RACHAEL H. KENNEY
PURDUE UNIVERSITY
CURRICULUM VITAE
2013

GENERAL INFORMATION

1. **Personal data.**

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1741 Sandpiper Dr.
West Lafayette, IN 47906
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2. **Academic record.**

a. Institutions attended, dates attended, degrees granted.

North Carolina State University, Raleigh, NC — August, 2008
Ph.D., Mathematics Education,
Advisors, Dr. Hollylynne Stohl Lee and Dr. Karen Hollebrands

University of Dayton, Dayton, OH — August, 2000
M.S., Applied Mathematics
Concentration: Secondary Mathematics Education
Advisor, Dr. Wiebke Diestelkamp

University of Dayton, Dayton, OH — May, 1999
B.S., Mathematics
Minor: English

b. Academic appointments

i. *Assistant Professor*, Mathematics Education. Departments of Mathematics and Curriculum & Instruction, Purdue University. August, 2008 – Present.
ii. *Lecturer*, Mathematics. Department of Mathematics, North Carolina State University. August, 2000 – May 2008.
iii. *Graduate Assistant*, Department of Mathematics, University of Dayton, August 1999 – August, 2000
iv. *Student Teaching Internship,* Carroll High School, Dayton, OH. Spring, 2000.

3. **Industrial, business and government positions**

Research Consultant, U.S. Department of Education (Jacob Javitz) funded Bright IDEA-**2** project. American Association for Gifted Children at Duke University and the NC Department of Public Instruction. January, 2004 – July, 2009

4. **Licenses, registrations, and certifications.**

Teaching Certification in Secondary Mathematics Education, University of Dayton, 2000, 2006

5. **Awards and Honors**

a. Nancy G. Pollack Thesis and Dissertation Award, College of Education, North Carolina State University, 2009.

b. Discovery Learning Research Center (DLRC) 2010 Faculty Research Fellowship. Purdue University, 2010-2011.
c. Service, Teaching, and Research, (STaR) for Early Career Mathematics Educators Fellowship. Sponsored by the National Science Foundation. 2010-2011.
d. Teaching Award: Outstanding Contributions to Undergraduate Teaching by an Assistant Professor, College of Science, Purdue University, 2012.

6. **Memberships in academic, professional and scholarly societies.**
   a. North American Chapter of the International Group for the Psychology of Mathematics Education (PMENA)
   b. Mathematical Association of America (MAA) SIGMAA on Research in Undergraduate Mathematics Education (RUME)
   c. Association of Mathematics Teacher Education (AMTE)
   d. National Council of Teachers of Mathematics (NCTM)
   e. Indiana Council of Teaches of Mathematics (ICTM)
   f. Hoosier Association of Mathematics Teacher Education (HAMTE)

A. DISCOVERY, RESEARCH, and CREATIVE ENDEAVOR[1]

Published Work[2]

a. Dissertation

Kenney, R. (2008). The influence of symbols on pre-calculus students' problem solving goals and activities (Doctoral dissertation). Available from Dissertations and Theses database. (UMI No. 3329205).

b. *Articles in Refereed Journals*:

i. Published

1. *Kenney, R.H., & *Kastberg, S. (2013). Links in learning logarithms. *The Australian Senior Mathematics Journal, 27*(1), 12-20.
2. *McCulloch, A.W., *Kenney, R.H., & Keene, K.A. (2013). What to trust: Reconciling mathematical work done by hand with conflicting graphing calculator solutions. *School Science and Mathematics, 113*(4), 201-210.
3. *Cox, D.C., *Chesler, J. *Beisiegel, M., *Kenney, R., Newton, J.A., Stone, J.A. (2013). The Status of Capstone Courses for Pre-Service Secondary Mathematics Teachers. *Issues in the Undergraduate Mathematics Preparation of Secondary Teachers, 4.* Retrieved from http://www.k-12prep.math.ttu.edu/journal/curriculum/volume.shtml
4. *Tzur R., Johnson, H. L., McClintock, E., Kenney, R. H., Xin, Y. P., Si, L....Jin, X. (2013). Distinguishing schemes and tasks in children's development of multiplicative reasoning. PNA, *73*, 85-101. http://www.pna.es/Numeros2/Volume7Number3.html ++
5. *McCulloch, A.W., *Kenney, R.H., & Keene, K.A. (2012). My answers don't match: Using the graphing calculator to check. *Mathematics Teacher, 105*(6), 464-468.
6. *Diestelkamp, W.S., Hartke, S.G., Kenney, R.H., (2004). On the degree of local permutation polynomials, *Journal of Combinatorial Mathematics and*

