

University of Nebraska-Lincoln
Center for Science, Mathematics, and Computer Education
Department of Mathematics
wsmith5@unl.edu

Last Updated February 5, 2021

Education

- 2008 Ph.D. University of Nebraska-Lincoln
Major: Educational Studies
Focus: Mathematics Education
Dissertation: Exploring how three middle level mathematics teachers use their experiences in an ambitious professional development program
- 1998 M.A. University of Nebraska-Lincoln
Major: Mathematics
Minor: Special Education
Nebraska teaching endorsement: 7-12 special education
- 1996 B.S. University of Nebraska-Lincoln
Major: Mathematics
Minors: Physics, Political Science
Nebraska teaching endorsement: 7-12 mathematics

Professional Experience

- 2020 - present Research Professor, University of Nebraska-Lincoln
Center for Science, Mathematics, & Computer Education
and Department of Mathematics
- 2015 - present Associate Director, Center for Science, Mathematics and
Computer Education, University of Nebraska-Lincoln
- 2015 - 2020 Research Associate Professor, University of Nebraska-Lincoln
- 2013 - 2015 Assistant Director, Center for Science, Mathematics, & Computer Education,
University of Nebraska-Lincoln
- 2012 - present Courtesy appointment, Department of Teaching, Learning and Teacher Education
- 2008 - 2015 Research Assistant Professor, University of Nebraska-Lincoln
Research Coordinator, NebraskaMATH,
Center for Science, Mathematics, & Computer Education
- 2004 - 2008 Graduate Research Assistant: Department of Teaching, Learning,
and Teacher Education
- 2003 - 2004 Graduate Teaching Assistant: Department of Teaching, Learning,
and Teacher Education
- 1999 - 2003 Middle school classroom mathematics teacher (grades 7-9)
Goodrich Middle School, Lincoln Public Schools
- 1996 - 1998 Graduate Teaching Assistant: Department of Mathematics and Statistics,
University of Nebraska-Lincoln

Awards and Honors

- In 2020, I was selected as one of 15 inaugural members of the University of Nebraska-Lincoln Research Leaders program (2020-2021).
- In 2018, I was awarded the Don Miller Distinguished Service Award by the Nebraska Association of Teachers of Mathematics. The purpose of this award is to honor mathematics educators for their contribution to the improvement of mathematics education in the state of Nebraska. This is a statewide award.
- In 2016, I was awarded the Floyd S. Oldt Boss of the Year Award from the University of Nebraska Office Professional Association (UNOPA). This is a UNL award.

Professional Memberships

- American Association for the Advancement of Science (AAAS)
- American Mathematical Society (AMS)
- American Education Research Association (AERA)
- American Evaluation Association (AEA)
- Association of Mathematics Teacher Educators (AMTE)
- Association for Women in Mathematics (AWM)
- Mathematical Association of America (MAA)
- Research in Undergraduate Mathematics Education (SIGMAA on RUME)
- SIGMAA on Mathematical Knowledge for Teaching
- National Council of Teacher of Mathematics (NCTM)
- Nebraska Association of Teachers of Mathematics (NATM)
- Psychology of Mathematics Education, North American Chapter (PME-NA)

Publications

Peer-Reviewed Articles

1. Smith, W. M., Ren, L., Beattie, H. F., & Heaton, R. M. (accepted to appear 2021). Noticing about noticing: Mathematics Teacher Educators and Primary Teachers. *Journal of Early Childhood Teacher Education*.
2. Williams, M., Apkarian, N., Uhing, K., Funk, R., Smith, W. M., Wakefield, N., Martinez, A., & Rasmussen, C. (2020). In the driver's seat: Course coordinators as change agents for active learning in university precalculus to calculus 2. In S. S. Karunakaran, Z. Reed, & A. Higgins, (Eds.), *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 646-654). Boston, MA.

3. Williams, M., Smith, W. M., Uhing, K., & Funk, R. (2019). Leadership and commitment to educational innovation: Comparing two cases of active learning reforms. In A. Weinberg, D. Moore-Russo, H. Soto, & M. Wawro (Eds.), *Proceedings of the 22nd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 680-687). Oklahoma City, Oklahoma.
4. Beck, M. F., Albano, A. D., & Smith, W. M. (2019). Person-fit as an index of inattentive responding: A comparison of methods using polytomous survey data. *Applied Psychological Measurement, 43*, 339-359. [urlhttps://doi.org/10.1177/0146621618798666](https://doi.org/10.1177/0146621618798666)
5. Bowers, J., Smith, W. M., Ren, L., & Hanna, R. (2019). Integrating active learning labs in a college-based pre-calculus lecture class: Measuring the value added. *Investigations in Mathematics Learning, 11*, 1-15. DOI 10.1080/19477503.2017.1375355
6. Green, J., Smith, W. M., Blankenship, E., Schmid, K., Kerby, A., & Carlson, M. A. (2018). Introductory statistics: Preparing in-service middle-level mathematics teachers for classroom research. *Statistics Education Research Journal, 17*, 216-239.
7. Ren, L., & Smith, W. M. (2018). Teacher characteristics and contextual factors: Links to early primary teachers' mathematical beliefs and attitudes. *Journal of Mathematics Teacher Education, 21*(4), 321-350. <https://doi.org/10.1007/s10857-017-9365-3>
8. Kutaka, T. S., Ren, L., Smith, W. M., Beattie, H. F., Edwards, C. P., Green, J. L., Chernyavskiy, P., Stroup, W., Heaton, R. M., & Lewis, W. J. (2018). Examining change in K-3 teachers' mathematical knowledge, attitudes, and beliefs: The case of Primarily Math. *Journal of Mathematics Teacher Education, 21*, 14-177. DOI 10.10007/x10857-016-8355-x
9. Kutaka, T. S., Albano, A. D., Smith, W. M., Edwards, C. P., Ren, L., & Beattie, H. F. (2017). Connecting teacher professional development and student mathematics achievement: A 4-year study of an Elementary Mathematics Specialist Program. *Journal of Teacher Education, 68*(5), 140-154. DOI 10.1177/0022487116687551
JTE also interviewed us for a blog post related to this manuscript:
<http://edwp.educ.msu.edu/jte-insider/2017/teacherpdmathachieve/>
10. Smith, W. M., Webb, D. C., Bowers, J., & Voigt, M. (2017). SEMINAL: Preliminary findings on institutional changes in departments of mathematics. In W. Smith, B. Lawler, J. Bowers, and L. Augustyn (Eds.), *Proceedings of the Sixth Annual Mathematics Teacher Education Partnership* (pp. 121-128). Washington, DC: Association of Public and Land grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep6.html>
11. Wakefield, N., & Smith, W. M. (2016). Enriching Student's Online Homework Experience in Pre-Calculus Courses: Hints and Cognitive Supports. In Fukawa-Connolly (Ed.), *Proceedings of the 19th Research in Undergraduate Mathematics Education Conference*, Pittsburg, PA.
12. Males, L. M., Flores, M., Ivins, I., Smith, W. M., Lai, Y., & Swidler, S. A. (2016). Planning with curriculum materials: An analysis of teachers' attending, interpreting, and responding. In M. B. Wood, E. E. Turner, M. Civil and J. A. Eli (Eds.), *Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 81-88). Tucson, AZ: The University of Arizona.

13. Ren, L., Green, J. L., & Smith, W. M. (2016). Using the Fennema-Sherman Mathematics Attitude Inventory with lower primary teachers: An adaptation and validation study. *Mathematics Education Research Journal*, 28(2), 303-326. DOI 10.1007/s13394-016-0168-0
14. Aaberg, S., Vitosh, J., & Smith, W. M. (2016). The legend of the Indian wrapper. *Mathematics Teacher*, 110(2), 134-141.
15. Schmid, K. K., Blankenship, E. E., Kerby, A., Green, J. L., & Smith, W. M. (2014). The development and evolution of a course for in-service middle-level mathematics teachers. *Journal of Statistics Education [online]*, 22(3). DOI 10.1080/10691898.2014.11889715
16. Colton, C., & Smith, W. M. (2014). Successfully transitioning to linear equations. *Mathematics Teacher*, 107(6), 452-457.
17. Smith, W. M., Lewis, W. J., & Heaton, R. M. (2013). Ensuring mathematics learning in rural schools through investments in teacher knowledge. *Great Plains Research*, 23, 185-197.
18. Ren, L., & Smith, W. M. (2013). Using the Mathematics Belief Scales short form with K-3 teachers: Validating the factor structure. In M. Martinez, & A. Castro Superfine, (Eds.), *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, pp. 857-860. Chicago, IL: University of Illinois at Chicago.
19. Heaton, R. M., & Smith, W. M. (2013). Developing effective mathematics teachers through National Science Foundation funded Math and Science Partnership grants. *The Mathematics Enthusiast*, 10(3), 509-518.
20. Larson, M. R., & Smith, W. M. (2013). Distributed leadership, professional development, and district coherence: Improving primary students' mathematics achievement. *Journal of Mathematics Education at Teachers College*, 4, 26-33.
21. Smith, W. M., & Heaton, R. M. (2013). Learning from practice about improving the quality of mathematics teacher research. *Mathematics Teacher Educator*, 1(2), 148-161.
22. Petit Cunningham, E., Smith, W. M., & Yang, Y. (2012). Exploring the impact of professional development on K-3 teachers' practices and their students' understanding. In L. R. Van Zoest, J.-J. Lo, & J. L. Kratky, (Eds.), *Proceedings of the 34th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Kalamazoo, MI: Western Michigan University.
23. Smith, W. M. (2012). Exploring relationships among teacher change and uses of contexts. *Mathematics Education Research Journal*, 24(3), 301-321. DOI 10.1007/s13394-012-0053-4
24. Heaton, R. M., Lewis, W. J., & Smith, W. M. (2009). Building middle level mathematics teachers' capacities as teachers and leaders: The Math in the Middle Institute Partnership. *The Journal of Mathematics and Science: Collaborative Explorations*, 11, 1-18.

