Gender, race and the use of a 3D virtual world to teach concepts around water quality*. Paper presented at the annual meeting of the American Educational Research Association (New York, NY).

Jong, C. (2007, February). *Connecting the pieces: Examining the variables that have an impact on preservice teachers in mathematics education.* Paper presented at the annual meeting of the American Association of Colleges of Teacher Education (New York, NY).

Ludlow, L.H., Barnatt,J., Salomon,Y., **Jong**,C. & Shakman,K. (2005, April). *Teachers for a new era evidence issues*. Roundtable presentation at the annual meeting of the American Educational Research Association (Montreal, Canada).

State and Regional Conference Presentations

Jong, C. (2021). Equity and responsive teaching in the elementary mathematics classroom. Presented at the annual conference of the Kentucky Association of Teacher Educators.

Thomas, J., & **Jong**, C. (2020). Maximizing the mathematical moment for all. Presented at the Kentucky Center for Mathematics Conference (Lexington, KY).

Meade, J., **Jong**, C., & Hutchison, J. (March, 2019). Literacy and Mathematics embedded experiences: A clinical site partnership. UK COE EdTalks- Building Partnerships with Sustainable Impacts

Meade, J., **Jong**, C., & Hutchison, J. (September, 2018). Literacy and Mathematics embedded experiences during a practicum semester. Presented at the Conference of the Kentucky Association of Teacher Education (Lexington, KY).

Thomas, J., Schack, E. O., Tassell, J., **Jong**, C., & Kinne, L. (2015). Elementary Preservice Teacher Preparation Collaborative: Initiating and sustaining a multi-institutional research venture. Presented at the Kentucky Mathematics Educator Development Conference (Richmond, KY).

Jong, C., Hume, B., & Dowty, H. (2015). Research and Practice in Multi-digit Alternative Algorithms. Presented at the Kentucky Center for Mathematics Conference (Lexington, KY).

Terrell, D.G., Barnatt, J., D'Souza, L., **Jong**, C., Gleeson, A., & Mitchell, K. (2014). Figured worlds of learning to teach: Interpreting early career trajectories. Paper presented at the annual meeting of the New England Educational Research Organization (West Dover, VT). ***Rubovits Award for Best Paper**

Jong, C., Jackson, C., & Miller, M. (2013). *Understanding preservice teachers' conceptions about teaching mathematics for social justice.* Presented at the Regional Conference of the National Council of Teachers of Mathematics (Louisville, KY).

Magruder, R., & **Jong**, C. (2013). *Beyond cookies: Understanding various division models.* Gallery Workshop presented at the Regional Conference of the National Council of Teachers of Mathematics (Louisville, KY).

Jong, C. (2012, March). *Access to algebra: Helping k-5 students develop relational thinking.* Presented at the Kentucky Council of Mathematics Annual Conference (Lexington, KY).

Jong, C. & Magruder, R. (2012). *Examining Preservice Elementary Teachers' Conceptions of Mathematics Teaching and Learning.* Presented at the University of Kentucky Third Annual STEM Symposium (Lexington, KY).

Jong, C. (2010, March). *Access to algebra: Helping teachers develop relational thinking in K-6 students.* Presented at the Virginia Council of Teachers of Mathematics Annual Conference (Harrisonburg, VA).

Jong, C. (2010, March). Assess for Success: Focus on Understanding. Presented at the Greater Richmond Council of Teachers of Mathematics spring conference (Richmond, VA).

Cochran-Smith, M., **Jong**, C., Barnatt, J., D'Souza, L., Miller, G., Shakman, K. (2006, April). *Studying learning to teach.* Paper presented at the annual meeting of the New England Educational Research Organization (Portsmouth, NH).

Cochran-Smith, M., Ludlow, L.H., Barnatt, J., Salomon-Fernandez, Y., Shakman, K., **Jong**, C. (2005, April). *From teacher education to pupil learning: Evidence matters*. Paper presented at the annual meeting of the New England Educational Research Organization (Northampton, MA).

Invited Presentations

Jong, C. (2021, December). Mathematics education in the U.S.: Current challenges and equitable directions. Plenary Lecture presented at the Korean Society of Mathematics Education Conference.

Jong, C. (2021, November). Noticing more than math: Identity and power. Presented at the F.Ed. (faculty education) research worth sharing lunch and learn co-sponsored by the UK MLK Center and Center for Equity and Social Justice.