[1] Pdf files of Dr. Kenney's publications can be found on her departmental webpage: http://www.math.purdue.edu/~rhkenney/Kenney_Homepage/Links_to_Publications.html
[2] * indicates primary writers on the papers
++ indicates papers written with graduate students

Combinatorial Computing. 50, 129-140.

ii. In Press

1. *Beisiegel, M., *Chesler, J., *Cox, D., *Kenney, R., *Newton, J.A., *Stone, J.A. (In Press, September 2013). Reconsidering the Mathematics Preparation of Pre-service Secondary Mathematics Teachers. *Notices of the AMS*.
2. *Kenney, R.H., *Shoffner, M., Norris, D. (In Press) Reflecting to learn mathematics: Supporting preservice teachers' pedagogical content knowledge with reflection on writing prompts in mathematics education. *Reflective Practice.* ++
3. *Kenney, R.H. & *de Oliveira, L. (In Press) A framework for connecting natural language and symbol sense in mathematical word problems for English language learners. Submitted to *Teaching for Excellence and Equity in Mathematics.*
4. *Kim, S.H., Phang, D., An, T., *Yi, J.S., *Kenney, R.H., & Uhan, N. (accepted with minor revisions) The Role of Visualization in Breaking Cognitive Lock-Up of Mental Models: Investigation Through Student-Professor Problems. *International Journal of Human-Computer Studies.* ++
5. *Kenney, R.H., Shoffner, M., Norris, D. (In Press). Reflecting on Mathematics Teaching and Learning through Writing: An Examination of Preservice Teachers' Perspectives. *The Teacher Educator*. ++

iii. Submitted and Under Review

1. *Kenney, R.H., An, T., Uhan, N., Yi, J., Kim, S., Shamsul, A. (Submitted 2012 – *Revised and Resubmitted* January 2013). Understanding Difficulties with Mathematical Optimization Modeling. Submitted to *Educational Studies in Mathematics*. ++
2. *Kenney, R.H. (Submitted 2013). Investigating a Link Between Pre-Calculus Students' Uses of Graphing Calculators and Their Understanding of Mathematical Symbols. Submitted to the *International Journal for Technology in Mathematics Education.*

c. *Articles in Conference Proceedings:*

i. Published/In Press

1. *Kenney, R., An, T., Kim, S.H., Yi, J.S., Uhan, N. (In Press). Addressing the reversal error with a visualization tool. Accepted to the *Thirty-first Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)*, Chicago, IL. ++
2. *Chesler, J., Beisegal, M., Cox, D., Kenney, R., Newton, J., Stone, J. (2012). The Status of Capstone Courses in the Preparation of Secondary Mathematics Teachers. In S. Brown, S. Larsen, K. Marrongelle, & M. Oehrtman (Eds.), *Proceedings of the 15th Annual Conference on Research in Undergraduate Mathematics Education* (Vol. 1, pp. 1.108-1.122), Portland, Oregon.
3. *Tzur, R., Johnson, H., McClintock, E., Xin, Y.P., Si, L., Kenney, R., Woodward, J., Hord, C., & Jin, X. (2012). Children's development of multiplicative reasoning: a schemes and tasks framework. *Proceedings of The 36th Conference of the International Group for the Psychology of Mathematics Education (PME)*. Taipei, Taiwan. ++
4. *McCulloch, A., *Kenney, R., & Keene, K (2011). Deciding what to trust: Conflict resolution when checking with a graphing calculator produces a different

solution. In L.R. Wiest & T. Lamberg (Eds.), *Proceedings of the Thirty-third Annual Meeting of PME-NA,* Reno, NV: University of Nevada Reno.