Books, Book Chapters and Proceedings Editor

25. Smith, W. M., Voigt, M., Ström, A., Webb, D. C., & Martin, W. G., (Eds.) (2021). *Transformational Change Efforts: Student Engagement in Mathematics Through an Institutional Network for Active Learning*. MAA/AMS Press.
26. Smith, W. M., & Funk, R. (2021). The Student Engagement in Mathematics through an Institutional Network for Active Learning project: An overview. In W. M. Smith, M. Voigt, A. Ström, and W. G. Martin (Eds.) *Transformational Change Efforts: Student Engagement in Mathematics through an Institutional Network for Active Learning* (Chapter 1). MAA/AMS Press.
27. Smith, W. M., Funk, R., Voigt, M., & Uhing, K. (2021). Research design and methodology. In W. M. Smith, M. Voigt, A. Ström, and W. G. Martin (Eds.) *Transformational Change Efforts: Student Engagement in Mathematics through an Institutional Network for Active Learning* (Chapter 2). MAA/AMS Press.
28. Funk, R., Smith, W. M., Uhing, K., & Williams, M. (2021). Phased Change University: A multistage approach to educational improvement. In W. M. Smith, M. Voigt, A. Ström, and W. G. Martin (Eds.) *Transformational Change Efforts: Student Engagement in Mathematics through an Institutional Network for Active Learning* (Chapter 3). MAA/AMS Press.
29. Williams, M., Funk, R., Smith, W. M., & Uhing, K. (2021). Long-Term University: Building a self-sustaining system. In W. M. Smith, M. Voigt, A. Ström, and W. G. Martin (Eds.) *Transformational Change Efforts: Student Engagement in Mathematics through an Institutional Network for Active Learning* (Chapter 6). MAA/AMS Press.
30. O'Sullivan, M. E., Smith, W. M., & Tubbs, R. (2021). Leadership. In W. M. Smith, M. Voigt, A. Ström, and W. G. Martin (Eds.) *Transformational Change Efforts: Student Engagement in Mathematics through an Institutional Network for Active Learning* (Chapter 10). MAA/AMS Press.
31. Voigt, M., Smith, W. M., Kress, N., Grant, D., & Ström, A. (2021). Culture and equity. In W. M. Smith, M. Voigt, A. Ström, and W. G. Martin (Eds.) *Transformational Change Efforts: Student Engagement in Mathematics through an Institutional Network for Active Learning*. MAA/AMS Press.
32. Smith, W. M. and the SEMINAL team. (2021). Conclusion: Sustainable transformations. In W. M. Smith, M. Voigt, A. Ström, D. C. Webb, and W. G. Martin (Eds.), *Transformational Change Efforts: Student Engagement in Mathematics Through an Institutional Network for Active Learning* (Chapter 17). MAA/AMS Press.
33. Tatto, M. T., Rodriguez, M. C., Smith, W. M., Pippin, J., & Reckase, M. D. (2020). *The First Five Years of Teaching Mathematics (FIRSTMATH): Concepts, Methods & Strategies for Comparative International Research*. Springer.
34. Smith, W. M., & Augustyn, L. C. (Eds.) (2020). *Proceedings of the Ninth Annual Mathematics Teacher Education Partnership*. Association of Public and Land grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep9.html>

35. Martin, W. G., Lischka, A., Smith, W. M., & Lawler, B. R. (Eds.) (2020). *The Mathematics Teacher Education Partnership: The power of a networked improvement community to transform secondary mathematics teacher preparation*. Volume 4 in B. Benken (Ed.), Association of Mathematics Teacher Educators Professional Book Series. Information Age Publishing.
36. Smith, W. M., Callahan, K., Mingus, T., & Hodge, A. (2020). Active learning mathematics research action cluster. In G. W. Martin, A. Lischka, W. M. Smith and B. R. Lawler (Eds.), *The Mathematics Teacher Education Partnership: The power of a networked improvement community to transform secondary mathematics teacher preparation* (pp. 143-178). Volume 4 in B. Benken (Ed.), Association of Mathematics Teacher Educators Professional Book Series. Information Age Publishing.
37. Martin, W. G., Smith, W. M., & Mohr-Schroeder, M. (2020). Program transformation. In G. W. Martin, A. Lischka, W. M. Smith and B. R. Lawler (Eds.), *The Mathematics Teacher Education Partnership: The power of a networked improvement community to transform secondary mathematics teacher preparation* (pp. 25-56). Volume 4 in B. Benken (Ed.), Association of Mathematics Teacher Educators Professional Book Series. Information Age Publishing.
38. Martin, W. G., Lischka, A. E., Smith, W. M., & Lawler, B. R. (2020). Looking back to look ahead: Transforming secondary mathematics teacher preparation. In W. G. Martin, A. E. Lischka, W. M. Smith and B. R. Lawler (Eds.), *The Mathematics Teacher Education Partnership: The power of a networked improvement community to transform secondary mathematics teacher preparation* (pp. 373-390). Volume 4 in B. Benken (Ed.), Association of Mathematics Teacher Educators Professional Book Series. Information Age Publishing.
39. LeMahieu, P., Smith, W. M., & Davis, A. (2020). Reflections on the MTE-Partnership: The power of networked improvement communities to support transformational change. In W. G. Martin, A. Lischka, W. M. Smith and B. R. Lawler (Eds.), *The Mathematics Teacher Education Partnership: The power of a networked improvement community to transform secondary mathematics teacher preparation* (pp. 401-410). Volume 4 in B. Benken (Ed.), Association of Mathematics Teacher Educators Professional Book Series. Information Age Publishing.
40. Smith, W. M., Callahan, K., Strayer, J., Jones, R. S., & Augustyn, L. C. (Eds.) (2019). *Proceedings of the Eighth Annual Mathematics Teacher Education Partnership*. Washington, DC: Association of Public and Land grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep8.html>
41. Tatto, M. T., Smith, W. M., Rodriguez, M. C., Reckase, M., & Bankov, K. (Eds.) (2018). *Exploring the Mathematical Education of Teachers Using TEDS-M Data*. Springer.
42. Kutaka, T. S., Smith, W. M., & Albano, A. D. (2018). Differences in beliefs and knowledge for future teachers: An international study of future teachers. In M. T. Tatto, W. M. Smith, M. C. Rodriguez, M. Reckase and K. Bankov (Eds.) *Exploring the Mathematical Education of Teachers Using TEDS-M Data* (pp. 349-378). Springer.
43. Kutaka, T. S., Smith, W. M., & Males, L. M. Exploring mathematical pedagogical content knowledge: An international study of future teachers. In M. T. Tatto, W. M. Smith, M. C.

- Rodriguez, M. Reckase and K. Bankov (Eds.) *Exploring the Mathematical Education of Teachers Using TEDS-M Data* (pp. 279-310). Springer.
44. Tatto, M. T., & Smith, W. M. (2018). Introduction: Exploring different dimensions of teacher education programs in the TEDS-M study. In M. T. Tatto, W. M. Smith, M. C. Rodriguez, M. Reckase and K. Bankov (Eds.) *Exploring the Mathematical Education of Teachers Using TEDS-M Data*, (pp. 17-30). Springer.
 45. Tatto, M. T., & Smith, W. M. (2018). Introduction: Exploring future teacher characteristics, knowledge, beliefs and opportunities to learn in the TEDS-M study. In M. T. Tatto, W. M. Smith, M. C. Rodriguez, M. Reckase and K. Bankov (Eds.) *Exploring the Mathematical Education of Teachers Using TEDS-M Data*, (pp. 195-204). Springer.
 46. Tatto, M. T., & Smith, W. M. (2018). Introduction: Methodological challenges and strategies in the TEDS-M study. In M. T. Tatto, W. M. Smith, M. C. Rodriguez, M. Reckase and K. Bankov (Eds.) *Exploring the Mathematical Education of Teachers Using TEDS-M Data*, (pp. 479-188). Switzerland: Springer.
 47. Smith, W. M., Lawler, B., Strayer, J., & Augustyn, L. C. (Eds.) (2018). *Proceedings of the Seventh Annual Mathematics Teacher Education Partnership*. Association of Public and Land grant Universities. <http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep7.html>
 48. Smith, W. M., Lawler, B., Bowers, J., & Augustyn, L. C. (Eds.) (2017). *Proceedings of the Sixth Annual Mathematics Teacher Education Partnership*. Association of Public and Land grant Universities. <http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep6.html>
 49. Beattie, H., Ren, L., Smith, W. M., & Heaton, R. M. (2017). Measuring elementary mathematics teachers' noticing: Using child studies as a vehicle. In E. O. Schack, M. H. Fisher, and J. A. Wilhelm (Eds.), *Teacher noticing: Bridging and broadening perspectives, contexts and frameworks*. Part of the Research in Mathematics Education Monograph series; Springer.
 50. Lai, Y., Smith, W. M., Wakefield, N. P. Miller, E. R., St. Goar, J., Groothuis, C. M., and Wells, K. M. (2016). Characterizing mathematics graduate student teaching assistants' opportunities to learn from teaching. In J. Dewar, P. Hsu, and H. Pollatsek (Eds.) *Mathematics education: A spectrum of work in mathematical sciences departments* (Chapter 6, pp. 73-88), Association for Women in Mathematics Series. Switzerland: Springer International Publishing. DOI 10.1007/978-3-319-44950-0_6
 51. Heaton, R. M., Lewis, W. J., & Smith, W. M. (2013). The Math in the Middle Institute: Strengthening middle level teachers' mathematical and pedagogical capacities. In C. Beaver, L. Burton, M. Fung, & K. Kruczek, Eds., *Resources for Preparing Middle School Mathematics Teachers*, pp. 47-58. MAA Notes Series. <http://www.maa.org/ebooks/notes/NTE80.html>
 52. Heaton, R. M., Lewis, W. J., Homp, M. R., Dunbar, S. R., & Smith, W. M. (2013). Challenging and rigorous yet accessible and relevant mathematics courses for middle level teachers. In C. Beaver, L. Burton, M. Fung, & K. Kruczek, Eds., *Resources for Preparing Middle School*

Mathematics Teachers, pp. 181-201. MAA Notes Series.
<http://www.maa.org/ebooks/notes/NTE80.html>

53. Smith, W. M., Graupner, S., Hayek, L. M., & Welker, J. L. (2012). Essential elements for building community: The New Teacher Network. In California Mathematics Project (Ed.), *Monograph: Mathematics Teacher Retention*, pp. 124-129. Los Angeles, CA: California Mathematics Project.

