

DIONNE CROSS FRANCIS

School of Education
University of North Carolina at Chapel Hill

I. PERSONAL INFORMATION

Contact Information:

University of North Carolina
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Chapel Hill, NC 27599
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II. EDUCATION

- 2004 - 2007 PhD, Educational Psychology
University of Georgia, Athens
- Concentration: Applied Cognition and Development
 - Dissertation: “Creating optimal mathematics learning environments: Combining argumentation and writing to enhance achievement”
- Certificate in Qualitative Inquiry
- 2002 - 2004 MA, Education
Wake Forest University, Winston-Salem, NC
- 1999 - 2000 Postgraduate Diploma in Education, Secondary Education – Mathematics
University of the West Indies, Jamaica
- Certification to teach mathematics in grades 7 -12
- 1993 - 1997 BA, Mathematics
University of the West Indies, Jamaica

III. PROFESSIONAL WORK EXPERIENCE

Academic Positions

- 2020 – present *Associate Professor, Mathematics Education*
University of North Carolina at Chapel Hill
- 2020 – present *Joseph R. Neikirk Term Professor*
University of North Carolina at Chapel Hill
- 2019 to present *Co-Director*

I CAN PERSIST (ICP) STEM Initiative

- 2013 – 2020 *Associate Professor, Mathematics Education*
Indiana University, Bloomington
- 2014 - 2019 *Director, Center for P-16 Research and Collaboration*
Indiana University, Bloomington
- 2007 - 2013 *Assistant Professor, Mathematics Education*
Indiana University, Bloomington
- 2006 - 2007 *Associate Instructor*
University of Georgia
- *Guest Lecturer, EPSY 2020 Learning and Development in Education, Department of Educational Psychology & Instructional Technology*
 - *Teaching Assistant, EMAT 3400 Children’s Mathematical Thinking, Department of Mathematics and Science Education*
- 2005 -2007 *Lead Graduate Research Assistant, Elementary Mathematics Assessment Project. Learning and Performance Support Laboratory, University of Georgia. Principal Investigator: Dr. Daniel. Hickey*
- 2005-2006 *Graduate Research Assistant, Teachers’ Emotions in the Classroom*
University of Georgia. Principal Investigator: Dr. Paul Schutz
- 2004 -2005 *Graduate Research Assistant, Design-based implementation and evaluation of NASA CET multimedia science curriculum. Learning and Performance Support Laboratory, University of Georgia.*
Principal Investigator: Daniel T. Hickey
- 2001-2004 *Secondary School Mathematics Teacher, Lithonia High School.*
DeKalb County, GA.
- 2003-2004 *Mathematics Tutor, Reading, Phonics, Math and More. Stone Mountain,*
GA.
- 2001–2003 *Secondary School Mathematics Teacher, Lithonia High School, GA, USA*
- 1997-2001 *Secondary School Mathematics Teacher, Champion College. Kingston,*
Jamaica

Other Professional Employment

- 2018 *Consultant, Transformational Leadership Program - Scholarships and Partnerships. Partnership between World Learning, Indiana University and*

University of Pristina, Kosovo funded by United States Agency for International Development (USAID).

2012– 2013; 2015 - 2018

Consultant, Effective Leadership Academy: Partnering for School Change. Kelley School of Business and Indiana University School of Education.

2017

Mathematics Professional Development Consultant & Instructor. St. Georges College, Jamaica

Responsibilities included:

- Designing and implementing professional development activities focused on guiding teachers and department chairs in developing ambitious teaching practices

2008 – Present

Curriculum Designer & Program Facilitator

Curricula include the following project-based units:

- *A pond, a swamp and a school – learning to living in harmony*
- *Inchworm*
- *SIMPA (Students' Ideas about Motivating Play Activities)*
- *STATS (Students' Thinking About Testing in Schools)*

2012

Consultant, South Sudan Higher Education Initiative for Equity and Leadership Development Project (SSHIELD). Center for Social Studies and International Education

2009 - 2013

Consultant, Greene Educational Services, Indiana

2009 -2010

Mathematics Professional Development Consultant & Instructor. Institute of Education, University of the West Indies, Mona, Jamaica

2005-2006

Curriculum and Assessment Developer, Center for Educational Technology. Wheeling Jesuit University.

2004-2005

Education Consultant, Visiting International Faculty Program, Atlanta, GA.

IV. HONORS

2020

Fulbright Award_ University of Ghana
Martha Lea and Bill Armstrong Chair in Teacher Education (declined due to professional relocation)
Indiana University Faculty Exchange – University of Ghana

2018

MIRA Award Nominee (Honoring the Best in Tech in Indiana)

2016

University of Georgia School of Education Young Alumni Award

- Indiana University Institute of Advanced Study Residential Fellow
Indiana University Institute of Advanced Study Individual Research Award
- 2015 Indiana University School of Education Trustee's Teaching Award
- 2014 K-12 Promotion of Education Award from the Women of Color STEM Conference
- 2012 Indiana University School of Education Students' Choice for Excellence in Teaching Award
- 2011 Indiana University School of Education Graduate Student Mentor Award
- 2009 American Psychological Association (APA), Division 15 Early Career Award
Ralph E. Powe Junior Faculty Enhancement Award
- 2006 University of Georgia Dissertation Completion Award,
American Psychological Association (APA), Division 15 Graduate Student Seminar,
(2006)
International Conference of the Learning Sciences (ICLS), Doctoral Student Seminar,
(2006)

V. BIBLIOGRAPHY AND SCHOLARSHIP

- * identifies publications with students and/or junior faculty (including postdocs)
- † identifies publications that targets practitioners

Books

Schutz, P., Hong, J. & **Cross Francis, D.** (2020). *Teachers' Goals, Beliefs, Emotions, and Identity Development: Investigating Complexities in the Profession*. Taylor and Francis

Schutz, P., Hong, J. & **Cross Francis, D.** (Eds.) (2018). *Research on Teacher Identity: Mapping Challenges and Innovations*. Springer

Chapters in books

Buck, G., **Cross Francis, D.** & Wilkins-Yel, K. (2020). *Research on Gender Equity in STEM Education*. In C. Johnson, M. J. Mohr-Schroeder, T. Moore & L. English (Eds.) *Handbook of Research on STEM Education*.(pp 289-299). Routledge.

Cross Francis, D. (in preparation). *Mathematics teaching and student Learning*. Handbook of Educational Psychology 4th Edition. Chapter

***Cross Francis, D.**, Wilkins-Yel, K., Paul, K. & Maltese, A. (2019). Underrepresentation of women and students of color in STEM. In A. Sahin & M. J. Mohr-Schroeder (Eds.) *STEM education 2.0. myths and truths: What has K-12 STEM education taught us?* (pp. 36 – 52). Brill.