5. *Kenney, R, Uhan, N., Yi, J., Kim, S., Gopaladesikan, M., Shamsul, A., and Hundia, A. (2011). Understanding and overcoming difficulties with building mathematical models in engineering: Using visualization to aid in optimization courses. In S. Brown, S. Larsen, K. Marrongelle, & M. Oehrtman (Eds.), *Proceedings of the 14th Annual Conference on Research in Undergraduate Mathematics Education* (Vol. 4, pg 4.116-4.119). Portland, Oregon. ++
6. *Tzur, R., Xin, Y.P., Si, L., Kenney, R, Guebert, A. (2010). Students with learning disability in math are left behind in multiplicative reasoning: Number as abstract composite unit is a likely 'culprit'. *Education Resources Information Center (ERIC) #ED510991*. http://www.eric.ed.gov/. (refereed paper presented at the Annual AERA conference, Denver, CO.) ++
7. *Kenney, R. (2010). Novice teacher reflections: A case study of novice teachers' self-analyses of videos of their own teaching. *Proceedings of the 13th SIGMAA conference on Research in Undergraduate Mathematics Education*, Raleigh, NC. Retrieved from http://sigmaa.maa.org/rume/crume2010/Abstracts2010.htm
8. *Woodward, J., *Kenney, R., Zhang, D., Guebert, A., Cetintas, S., Tzur, R., Xin, Y. (2009). Conceptually based task design: Megan's progress to the anticipatory stage of multiplicative double counting (mDC). In S. L. Swars, D. W. Stinson & S. Lemons-Smith (Eds.), *Proceedings of the Thirty-first Annual Meeting of PME-NA* (Vol. 5, pp. 1378-1385). Atlanta, GA: Georgia State University. ++
9. *Kenney, R. (2009). Linking college pre-calculus students' uses of graphing calculators to their understanding of mathematical symbols. In S. L. Swars, D. W. Stinson & S. Lemons-Smith (Eds.), *Proceedings of the Thirty-first Annual Meeting of PME-NA* (Vol. 5). Atlanta, GA: Georgia State University.
10. *Kenney, R. (2009). Pre-Calculus students interactions with mathematical symbols. *Proceedings of the 12th SIGMAA conference on Research in Undergraduate Mathematics Education*, Raleigh, NC. Retrieved from http://sigmaa.maa.org/rume/crume2009/proceedings.html
11. *Kenney, R. (2008). The influence of symbols on students' problem solving goals and activities. *Proceedings of the 11th SIGMAA on Research in Undergraduate Mathematics Education (RUME) conference*, San Diego, CA. Retrieved from http://sigmaa.maa.org/rume/crume2008/Proceedings/Proceedings.html
12. *Kenney, R. (2007). Students' uses and interpretations of symbols when solving problems with and without a graphing calculator. In T. Lamberg & L.R. Wiest (Eds.), *Proceedings of the Twenty-Ninth Annual Meeting PME-NA.* Lake Tahoe, NV: University of Nevada Reno.
13. *Kenney, R. (2005). Students understanding of logarithmic functions. In G. M. Lloyd, M. Wilson, J.L.M. Wilkins, & S. L. Behm (Eds.), *Proceedings of the Twenty-Seventh Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA).* Roanoke, VA: Virginia Tech.