Other Publications (not peer-reviewed)

54. Smith, W. M., Rasmussen, C., R., & Tubbs, R. (2021). Introduction to the special issue on infusing active learning into precalculus and calculus courses: Insights and lessons learned from mathematics departments in the process of change. *PRIMUS*.
55. McQuillan, J., Leadabrand, M., Smith, W. M., Speigel, A., & Wonch Hill, P. (2020). Seeing our connections in a pandemic: How network maps help trace viral spread. Informational essay accompanying C'rona Comix for the Worlds of Connections project. University of Nebraska Press. <http://worldofviruses.unl.edu/covid-19/>
56. Franz., D. P., Lawler, B. L., Lischka, A., Martin, W. G., Mohr-Schroeder, M., Smith, W. M., Strutchens, M., Sutton, J., & Uy, F. (2020). MTEP 2.0: Launching a new focus on program transformation. In W. M. Smith and L. C. Augustyn (Eds.), *Proceedings of the ninth annual Mathematics Teacher Education Partnership (virtual) conference*. Association of Public and Land-grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep9.html>
57. Smith, W. M. (2020). Actively learning mathematics. In W. M. Smith and L. C. Augustyn (Eds.), *Proceedings of the ninth annual Mathematics Teacher Education Partnership (virtual) conference* (pp. 28-31). Association of Public and Land-grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep9.html>
58. Apkarian, N., Smith, W. M., Vroom, K., Voigt, M., Gehertz, J., PtC Project Team, and SEMINAL Project Team (2019). *X-PIPS-M Survey Suite*. <https://www.maa.org/sites/>
59. Molfese, V., Burton, A., Smith, W. M., Chen, K., Leeper-Miller, J., Heaton, R. M., & Augustyn, L. C. (2019). *Infants and toddlers as mathematical thinkers*.
<https://scimath.unl.edu/csmce/math-early-on/2019/>
60. Smith, W. M. (2019). Actively learning mathematics. In W. M. Smith, K. Callahan, J. Strayer, R. S. Jones, and L. C. Augustyn (Eds.), *Proceedings of the Eighth Annual Mathematics Teacher Education Partnership* (pp. 34-36). Association of Public and Land-grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep8.html>
61. Martin, W. G., Smith, W. M., Mohr-Schroeder, M. J., Franz, D. P., & Strutchens, M. E. (2019). Transformations Panel. In W. M. Smith, K. Callahan, J. Strayer, R. S. Jones, and L. C. Augustyn (Eds.), *Proceedings of the Eighth Annual Mathematics Teacher Education Partnership*

- (pp. 13-19). Association of Public and Land-grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep8.html>
62. Smith, W. M. (2018). NebraskaMATH STEP: Secondary Teacher Education Partnership. In W. M. Smith, B. Lawler, J. Strayer, and L. C. Augustyn (Eds.), *Proceedings of the Seventh Annual Mathematics Teacher Education Partnership* (pp. 35-38). Association of Public and Land-grant Universities. <http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep7.html>
63. Smith, W. M. (2018). Actively learning mathematics. In W. M. Smith, B. Lawler, J. Strayer, and L. C. Augustyn (Eds.), *Proceedings of the Seventh Annual Mathematics Teacher Education Partnership* (pp. 57-62). Association of Public and Land-grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep7.html>
64. Martin, W. G., and Smith, W. M. (2018). Transformations working group. In W. M. Smith, B. Lawler, J. Strayer, and L. C. Augustyn (Eds.), *Proceedings of the Seventh Annual Mathematics Teacher Education Partnership* (pp. 39-44). Association of Public and Land-grant Universities.
<http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep7.html>
65. Smith, W. M., & Webb, D. C. (2017). Active Learning in Mathematics Research Action Cluster. In W. M. Smith, B. Lawler, J. Bowers, and L. Augustyn (Eds.), *Proceedings of the Sixth Annual Mathematics Teacher Education Partnership* (pp. 49-53). Association of Public and Land grant Universities.
66. Smith, W. M. (2016). Active learning mathematics at the University of Nebraska-Lincoln. In B. R. Lawler, Ronau, R. N., & M. J. Moh-Schroeder (Eds.), *Proceedings of the fifth annual Mathematics Teacher Education Partnership conference* (pp. 121-128). Association of Public Land-grant Universities.
67. Bowers, J., & Smith, W. M. (2016). Getting college ready for “college ready” students. In B. R. Lawler, Ronau, R. N., & M. J. Moh-Schroeder (Eds.), *Proceedings of the fifth annual Mathematics Teacher Education Partnership conference* (pp. 116-120). Association of Public Land-grant Universities.
68. Augustyn, L. C., Smith, W. M., & Lewis, W. J. (2016). *Strengthening a community of teacher leaders*. https://scimath.unl.edu/noyce/_files/Noyce%20Teacher%20Leadership%20Booklet%202016.pdf
69. Smith, W. M. (2008). *Exploring how three middle level mathematics teachers use their experiences in an ambitious professional development program*. Doctoral dissertation, Lincoln, NE.
70. Heaton, R. M., Smith, W. M., Kromminga, R., & Hartman, D. (2008). *Understanding the meaning of rural within a middle school mathematics professional development and research project in Nebraska*. Appalachian Collaborative Center for Learning, Assessment, and

Instruction in Mathematics (ACCLAIM) Working Paper #40.

<https://sites.google.com/site/acclaimruralmath/Home/acclaim-publications>

71. Heaton, R. M., Smith, W. M., Kromminga, R., & Hartman, D. (2008). The ambiguity of rural. *Rural Mathematics Educator*, 7(1). <http://www.acclaim-math.org//newsletter.aspx?id=55>

Manuscripts under review or revision

72. Funk, R., Uhing, K., Williams, M. & Smith, W. M. The role of leadership in educational innovation: A comparison of two mathematics departments' initiation, implementation and sustainment of active learning in the first-year courses. *SN Social Science*.
73. Hamel, E., Leeper Miller, J., Molfese, T., Burton, A., Smith, W. M., & Heaton, R. The cycle of inquiry as a framework for improving early childhood math instruction. *Early Education and Development*.
74. Yow, J. A., Criswell, B., Lotter, C., Smith, W. M., Rushton, G., Adams. P., Ahrens, S., & Hutchinson, A. Program attributes for developing and supporting STEM teacher leaders. *Teaching and Teacher Education*

Manuscripts in Preparation or under revision for re-submission

1. Donsig, A., Uhing, K., Wakefield, N., Smith, W. M., Funk, R., Hass, M., Brummer, J., & Lai, Y. (in preparation). Investing in instructors' agency to improve precalculus and calculus teaching and learning. *PRIMUS*.
2. Males, L. M., Setniker, A., Smith, W. M., & Flores, M. (in preparation). Using Staged Planning to Understand How Novice and Experienced Teachers Attend, Interpret and Respond to Curricular Materials. *Journal of Teacher Education*.
3. Williams, M., Apkarian, N., Uhing, K., Funk, R., Smith, W. M., Wakefield, N., Martinez, A., & Rasmussen, C. (in preparation). In the driver's seat: Course coordinators as change agents for active learning in university precalculus to calculus 2. *International Journal of Research in Undergraduate Mathematics Education*.
4. Carney, M., Howell, H., Jacobson, E. Smith, W. M., Smith, J., Bharaj, P., & Kersting, N. (in preparation). Review of validated assessments of teachers' mathematical knowledge. *Review of Educational Research*.
5. McQuillan, J., Miranda, Smith, W. M., & Spiegel, A. (in preparation) Teacher Networks for Inquiry-Oriented Science.

Presentations

Not listed here are presentations that are listed above in conference proceedings.

International Presentations

1. Bankov, K., Smith, W. M., & Tatto, M. T. (November, 2014). Learning to teach: Building global research capacity for evidence-based decision making. Presentation at the annual meeting of the World Educational Research Association, Edinburgh, Scotland.
2. Tatto, M. T., Rodriguez, M. C., Reckase, M., & Smith, W. M. (November, 2013). FIRSTMATH: Lessons in piloting an international study of novice mathematics teachers. Invited panel presentation at the Trends in Mathematics Education Conference, Istanbul, Turkey. Invited.
3. Smith, W. M., & Males, L. M. (March, 2013). Navigating teaching from the beginning: Two cases of first year teachers accessing and utilizing resources. Paper presented at the Trends in Mathematics Education Reform Conference, Prague, Czech Republic. Invited.
4. Smith, W. M. (March, 2013). Studying Nebraska's new mathematics teachers. Poster presented at the Trends in Mathematics Education Reform Conference, Prague, Czech Republic.
5. Smith, W. M. (Nov., 2012). Studying Nebraska's new mathematics teachers. Poster presented at the Trends in Mathematics Education Conference, Cork, Ireland. Invited.
6. Kutaka, T. S., Edwards, C. P., & Smith, W. M. (April, 2012). Math competence beliefs in the early childhood years. Paper presented at the Annual Meeting of the American Educational Research Association, Vancouver, BC.

National Presentations

7. Smith, W. M., & Rosenberg, J. (October, 2021). Implementing Active Learning in Undergraduate STEM Courses with Dr. Jessica Rosenberg and Dr. Wendy Smith. AAAS-IUSE Virtual Workshop Series (invited).
8. Smith, W. M. (March, 2021). Transforming first-year mathematics: Student engagement in mathematics through an institutional network for active learning. Invited plenary presentation to the virtual conference Catalyzing Systemic Change in Undergraduate Mathematics: A Convening of Mathematics Leaders.
9. Smith, W. M. (March, 2021). Opportunities for Securing Funding to Study Secondary Mathematics Teacher Preparation Program Transformation. Presentation to the Mathematics Teacher Education Partnership NIC-Cast Series [virtual].
10. Rasmussen, C., & Smith, W. M. (February, 2021). Transforming First-Year Mathematics Courses. PCRG Webinar series on RUME [virtual].
11. Smith, W. M., Lischka, A., Lawler, B., Martin, W. G., Strutchens, M., Franz, D. P., & Uy, F. (February, 2021). The Mathematics Teacher Education Partnership: Transforming Secondary Teacher Preparation Toward the AMTE Standards. Presentation to the Annual meeting of the Association of Mathematics Teacher Educators [virtual].
12. Smith, W. M., & Lawler, B. (February, 2021). Leading Program Change in Secondary Mathematics Teacher Preparation. Presentation to the Mathematics Teacher Education Partnership pre-conference workshop prior to the annual meeting of the Association of Mathematics Teacher Educators [virtual].

13. Smith, W. M., & Lischka, A. (February, 2021). Partnerships to Support Program Transformation in Secondary Mathematics Teacher Preparation. Invited presentation to the Mathematics Teacher Education Partnership pre-conference workshop prior to the annual meeting of the Association of Mathematics Teacher Educators [virtual].
14. Smith, W. M., Lischka, A., Mohr-Schroeder, M., Lawler, B., & Martin, W. G. (January, 2021). Presentation to the Mathematics Teacher Education Partnership NIC-Cast Series [virtual].
15. Rasmussen, C., Donsig, A., O'Sullivan, M., Smith, W. M., Webb, D. C. & Grant, G. (accepted for 2021). Successful Department Change Efforts to Transform Precalculus and Calculus. Panel presentation accepted to the Joint Math Meetings then shifted to a virtual webinar.
16. Smith, W. M., & Martinez, A. E. (November, 2020). Transforming first-year mathematics: Student engagement in mathematics through an institutional network for active learning. Presentation to the Annual (Virtual) Conference of the American Association of Colleges and Universities, online.
17. Smith, W. M. (September, 2020). Driver diagrams. Presentation to the Mathematics Teacher Education Partnership's Networked Improvement Community webcast (NIC-Cast).
18. Martin, W. G., Smith, W. M., & Uy, F. (August, 2020). Building our networked improvement community to transform secondary mathematics teacher preparation. Presentation to the Mathematics Teacher Education Partnerships' Networked Improvement Community webcast (NIC-Cast).
19. Smith, W. M. (July, 2020). Noyce track 4 PAPPG and ancillary proposal documents. Online webinar for the PERSIST project (DUE-1904102).
20. Smith, W. M., & Sutton, J. T. (July, 2020). Noyce Track 4 planning for objective external feedback. Online webinar for the PERSIST project (DUE-1904102).
21. Martin, W. G., Smith, W. M., & Uy, F. (June, 2020). Welcome and team exercise I: Identification of the partnership. Invited Plenary presentation to the Mathematics Teacher Education Partnership Virtual Conference, [online].
22. Smith, W. M. (June, 2020). Team exercise III: Driver diagrams. Invited Plenary presentation to the Mathematics Teacher Education Partnership Virtual Conference, [online].
23. Martin, W. G., & Smith, W. M. (June, 2020). Conclusion and next steps. Invited Plenary presentation to the Mathematics Teacher Education Partnership Virtual Conference, [online].
24. Males, L. M., Block, S., & Smith, W. M. (June, 2020). Transforming Secondary Mathematics Teacher Preparation across a State: Promises and Challenges. Contributed discussion session at the Mathematics Teacher Education Partnership Virtual Conference, [online].
25. Williams, M., Apkarian, N., Uhing, K., Funk, R., Smith, W. M., Wakefield, N., Martinez, A., & Rasmussen, C. (was July, 2020; now scheduled July, 2021). Course coordinators as change agents for active learning in university precalculus to calculus 2. Paper would have been presented at the International Congress on Mathematics Education, Shanghai, China.