- ***Cross Francis, D., Hong, J., Lui, J. & Eker, A. (2018).** “I’m not just a math teacher”: Understanding the Development of Elementary Teachers’ Mathematics Teacher Identity.. In P. Schutz, J. Hong & D. Cross Francis (Eds.) *Research on Teacher Identity: Mapping Challenges and Innovations*. (pp. 133-143). Springer
- Schutz, P., **Cross Francis, D.** & Hong, J. (2018). Research on Teacher Identity: Introduction to Mapping Challenges and Innovations. In P. Schutz, J. Hong & D. Cross Francis (Eds.) *Research on Teacher Identity: Mapping Challenges and Innovations*. (pp 3-9). Springer
- Hong, J., **Cross Francis, D.** & Schutz, P. (2018). Research on Teacher Identity: Common Themes, Implications, and Future Directions. In P. Schutz, J. Hong & D. Cross Francis (Eds.) *Research on Teacher Identity: Mapping Challenges and Innovations*. (pp. 243-251). Springer
- *†**Cross Francis, D., Adefope, O., Lee, M. & Perez, A. (2017).** Hungry for early spatial and algebraic reasoning: Teacher Notes and Activities. In D. Thiessen (Ed.) *Exploring Mathematics through Literature: Articles and Lessons for Prekindergarten through Grade 8*. Available online: <http://www.nctm.org/publications/exploringmath/>
- ***Cross Francis, D., Rapacki, L. & Eker, A. (2014).** The individual, the context and practice: A review of the research on teachers’ beliefs related to mathematics. In M. Gregoire Gill & H. Fives (Eds.) *International Handbook of Research on Teachers’ Beliefs* (pp. 336-352).Routledge.
- Spangler, D., Kim, J., **Cross, D.**, Swanagan, D., Kilic, H. & Iscimen, A. (2014). Using classroom evidence to inform and improve instruction. In K. Karp (Ed.) *Annual Perspectives in Mathematics Education: Using Research to Improve Instruction* (pp. 97-103). Reston, VA.
- Cross, D. I. & Hong, J. Y. (2009).** Beliefs and professional identity: Critical constructs in examining the impact of reform on the emotional experiences of teachers. In P.A. Schutz & M. Zembylas, M. (Eds). *Advances in teacher emotion research: The impact on teachers' lives* (pp 273-296). Springer.
- Mewborn, D., & **Cross, D.** (2007). Mathematics teachers’ beliefs and their connection to student learning. In W.G. Martin, M.E. Strutchens & P.C. Elliott (Eds.) *The learning of mathematics: NCTM 69th Yearbook* (pp. 259-270). Reston, VA.
- Schutz, P.A., **Cross, D.I.**, Hong, J.Y., & Osbon, J. N. (2007). Teacher understandings, thoughts and beliefs about emotions in the classroom. In P.A. Schutz & R. Pekrun (Eds.), *Emotions in Education* (pp. 215-233). San Diego CA: Elsevier Inc.
- Refereed Journal Articles*
- ***Cross Francis, D., Hong J., Liu, J., Eker, A., Lloyd, K., Bharaj, P. K., & Jeon, M. (2020).** The Dominance of Blended Emotions: A Qualitative Study of Elementary Teachers’

Emotions Related to Mathematics Teaching. *Frontiers in Psychol.* 11:1865. doi: 10.3389/fpsyg.2020.01865

- *Hong, J. & **Cross Francis, D.** (2020). Unpacking complex phenomena through qualitative inquiry: The case of teacher identity research, *Educational Psychologist*, DOI: 10.1080/00461520.2020.1783265
- *†Tan, V., Liu, J., Bharaj, P. K., & **Cross Francis, D.**, (in press). Workplace Simulation Project: Innovating STEM education by partnering schools and industry, *Research to Practice, School Science and Mathematics*.
- *Hong, J., **Cross Francis, D.**, Wang, Q., Lewis, L., Parsons, A., Neill, C., & Meek, D. (2020). The role of trust: Teacher capacity during school leadership transition. *Frontiers in Education*, 5, 1-9. <https://doi.org/10.3389/feduc.2020.00108>
- ***Cross Francis, D.**, Tan, V. & Nicholas, C. (2019). Supporting disciplinary and interdisciplinary knowledge development and design thinking in an informal, pre-engineering program: A Workplace Simulation Project. *School Science and Mathematics, 119(7)*, 382-395.
- ***Cross Francis, D.**, Liu, J., Bharaj, P.K. & Eker, A. (2019). Integrating social-emotional and academic development in teachers' approaches to educating students. *Policy Insights in Behavioral and Brain Sciences*, 6(2), 138 – 146.
- *†Tan, V., Nicholas, C., Scribner, A. & **Cross Francis, D.** (2019). Enhancing STEM Learning through an Interdisciplinary, Industry-Generated Project. *Technology and Engineering Teacher*, 79 (1), 26 - 31.
- *†Lee, M. & **Cross Francis, D.** (2019). Measuring Penny. *Teaching Children Mathematics*, 25(4), 232-241.
- *†Lee, M. & **Cross Francis, D.** (2018). Using literature to develop young students' measurement and graphing talents. *OnCore*. Fall 2018, 5-11.
- *Lee, M. & **Cross Francis, D.** (2018). Investigating the relationship among elementary teachers' perceptions of the use of students' thinking, their professional noticing skills, and their teaching practices. *Journal of Mathematical Behavior*, 51, 118-128.
- *Hong, J. Y., Greene, B., Roberson, R., **Cross Francis, D. I.**, & Rapacki, L. (2017). Variations in pre-service teachers' career exploration and commitment to teaching. *Teacher Development*.
- *†Zeybek, Z. & **Cross Francis, D.** (2017). Let's cut the cake. *Teaching Children Mathematics*, 23(9), 542 - 548