2. Invited lectures presented, including conference presentations (other than those with proceedings listed above)
   a. *National meetings*
      i. Newton, J., Kasten, S., Karunaratne, S., Kenney, R., Senk, S., He, J., Wortinger, K.,

Jung, H., & Heid, M. K. (2013, January). Investigations into secondary mathematics teacher education programs: Capstones,*"methods," and alge*bra. Paper presented at the Association of Mathematics Teacher Educators, Orlando, FL.

ii. Kenney, R., (2012, February). Reflecting on Writing: Developing Preservice Teachers' Pedagogical Content Knowledge in Mathematics. Presentation at the *Annual Meeting for the Association of Mathematics Teacher Educators (AMTE)*. Fort Worth, TX.

iii. Chesler, J., Beisegal, M., Cox, D., Kenney, R., Newton, J., Stone, J. (2012, February). The Status of Capstone Courses in the Preparation of Secondary Mathematics Teachers. Presentation at the *Annual Meeting for the Association of Mathematics Teacher Educators (AMTE*), Fort Worth, TX.

iv. Newton, J., Kenney, R., Umbeck, L. (2011, January). Concept Maps as an Evaluation Tool for Professional Development. Presentation at the *Annual meeting for the Association of Mathematics Teacher Educators (AMTE),* Irvine, CA.

b. International meetings

i. Kenney, R., & Shoffner, M. (2012, July). Writing And Reflection: Tools For Developing Pedagogical Content Knowledge With Mathematics Preservice Teachers. Research presentation at the 12th International Congress on Mathematics Education, Seoul, Korea.

c. Seminars

i. <u>At Purdue University</u>

1. Kenney, R. (2013, March). Writing and Reflection: Tools for Developing Pedagogical Content Knowledge with Mathematics Preservice Teachers. Oral presentation for the EDCI 591 Doctoral Seminar, Purdue University, West Lafayette, IN.
2. Kenney, R. (2012, October).Understanding and Overcoming Difficulties with Building Mathematical Models in Engineering: Using Visualization to Aid in Optimization Courses. Oral presentation at the Fall Chemical Education Seminar Series, Purdue University, West Lafayette, IN.
3. Kenney, R. (2009, January).The Influence of Symbols on Problem Solving Goals and Activities. Oral presentation at the Career and Technical Education Seminar, Purdue University, West Lafayette, IN, January, 2009.

ii. <u>Other educational institutions</u>

1. Kenney, R. (2013, May). Using Writing and Reflection in Mathematics Teacher Education: Building Preservice Teachers Knowledge of Content and Pedagogy- Invited to present at University of North Carolina, Chapel Hill.
2. Kenney, R. (2013, May). Using Writing and Reflection in Mathematics Teacher Education: Building Preservice Teachers Knowledge of Content and Pedagogy- Invited to present at University of North Carolina, Greensboro.
3. Kenney, R. (2013, March). Building a Research Agenda: From Dissertation to Publication. Invited Closing Speaker for the 2nd Annual Indiana Mathematics Education Research Symposium (IMERS), Indianapolis, IN.
4. Kenney, R. (2008, April). Influence of Symbols on Students' Goals and Activities. Short Oral presentation at the semi-annual Mathematics Education Research Symposium, NC State University, Raleigh, NC.

d. Poster Presentations

i. Kenney, R., An, T., Kim, S.H., Yi, J.S., Uhan, N. (2012, November). Building Mathematical Models: Identifying Common Errors in Engineering Students' Work with Linear Programming Problems. Poster presentation at the Thirtieth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Kalamazoo, MI.
ii. Kenney, R., Shoffner, M., & Norris, D. (2012, November). Examining Preservice Teachers' Perspectives on Writing in the Mathematics Classroom. Poster presentation at the Thirtieth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Kalamazoo, MI.
iii. An, T., Kenney, R., Kim, S.H., Yi, J.S., Uhan, N., Shamsul, A., Phang, D. (2012, July). Addressing the Reversal Error with an Interactive Web-based Solution. Poster presentation at the *12th International Congress on Mathematical Education (ICME)*, Seoul, South Korea.
iv. An, T., Kim, S.H., Shamsul, A., Kenney, R., Uhan, N., Yi, J.S (2011, September). Purdue Optimization Modeling Education Tool (POET). Poster presentation at the *Engineering 2020 Workshop*, Purdue University.
v. Kenney, R., & Newton, (2011, January) The undergraduate preparation of pre-service mathematics teachers: A survey of U.S. programs of study. Poster presented at the Association of Mathematics Teacher Educators STaR Pre-session, Irvine, CA.