26. Smith, W. M., Wakefield, N., Voigt, M., McGrane, C., & Martinez, A. (May, 2020). A look at SEMINAL survey data. Plenary presentation to the SEMINAL virtual conference (online).
27. Smith, W. M., & McGrane, C. (May, 2020). Introduction to data on student outcomes. Concurrent presentation to the SEMINAL virtual conference (online).
28. Tatto, M. T., & Smith, W. M. (presentation canceled when conference format changed, March, 2020). Developing a fair system to evaluate teacher preparation and teaching: Building research capacity. Presentation to the Annual Conference of the Comparative & International Education Society, Miami, FL.
29. Williams, M., Apkarian, N., Uhing, K., Funk, R., Smith, W. M., Wakefield, N., Martinez, A., & Rasmussen, C. (February, 2020). In the driver's seat: Course coordinators as change agents for active learning in university precalculus to calculus 2. Paper presented at the Conference on Undergraduate Mathematics Education, Boston, MA.
30. Smith, W. M., & Harrell-Willaims, L. (February, 2020). Grant writing. Invited presentation to the Mentoring and Partnerships for Womxn in Research in Undergraduate Mathematics Education (MPWR) workshop, Boston, MA.
31. Smith, W. M. (January, 2020). SEMINAL. Colloquium presentation at The Ohio State University, Columbus, OH.
32. Rasmussen, C., Smith, W. M., Webb, D. C., & Gobstein, H. (November, 2019). Change efforts to improve student success in foundational math courses. Presentation to the Association of American Colleges and Universities Conference, Chicago, IL.
33. Thomas, A., & Smith, W. M. (October, 2019). Learning Leadership. Presentation to the National STEM Education Research Summit, Raleigh, NC.
34. Smith, W. M. (June, 2019). Transformation Panel. Plenary panel presentation to the Mathematics Teacher Education Partnership Conference, St. Louis, MO.
35. Smith, W. M., & Apkarian, N. (May, 2019). SEMINAL-PtC. Plenary presentation to the Joint SEMINAL-PtC Workshop, Lincoln, NE.
36. Amick, L., Strutchens, M. E., Smith, W. M., Lischka, A. E., & Franz, D. P. (April, 2019). Collaborating to improve the preparation of secondary mathematics teachers. Presentation to the annual Research Conference of the National Council of Teachers of Mathematics, San Diego, CA.
37. Williams, M., Smith, W. M., Uhing, K., & Funk, R. (March, 2019). Leadership and commitment to educational innovation: Comparing two cases of active learning reforms. Presentation to the Research in Undergraduate Mathematics Education conference, Oklahoma City, OK.
38. Smith, W. M. (February, 2019). How school-university partnerships can foster mathematics teacher leadership: Applying an ecological framework. Presentation to the annual conference of the Association of Mathematics Teacher Educators, Orlando, FL.

39. Smith, W. M., Rasmussen, C. R., Webb, D. C., Tubbs, R., Voigt, M., & Gobstein, H. (January, 2019). The Student Engagement in Mathematics through an Institutional Network for Active Learning project: Investigating departmental change. Invited presentation at the annual Joint Mathematics Meeting, Baltimore, MD.
40. Smith, W. M., & Rushton, G. (July, 2018). Teacher Leadership (T-LEAD): Investigating the persistence and trajectories of Noyce Master Teaching Fellows. Presentation at the annual Noyce conference, Washington, D.C.
41. Smith, W. M. (June, 2018). NebraskaMATH STEP: Secondary Teacher Education Partnership. Invited presentation at the annual Mathematics Teacher Education Partnership conference, Denver, CO.
42. Martin, W. G., Ellis, M. W., Smith, W. M., & Strutchens, M. E. (February, 2018). Transforming secondary mathematics teacher preparation: A networked approach to enacting the AMTE standards. Presentation to the annual conference of the Association of Mathematics Teacher Educators, Houston, TX.
43. Tatto, M. T., Rodriguez, M. C., Smith, W. M., & Reckase, M. D. (February, 2018). Learning to Teach: A Cross-National Study of Novice Teachers (Methodological Challenges with a focus on Novice Mathematics Teachers. Invited presentation to dean's lecture series, Arizona State University, Tempe, AZ.
44. Smith, W. M., Webb, D. C., Bowers, J., & Voigt, M. (June, 2017). SEMINAL. Presentation to the annual conference of the Math Teacher Education Partnership, New Orleans, LA.
45. Males, L. M., Flores, M., Smith, W. M., & Setniker, A. (April, 2017). At the intersection of curriculum use and planning: How do teachers plan? Presentation to the annual Research Conference of the National Council of Teachers of Mathematics, San Antonio, TX.
46. Smith, W. M., Donsig, A., & Wakefield, N. (February, 2017). Precalculus course transformation at the University of Nebraska-Lincoln. Presentation at the John N. Gardner Institute Gateway Course Experience Conference, Las Vegas, NV.
47. Beattie, H., Smith, W. M., Ren. L., & Heaton, R. M. (February, 2017). Learning from practice: Developing elementary mathematics teachers' noticing. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
48. Lai, Y., & Smith, W. M. (January, 2017). Mathematical knowledge for teaching and mathematical habits of mind in the NebraskaNOYCE program. Presentation at the Joint Math Meetings, Atlanta, GA.
49. Smith, W. M., Augustyn, L. C., Vitosh, J., Katt, S., & Goodell, J. (July, 2016). Noyce teacher leadership: Opportunities and leadership trajectories. Presented at the national Noyce conference, Washington, DC.
50. Smith, W. M. (June, 2016). Active learning mathematics at the University of Nebraska-Lincoln. Presented at the annual meeting of the Mathematics Teacher Education Partnership, Atlanta, GA.

51. Bowers, J., & Smith, W. M. (June, 2016). Getting college ready for “college ready” students. Presented at the annual meeting of the Mathematics Teacher Education Partnership, Atlanta, GA.
52. Tatto, M. T., & Smith, W. M. (April, 2016). Learning to teach mathematics: A cross-national study as a follow-up of TEDS-M. Symposium presented at the Annual Meeting of the National Council of Teachers of Mathematics, San Francisco, CA.
53. Ren, L., Smith, W. M., Beattie, H., & Heaton, R. M. (April, 2016). Using child studies to promote K-3 teacher noticing. Center for Research on Children, Youth, Families and Schools’ 2016 Summit on Research in Early Childhood, Lincoln, NE.
54. Tatto, M. T., & Smith, W. M. (January, 2016). Learning to teach mathematics: Methodological challenges in a cross-national study of novice mathematics teachers. Paper presented at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
55. Smith, W. M. (April, 2015). Novice mathematics teachers’ enacted practices: Developing an observation protocol to use in international settings. Symposium paper presentation at the annual meeting of the American Educational Research Association, Chicago, IL.
56. Kutaka, T. S., Smith, W. M., Albano, A. D., & Kang, C. (April, 2015). Differences in beliefs and knowledge for teaching mathematics: An international study of future teachers. Symposium paper presentation at the annual meeting of the American Educational Research Association, Chicago, IL.
57. Smith, W. M. (February, 2015). Discussing the development of a mathematically-focused observation instrument. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Orlando. FL.
58. Smith, W. M., Edwards, C. P., Heaton, R. M., & Homp, M. R. (April, 2014). Translating teacher learning in professional development to classroom practice. Presentation at the annual meeting of the American Educational Research Association, Philadelphia, PA. (also co-Chair of this Symposium)
59. Swidler, S. A., Smith, W. M., & Heaton, R. M. (February, 2014). Practitioner inquiry in preservice mathematics teacher education. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
60. Smith, W. M., Males, L. M., Swidler, S. A., Larson, B., & Pinguoch, B. (February, 2014). Preparing better teachers: Multiple perspectives on secondary mathematics certification. Symposium presentation at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
61. Sutton, J. T., Smith, W. M., & Good, B. (October, 2013). Data management: Do it right from the outset or do it again and again. Presentation at the annual American Evaluation Association, Washington, D.C.
62. Smith, W. M., Sutton, J. T., & Good, B. (October, 2013). Data management: Do it right from the outset or do it again and again. Presentation for the Research Education Lab (REL) Central Online Seminar series. Invited.

63. Smith, W. M., Lewis, W. J., & Heaton, R. M. (April, 2013). Ensuring mathematics learning in rural schools through investments in teacher knowledge. Presentation to the Great Plains Symposium: Gains and Losses from School Consolidation in the Great Plains, Kearney, NE. Invited
64. Kutaka, T. S., Fleharty, H., Smith, W. S., & Green, J. L. (April, 2013). Connections between teachers' mathematical knowledge for teaching and school-level poverty. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
65. Smith, W. M., Sutton, J. T., & Good, B. (April, 2013). Data management: Do it right from the outset or do it again and again. Presentation for the MSPnet Academy webinar series. Invited
66. Smith, W. M., Sutton, J. T., & Good, B. (February, 2013). Data management: Do it right from the outset or do it again and again. Presentation at the Math Science Partnerships Learning Network Conference, Washington, D. C.
67. Fellers, P., Stroup, W. W., Lukin, L., Sutton, J. T., Wang, X., Smith, W. M., & Green, J. L. (February, 2013). An investigation of the behavior of value-added models for estimating MSP impact. Math Science Partnerships Learning Network Conference, Washington, D.C.
68. Smith, W. M. (January, 2013). Preservice teachers' investigations of struggling students: Developing more equitable mathematics teaching practices. Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
69. Smith, W. M. (Sep, 2012). How to turn good ideas into articles and presentations. Presentation at the Nebraska Association of Teachers of Mathematics, Lincoln, NE.
70. Edwards, C. P., & Smith, W. M. (April, 2012). Improving math education in Nebraska primary classrooms through teacher professional development: The NebraskaMATH project. CYFS Summit on Research in Early Childhood, Lincoln, NE.
71. Smith, W. M., & Shen, Y. (February, 2012). Examining K-3 teacher change trajectories across participation in a longitudinal mathematical professional development program. Paper presented at the Annual meeting of the Association of Mathematics Teacher Educators, Fort Worth, TX.
72. Smith, W.M. (October, 2011). Enacting standards for mathematical practices in NebraskaMATH. Presentation at the Enacting Standards for Mathematical Practices Conference, Lincoln, NE. Invited.
73. Smith, W. M., Millerd, P., Sand, G., & Welker, J. (October, 2011). NebraskaMATH: Developing and supporting professional communities of mathematics teachers in Nebraska. Invited presentation at the fourth forum of the Conference Board of Mathematical Sciences, Reston, VA.
74. Smith, W. M., Heaton, R. M., & Petit Cunningham, E. (April, 2011). How deep analysis of student work can improve instruction. Paper presented at the Annual Meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
75. Smith, W. M. & Homp, M. R. (April, 2011). NebraskaMATH courses related to CCSS-M. Presentation at the Gearing up for the Common Core Standards in Mathematics Conference, Tucson, AZ. Invited.