Jong, C. (2021, May). Antiracist k-12 mathematics teaching. Presented at the Education and Civil Rights for the New Decade Virtual Conference hosted by the University of Kentucky as part of a panel presentation on Implementing Anti-racist Education in K-12 Settings.

Jong. C. with Tyler, K., Ebong, I., Baker, C. Mitchell, T. (2019, August). Panel Discussion on Academic Success. Part of the Ubuntu Orientation sponsored by the Center for Graduate and Professional Diversity Initiatives.

Jong, C. (2016, March). Exploring Preservice Teachers' Conceptions of Teaching Mathematics for Social Justice. Symposium on Equality and Social Justice within Schools. Sponsored by the UK Center for Equality and Social Justice

Jong, C. (2014, April). *Mathematics Experiences and Conceptions Surveys: Measuring Preservice Elementary Teachers' Mathematics Conceptions and Experiences Over Time.* The University of Arizona Mathematics Department Colloquium.

Grants (Awarded)

Jong, C. (PI), Fisher, M.H. (co-PI), Thomas, J. (co-PI), Schack, E.O. (Senior Personnel), (June. 2019 - July 2022). Project M^{3}INE: Microlearning Mathematics Modules that Intersect Noticing and Equity. **NSF IUSE Grant, $599,875** (**AWARDED**)

Jong, C. (PI). Extending the Mathematics Experiences and Conceptions Surveys (MECS) to Evaluate Mathematics Teacher Education Over Time. Proposal submitted to **UK College of Education Creative Activities Award for $12,500 in Spring 2017.** (**AWARDED**)

Thomas, J. (PI), Fisher, M.H. (PI), Schack, E.O. (PI), **Jong, C.** (Co-PI), Gabbard, A. (Senior Personnel), Goodson-Espy, T (Senior Personnel). (Aug. 2014 - July 2017). Collaborative Research: Project TECHNO: Technology-Centered Mathematical Noticing. **NSF IUSE Grant, $500,000 Total ($209,000 for UK).** (**AWARDED**)

Jong, C. (PI). Evaluating Mathematics Teacher Education Programs Over Time. Proposal submitted to **UK Summer Fellowship for $7,000 in December 2012.** (**AWARDED**)

Supporting Undergraduate Research Fellows in Timely STEM Education Research via the University of Kentucky's STEM Educational Research Laboratory. Proposal submitted to the **National Science Foundation, REU for $316,000 in September 2012.** Principal Investigators: Molly Fisher and Jennifer Wilhelm. Senior Personnel: **Cindy Jong**, Christa Jackson, Margaret Mohr-Schroeder, and Rebecca Krall**. (AWARDED)**

Grants (Unfunded)

Thomas, J. (PI), **Jong**, C. (co-PI), Fisher, M.H. (co-PI) at the University of Kentucky; Jessup, N. (PI) at Georgia State University, and Kalinec-Craig, C. (PI) at University of Texas San Antonio (October

2021). Collaborative Research: Teaching Equitable Noticing in Mathematics (TEN-Maths). NSF EHR-Core. ($1,415,453 total; UK portion $733,759).

Alameh, S. (PI), Fisher, M. (Co-PI), **Jong**, C. (Co-PI), Thomas, J. (Senior Personnel), and Krall, R. (Senior Personnel). (*pending*, 2021). Super STEM Saturdays for Engaging the Community. NSF AISL Grant. $299,420.

Police, S. (PI), Berry (PI), J. Santillan-Jimenez (co-PI), E., **Jong**, C. (co-PI) & Mohr-Schroeder, M. (co-PI) (February, 2021). Community and Universities Building Equity (CUBE). Kellogg Foundation. Racial Equity 2030. $20,000,000.

Thomas, J. (PI), **Jong**, C. (Co-PI), Fisher, M.H. (Co-PI), Schack. E.O. (PI). (*unfunded*, 2018). Collaborative Research: Categorizing Decision Making in Mathematical Moments (Cat-DM^3). NSF ECR Grant, $499,027.