- *†Lee, M. & **Cross Francis, D.** (2016). Five ways to improve children's understanding of length measurement. *Teaching Children Mathematics*, 23(4), 218-224
- Cross Francis, D.** (2015). Dispelling the notion of inconsistencies in teachers' mathematics beliefs and practices: A three-year case study. *Journal of Mathematics Teacher Education*, 18(2), 173 - 201.
- *†**Cross Francis, D.**, Hudson, R., Lee, M., Rapacki, L. & Vesperman, C. (2014). Motivating play using statistical reasoning. *Teaching Children Mathematics*, 21(4), 228-237
- *†Rapacki, L. & **Cross Francis, D.** (2014). I am a Math Coach, Now What? *Teaching Children Mathematics*, 20 (9), 556-563
- ***Cross Francis, D.**, Hudson, R., Vesperman, C. & Perez, A. (2014). Comparing Technology-supported Teacher Education Curricular Models for Enhancing Statistical Content Knowledge. *Interdisciplinary Journal of Problem-based Learning*, 8(1).
- ***Cross, D. I.**, Hudson, R. A., Adefope, O., Lee, M. Y., Rapacki, L., & Perez, A. (2012). Success made probable: African-American girls' exploration in statistics through project-based learning. *Journal of Urban Mathematics Education*, 5(2), 55-86.
- Hickey, D., Taasoobshirazi, G. & **Cross, D.** (2012). Assessment as learning: Enhancing discourse, understanding, and achievement in innovative science curricula. *Journal of Research in Science Teaching*, 49 (10), 1240-1270.
- Cross, D.I.** & Hong, J. (2012). An ecological examination of teachers' emotions in the school context. *Teaching and Teacher Education*, 28 (12), 957-967.
- *†**Cross, D. I.**, Adefope, O., Lee, M. & Perez, A. (2012). Hungry for early spatial and algebraic reasoning. *Teaching Children Mathematics*, 19 (1), 42-49
- *†Hudson, R., **Cross, D. I.**, Lee, M. & Rapacki, L. (2012). Learning to tinker: Using dynamic data analysis software to develop statistical reasoning. *Teaching Children Mathematics*, 18 (8), 508-513
- *Gresalfi, M., Barnes, J. & **Cross, D.** (2012). When does an opportunity become an opportunity? Unpacking classroom practice through the lens of ecological psychology. *Educational Studies in Mathematics*, 80 (1), 249-267.
- Cross, D. I.**, Hong, J. & Williams-Johnson, M. (2011). 'It's not better or worse, it's just different': Examining Jamaican teachers' pedagogical and emotional experiences in the US. *Teacher Development*, 15, 499-515.
- *Park Rogers, M. A., **Cross, D. I.**, Gresalfi, M., Trauth-Nare, A. E. & Buck, G. A. (2011). First year implementation of a project-based learning approach: The need for addressing

teachers' orientations in the era of reform. *International Journal of Science and Mathematics Education*, 9(4), 893-917.

- *†Kilic, H., **Cross, D.**, Ersoz, A., Mewborn, D., May, D. & Kim, J. (2010). Teacher facilitation techniques for small group discourse. *Teaching Children Mathematics*, 16(6), 350-360.
- Cross, D.** (2009). Alignment, cohesion and change: Examining mathematics teachers' belief structure and its influence on instructional practice. *Journal of Mathematics Teacher Education*, 12(5), 325-346.
- Cross, D.** (2009). Creating optimal mathematics learning environments: Combining argumentation and writing to enhance achievement. *International Journal of Science and Mathematics Education*, 7 (5), 905-921.
- Williams, M. R., **Cross, D.**, Hong, J. Y., Aultman, L. P., Osbon, J. N., & Schutz, P. A. (2008). "There are no emotions in math": How teachers approach emotions in the classroom. *Teacher College Record*, 110 (8), 1574-1612.
- Cross, D.**, Taasoobshirazi, G., Hendricks, S. & Hickey, D. (2008). Argumentation: A strategy for improving achievement and revealing scientific identities. *International Journal of Science Education*, 30 (6), 837-861.
- Schutz, P. A. Hong, J. Y., **Cross, D. I.**, & Osbon, J. N. (2006). Reflections on investigating emotion in educational activity settings. *Educational Psychology Review*, 18(4), 343-360.

Refereed Conference Proceedings

- ***Cross Francis, D.**, Eker, A., Lui, J., Lloyd, K. & Bharaj, P. (2019). Teachers' perceptions of teacher-student relationships and their importance to mathematical success. In Otten, S., Candela, A. G., de Araujo, Z., Haines, C., & Munter, C. (2019). *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.
- ***Cross Francis, D.**, Eker, A., Lloyd, K., Lui, J. & Alhaayan, A. (2018). High-quality instruction ≠ High-level noticing: Examining factors that influence teachers' noticing. In Hodges, T.E., Roy, G. J., & Tyminski, A. M. (Eds.). (2018). *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. (pp. 1020-1027). Greenville, SC: University of South Carolina & Clemson University.
- *Eker, A. & **Cross Francis, D.** (2018). Exploring teachers' decisions in unit design and implementation. In Hodges, T.E., Roy, G. J., & Tyminski, A. M. (Eds.). (2018). *Proceedings of the 40th annual meeting of the North American Chapter of the*

International Group for the Psychology of Mathematics Education. (pp. 363-365).
Greenville, SC: University of South Carolina & Clemson University.

- ***Cross Francis, D.**, Eker, A., Lloyd, K., Lui, J. & Alhaayan, A. (2017). Exploring the relationship between teachers' noticing, mathematical knowledge for teaching, emotions and efficacy. 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. 122-1225). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators.
- *Sevis, S., **Cross Francis, D.** & Hudson, R. (2017) Teachers' takeaways from morning math problems. 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* (pages 423-430). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators.
- ***Cross Francis, D.**, Hudson, R., Lee, J., & Vesperman, C. (2013). *Middle grades teachers' enactment of knowledge of sampling*. Martinez, M. & Castro Superfine, A (Eds.). (2013). Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 349-357). Chicago, IL: University of Illinois at Chicago
- Cross, D. I.**, & Hong, J. (2012). "*I'm not sitting here doing worksheets all day!*": A longitudinal case study exploring perceived discrepancies between teachers' beliefs and practices. In Proceedings of the Twelfth International Conference on Mathematics Education (pp. 5695-5704). COEX, Seoul, South Korea.
- Cross, D. I.** (2009). *Investigating in-service teachers' mathematical belief models*. In S. L. Swars, D. & S. Lemons-Smith, S. (Eds.), Proceedings of the thirty-first annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Atlanta, GA: Georgia State University.
- Mewborn, D. S., Ersoz, F. A., **Cross, D. I.**, Kilic, H. May, D. K., & Kim, J. (2007). *Open-ended assessment, formative feedback routines, and classroom discourse: Influences on student learning*. In T. Lamberg (Ed.), Proceedings of the twenty-ninth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 235-237). Reno, NV: University of Nevada–Reno.

Reports

Cross Francis, D. (2018, January). *Center for P-16 Research and Development Self-Study*. Report written in collaboration with the Center's staff and submitted to the External Review Panel.

Cross, D. & Hickey, D. (2005, June) *Design-Based Implementation & Evaluation: Exploring the Environment[®] Final Report*. Project supported by NASA-funded Center for Educational Technologies: Classroom of the Future.