76. Smith, W. M., Homp, M. R., & Lewis, W. J. (April, 2011). Developing Mathematical Habits of Mind in Mathematics Teachers. Presentation at the Gearing up for the Common Core Standards in Mathematics Conference, Tucson, AZ. Invited.
77. Kutaka, T. S., Edwards, C. P., Smith, W. M., & Shen, Y. (April, 2011). Exploring How Accurately K-3 Children Assess Their Mathematical Competencies. Poster presented at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
78. Heaton, R. M., & Smith, W. M. (2011). Action research about facilitating high quality teacher action research. Paper presented at the Annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
79. Smith, W. M. (2011). NebraskaMATH: Primarily Math research design. Paper presented at the Math Science Partnership program's annual Learning Network Conference, Washington, DC.
80. Green, J. L., & Smith, W. M. (2011). Connecting the pieces: Methodology for developing student achievement trajectories from different instruments. Paper presented at the Math Science Partnership program's annual Learning Network Conference, Washington, DC.
81. Green, J., Smith, W. M., Heaton, R. M., Shuo, J., & Stroup, W. (2010). Estimating the impact of a professional development program on student learning using a value-added model. Paper presented at the Annual Meeting of the American Educational Researcher Association, Denver, CO.
82. Smith, W. M. (April 2009). Exploring how three middle level mathematics teachers use their experiences in an ambitious professional development program. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego.

Local/Statewide Presentations

83. Soh, L.-K., Nugent, G., & Smith, W. M. (March, 2021). AIR@NE. Presentation to the Discipline Based Education Research Seminar [online].
84. Smith, W. M. (January, 2020). SEMINAL: An updated look at understanding departmental transformation efforts. Presentation to the Discipline Based Education Research Seminar, Lincoln, NE.
85. Smith, W. M. (November, 2018). SEMINAL: Preliminary Findings. Presentation to the Discipline Based Education Research Seminar, Lincoln, NE. Invited 1-hour presentation to about 10 UNL DBER faculty and graduate students.
86. Smith, W. M. (September, 2018). NebraskaMATH statewide partnership: Collaborating to improve mathematics teacher preparation. Presentation to the Nebraska Association of Teachers of Mathematics Annual Conference, Kearney, NE.
87. Smith, W. M. (September, 2017). SEMINAL: Preliminary Findings. Presentation to the Discipline Based Education Research Seminar, Lincoln, NE.

88. Smith, W. M., & Sutton, J. T. (September, 2017). Examination of Coaching Models: What Could Work for You? Presentation to the Nebraska Association of Teachers of Mathematics Annual Conference, Kearney, NE.
89. Smith, W. M. (April, 2017). Undergraduate SEMINAL grant. Presentation to the Discipline Based Education Research Seminar, Lincoln, NE.
90. Smith, W. M. (October, 2016). Collegiate Active Learning Calculus Survey (CALCS): Adapting an instrument and using results. Presentation to the Discipline Based Education Research Seminar, Lincoln, NE.
91. Smith, W. M., (September, 2016). Improving Practice Through Informal Teacher Research. Presentation to the Nebraska Association of Teachers of Mathematics Annual Conference, Kearney, NE.
92. Smith, W. M. (September, 2015). NebraskaMATH: Sharing Findings from a Statewide Partnership. Presentation to the Discipline Based Education Research Seminar, Lincoln, NE.
93. Smith, W. M. (April, 2015). Transforming Precalculus Instruction: Evidence-Based Course Design. Presentation to the Discipline Based Education Research Seminar, Lincoln, NE.
94. Heaton, R. M., Smith, W. M., & Kutaka, T. S. (December, 2014). Primarily Math. Presentation at the Nebraska Summit on Math and Science Education, Lincoln, NE.
95. Smith, W. M. (October, 2013). Examining the research of Dr. Doug Clements. Presentation to the Issues in Mathematics Education Seminar, Lincoln, NE.
96. Heaton, R. M., Smith, W. M., & Kutaka, T. S. (September, 2013). Creating Interdisciplinary Collaborations to Support and Understand Mathematics Teaching and Learning. Presentation to the Discipline Based Education Research Seminar, Lincoln, NE.
97. Smith, W. M. (October 2011 and May 2012). District Mathematics Professional Development Workshop. Shenandoah, IA.
98. Smith, W. M. (October, 2011). Enacting standards for mathematical practices in NebraskaMATH. Invited presentation given at the Enacting Standards for Mathematical Practices Conference, Lincoln, NE.
99. Smith, W. M. (September, 2011). What assumptions do you hold related to “effective math teaching”? Presentation to the Issues in Mathematics Education Seminar, Lincoln, NE.
100. Smith, W. M. (September, 2008). Teachers’ Uses of Context. Presentation to the Issues in Mathematics Education Seminar, Lincoln, NE.

Service to the Profession: Editorial, Refereeing, Reviewing, and Organizing Conferences and Workshops

- **JMM Sessions hosted**

I co-hosted a contributed paper session related to departments incorporating active learning into first-year mathematics courses. With over 30 submitted abstracts, we were awarded three

different 2-4 hour sessions to host 27 of the contributed talks. Co-hosts Chris Rasmussen and Matthew Voigt, San Diego State University. Attendance across the 10.5 hours ranged from approximately 12-75. 2020 Denver, CO.

- **Conference and Workshop Organization**

1. I led the organization of a virtual conference for SEMINAL (see grant activity) under the new Change DIAL conference award (see grant activity). The virtual conference had over 60 attendees to most sessions.
2. I co-led the organization of PERSIST workshops for Noyce Track 4 PIs (July 2019) and prospective Noyce Track 4 PIs (Feb 2020 and July 2020), together with the other project personnel.
3. I led the organization of a conference between the SEMINAL (see grant activity) and Progress through Calculus projects in May 2019. The conference had approximately 80 attendees from around the country, from departments working to adopt more active learning strategies in their precalculus and calculus sequence courses. An NSF program officer was also in attendance (Talitha Washington).
4. I co-led the organization of the Mathematics Teacher Education Partnership annual summer conferences (in person 2018, 2019; online 2020); these have been funded by the NIC-Transform grant (see grant activity).
5. Together with Chris Rasmussen (San Diego State University), Naneh Apkarian (Arizona State University), in 2020 we were awarded the MSRI's Critical Issues in Mathematics Education Conference for April 2021. The in-person event is postponed but will have a small virtual component on the original dates.

- **Seminar Organization**

I co-organized the Mathematics Education Doctoral Seminar, with Drs. Nathan Wakefield and Yvonne Lai. We meet weekly for 90 minutes and feature a variety of formats to engage attendees in mathematics education. We had approximately 15-17 attendees most weeks. This seminar is mentioned under my teaching section.

- **Editorial Duties**

1. Guest editor of a 2020 special issue of PRIMUS (with Chris Rasmussen, San Diego State University, and Rob Tubbs, University of Colorado Boulder). We solicited and reviewed manuscripts in 2019; approved final revisions in 2020. 26 of the 27 of the submitted articles are available online (as of Dec 2020), with print version to come in 2021.
2. Co-edit the Mathematics Teacher Education Partnership book, published in 2020 (see publications).
3. Lead the editorial team for the SEMINAL Phase 1 book, to appear in 2021 (see publications).
4. Lead Editor, 2017-2021 Proceedings of the annual meeting of the Mathematics Teacher Education Partnership
5. Guest Editor, special issue of The Mathematics Enthusiast, with Ruth Heaton (2012-2013)

- **Refereeing**

- 2020 – Educational Policy Analysis Archives (invited)
- 2020 – International Journal of STEM Education (invited)
- 2019 – Mathematics Teaching and Learning (invited)
- 2018 – Investigations in Mathematics Learning
- 2016 – 2019 National Council of Teachers of Mathematics Research Conference (invited)
- 2015 – Journal of Teacher Education (invited)
- 2015 – 2016 National Council of Supervisors of Mathematics (invited)
- 2014 – 2016 Great Plains Research
- 2014 – Journal of Statistics Education
- 2012 – Journal for Research in Mathematics Education
- 2012 – 2018 Psychology of Mathematics Education-North American Chapter
- 2012 – 2018 National Council of Teachers of Mathematics annual conference
- 2011 – Mathematics Teacher Educator
- 2010 – Contemporary Issues in Technology and Teacher Education – Math
- 2010 – Association of Mathematics Teacher Educators annual conference
- 2009 – 2019 American Educational Research Association annual meeting
- 2009 – Journal of Educational and Behavioral Statistics (invited)

- **Professional travel** (not including conferences already listed under presentations)

- National STEM Education Centers: Accelerating Systemic Change Network virtual conference, June 2020
- Validity Evidence for Measurement in Mathematics Education (V-M2Ed), February 2020 (Las Vegas, NV)
- Joint Mathematics Meetings (JMM), January, 2020
- Research on Undergraduate Mathematics Education (RUME), February 2018 (San Diego, CA)
- American Educational Research Association 2006 (San Francisco), 2011 (Denver)
- Association of Mathematics Teacher Educators 2010 (Irvine), 2020 (Phoenix)
- Joint Math Meetings January 2018 (San Diego)
- Carnegie Summit on Education, March 2017 (San Francisco)
- National STEM Education Centers, June 2017 (New Orleans)
- Science and Math Teacher Imperative (SMTI), June 2017 (New Orleans)
- Mathematics Teacher Education Partnership 2012 (Atlanta), 2014 (Milwaukee), 2015 (Fullerton, CA)
- Nebraska Association of Teachers of Mathematics 1998-2001, 2011, 2013-2015 (Kearney, NE)