Jong, C. (PI), Fisher, M.H. (Co-PI), Thomas, J. (Co-PI), Schack. E.O. (PI), Lavery, M. (PI). (*unfunded*, 2017). Collaborative Research: Categorizing Decisions in Mathematical Contexts (Cat-DMC). NSF ECR Grant, $1,321,261

Jong, C. (PI), Fisher, M.H. (Co-PI), Thomas, J. (Co-PI), Wilhelm, J. (Co-PI). (*unfunded*, 2016). Collaborating to Conceptualize and Measure Teacher Noticing in Critical Mathematics and Science Contexts: A Conference Proposal to the American Educational Research Association, $34,169.

Fisher, M.H. (PI), Thomas, J. (PI), **Jong**, C. (Co-PI), Schack E.O. (Co-PI), Murphy T.J. (Co-PI) (*unfunded, 2013*). Project TECHNO: TECHnology-centered Mathematical NOticing. Kentucky Department of Education MSP Grant, $320,000.

Jong, C. (PI); Thomas, J. (co-PI); Wilhelm, J. (co-PI); Schack, E. (co-PI); Fisher, M. (co-PI). American Educational Research Association, Collaborating to Conceptualize and Measure Teacher Noticing in Critical Mathematics and Science Contexts: A Conference Proposal to the American Educational Research Association. (September 16, 2016).

Hodge, L. (PI), Hodges, T.E. (PI), **Jong, C. (PI)**, (*submitted January 2014*). Collaborative Research: By Design: Collaborative Communities and Meaningful Math (C2M2). NSF AISL Grant, $250,000.

Thomas, J. (PI), Fisher, M.H. (PI), Schack, E.O. (Co-PI), **Jong, C.** (Co-PI), Murphy, T.J. (Co-PI). (*submitted September 2013*) Project TECHNO: Technology-Centered Mathematical Noticing. Kentucky Department of Education MSP Grant, $320,000.

Jong, C (PI) and Hodges, T.E. (PI), (submitted February 2013). Collaborative Research: Extending the Mathematics Conceptions and Experiences Surveys (MECS) to Evaluate the Impact of Mathematics Teacher Education Over Time. Proposal submitted to the National Science Foundation for $208,000. Promoting Research and Innovations in Methodologies for Evaluation (PRIME- Solicitation).

Jong, C (PI) and Hodges, T.E. (PI), (submitted February 2013). Designing Instruments to Evaluate and Improve Mathematics Teacher Education. Proposal submitted to the Spencer Foundation for $40,000.

Collaborative Research: Project TECHNO: Technology-Centered Mathematical Noticing. **Proposal submitted to the National Science Foundation for $599,000 in January 2013.** Transforming Undergraduate Education in STEM (TUES- Solicitation). Principal Investigators: Jonathan Thomas (NKU), Edna Shack (MSU), and Molly Fisher (UK); co-PI: **Cindy Jong**. (**not awarded**)

Learning Math in Rural Communities: Reaching Beyond School. **Proposal submitted to the National Science Foundation for $7,991,713 in December 2012.** Mathematics Science Partnership (MSP- Solicitation). Principal Investigators: Eugenia Toma; co-PIs: Joshua Cowen, J.S. Butler, Carl Lee, **Cindy Jong,** David Royster, and Kim Zeidler. (**not awarded**)

Mathematics Conceptions and Experiences Surveys (MECS). **Proposal submitted to the National Science Foundation for $248,000 in January 2012.** Promoting Research and Innovations in Methodologies for Evaluation (PRIME- Solicitation 12-508). Principal Investigator: **Cindy Jong**; Co- Principal Investigators: Thomas Hodges and Rachael Welder. (**not awarded**)

Mathematics Conceptions and Experiences Surveys: Designing Instruments to Examine the Development of Elementary Mathematics Teachers. **Proposal submitted to the Spencer Foundation for $39,500 in December 2011.** Principal Investigator: **Cindy Jong**; Co- Principal Investigators: Rachael Welder and Thomas Hodges. (**not awarded**)

Evaluating Mathematics Teacher Education Experiences Over Time. **Proposal submitted to UK Summer Fellowship for $7,000 in December 2011.** Principal Investigator: **Cindy Jong.** (**not awarded**)

Mathematics Conceptions and Experiences Surveys: Designing Instruments to Inform and Improve the Development of Elementary Mathematics Teachers. **Proposal submitted to the Spencer Foundation for 359,800 in November 2011**. Principal Investigator: **Cindy Jong**; Co- Principal Investigators: Rachael Welder and Thomas Hodges. (**not awarded**)