Manuscripts under review

Cross Francis, D., Eker, A., Liu, J., Lloyd, K. & Bharaj, P. (under review). *Examining the relationship between noticing and instructional quality*. Journal Article.

***Cross Francis, D., Park Rogers, M., Eker, A., Liu, J. & Lloyd, K.** (under review). Math Explorations within a STEM Activity.

Zeybek, Z., **Cross Francis, D., Adefope, O., Lee, M. & Eker, A.** (under review). *Learning fractions conceptually*. Journal Article

Cross Francis, D. & Park Rogers, M. (under review). *Examining the effect of combining mathematics and science professional development on teachers' mathematical knowledge for teaching and quality of instruction*. Manuscript for publication.

*Neill, C., Wang, Q., **Cross Francis, D., Parsons, A., Lewis, L. A., & Hong, J.** (under review). *The wrong tools for the job: Teachers' voices on cultural capital mismatch*. Manuscript submitted for publication.

Refereed Conference Presentations

***Cross Francis, D., Eker, A., Lui, J., Lloyd, K., Bharaj, P., Hong, J. & Jeon, M.** (2020, October). *"I must be a glutton for punishment": Teachers' emotions related to videorecording of mathematics instruction*. Paper accepted for presentation at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Mazatlan, Mexico

***Cross Francis, D., Eker, A., Lui, J., Lloyd, K., Bharaj, P., Hong, J. & Jeon, M.** (2020, October). *Exploring prospective elementary teachers' conceptions of quadrilaterals*. Poster accepted for presentation at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Mazatlan, Mexico

***Cross Francis, D., Hong, J., Liu, J., Eker, A., Lloyd, K. & Bharaj, P. & Jeon, M.** (2020, October). *Examining teachers' emotional experiences through the process of mathematics instructional change*. Paper accepted for presentation at the 14th International Congress on Mathematical Education (ICME-14). Shanghai, China.

- *Liu, J., **Cross Francis, D.** & Eker, A. (2020, July). *Examining U.S. elementary teachers' perceptions of and comfort with students' mathematical mistakes*. Paper accepted for presentation at the 14th International Congress on Mathematical Education (ICME-14). Shanghai, China.
- * Wang, Q., Hong, J. Y., Neill, C. D., **Cross Francis, D. I.**, Lewis, L. A. & Parsons, A. (2020, Apr 17 - 21) *Elementary Teachers' Experiences in Building Positive Teacher-Student Relationships in High-Poverty and High-Diversity Schools* [Roundtable Session]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/txaykag> (Conference Canceled)
- * Hong, J. Y., Wang, Q. & **Cross Francis, D. I.** (2020, Apr 17 - 21) *Low Commitment to a Teaching Career: Hesitation, Doubt, and Discouragement* [Paper Session]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/wexpav6> (Conference Canceled)
- * Danish, J. A., Nicholas, C., Hmelo-Silver, C. E., Park Rogers, M. A., **Cross Francis, D. I.**, Enyedy, N. D., Keifert, D. & Stiso, C. (2020, Apr 17 - 21) *What, How, and Why Do Elementary Teachers Think About Using Representations in Their Science Teaching?* [Paper Session]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/uey6p37> (Conference Canceled)
- ***Cross Francis, D.**, Eker, A., Lui, J., Bharaj, P & Lloyd, K. (2019). *Exploring teachers' perceptions of teacher-student relationships and their importance for students' mathematical success*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. St. Louis, MO.
- Cross Francis, D.** & Hong, J. (2019). *Investigating the Effectiveness of an Individualized Coaching Model for Mathematics Teachers*. Paper presented at the annual meeting of the European Association of Research on Learning and Instruction, Aachen, Germany.
- *Hong, J., **Cross Francis, D.**, Neill, C. (2019). *Various Dispositions of Teacher Empathy in Diverse Classrooms*. Paper presented at the annual meeting of the European Association of Research on Learning and Instruction, Aachen, Germany.
- Park Rogers, M., Danish, J., Nicholas, C., **Cross Francis, D.**, Hmelo-Silver, C. (2019). *Supporting teacher cognition and instruction of science representations in elementary classrooms: A peek into the first year of a multi-year program*. Poster presented at the Association for Science Teacher Education International Conference. Savannah, GA.
- Cross Francis, D.** (2019). *Identifying the Differential Impact of an Individualized Coaching Approach*. Paper presented at the annual meeting of the National Council of Teachers of Mathematics, San Diego, CA.

- *Eker, A., Lui, J., Lloyd, K., Bharaj, P. & **Cross Francis, D.** (2019) *The Impact of Professional Identity on Quality of Mathematics Instruction*. Paper presented at the annual meeting of the National Council of Teachers of Mathematics, San Diego, CA.
- *Bharaj, P. & **Cross Francis, D.** (2019). *A Study to Examine Preservice Teachers' Understanding of the Quadrilaterals*. Paper presented at the annual meeting of the National Council of Teachers of Mathematics, San Diego, CA.
- Cross Francis, D.** & Park Rogers, M. (2019). *Examining the effect of combining mathematics and science professional development on teachers' mathematical knowledge for teaching and quality of instruction*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- *Hong, J., **Cross Francis, D.**, Wang, Q., Lewis, L., Parsons, A. & Neill, C. (2019). *Building and sustaining trusting relationships during transition: A curious case of an urban elementary school*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- ***Cross Francis, D.**, Eker, A., Lui, J., Lloyd, K. & Flessner, C. (2019). *Examining the role of professional identity on teachers' conceptions of mathematically productive relationships*. Poster presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- Schutz, P., Hong, J. & **Cross Francis, D.** (2019). *Teacher identity development in dynamic social and cultural contexts*. Symposium organized at the annual meeting of the American Educational Research Association, Toronto, Canada.
- *Lui, J., Lloyd, K., Flessner, C., **Cross Francis, D.** & Eker, A. (2019). *The impact of mathematically productive relationships on classroom management*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- *Neill, C., Wang, Q., **Cross Francis, D.**, Parsons, A., Lewis, L. & Hong, J. (2019). *Managing mismatch: Bridging the gap or stubbornly standing still*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- *Parsons, A., Lewis, L., Hong, J., Neill, C., Wang, Q. & **Cross Francis, D.** (2019). *Island or Village: The impact of new administrators on communication, cohesion and community*. Poster presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- ***Cross Francis, D.**, Eker, A., Lloyd, K., Lui, J. & Alhaayan, A. (2018). *High-quality instruction \neq High-level noticing: Examining factors that influence teachers' noticing*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Greenville, SC.