3. Evidence of involvement in the graduate research program of the department.

a. Chairperson for Ph.D. Students

i. Soo Yeon Shin
ii. Patrick Frey
iii. Phu Doan
iv. Tuyin An
v. Alexia Mintos
vi. Elizabeth Kersey

b. Chairperson for Masters' Students

i. Joshua Rendell
ii. Deborah Sutton (Graduated May 2013)

4. **Grants**

a. Research and/or training grants.

Information	***Grants***
Agency/Grant	Purdue University / Purdue's Engineer of 2020 2010-2011 Seed Grant Program
Proposal Title	*POET (Purdue Optimization modeling Education Tool): Using Visualization to Effectively Teach Mathematical Optimization Modeling Skills*
Collaborators	Dr. Ji Soo Yi, Industrial Engineering, Purdue (PI) Dr. Nelson Uhan, Industrial Engineering, Purdue (Co- PI)
Duration of Funding	2010-2011
Total Amount of Award	$40,000
Amount for which I am responsible	$13,000
My Role	Co-PI
STATUS	**RECEIVED**

Agency/Grant	Purdue University/ Discovery Learning Research Center Faculty Fellowship Seed Grant
Proposal Title	*Writing in the mathematics classroom: Teacher reflection on the use of writing as a tool to support student learning in the mathematics classroom*
Collaborators	Dr. Melanie Shoffner, English Education, Purdue (PI)
Duration of Funding	12/1/10 – 8/31/11
Total Amount of Award	$27,628
Amount for which I am responsible	$27,628
My Role	PI
STATUS	**RECEIVED**
Agency/Grant	Math-Science Partnership Grant submitted by the MSD of Washington Township in Indiana
Proposal Title	*Algebra with an Attitude: Collaboration Efforts to Break the Algebra Barrier*
Collaborators	Dr. Signe Kastberg, Purdue University Dr. Gina Yoder, IUPUI Jerry Woodward, Purdue University Kathy Rieke, Washington Township Schools
Duration of Funding	4/1/11-9/30/13
Total Amount of Award	$418,000
Amount for which I am responsible	$45,000
My Role	University Partner
STATUS	**RECEIVED**
Agency/Grant	NSF/ Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics (TUES)
Proposal Title	*The POET Project: Investigating the Use of Visualization to Effectively Teach Optimization Modeling Skills*
Duration of Funding	6/1/11-5/31/14
Collaborators	Dr. Ji Soo Yi, Industrial Engineering, Purdue (PI) Dr. Nelson Uhan, Mathematics, U.S Naval Academy (Co-PI)
Total Amount of Award	$199,939
Amount for which I am responsible	$55,396
My Role	Co -PI
STATUS	**RECEIVED**
Agency/Grant	Math-Science Grant submitted by the MSD of Washington Township in Indiana
Proposal Title	*From Standards to STEM: Integrating Science and Math in the Classroom*
Collaborators	Dr. Signe Kastberg, Purdue University Dr. Jomo Mutegi, IUPUI Allyson Smith, Washington Township Schools
Duration of Funding	2013-2016
Total Amount of Award	$448,521.69
Amount for which I am	$28.248