An Exploration of Formal and Informal Learning Experiences on STEM versus Traditional Career Choices Among Women. **Proposal submitted to the National Science Foundation for $525,000 in March 2011.** Principal Investigator: Mary Hermann; Co-Principal Investigators: Donna Dockery, Terry Carter, **Cindy Jong**, and Whitney Sherman (**not awarded**)

Honors and Awards

Research:

UKNOW (July 1, 2020): COE Associate Dean Seeks to Break Barriers through 1st Handbook of Research in STEM Education Research, with M. Mohr-Schroeder

COE Research Spotlight (March, 2019) Community Super Investigators UK Club

UKNOW (August 9, 2019): UK COE Receives Funding to Improve Math Education for Elementary Students, with J. Thomas and M. Fisher

University of Kentucky College of Education Research and Creative Activities Award, 2017 ($12,500)

Rubovits Award for Best Paper presented at the annual conference of the New England Educational Research Organization, 2015

UKNOW (April 23, 2015): Research Symposium to Focus on Diversity, Inclusiveness

Committee on Scholars of Color in Education: Research-Mentoring Program, AERA 2012
Division K New Faculty Seminar, AERA 2011

STaR Fellow, 2010-2011
National Science Foundation funded Mentorship Project for Early Career Mathematics and Mathematics Education Faculty

Boston College Lynch School of Education Dissertation Fellowship, 2008-09 ($18,000)
National Center for Educational Statistics (NCES) International Database Training Seminar, June 2007

Mathematical Thinking using Cognitively Guided Instruction ($1,000)
UNLV Undergraduate Research Grant, Spring 2002

Teaching:

University of Kentucky Outstanding Teaching Award recipient, 2022

University of Kentucky Outstanding Teaching Award nominee, 2020

University of Kentucky College of Education *Teacher Who Made a Difference Award*, 2017

UKNOW (May 4, 2016): UK COE Welcome Breckinridge Elementary Students, with J. Meade, M. Shake, and L. Amick

University of Kentucky College of Education *Teacher Who Made a Difference Award*, 2014

Boston College *Donald J. White Teaching Excellence Award*, 2008

Boston College *Teaching Fellowship*, 2007

Teaching Experience

University of Kentucky – Lexington, KY
Teaching Mathematics in the Elementary School (Undergraduate Course)
Instructor: Fall 2011- present
Equity in STEM Education (Graduate Course)
Instructor: Spring 2016- present
Research in STEM Education (Graduate Course)
Instructor: Spring 2014
History of STEM Education (Graduate Course)
Instructor: Spring 2012; Fall 2013
Intro to STEM Education (Undergraduate Course)
Instructor: Fall 2012

Virginia Commonwealth University – Richmond, VA
Teaching Mathematics for Elementary Education
Instructor: Fall 2009 to Spring 2011

Leadership in Mathematics Education (co-taught)
Instructor: Fall 2010

Boston College – Chestnut Hill, MA
Teaching Mathematics and Technology in the Elementary School
Instructor: Fall 2008 (graduate section)
Instructor: Fall 2007 (undergraduate section) ~Course Evaluations: 4.7/5.0 **Awarded Boston College Donald J. White Teaching Excellent Award*
Teaching Assistant: Fall 2006
Mathematics Lab Instructor: Fall 2005 – Spring 2006

Salem State College – Salem, MA
Mathematics for Elementary and Middle School Teachers
Co-Instructor: August 2006 (graduate summer course)

Mountain View Elementary School – Las Vegas, NV
2nd Grade, Teacher: August 2002- July 2004