- Eker, A. & **Cross Francis, D.** (2018). *Exploring teachers' decisions in unit design and implementation*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Greenville, SC.
- Hong, J. & **Cross Francis, D.**, (2018). *Beyond Thematic Coding: Applications of Qualitative Methods to Advance Motivation Studies*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Cross Francis, D.**, Eker, A., Lloyd, K., Lui, J. & Campbell, M. (2018). *Teaching to Support Productive Struggle: Exploring Tensions between Positive Teacher-Student Relationships and Mathematical Relationships*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- ***Cross Francis, D.**, Eker, A., Lloyd, K., Lui, J. & Alhaayan, A. (2017). *Exploring the relationship between teachers' noticing, mathematical knowledge for teaching, emotions and efficacy*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Indianapolis, IN.
- Sevis, S., **Cross Francis, D.** & Hudson, R. (2017) Teachers' takeaways from morning math problems. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Indianapolis, IN.
- ***Cross Francis, D.**, Hong, J., Liu, J. & Eker, A. (2017). *"I'm Not Just a Math Teacher": Understanding the Development of Elementary Teachers' Mathematics*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.
- ***Cross Francis, D.**, Hong, J., Liu, J. & Eker, A. (2017). *Examining the Role of Professional Development in Elementary Teachers' Emotional Shifts*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Cross Francis, D.**, Hudson, R. & Lee, M. (2017). *Examining the Role of Problem Solving in Changing Elementary Teachers' Beliefs About Mathematics*. Roundtable at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Cross Francis, D.** (2016). *"It's not like I hate my job": Insights into the deceptive nature of positive emotions*. Paper presented at the International Conference on Motivation, Thessaloniki, Greece.
- Hong, J., Greene, B. & **Cross Francis, D.** (2016). *Negative Emotions and Attributions: Understanding the Actions and Inaction of Early Career Teachers*. Paper presented at the International Conference on Motivation, Thessaloniki, Greece
- Lee, M. Y., & **Cross Francis, D.** (2016). *Investigating the relationship between elementary teachers' perception about the use of students' thinking and their professional noticing skills*. Paper presented at the 13th International Congress on Mathematical Education (ICME-13). Hamburg, Germany.

Cross Francis, D. (2015). *Psychological Informants of Elementary Teachers' Mathematical Noticing*. Poster presented at the annual meeting of the American Psychological Association, Toronto, Canada.

***Cross Francis, D.**, Rapacki, L., Hudson, R.I & Dilworth, L. (2015). *Really Don't Want to Watch My Video": Examining Psychological and Cognitive Informants of Teachers' Noticing*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Orlando , FL.

*Hudson, R., **Cross Francis, D.**, Rapacki, L & Lee, M. (2015). *Teachers Beliefs as Portrayed in NCTM's Principles to Actions*. Paper to be presented at the annual meeting of the National Council of Teachers of Mathematics Research Pre-session, Boston, MA.

Adefope, O., **Cross Francis, D.**, Lee, M. & Zeybek, Z. (2015). *Delving into the pieces: Drawing connections between different domains of mathematical knowledge for teaching*. Paper to be presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Wright Fields, C., Lovelace, D., & **Cross Francis, D.** (2015). *Leveraging Resources through Campus Collaboratives to Support Student Success*. Workshop at the ACPA-College Student Educators International Convention, Tampa, FL.

Wright Fields, C., Lovelace, D., Power Carter, S., & **Cross Francis, D.** (2015). *Students' Cultural Identity Development in a Pre-College Academy*. Workshop at the ACPA-College Student Educators International Convention, Tampa, FL.

Cross Francis, D., Lee, J. & Hudson, R. (January, 2014). *Productive dispositions for teaching and thriving in mathematics project-based learning (PBL)*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.

Cross Francis, D., Hudson, R., Lee, J., & Vesperman, C. (November, 2013). *Middle grades teachers' enactment of knowledge of sampling*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL: University of Illinois at Chicago

Cross Francis, D., Hudson, R. & Vesperman, C. (January, 2013). *Comparing teacher education curricular models for statistical content knowledge*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Orlando , FL.

*Hong, J., Greene, B., Roberson, R., **Cross, D.**, & Rapacki, L. (August, 2012). *Understanding pre-service teachers' professional identity development*. Poster to be presented at the annual meeting of the American Psychological Association, Orlando, Florida.

- *Robbins, R., Hong, J., **Cross, D.**, & Roberson, R. (August, 2012). *Multi-cultural classroom pedagogy*. Poster to be presented at the annual meeting of the American Psychological Association, Orlando, Florida.
- ***Cross, D.**, Rapacki, L. & Adefope, O. (2012, April). *Designing professional development to resolve identified inconsistencies in teachers' math-related beliefs*. Paper to be presented at the annual meeting of the National Council of Teachers of Mathematics Research Pre-session, Philadelphia, PA.
- Cross, D. I.** & Hong, J. (2012, July). *"I'm not sitting here doing worksheets all day!": A longitudinal case study exploring perceived discrepancies between teachers' beliefs and practices*. Paper to be presented at the 12th International Congress on Mathematical Education (ICME-12), Seoul, Korea
- Hong, J. & **Cross, D.** (Symposium session program chairs). *Motivation and Emotion in Context: Exploring the Influence of Culture and Context on Teachers' Lives*. Symposium at the annual meeting of the 2012 American Educational Research Association, Vancouver, British Columbia, Canada.
- Cross, D.** & Hong, J. (2012, April). *Emotional regulation during the act of teaching*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.
- Hong, J. & **Cross, D.** (2012, April). *"You have a calling and teaching's my call": Exploring teachers' vocation, identity, and resilience strategies*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.
- Cross, D.** & Hong, J. (2012, April). *Dispelling the notion of inconsistencies between teachers' beliefs and practices: A three-year case study*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.
- *Hong, J., Greene, B., Roberson, R., **Cross, D.**, Rapacki, L. & Higgins, E. (2012). *Teacher identity development: A psychological journey of career decision-making*. Poster presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.
- Galindo, E., **Cross, D.**, Lee, J., & Borgioli Yoder, G. (2012, Jan). *Nurturing an emergent professional learning community: A framework for a mathematics partnership in rural school districts*. Poster session at the United States Department of Education Mathematics and Science Partnerships Program, New Orleans, LA.
- Cross, D.** (2011, August). *Improving content knowledge as a route to changing beliefs*. Poster presented at the annual meeting of the American Psychological Association, Washington, DC.