- Critical Issues in Mathematics Education (CIME), Mathematical Sciences Research Institute (MSRI) March 2014 (Berkeley)
- Science and Mathematics Teacher Imperative, Mathematics Teacher Education Partnership June 2014 (Milwaukee)
- Summer Institute for Online Teaching, University of Nebraska, May 2020 (online course)
- Teacher Education Development Study-Mathematics (TEDS-M) July 2014 (Limerick, Ireland)
- Teacher Education Development Study-Mathematics (TEDS-M) Writing Workshop, January 2016 (East Lansing, Michigan), March 2016 (East Lansing, Michigan), July 2016 (St. Paul, Minnesota)
- Research and Development Conference: Preparing and Implementing Successful Mathematics Coaching Programs, June 2016 (Richmond, VA)
- Research on Undergraduate Mathematics Education (RUME), February 2018 (San Diego, CA), February 2017 (San Diego, CA)

External Service

- Member, AMTE Program committee, 2020-2022.
- Member, Constitutions and By-Laws Connections Committee for the Association of Mathematics Teacher Educators, 2018-2021.
- Manuscript Feedback Group. The Association of Mathematics Teacher Educators.
- Organizing statewide committee of faculty in mathematics, mathematics education, and special education; K-12 school and district personnel in mathematics, special education, and English language learners; and representatives from the State Department of Education.
- Mathematics Teacher Education Partnership planning team (2016-present) and assistant director (2020-present)
- Member, National Advisory Board for College Mathematics Instructor Preparation Project (NSF/IUSE Collaborative grant to U. South Carolina and WestEd), 2020-2022
- Member, National Advisory Board for Dordt College's Noyce grant, 2017-2022
- Member, National Advisory Board for The Noyce Connection: Building a Community of Science and Mathematics Teacher Educators (an NSF/Noyce grant to AAAS)
- Member, National Advisory Board for COMMIT (Communities of Inquiry for Improving Teaching) grant to the U. of Nebraska at Omaha (2021-2024)
- **Other** (e.g. serving on NSF/Simons Foundation/AAAS panels, attending research workshops at UNL, research initiatives etc.)
 - Panelist and ad hoc reviewer for the National Science Foundation (2016-present)
 - Attend Nebraska Department of Education annual Teacher Education Forum (day-long event), 2018, 2019, 2020 (online)

- As the CSMCE Associate Director, I help other faculty with funded research. I serve as a financial administrator for a number of such grants I help faculty write and submit IRB protocols aligned with their research. I help support faculty in writing and submitting grants, particularly related to crafting budgets and getting IRB permissions. I also work with a number of faculty on the outreach portions of their grants, committing CSMCE support to their efforts.

External Funding as PI or Co-PI [\$36,919,534]

1.
 - **Title:** Exploring Cognitive and Foundational Processes Underlying Pre-Algebra among Students with and without Mathematics Learning Difficulties
 - **Agency/Organization:** IES/special education (#2417140222001)
 - **PIs/Co-PIs:** Jessica Namkung (PI), Wendy Smith (Co-PI)
 - **Amount:** \$1,399,534
 - **Period:** 7/1/2020-6/30/2024
 - **Details:** Dr. Namkung is leading these efforts to pilot measures to capture middle school students' cognitive processes in mathematics (pre-algebra). Due to the pandemic, year 1 work is on hold until fall 2021. As Co-PI, my role is liaising with school districts, and supporting the PI in data collection and analysis, and later with dissemination efforts.
2.
 - **Title:** Change in Departments and Institutions via Active Learning (Change DIAL)
 - **Agency/Organization:** NSF (Conference award) (DUE-1944720)
 - **PIs/Co-PIs:** Wendy Smith (PI); Co-PIs Lindsay Augustyn (UNL), Chris Rasmussen (San Diego State), David Webb (University of Colorado Boulder)
 - **Amount:** \$99,791
 - **Period:** 4/15/2020-3/31/2022
 - **Details:** This conference grant was intended to support an in-person conference in Lincoln, NE in June 2020. However, between the award date and the global pandemic, the plans have shifted to a summer 2021 conference virtual conference plus a fall 2021/spring 2022 in person conference in Lincoln. The conference has three central goals: Connect conference participants to an existing community of mathematics faculty, researchers, and administrators dedicated to educational innovation in Precalculus through Calculus 2 courses. (2) Leverage these connections to share and generate knowledge of strategies for initiating, implementing, and sustaining cultural change that supports the improvement of courses in the calculus sequence. (3) Foster instructor development by encouraging participants to share highly effective instructional practices and tasks for an active learning classroom.
3.
 - **Title:** STEM Career Opportunities in Nebraska: Networks, Experiential-learning and Computational Thinking (STEM CONNECT)
 - **Agency/Organization:** NSF/S-STEM (DUE-1930211)
 - **PIs/Co-PIs:** Jim Lewis (PI), Amy Goodburn, Petronela Radu, Brittany Sharif, Wendy Smith

- **Amount:** \$3,580,869
 - **Period:** 10/01/2019-9/30/2014
 - **Details:** This scholarship grant for undergraduate STEM majors features a partnership with two of Nebraska's community colleges (Southeast and Western Nebraska). With a focus on supporting high-need students at the beginning of their college career as well as their transition from community college to four-year programs, the project features special sections of mathematics and computer science courses for cohort participants to build their computational thinking skills.
4.
 - **Title:** Innovating Life Sciences Education through Computational Modeling and Simulations
 - **Agency/Organization:** NSF/IUSE (DUE-1915131)
 - **PIs/Co-PIs:** Tomas Helikar (PI); Wendy Smith % Joe Dauer (Co-PIs)
 - **Amount:** \$1,896,570
 - **Period:** 10/1/2019-9/30/2024
 - **Details:** This institutional transformation grant seeks to scale up the practices of modeling and simulation in undergraduate life sciences courses, using the Cell Collective platform.
 5.
 - **Title:** Persistence, Effectiveness and Retention Studies In STEM Teaching (PERSIST)
 - **Agency/Organization:** NSF/Noyce (DUE-1904102)
 - **PIs/Co-PIs:** Wendy Smith (PI); Co-PIs Hannah Sevan (University of Massachusetts Boston) and Gillian Roehig (University of Minnesota)
 - **Amount:** \$392,264
 - **Period:** 1/1/2019-12/31/2021
 - **Details:** This collaborative grant funds workshops for current and potential future Noyce Track 4 PIs, to help foster collaborative research related to STEM teacher preparation, effectiveness and retention. In 2020, after one of the 3 spring conferences was shifted online (March 14; the Jan & Feb ones were held as planned), we used the saved funds to offer an additional set of online workshops in summer 2020. During fall 2020, we converted those recordings into a usable format and have set up an OpenCanvas "course" that people can access for free to view our webinars and access related materials.
 6.
 - **Title:** Computer Science for All: Adapt, Implement and Research at Nebraska (AIR@NE)
 - **Agency/Organization:** NSF/CSforAll (DUE-1837476)
 - **PIs/Co-PIs:** Leen-Kiat Soh (PI); Co-PIs Wendy Smith, Gwen Nugent, Guy Trainin, and Kent Steen (LPS)
 - **Amount:** \$2,000,000
 - **Period:** 10/1/2018-9/30/2022
 - **Details:** This grant funds K-8 teacher professional development in computer science and how to teach computer science, with a goal of developing teacher leaders in computer science across the state. The project also has a research component to understand how to better prepare K-8 teachers to effectively teach computer science to students, thereby broadening participation by K-12 students in computer science.

7.
 - **Title:** NIC-Transform: Using Networked Improvement Communities to Design and Implement Program Transformation Tools for Secondary Mathematics Teacher Preparation
 - **Agency/Organization:** NSF/IUSE (DUE-1834551)
 - **PIs/Co-PIs:** Wendy Smith (PI, UNL); Gary Martin (PI, Auburn)
 - **Amount:** \$150,000 UNL (\$300,000 total)
 - **Period:** 10/1/2018-9/30/2021 (new in 2020: one year no cost extension)
 - **Details:** This collaborative research grant studied five institutions working on program transformation for improving secondary mathematics teacher preparation. A key focus of this grant was the development and testing of a knowledge generating and management system, to document what sites are doing, learning from each other, and refine efforts. The work also is related to the Mathematics Teacher Education Partnership.
8.
 - **Title:** Teacher Leadership: Investigating Trajectories and Persistence (T-Lead)
 - **Agency/Organization:** NSF/Noyce (Track 4) (DUE-1758462)
 - **PIs/Co-PIs:** Wendy Smith (PI, UNL); Co-PIs at Middle Tennessee State (Greg Rushton), Westchester University (Brett Criswell), and University of South Carolina (Jan Yow and Christine Lotter), together with subawards to Auburn University (Gary Martin and Marilyn Strutchens), California State University San Bernadino (Cory Johnson), University of Cincinnati (Helen Myers), University of Colorado Boulder (Valerie Otero), and Michigan Technical University (Amanda Gonczi)
 - **Amount:** \$701,004 UNL (\$1,500,000 total)
 - **Period:** 6/8/2018-5/31/2021
 - **Details:** This collaborative research grant collected data from eight Noyce projects that fund Master Teaching Fellowships, including two at UNL. We explored the relative influences of a variety of contextual factors on teachers' leadership trajectories and persistence as teachers in high-need schools. This project also worked to validate a measure of teacher leadership activities and efficacy with experienced teachers.
9.
 - **Title:** NebraskaSTEM
 - **Agency/Organization:** NSF/Noyce (Track 3) (DUE-1758496)
 - **PIs/Co-PIs:** Amanda Thomas (PI); Co-PIs Wendy Smith, Guy Trainin, Leen-Kiat Soh
 - **Amount:** \$1,499,493
 - **Period:** 3/2/2018-3/1/2023
 - **Details:** This Noyce grant recruited and supports 15 elementary STEM teacher leaders from high-need rural Nebraska districts. The teachers first completed a STEM teacher leadership master's degree (August 2019), and then have worked locally on leadership projects related to improving student outcomes in elementary STEM.
10.
 - **Title:** Student Engagement in Mathematics through an Institutional Network for Active Learning (SEMINAL)
 - **Agency/Organization:** NSF/IUSE (DUE-1624643)