Advising Dissertations and Theses

Walker Mask, Ph.D. student in STEM Education, committee chair
Andrea Ratcliff, Ph.D. student in STEM Education, committee chair
Parastoo Zareie, Ph.D. student in STEM Education, committee chair
Mia Brown, Ph.D. student in STEM Education, committee chair
Christopher Russey, Ph.D. student in STEM Education, committee chair
Cheyenne Mills, MS student in STEM Education, committee chair
Elisabeth Read, Ed.D. student in Educational Leadership, committee member
Shane Campbell, Ph.D. student in STEM Education, committee member
Candice Conley, Ph.D. student in STEM Education, committee member
Ashlee Matney, Ph.D. student in STEM Education, committee member
Johnathan Rogers, Ph.D. student in STEM Education, committee member
John David Baumgarten, Ph.D. student in EDC, committee member
Emily Dodson-Snowden, Ph.D. student in STEM Education, committee member (April, 2022)
Cynthia Shelton, Ph.D. student in STEM Education, committee member (November, 2021)
Andrés R. Vindas Meléndez, Ph.D. student in Mathematics, committee member (April, 2021)
Jessica Doering, Ph.D. student in STEM Education, committee member (April, 2021)
Kristen Witt, Ph.D. student in STEM Education, committee member (November, 2020)
Cori Henderson, Ph.D. student in EPE, committee member (November, 2020)
Morgan Lane, MS in STEM Education, committee chair (November, 2019)
Ruixue Liu - Ph.D. student in EPE, committee member (April, 2019)
Michael Osborne, Ph.D. student in EDC, committee member (April, 2019)
Thomas Roberts - Ph.D. student in STEM Education, committee co-chair (May, 2017)
Maureen Cavalcanti - Ph.D. student in STEM Education, committee member (May 2017)
Kayla Blyman - Ph.D. student in STEM Education, committee member (May 2017)
Ben Crawford- MS in STEM Education, committee member (April, 2018)
Leanna Prater - Ph.D. student in EDC, committee member (April, 2016)
Brandon French – MS in STEM Education, committee member (April, 2016)
Kate Johnson - Ph.D. student in STEM Education, committee member (June 2015)
Ashley Taylor – MS student in EDP, committee member (April 2014)

National Service and Leadership

- Journal of Mathematics Teacher Education, Editorial Board Member, *2021- present*
- International Consortium for Research in Science and Mathematics Education – Mentor, *spring 2022*
- NSF CAREER Program, Review Panel Member, *spring 2021*
- NSF DRK-12 Program, Review Panel Member, *spring 2020*
- NSF DRK-12 Program, Review Panel Member, *spring 2019*
- PME-NA 2019- Chair of the Steering Committee
- PME-NA *2017-2019*, Mentor
- P&T External Reviewer, *2016- present*
- PME-NA 2016 – 2019 Elected Member of Steering Committee; Chair of Recruitment Subcommittee; Member of Bilingual Subcommittee; 2017-18 Chair-Elect
- PME-NA 2016 – Strand Leader for Research and Theory Strand
- AERA- 2014-2016 Division K, co-Chair of the Mathematics, Science, and Technology Section
- AERA- Division K, Mentor to 3 New Faculty Members, *2015*
- NCTM – 2013 Annual Meeting Planning Committee (Denver, CO)
- Studies in Educational Evaluation- Reviewer, *2021*
- ZDM Mathematics Education- Reviewer for Special Issue on Professional Noticing, *2020*
- Journal of Mathematics Teacher Education- Reviewer, *2018- present*
- Teaching and Teacher Education- Reviewer, *2018- present*
- Investigations in Mathematics Learning- Reviewer, *2018- present*
- Mathematics Education Research Journal- Reviewer, *2018- present*
- Journal of Educational Research- Reviewer, *2016 to present*
- NCTM – Reviewer for the *Journal for Research in Mathematics Education*, *2009 to Present*
- NCTM- Reviewer for Teaching Children's Mathematics, *2011 to 2019*
- School Science and Mathematics Journal- Reviewer, *2013 to Present*
- Mod4- University of Michigan: Pilot Teacher Education Materials and Provide feedback/recommendations for Revisions, *Fall 2008 to Spring 2010*
- AERA and NCTM –Reviewer for Annual Meeting Conference Proposals, *2008 to Present*
- PME-NA - Reviewer for Annual Meeting Conference Proposals, *2011 to Present*

State, Regional, and University Service and Leadership

- UK- Senate Advisory Committee on Diversity and Inclusion, *2017- Present (*Chair*, 2020-present)*
- Ethics, Equity, Inclusion, and Justice in the Mathematical Sciences (EEIJMS), UK working group co-organizer, *2020-present*
- UK- Dream Scholars Mentor, *spring 2022- present*
- UK- Latinx Affinity Group, Active Member, *2019- present*
- UK- Asian and Asian American Affinity Group, Member, *2021- present*
- UK- DEI Project 3, Committee to establish the Faculty Advisory Group, *2020-2021*
- UK- Center for Graduate and Professional Diversity Initiatives, Mentor, *2019-present*
- Community Super Investigators (CSI-UK Club), An Afterschool Project-based Learning Club that integrated Math and Literacy for 4^{th}-5^{th} grade students at Picadome Elementary (*Fall,*