- Hong, J.Y., Greene, B., & **Cross, D.** (2011, May). *Understanding teacher identity development through narrative inquiry*. Paper presented for the 2011 Narrative Research in Progress Conference, Anchorage, AK.
- Cross, D.**, Hudson, R. & Lee, J. (2011, April). *Designing environments to support teacher learning of project-based learning*. Poster presented at the annual meeting of the National Council of Teachers of Mathematics Research Pre-session, Indianapolis, IN.
- ***Cross, D.**, Adefope, O., Lee, M., Rapacki, L. (2011, April). *Success made probable: African-American girls' exploration in statistics through project-based learning*. Paper presented at the annual meeting of the National Council of Teachers of Mathematics Research Pre-session, Indianapolis, IN.
- *Perez, A., **Cross, D.**, Adefope, O. & Lee, M. (2011, April). *GeoAlgebra: Kindergarteners seeing patterns and making generalizations*. Presentation at the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
- Cross, D.**, Hudson, R. & Lee, J. (2011, April). *S.T.A.T.S: Students' reasoning about statistics within a project-based context*. Presentation at the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
- Cross, D.**, Hudson, R. & Lee, J. (2011, April). *'If they produce it, they will remember it': Examining the role of productive mathematical teaching dispositions and other supports on the implementation of math PBL*. Poster presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Cross, D.** & Hong, J. (2011, April). *An ecological examination of teachers' emotions in the school context*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- *Galindo, E., Yoder, G. Rapacki, L. & **Cross, D.** (2011, January). *Joining with teachers to construct an emergent curriculum: Lessons from a partnership in grades K-6*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.

Invited Lectures and Presentations

- Cross Francis, D.** (April, 2019). *The development of mathematics teachers' beliefs, knowledge and practice*. Invited discussant at the annual meeting of the American Educational Research Association, Toronto, Canada.
- Cross Francis, D.** (July, 2018). *Building and maintaining mathematically productive relationships*. Invited presentation at the ElevateED: Educational Conference presented by MSD Pike Township and Lawrence Township

Cross Francis, D. (July, 2018). *Shaping interdisciplinary Mindsets: Exploring M-thinking with the context of S-T-E-M.* Invited presentation at the ElevateED: Educational Conference presented by MSD Pike Township and Lawrence Township

Cross Francis, D. (July, 2018). *Dice, spinners, cards: Exploring probability in the early grades.* Invited presentation at the ElevateED: Educational Conference presented by MSD Pike Township and Lawrence Township

Cross Francis, D. (July, 2018). *Constructing Quads: The wonders of the compass and straightedge.* Invited presentation at the ElevateED: Educational Conference presented by MSD Pike Township and Lawrence Township

Cross Francis, D. & Haywood, S. (October, 2017). *Workplace Simulation Project: Connecting Schools and Businesses.* Award presentation at the annual meeting of Indiana University Womens' Philanthropy Leadership Council, Bloomington IN.

Cross Francis, D. (October, 2017). *Elementary Math Specialists: Ensuring the Intersection of Research and Practice.* Plenary Panel at the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education

Cross Francis, D. (July, 2017). *Supporting ambitious instruction.* Invited presentation at the iSTEP program. Indiana University School of Public Health.

Cross Francis, D., Park Rogers, M. & Donahue, K. (March, 2017). *Where did they go?: Using STEM to track and understand marine animal movements.* Invited presentation for the Monroe County Community School Corporation's Girls in Engineering, Mathematics and Science (GEMS) Conference

Cross Francis, D. (September, 2016). *Wonderlab: Supporting long-term educational and professional interest in STEM.* Invited presentation at Wonderlab's Science Night Out.

Cross Francis, D. (August, 2016). *Advances and Issues in the Study of Gender and Motivation in STEM.* Symposium discussant at the International Conference on Motivation, Thessaloniki, Greece.

Cross Francis, D. (July, 2016). *Fractions ARE Fun!: A manipulative-based approach to exploring fraction computation.* Invited presentation at the ElevateED: Educational Conference presented by MSD Pike Township and Lawrence Township

Cross Francis, D. (July, 2016). *Using Literature as an Anchor from Integrating Core Mathematical Ideas in the Early Grades.* Invited presentation at the ElevateED: Educational Conference presented by MSD Pike Township and Lawrence Township

Cross Francis, D. (July, 2016). *The problems of mathematics education.* Invited presentation at the iSTEP program. Indiana University School of Public Health.

- Cross Francis, D. & Rapacki, L.** (June, 2016). *Exploring a psychologically-based approach to developing math teacher leaders*. Invited presentation at Research and Development Conference: Preparing and Implementing Successful Mathematics Coaching Programs. Virginia Commonwealth University, VA.
- Cross Francis, D. I.** (August, 2013). *Examining the impact of a beliefs-driven teacher change approach on teachers' instructional practices*. Invited paper to be presented at the annual meeting of the American Psychological Association, Honolulu, HI.
- Cross Francis, D.** (2013, August). Moving towards a vision of mathematics learning as patient problem solving. Invited presentation to launch the Lawrence Township Summer Summit 2013. Fall Creek Valley Middle School, Indianapolis, IN.
- Cross Francis, D.** (2013, April). *Common Core State Standards: Implications for Equity and Social Justice*. Invited presentation for a session organized by the Division C Affirmative Action Council at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Cross Francis, D. & Hong, J.** (2013, March). *A longitudinal case study exploring perceived discrepancies between math teachers' beliefs and practices*. Invited presentation to the Mathematics Department at University of Oklahoma, Norman, OK.
- Cross Francis, D.** (2013, February). *Seeing the ME in THEM: Promoting Equity and Diversity in the Classroom*. Workshop organized and conducted at the LEAD Conference. Indiana University Hudson and Holland Program, Bloomington, IN.
- Cross, D.** (2012, October). *Girls and Women in Education – A Conversation about Culture, Leadership, and Laws*. Invited member of the panel sponsored by the Office of Women's Affairs. Indiana University School of Education, Bloomington IN.

VI. GRANTS & RESEARCH PROJECTS

External Funding Agencies

- | | |
|-------------|---|
| 2020 – 2025 | Cross Francis, D. (Co-Principal Investigator). <i>Analyzing a Multigenerational Mentorship Environment Designed to Advance STEM Persistence of Undergraduate Women of Color</i> . National Science Foundation, (\$1,549,141; 22.5% effort per year) |
| 2019 – 2020 | Cross Francis, D. (Principal Investigator). <i>21st Century Community Learning Center</i> , Indiana Department of Education. (\$146,184; 5% effort per year) |