responsible	
My Role	University Partner
STATUS	**RECEIVED**
Agency/Grant	Purdue University Teaching Education Innovation Grant
Proposal Title	*Teaching Diverse Students in the Secondary Content Area Classroom*
Duration of Funding	2011-2013
Collaborators	Dr. Luciana C. de Oliveira, Literacy and Language Education (English Language Learning), Dept. of Curriculum and Instruction, Purdue Dr. Emily Bouck, Special Education, Dept. of Educational Studies, Purdue Marcia Gentry, Gifted, Creative, and Talented Studies, Dept. of Educational Studies, Purdue
Total Amount of Award	$10,000
Amount for which I am responsible	$1000
My Role	Co -PI
STATUS	**RECEIVED**
Agency/Grant	Purdue Research Foundation (PRF) Year-Long Research Grant
Proposal Title	*Preservice Mathematics Teachers' Cognitive Development of Proof and Proving Skills: Investigation of an Undergraduate Geometry Class*
Duration of Funding	2013-2014
Collaborators	Tuyin An, graduate student
Total Amount of Award	$17598
Amount for which I am responsible	$17598
My Role	PI
STATUS	**RECEIVED**
Agency/Grant	Purdue University Graduate Research Assistant Seed Grant Program
Proposal Title	*Formative Assessment to Develop Pedagogical Content Knowledge in Mathematics Education*
Duration of Funding	2013-2014
Collaborators	Dr. Melanie Shoffner, Purdue University
Total Amount of Award	$17598
Amount for which I am responsible	$17598
My Role	Co-PI
STATUS	**RECEIVED**

b. Other Grants Awarded

i. Purdue Research Foundation (PRF) International Travel Grant. $1000. April 2012.

B. TEACHING/LEARNING

1. Courses Taught

a. ***Tabular summary of course evaluations from all courses for the last three years*** :

Core Items from PICES

CO1 = Overall, I would rate this course as (5 = excellent, 1= very poor).

CO2 = Overall, I would rate this instructor as (5 = excellent, 1= very poor).

Sem/Yr	Course	Title	N	RR%	CO1	CO2
S/10	EDCI426	Teach Math M/J High	25	76	4.2	4.5
F/10	MA484	Seminar Teaching Alg/Trig	9	100	4.9	4.8
F/10	MA223	Business Calculus	96	**		
S/11	EDCI426	Teach Math M/J High	22	86	4.1	4.6
F/11	MA484	Seminar Teaching Alg/Trig	7	71	5	4.9
S/12	MA301	Intro to Proof/Real Analysis	29	62	4.2	4.3
S/12	EDCI620	Dev Math Ed Researcher	10	90	4.2	4.1
F/12	MA484	Seminar Teaching Alg/Trig	8	38	5	5
S/13	MA301	Intro to Proof/Real Analysis	33	69	4.3	4.5

*** Although I was the teacher-of-record by the end of this course, I took over teaching in October for an instructor who took a leave of absence.*

2. **Contributions to course and curriculum development**.
    a. MA484 – No course materials or textbook exist for this class. Adapted activities that other instructors have used to incorporate lesson planning and time management strategies, conceptual question development, and analysis of student learning activities. Fall 2008, 2009, 2010, 2011, 2012
    b. EDCI591 – Co-designed a Master's course for middle school and secondary mathematics teachers focusing on algebra readiness. This course was offered as an intensive one-week course over the summer 2009 and has been revised to become a course in the mathematics education masters program. Spring 2009.
    c. EDCI425; EDCI 426 – Helped redesign the syllabus and define and create activities and materials for use in the mathematics methods course series. Fall, 2009, Spring 2010.
    d. Mathematics Education Masters Program - Helped define a new program that aligns with national, state, and university standards. Collaborated with Mathematics Education faculty to create syllabi for six new Master's courses in Mathematics Education at Purdue. Was in charge of writing up all materials for program (Framework, assessments, program criteria) for COE. 2010-2013.
    e. EDCI 620 – Seminar course with different focus each year. Designed a course to focus on research methodologies in Mathematics Education. Spring, 2012.