2018) and 2nd-3rd grade students at Garden Springs Elementary (*Fall, 2019*), in collaboration with K. Perry and undergraduate research fellows
- UK- University Senator, *2012-2015*
- UK- Library Committee, *2012-2015*
- VCU- Library Committee, *2010-2011*
- Virginia Department of Education –Reviewer for the Mathematics Science Partnership Grants, *Fall 2009*
- Massachusetts Department of Higher Education- Reviewer for the STEM Pipeline Grants, *Spring 2009*
- VCU- da Vinci Center for Innovation in Product Design and Development: Advised students working on a project for the VDOE to enhance their website, *Fall 2010*

College of Education and Department Service and Leadership

- UK COE- 2030 Vision Task Force, 2021-2022
- UK COE- Promotion & Tenure Committee, *2016- present*
- UK COE- Member of Search Committee for Tenure-track Literacy Education ,*Summer 2021*
- UK COE- Member of Search Committee for Tenure-track Science Education, *2020*
- UK COE- Inclusiveness Committee, *2014 – present* (co-Chair, spring 2015-spring 2017)
- UK COE- Pre-Tenure Faculty Mentor, *2018-Present*
- UK COE- Advisory Board of the Evaluation Center, 2016-2018
- UK COE- Chair of Search Committee for Tenure-track Mathematics Education Position (successfully hired Jonathan Thomas), *2014*
- UK COE- Volunteer as Faculty Mentor to 3 Undergraduate Students, *2013-2014*
- UK COE- STEM Representative Faculty on Ed Life LLC, *2013-2014*
- UK COE- Library Committee, *2012- present*
- UK COE- Technology Committee, *2011- present*
- UK COE- Elementary Education Program Committee, *2011- present*
- VCU SOE- Diversity Committee, *2010-2011*
- VCU Department of Teaching and Learning: Early/Elementary Science Education Faculty Search Committee, *Fall 2010*
- VCU Department of Teaching and Learning: Curriculum and Instruction Faculty Search Committee, *Fall 2010*
- VCU SOE- Search Committee for Instructional Technology Specialist position, *Spring 2010*
- VCU Department of Teaching and Learning: Early/Elementary Education Program Committee- Active Member, *2009-2011*
- VCU SOE- Grade Appeal Committee, *Fall 2009*

Professional Development

PCMI- accepted to the Rehumanizing Mathematics Workshop (postponed to July 2021, virtually)

UK- Faculty Learning Community, Teaching for Equity, Spring 2018 – Spring 2019 (co-Chair of FLC to create Video on Student Voices on What it means to be Included and to create Symposium on Teaching for Equity for UK Faculty, March 22, 2019)

Validity Evidence for Measures in Mathematics Education (V-M2Ed), part II, NSF Funded, Synthesis Leader, January 2020-present

Validity Evidence for Measures in Mathematics Education (V-M2Ed) Participant, NSF Funded Conference, San Antonio, TX, April 2017

Committee on Scholars of Color in Education, New Faculty Mentoring participant, AERA Annual Meeting, April 2012 Vancouver, Canada

An Interdisciplinary Conference on Assessment in K-12 Mathematics: Collaborations Between Mathematics Education and Psychometrics, sponsored by the National Science Foundation. Atlanta, GA September 25-27, 2011. IRT Workshop Participant

Division K New Faculty Seminar, AERA Annual Meeting, April 2011 New Orleans, LA

Association of Mathematics Teacher Educators, Annual Meeting, January 27-30, 2010 Irvine, CA. Participation in STaR Fellowship

STaR Summer Institute, July 11-16, 2010 Park City, Utah
Sessions were designed to help New Mathematics and Mathematics Education Assistant Professor across the Nation improve their Research, Teaching, and Service Directors: Robert and Barbara Reys (University of Missouri)

Professional Affiliations

American Educational Research Association (Division K; SIG-RME)
National Council of Teachers of Mathematics
School Science and Mathematics Association
Psychology of Mathematics Education- North America
Association of Mathematics Teacher Educators
Society for the Advancement of Chicanos/Hispanics and Native Americans in Science
Kentucky Council of Mathematics
Kentucky Council of Teachers of Mathematics