- 2017 – 2022 Cross Francis, D. (Co-Principal Investigator). *Teachers as Learners: Teacher Cognition and Learning about Incorporating Science Representations in Elementary Classrooms*. James S. McDonnell Foundation. (\$2,330,529; 7.5% effort per year)
- 2017 – 2021 Cross Francis, D. (Principal Investigator). *Balfour Scholars Program*. Lloyd G. Balfour Foundation. (\$773,000; 5% effort per year)
- 2018 – 2019 Cross Francis, D. (Co-Principal Investigator). *2018 Baxter STEM Academy at Indiana University School of Education*. Baxter Pharmaceuticals. (\$34,750; 0% effort)
- 2016 – 2018 Cross Francis, D. (Principal Investigator). *Workplace Simulation Project PLUS (WSP+): Developing future professionals with STEM+C knowledge and 21st Century skills and Dispositions*. Skill UP Indiana! Developing Indiana's Workforce for the Jobs of Tomorrow. (\$666,720; 22.5% effort per year)
- 2012 – 2016 Cross Francis, D. (Principal Investigator). (2012-2016). *Balfour Scholars Program*. Lloyd G. Balfour Foundation. (\$800,000; 5% effort per year)
- 2015 – 2017 Cross Francis, D. (Principal Investigator and Professional Developer). *LIFE: A professional development partnership between Lawrence Township schools (Brook Park, Harrison Hill and Winding Ridge), Indianapolis Public Schools (IPS # 48), Fairview Elementary Schools, Indiana University Bloomington and Indiana University Northwest*. Indiana Commission for Higher Education. (\$281,168; 22.5% effort)
- 2013 – 2015 Cross, D. (Principal Investigator & Professional Developer). *Tapping Teacher Potential: A Professional Development Program Designed to Boost Mathematics Teacher Effectiveness across Lake County*. Collaboration between Indiana University Bloomington, Gary Community School Corporation (GCSC) and the School City of Hammond (SCH). Indiana Commission of Higher Education. (\$261,660; 22.5% effort per year)
- 2013 – 2015 Cross, D. (Principal Investigator & Professional Developer), Park Rogers, M. (Co-Investigator). *Partnerships for Improving Mathematics and Science Instruction through Integration (PIMSII)*: Collaboration between Indiana University Bloomington, Indiana University Northwest, Gary Community School Corporation (GCSC) and the School City of East Chicago (SCEC). Indiana Department of Education. (\$649,678; 12.5% effort per year)
- 2010 – 2013 Cross, D. (Co-Principal Investigator and Professional Developer), Galindo, E. (Principal Investigator). *Greene County Math Advancement*

Partnership Project. A Partnership between Indiana University School of Education, the IU Department of Mathematics in the College of Arts and Sciences, White River Valley School District. Indiana Department of Education. (\$1,103,548; 7.5 % effort per year)

- 2010 – 2011 Cross, D. (Principal Investigator). *Success made probable: Exploring statistics through Project-Based Learning*. American Association of University Women Community Action Grant. \$7,000.
- 2009 – 2011 Cross, D. (Principal Investigator & Professional Developer). *Improving elementary teachers' mathematical content knowledge as a route to changing beliefs*. American Psychological Association Division 15 Early Career Award. \$7,500.
- 2009 – 2010 Cross, D. (Principal Investigator & Professional Developer). *Examining the impact of inquiry-based pedagogical practices on the mathematics understanding and achievement of urban, elementary-aged, African-American girls*. Oak Ridge Associated Universities. \$10,000.
- 2008 – 2010 Cross, D. (Co-Principal Investigator & Professional Developer), Galindo, E. (Principal Investigator). (2008-2010). *"Greene County Math Partnership Project."* A Partnership between Mathematics Educators in IU's School of Education, White River Valley School District, and Mathematicians from the IU Department of Mathematics. Indiana Department of Education. (\$532,741; 7.5% effort per year).
- 2007 – 2009 Cross, D. (Co- Principal Investigator). *Shifting mindsets: A study of a first-year implementation of New Technology High School*. National Science Foundation (NSF) - Small Grants Exploratory Research, Discovery Teaching K-12 Program. (\$199,782; 10% effort per year)
- Internal**
- 2019 – 2020 Cross Francis, D. (Principal Investigator). *Teachers as Cultural and Social Beings: Understanding Ghanaian teachers' multi-dimensional experiences as shaped by culture and context during mathematics curricular and pedagogical reform*. Indiana University Office of the Vice Provost for Research Grant-in-Aid. (\$3000; no funding for salary)
- 2019 – 2020 Cross Francis, D. (Co-Principal Investigator). (2019-2020). *Using Virtual Reality as a Learning Space for Pre-service Teachers*. Indiana University Office of the Vice Provost for Research- Faculty Research Support Program. (\$27,195; no funding for salary)
- 2016 – 2018 Cross Francis, D. (Principal Investigator). (2016-2018). *Effective Leaders Academy*. Indiana University Provost Office. (\$453,794; 5% effort per year)

- 2016 – 2017 Cross Francis, D. (Principal Investigator). *Workplace Simulation Project*. IU Women’s Philanthropy Leadership Council. (\$20,000; no funding for salary)
- 2016 – 2017 Cross Francis, D. (Principal Investigator & Professional Developer). *Examining the cumulative effect of an Engineering-focused Workplace Simulation (WSP) on students’ understanding of, interest in and attitudes towards STEM+C disciplines*. Indiana University Collaborative Research Grant. (\$74,720; 12.5%)
- 2015 – 2016 Cross Francis, D. (Principal Investigator & Professional Developer). *Investigating the Factors that Promote Ambitious Mathematics Instruction*. IU School of Education’s Office of Research and Development. (\$4000; no funding for salary)
- 2015 – 2016 Cross Francis, D. *Overseas Conference Fund Grant*. Office of the Vice President for International Affairs. (\$1000; no funding for salary)
- 2012 – 2013 Cross, D. (Principal Investigator). *Identifying aspects of professional development design that promote resolution of identified ‘inconsistencies’ in teachers’ math-related beliefs*. Indiana University Proffitt Summer Faculty Fellowship. (\$10,000; 10% effort)
- 2010 – 2011 Cross, D. (Principal Investigator). *Enhancing elementary teachers mathematical content knowledge as a route to changing beliefs*. Indiana University School of Education Proffitt Grant. (\$19,000; no funding for salary)
- 2010 – 2011 Cross, D. (Principal Investigator). *Mathematics learning for all: Using project-based learning to promote equitable mathematics*. Summer Stipend for Collaborative Research. (\$10,000; no funding for salary)
- 2009 – 2010 Cross, D. (Principal Investigator). *Overseas Conference Fund Grant*. Office of the Vice President for International Affairs. (\$700; no funding for salary).
- 2008 – 2010 Cross, D. (Co- Principal Investigator). *Enhancing urban African-American girls’ conceptual engagement in science and mathematics*. Pathways Partnerships. (\$40,000; 5% per year).
- 2007 – 2008 Cross, D. (Principal Investigator). *Examining the factors that influence students’ engagement in writing and argumentation activities in mathematics*. Indiana University Proffitt Summer Faculty Fellowship. (\$10,000; 10 % effort)