- **PIs/Co-PIs:** Wendy Smith (PI); UNL Co-PIs Allan Donsig, Nathan Wakefield; collaborative PIs Howard Gobstein (APLU), David Webb, David Grant, Robert Tubbs (Colorado Boulder), Chris Rasmussen and Michael O’Sullivan (San Diego State University)
 - **Amount:** \$332,442 UNL plus \$66,462 supplemental funding awarded in 2020 (\$3,653,022 total with supplements)
 - **Period:** 9/1/2016-2/28/2022 (new in 2020: 6 month extension along with supplement)
 - **Details:** A fundamental goal of the project is to develop a better understanding of how to enact and support institutional change for implementing active learning mathematics (ALM) in undergraduate learning environments. This project will investigate environments at six institutions that have successfully improved student learning in the Precalculus-to-Calculus 2 (P2C2) sequence by employing active learning in mathematics (ALM), as well as nine other institutions in the process of institutionalizing ALM. The results of this work will lead to important strategies for adapting, implementing, supporting, and assessing ALM in P2C2 courses. The 2020 supplement provides for additional data collection, analyses, and dissemination.
11. • **Title:** Nebraska Partnership TEAMS: Teaching to Enhance Achievement in Math and Science
- **Agency/Organization:** Department of Education Math Science Partnership
 - **PIs/Co-PIs:** Wendy Smith (PI); Co-PIs Leilani Arthurs, Elizabeth Lewis, Lorraine Males, Mindi Searls, Amanda Thomas, Michelle Homp, Julie Thomas, Yvonne Lai, Ruth Heaton
 - **Amount:** \$1,062,400
 - **Period:** 8/5/2016-7/31/2018
 - **Details:** This service grant allowed us, in cooperation with a corps of teacher leaders, to create and offer professional development to K-12 math and science teachers statewide (at multiple locations) in summer 2017 and across the 2017/18 school year. The project also sought to strengthen the statewide professional community of K-12 math and science teachers. We held leadership institutes in summer 2018 for teachers and their principals.
12. • **Title:** NebraskaNOYCE Phase II
- **Agency/Organization:** NSF/Noyce (research track) (DUE-1439867)
 - **PIs/Co-PIs:** Wendy Smith PI; Yvonne Lai and Lorraine Males Co-PIs
 - **Amount:** \$299,878
 - **Period:** 9/1/2014-9/30/2019
 - **Details:** This research grant allowed us to conduct research about the impact of the Noyce Master Teaching Fellows and Teaching Fellows supported by the NebraskaNOYCE grant.
13. • **Title:** SWIRLS
- **Agency/Organization:** NSF, as a supplement to NebraskaNOYCE Phase II
 - **PIs/Co-PIs:** Yvonne Lai (PI); Wendy Smith (Co-PI)
 - **Amount:** \$49,986
 - **Period:** 1/1/2018-9/30/2019

- **Details:** This supplement funded a graduate research assistant to have an internship in a non-university setting, at ETS, in 2018. The funds then provided travel support for the graduate student to disseminate her research in 2019.
14.
 - **Title:** Midwest Regional Robert Noyce Connections 2014-2016
 - **Agency/Organization:** NSF/Noyce (DUE-1405512)
 - **PIs/Co-PIs:** Wendy Smith (PI); Co-PIs W. Hunter (Illinois State), R. Post (Wittenberg University), Kim Nguyen (IUPUI)
 - **Amount:** \$799,420
 - **Period:** 2/1/2014-1/31/2016
 - **Details:** This grant was for our team to host the Midwest Regional Noyce Conference, and also to conduct other community-building and informational activities throughout 2014 and 2015, including webinars, local workshops, and building an online community among Noyce project personnel and Noyce Scholars in 15 Midwest states. We held a workshop for teachers at the Kennedy Space Center (FL) in 2016.
 15.
 - **Title:** UNL-LPS Title I Professional Development Partnership, 2014-2017
 - **Agency/Organization:** Lincoln Public Schools Title I Professional Development Funds
 - **PIs/Co-PIs:** Wendy Smith and Jim Lewis
 - **Amount:** 4 one-year grants, May 2014-Aug 2017: \$538,246 (2014), \$553,196 (2015), \$219,007 (2016), \$28,178 (2017)
 - **Period:** May 2014-Aug 2017
 - **Details:** These grants were for UNL and LPS to partner in offering one cohort each of Primarily Math (grades K-3) and Math in the Middle (grades 4-8) to teachers in LPS Title I buildings. The 2016 and 2017 awards included funds for teachers in grades 4-6 at Title I buildings to take one mathematics course for teachers.
 16.
 - **Title:** Active Learning Mathematics Research Action Cluster
 - **Agency/Organization:** Helmsley Charitable Trust/ Association of Public Land-grant Universities (APLU)
 - **PIs/Co-PIs:** PI: Jim Lewis, Co-PIs Allan Donsig and Wendy Smith.
 - **Amount:** \$70,283 (subaward to APLU's \$1,049,368 award)
 - **Period:** 12/2013-3/2015
 - **Details:** This grant was a subaward to the larger grant awarded to APLU, PIs Howard Gobstein and Gary Martin. This pilot project research grant studies reforms to college freshmen-level mathematics courses. Five universities collaborated on this project. This project was part of the larger Mathematics Teacher Education Partnership project. This award led to the NSF IUSE SEMINAL project (see above)
 17.
 - **Title:** NebraskaMATH Omaha Public Schools Teacher Leader Academy
 - **Agency/Organization:** The Sherwood Foundation[®] and the Lozier Foundation
 - **PIs/Co-PIs:** PI Jim Lewis; Co-PIs Ruth Heaton and Wendy Smith

- **Amount:** \$5,455,811 (2013-2016); \$1,829,433 (2016-2017)
 - **Period:** 2013-2016
 - **Details:** This research and development grant extended the NebraskaMATH partnership for focus work with teachers from the Omaha Public Schools.
18. • **Title:** 2012 Learning Network Conference
- **Agency/Organization:** NSF (DUE-1143844)
 - **PIs/Co-PIs:** PI: Lance Perez; Co-PIs Wendy Smith, Ruth Heaton, Hannah Sevian (University of Massachusetts Boston)
 - **Amount:** \$255,394
 - **Period:** 9/1/2011-8/31/2012
 - **Details:** This grant was for our team to plan and carry out NSF's annual Math Science Partnerships Learning Network Conference in Washington, D.C., January 22-24, 2012, and then to oversee a broader dissemination effort of selected conference presentations.
19. • **Title:** Data Connections: Developing a Coherent Picture of Mathematics Teaching and Learning
- **Agency/Organization:** NSF/MSP RETA (DUE-1050667)
 - **PIs/Co-PIs:** PI: Walt Stroup; Co-PIs Wendy Smith, Leslie Eastman (Lincoln Public Schools), Jenny Green (Montana State [now Michigan State]).
 - **Amount:** \$1,213,475
 - **Period:** 6/15/11-5/31/15
 - **Details:** This grant developed, refined, and disseminated statistical models that developed a coherent picture of mathematics teaching and learning, particularly in regard to Math Science Partnership programs.
20. • **Title:** 2011 Learning Network Conference
- **Agency/Organization:** NSF (DUE-1067910)
 - **PIs/Co-PIs:** PI: Lance Perez; Co-PIs Wendy Smith, Ruth Heaton, Hannah Sevian (University of Massachusetts Boston)
 - **Amount:** \$141,383
 - **Period:** 11/15/2010-10/31/2012
 - **Details:** This grant was for our team to plan and carry out NSF's annual Math Science Partnerships Learning Network Conference in Washington, D.C., January 23-25, 2011, and then to oversee a broader dissemination effort of selected conference presentations.
21. • **Title:** NebraskaNOYCE
- **Agency/Organization:** NSF/Noyce (TF/MTF Track) (DUE-1035268)
 - **PIs/Co-PIs:** Wendy SMith (PI); Co-PIs Yvonne Lai, Lorraine Males, Steve Swidler
 - **Amount:** \$3,000,000
 - **Period:** 9/01/2010-8/31/2017

- **Details:** This grant created Robert Noyce NSF Teacher Scholarship programs both for people to become new secondary mathematics teachers in high need Nebraska secondary schools, and for master mathematics teachers in Nebraska to be funded to further their education and take on added leadership roles in Nebraska mathematics instruction in high need schools.
22. • **Title:** NebraskaMATH
- **Agency/Organization:** NSF/MSP (DUE-0831835)
 - **PIs/Co-PIs:** PI Jim Lewis 2009-2014, Ruth Heaton 2015; Co-PIs Carolyn Edwards (dec.), Tom McGowan (ret.), Jadi Miller (was LPS), Ira Papick (ret.), Walt Stroup (ret.); Wendy Smith as Research Coordinator 2009-2014, Co-PI in 2015.
 - **Amount:** \$9,235,407
 - **Period:** 01/01/2009-12/31/2015
 - **Details:** This targeted Math Science Partnership grant created Primarily Math for K-3 teachers, Nebraska Algebra, and the New Teacher Network, to help address the critical transition points of K-12 schooling through longitudinal professional development for teachers. This highly successful grant also included a very large research component to study the impact of professional development on both teacher and student outcomes.

External Funded Proposals as Senior Personnel [\$2,042,242]

1. • **Title:** Development of Research to Improve Undergraduate Student Outcomes in Mathematics
 - **Agency/Organization:** NSF
 - **PIs/Co-PIs:** Julia St. Goar (PI, Merrimack College); named mentors Yvonne Lai & Wendy Smith
 - **Amount:** \$50,661 subaward to UNL
 - **Period:** 9/3/2020-8/31/2022
 - **Details:** Lai & Smith serve as senior mathematics education researcher mentors for Dr. St. Goar, to provide feedback on the research design, analysis, and dissemination. The research objectives are (1) extended data analysis of student work on congruence proofs in two courses, (2) design of student interviews to examine potential Key Developmental Understandings (KDUs) for congruence and similarity proofs, (3) conducting interviews examining potential KDUs for congruence proofs, and (4) videos of a geometry course at the University of Nebraska-Lincoln (UNL) focused on geometry from a transformation approach.
2. • **Title:** Worlds of Connections: Engaging Youth with Health Research through Network Science and Stories in Augmented Reality
 - **Agency/Organization:** NIH SEPA NIGMS
 - **PIs/Co-PIs:** Julia McQuillan (PI); multiple Co-PIs including Wendy Smith and Amy Spiegel

- **Amount:** \$1,235,707 (\$183,245 cost share)
 - **Period:** 9/1/2018-7/31/2023
 - **Details:** Worlds of Connections (WOC) is an informal science learning research project that is funded by a National Institute of Health (NIH) Science Education Project Award (SEPA). Our long term goal is to enhance the diversity of the bio-behavioral and biomedical workforce by increasing interest in Network Science among members of underrepresented minority communities and to promote public understanding of the benefits of NIH-funded research for public health. My role was to help plan and lead the teacher workshop in 2019, to help develop the workshop into a course (to offer in 2021), and to serve generally as a mathematics consultant for the project in the activities they are developing for middle school students about network science.
- 3.
- **Title:** Math Early On Phase II
 - **Agency/Organization:** Buffett Early Childhood Fund
 - **PIs/Co-PIs:** Tori Molfese (PI); Co-PIs Jenny Leeper Miller, Wendy Smith (former PI was Ruth Heaton before she left UNL)
 - **Amount:** \$662,227
 - **Period:** 8/1/2015-7/31/2020
 - **Details:** Math Early On provides professional development in mathematics to preschool teachers working in Nebraska Educare.