C. ENGAGEMENT, EXTENSION, SERVICE, AND UNIVERSITY OUTREACH ACTIVITIES

1. **Principal conferences, schools, workshops, short courses, and other organized educational activities participated in during the past five years.**
    a. Research Writing Group. 2008-2012.
    b. Mathematics Education Reading Group, 2009-present
    c. Indiana Council of Teachers of Mathematics (ICTM) Workshop. Co-taught a 1.5-hour workshop "Making Sense of Algebra in Grades 6-12" at the annual fall conference in Indianapolis, IN. (~40 participants), 2009.
    d. National Council of Teachers of Mathematics (NCTM) Conference Workshop. Co-taught a 1.5 hour workshop, "Making Sense of Algebra." San Diego, CA, (~40 participants), 2010.
    e. National Council of Teachers of Mathematics (NCTM) Conference Workshop. Co-taught a 1 hour workshop, "My Answers Don't Match: Using the Graphing Calculator to Check." Indianapolis, IN, (~45 participants), 2011.
    f. National Council of Teachers of Mathematics (NCTM) Conference Workshop. Taught a

1 hour workshop, "Using Open-Ended Questions to 'Teach to the Test'." Indianapolis, IN, (~50 participants), 2011.

g. Algebra with an Attitude: Collaboration Efforts to Break the Algebra Barrier. Co-designed and ran an 8-day workshop with middle school teachers as part of the MSP grant between Purdue University and Washington Township in Indianapolis., (8-15 participants), 2011-2013
h. Indiana Council of Teachers of Mathematics (ICTM) Workshop. "Asking the Questions that can get Students Talking in Math Class." Indianapolis, IN, (~35 participants), 2012.

2. University or departmental service

a. Teaching Enhancement Committee, Mathematics Department, North Carolina State University, 2005-2008.
b. Graduate Committee, Curriculum & Instruction, Purdue University, 2008 (temporarily).
c. Undergraduate Committee, Mathematics Department, Purdue University, 2008-2012.
d. Leadership Council, Purdue University College of Science K-12 Outreach Program, 2008-2009.
e. Mathematics Education Search Committee, Purdue University, 2008-2010.
f. Program Conveners Council, College of Education, Purdue University, 2009-present.
g. Mathematics Education Club Faculty Adviser, Purdue University, 2009-present.
h. Liaison between Purdue Mathematics Department and Lafayette Jefferson High School for the Concurrent Credit Mathematics Program, 2009-2011.
i. College of Science Grievance Hearing Committee, Purdue University, 2010-2011.
j. Mentor of undergraduate research student from the SROP summer program at Purdue University, 2011.
k. NCATE Accreditation – coordinated and was the primary writer for a large-scale, national accreditation of the Mathematics Education program, College of Education, Purdue University, 2010-2012.
l. Reviewer – Purdue University Discovery Learning Research Center Faculty Fellowship Program applications, 2012
m. College of Education Faculty Grievance Committee – 2011-2012
n. College of Science Grade Appeals Committee – 2012-present
o. Mentor of an Undergraduate Research Trainee from the College of Education URT program, 2012-2013.
p. Judge – 7th Annual Graduate Student Educational Research Symposium, Purdue University, 2013.
q. Reviewer – Department of Curriculum and Instruction Graduate Awards, Purdue University, 2013.

3. National Service

a. *Reviewer,* North American Chapter of the International Group for the Psychology of Mathematics Education. 2007, 2012, 2013
b. *Reviewer*, Reviewed chapter for book: Newton, J. & Kasten, S. (2012) *Reasoning and Sense-Making Activities for High School Mathematics: Selections from Mathematics Teacher*. NCTM: Reston, VA.
c. *Reviewer,* Association of Mathematics Teacher Educators annual conference proposals. 2011, 2012
d. *Reviewer,* Mathematics Teacher Educator Journal, 2012-present
e. *Reviewer,* Indiana Math Teacher Journal, 2012-present.