- 2007 – 2008 Cross, D. (Co-Principal Investigator). *Planning for Progress: A working conference to coordinate and extend efforts towards enhancing math and science instruction*. Planning for Partnerships Grant Award. (\$5,000; no funding for salary)
- 2008 – 2009 Cross, D. (Co-Principal Investigator), Buck, G. (Principal Investigator). (2008-2009). *Shifting Mindsets: Understanding the structural supports needed to successfully implement project-based instruction*. Office of the Vice Provost for Research - Bridge Funding Project. Indiana University. (\$70,094; no funding for salary)

VII. PROFESSIONAL SERVICE

Service to Professional Organizations

American Educational Research Association

- Co-Chair, Program Committee – Division C, Section 1c (2014-2015)
- Member, Minority Fellowship Committee (January 2014 – 2016)
- Member, Best Paper Award Committee –SIG Lives of Teachers (October 2012 – 2013)
- Chair, Affirmative Action Committee – Division C (May 2009 – 2010)
- Co-Chair, Affirmative Action Committee – Division C (August 2008 – April 2009)
- Member, Affirmative Action Committee – Division C (August 2007- July 2008)
- Member, Review Board. Division C – Section 6 (August 2007 – Present)

American Psychological Association – Division 15

- Member, Teaching Practice Committee (September 2019 – Present)
- Member-at-large, Division 15 (August 2012 – 2015)
- Member, Early Career Award Committee (June 2010 – August 2013)
- Co-Chair, Program Committee (August 2009 – 2010)

Member, Advisory Council for the 7th Edition of Van de Walle (2007-2008)

- Responsibilities included reading assigned sections of the text, ‘Van de Walle, J.A. (2007). *Elementary and Middle School Mathematics: Teaching Developmentally*’ and making recommendations for changes and additions to the text.

Editorial and Review Responsibilities

Editorial Board Member

- Contemporary Educational Psychology (2011 – Present)
- Review of Educational Research (2017 – Present)

Reviewer

- NSF Panel (2017 – Present)

Ad Hoc Reviewer

- Journal of Educational Psychology (2013 – present)
- Mathematics Teaching in the Middle School (2013 – present)

- Teaching Children Mathematics (2012-present)
- Journal for Research in Mathematics Education (2011 – present)
- Journal of Mathematical Behavior (2011– present)
- Elementary School Journal (2011 – present)
- Teacher College Record (2008 – present)
- Journal of Teacher Education (2008 –present)
- Teacher Development (2013 – present)
- Journal of Research in Childhood Education (2007 – present)
- International Journal of Science Education (2007 – present)

Conference Proposal Reviewer

- 2016 – 2019, Psychology of Mathematics Education – North American Chapter (PME-NA)
- 2012 AMTE, Association of Mathematics Teacher Educators
- 2012 AERA, SIG: Research in Mathematics Education
- 2011 NCTM Research Pre-session
- 2011 AERA Annual Meeting, SIG: Research in Mathematics Education
- 2010 NCTM Research Pre-session
- 2010 AERA Annual Meeting, Division K: Teaching and Teacher Education, Sections 1 (STEM) & 2 (Quality teaching of pre K–12 students in traditional and nontraditional settings-subject matter specific); Division C: Learning & Instruction, Section 3; SIG: Research in Mathematics Education
- 2005 - 2009 AERA Annual Meeting, Division C: Learning and Instruction,
- 2005 - 2009 AERA Annual Meeting, Division K: Teaching and Teacher Education
- 2009 APA Annual Meeting, Division 15: Educational Psychology
- 2005-2006 Student Editorial Advisory Board, *Educational Researcher: Research News & Comment*

Service to Indiana University

- Member – Administrative Review Committee, Office of Research and Development, School of Education (2019 – 2020)
- Chair – Staff Recognition Award Committee, School of Education (2019)
- Policy Council, School of Education (2018 – present)
 - Co-Chair (2018 – 2019)
 - Member (2012-2015; 2019 – present)
- Agenda Committee, School of Education
 - Co-Chair (2018-2019)
 - Member (2019 – present)
- Member- Search Committee, Early Childhood Education Faculty position in the Department of Curriculum and Instruction Indiana University (2017-2018)
- Member, MILL Committee, School of Education (2015 - present)
- Director, Center for P-16 Research and Collaboration, School of Education (2014 - 2019)
- Promotions, Tenure and Contracts Committee, School of Education
 - Member (2014 – 2015; 2019 – Present)

- Member – Advisory Committee, INSPIRE Living-Learning Center (2014 – present)
- Member- Search Committee, Early Childhood Faculty position in the Department of Curriculum and Instruction Indiana University (Fall 2018)
- Member- Search Committee, Special Education Faculty position in the Department of Curriculum and Instruction Indiana University (Fall 2013)
- Member- Search Committee, Mathematics Education Faculty position in the Department of Curriculum and Instruction Indiana University (Spring 2013)
- International Programs Committee (Member, 2009-2012; 2013 - present; Co-chair, 2012 – 2013)
- Member- Faculty Affairs/Budgetary Affairs Committee (October 2011 – 2014)
- Reviewer – Indiana University Collaborative Research Grants (December 2011)
- Member – CIRCAS (Curriculum & Instruction Research and Creative Activity Symposium) Committee, School of Education (Fall 2011, Spring 2012)
- Member – Faculty Annual Review Committee, Curriculum & Instruction Department, School of Education (Spring 2011, Spring 2020)
- Academic Facilitator (Mathematics Room) – Martin Luther King Day School of Education Activity Day (January 2011, 2012, 2013)
- Member – Search Committee, Chair - Department of Curriculum and Instruction (2010, 2012)
- Member- Search Committee, Developmental Psychology position, Department of Counseling and Educational Psychology, Indiana University (Spring 2008)

Service to Community

- Board of Directors, DirectEmployers Foundation, Indianapolis
 - Member (2015 – 2018)
 - Chair (2018 – present)
- Board of Directors, WonderLab
 - Member (2018 to present)

VIII. MEMBERSHIP in PROFESSIONAL ORGANIZATIONS

American Educational Research Association (AERA)

- Divisions C (Learning and Instruction) and K (Teaching and Teacher Education)
- SIG Research in Mathematics Education
- SIG Motivation in Education
- SIG Lives of Teachers

American Psychological Association

- Division 15 (APA)

National Council of Teachers of Mathematics (NCTM)

Association of Mathematics Teacher Educators (AMTE)

Hoosier Association of Mathematics Teacher Educators (HAMTE)

Indiana Council of Teachers of Mathematics (ICTM)