Internal Funded Proposals [\$89,734]

1.
 - **Title:** Communities of Practice in First Year Math Courses: Investigating the Transition to Remote Learning
 - **Agency/Organization:** UNL ORED COVID-19 Rapid Response Grant Program
 - **PIs/Co-PIs:** Allan Donsig (PI); Co-PIs Nathan Wakefield & Wendy Smith
 - **Amount:** \$31,780
 - **Period:** 4/15/2020-12/31/2020
 - **Details:** We studied how the spring/summer 2020 sudden transition to online instruction affected both students and graduate student instructors in first year mathematics courses, emphasizing the role of existing supports, particularly the established community of practice. Communities of practice are essential to long term change in a department's instructional practice. This sudden change is a unique opportunity to see clearly the role of a community of practice in supporting instructors' adoption of teaching practices. Using extensive data on student outcomes, we want to understand how the community of practice affects students' learning and their perceptions of instruction. This project served as a pilot and we submitted an IUSE/NSF proposal in December 2020 to fund a larger related research effort.
2.
 - **Title:** Women in Science, 2017-2019
 - **Agency/Organization:** NSF-EPSCOR

- **PIs/Co-PIs:** Wendy Smith PI
 - **Amount:** \$10,000 per year, 2017, 2018, 2019
 - **Period:** 1/1/2017-12/31/2019
 - **Details:** These funds support an annual event for high school girls to come to Lincoln, Nebraska for a 2-day conference, Women in Science. Starting with a plenary speaker by a female scientist, the workshop is mostly hands-on sessions the girls attend both on and off campus to engage in scientific activities.
- 3.
- **Title:** Supporting Blended Education in High-Enrollment Math Courses
 - **Agency/Organization:** University of Nebraska Kelly Fund
 - **PIs/Co-PIs:** PI Nathan Wakefield, Co-PI Wendy Smith
 - **Amount:** \$24,954
 - **Period:** 07/01/2015-06/30/2016
 - **Details:** In this project, we added “hints” to online WeBWorK homework questions for College Algebra. The hints were meant to address common misconceptions, and took the form of questions or statements rather than the more typical hint which walks students through a problem using different numbers.
- 4.
- **Title:** NASA Nebraska mini grant for Math Day 2014
 - **Agency/Organization:** NASA Nebraska
 - **PIs/Co-PIs:** Wendy Smith
 - **Amount:** \$3,000
 - **Period:** 7/1/2014-12/31/2014
 - **Details:** This project funded travel for districts to bring students to UNL’s November 2014 Math Day in Lincoln, NE.

Courses Taught

[Note: 10% of my appointment is teaching]

- MATH 896 Seminar: Functions in STEM (instructor of record for 5 sections) (summer 2017)
- EDPS 892 Introduction to Educational Assessment (co-lead instructor) (summer 2015)
- MATH 896 Seminar in Math: Math in the Middle Capstone Course (summer 2015)
- TEAC 800 Inquiry into Teaching and Learning (summer 2013, fall 2013)
- TEAC 801 Curriculum Inquiry (summer 2010, spring 2012, spring 2013, summer 2014)
- TEAC 836B Special Topics: Leadership in Mathematics Education (fall 2020)
- TEAC 888 Teacher as Scholarly Practitioner (fall 2010, fall 2014)
- TEAC 890 Responsive Instruction in the Mathematics Classroom (summer 2011)

- TEAC 949a Trends and Issues in Mathematics Education Research (summer 2011)
- TEAC 923 Seminar in Mathematics Education Research (summer 2012)
- TEAC 895/MATH 896 Graduate Seminar each fall & spring since fall 2010 to graduate students and postdocs working on CSMCE projects, from the Depts of Mathematics, TLTE, Ed Psych, Psychology, Statistics, CYFS

Other Workshops (not for graduate credit)

- DBER Journal Club co-organizer, fall 2019 - present
- I co-created and co-led a week-long professional development workshop in summer 2019 as part of the Worlds of Connections Project (PI Julia McQuillan). This workshop served as a pilot for a new graduate course for teachers (in Sociology) to be offered in 2021.
- I created and led professional development workshops designed to improve teacher leadership. The workshop was offered four times (Lincoln, Grand Island, Ogallala, and Norfolk) in summer 2018.
- I led a day-long, district-wide professional development session for all Hastings Public Schools elementary teachers, Growth Mindset with a Focus on Mathematics applications, February 2018.
- Planning Committee member, Enacting Standards for Mathematical Practices workshop, 2011

Mentoring

Postdoctoral Scholars

1. Dr. Amy Been Bennett, Mathematics, 2020-present
2. Dr. Molly Williams, CSMCE, 2016-2017
3. Dr. Lixin Ren, CSMCE, 2015-2016
4. Dr. Traci Kutaka, CSMCE, 2013-2015
5. Dr. Annika Denkert, CSMCE, 2013-2014

Ph.D. Students:

1. Rachel Funk, Math PhD. Co-advising with Yvonne Lai. Expected graduation 2021.
2. Matthew Timm, TLTE EdD. Co-advising with Lorraine Males. Expected graduation 2021.
3. Ashley Cooper, TLTE EdD. Co-advising with Amanda Thomas. Expected graduation 2021.
4. Susie Katt, TLTE EdD. Co-advising with Lorraine Males. Graduated December 2020.
5. Amber Vlasnik, TLTE EdD. Co-advising with Lorraine Males. Graduated December 2020.

PhD Supervisory committees.

1. Brittany Johnson, UNL, Mathematics, expected 2023, reader

2. Michael Hart, UNL, TLTE, expected graduation 2022, reader
3. Jentry Barrett, UNL, CYFS, expected graduation 2022, reader
4. Patrick Janike, UNL, TLTE, Ed.D. awarded in 2019, reader
5. Paula Jakopovic, UNL, Teaching, Learning and Teacher Education, Ph.D. awarded in August 2017, reader
6. Danielle Buhrman, UNL, Teaching, Learning and Teacher Education, Ed.D. awarded in May 2017, reader
7. Alison Temple, Grand Canyon University, Ph.D. awarded in May 2017
8. Tracy (Ruomeng) Zhao, UNL, Education Psychology, Ph.D. awarded in Dec 2016, reader
9. Mary (Molly) Williams, UNL, Teaching, Learning and Teacher Education, Ph.D. awarded in 2016, reader
10. Pamela Fellers, UNL, Statistics, Ph.D. awarded in 2014
11. Yinjing Shen, UNL, Child, Youth, and Family Studies, Ph.D. awarded in 2014, reader
12. Traci Kutaka, UNL, Psychology, Ph.D. awarded in 2013, reader
13. Nelly Belinga (Grand Canyon University), expected 2021, reader/external member
14. Diane Reilly (Grand Canyon University), expected 2021, reader/external member
15. Kasey Smith (Grand Canyon University), expected 2021, reader/external member
16. Roy Cobb (Grand Canyon University), Ph.D. awarded 2020, reader/external member

Master's Supervisory Committee Member

Since 2012, I have served as the primary advisor in the Mathematics Department for all Master of Arts for Teachers (MAT) students (175 graduates, 56 current), serving as the main point of contact between the teachers and Mathematics Dept and creating/coordinating the MAT exams. I served on the supervisory committee of the 175 MAT students listed here; an asterisk (*) indicates that I advised that student on their final expository paper.

- | | |
|--------------------------------|---------------------------------|
| 1. Geoff Carnahan, MAT, 2020 | 7. Emily Kometscher, MAT, 2020 |
| 2. James Lynam, MAT, 2020 | 8. Amanda Nielsen, MAT, 2020 |
| 3. Laura Rademacher, MAT, 2020 | 9. Chrissy Jackson, MAT, 2019 |
| 4. Kaitlyn Tenski, MAT, 2020 | 10. Michael Mauer, MAT, 2019 |
| 5. Alison Timony, MAT, 2020 | 11. Michelle Ledford, MAT, 2019 |
| 6. Alison Willis, MAT, 2020 | 12. Sarah Mack, MAT, 2019 |

13. Jinjin Shen, MAT, 2019
14. Timothy Smith, MAT, 2019
15. Geena Taite, MAT, 2019
16. Melissa Usasz, MAT, 2019
17. Rebecca Workman, MAT, 2019
18. Amber Clausen, MAT, 2019
19. Chelsey Grassel, MAT, 2018*
20. Grant Doerr, MAT, 2018
21. Wendi Baus-Herbin, MAT, 2018
22. Emily Dvorak, MAT, 2018
23. Kristina Pearson, MAT, 2018
24. Jordan Sis, MAT, 2018
25. Jared Dixon, MAT, 2018*
26. Elizabeth Hock, MAT, 2018*
27. John Strand, MAT, 2018*
28. Elizabeth Crabtree, MAT, 2017
29. Celia Newman, MAT, 2017
30. Alexander Dostal, MAT, 2017
31. Desiree Anderson, MAT, 2017*
32. Scott Toovey, MAT, 2017*
33. Cody Gregory, MAT, 2017
34. Brett Troyer, MAT, 2017
35. Mary Nuckolls, MAT, 2017
36. Ryan Treat, MAT, 2017*
37. Kyle Ediger, MAT, 2017
38. Margaret Fisher, MAT, 2017
39. Masake Kane, MAT, 2017
40. Danielle Malson, MAT, 2017
41. Drew Adams, MAT, 2016
42. Staci Applegarth, MAT, 2016
43. Claire Aylward, MAT, 2016*
44. Brent Barbour, MAT, 2016
45. Rachel Birtles, MAT, 2016
46. Kristi Briggs, MAT, 2016
47. Deb Bulin, MAT, 2016
48. Kristin Burt, MAT, 2016
49. Jacob Cathey, MAT, 2016
50. Ben Darling, MAT, 2016
51. Mindy Dhoritey, MAT, 2016
52. Sherri Doll, MAT, 2016
53. Rosanne Entzminger, MAT, 2016
54. Rebecca Evans, MAT, 2016
55. Kara Fauber, MAT, 2016
56. Anna Fischer, MAT, 2016
57. Chad Geiger, MAT, 2016
58. Michelle Gibbs, MAT, 2016
59. Jared Good, MAT, 2016
60. Allison Gregg, MAT, 2016
61. Kaitlyn Habermeier, MAT, 2016
62. Jasmine Hansen, MAT, 2016
63. Nicole Harris, MAT, 2016
64. Michael Hart, MAT, 2016
65. Craig Hendrix, MAT, 2016
66. Jessica Hoffmann, MAT, 2016
67. Aleah Holden, MAT, 2016
68. Mark Holland, MAT, 2016
69. Karen Humphrey, MAT, 2016

70. Lauren Kasson, MAT, 2016*
71. Katie Kimball, MAT, 2016
72. Dianna Knight, MAT, 2016
73. Cole Kohout, MAT, 2016
74. Hannah Leitt, MAT, 2016
75. Amber Liljedahl, MAT, 2016*
76. Michael Masin, MAT, 2016
77. Douglass Matulka, MAT, 2016*
78. Joanne Maurer, MAT, 2016*
79. Megan McElfresh, MAT, 2016
80. Todd McQuistan, MAT, 2016
81. Philip Medeiros, MAT, 2016
82. Traci Miller, MAT, 2016
83. Andrew Moser, MAT, 2016
84. Jonathan Northouse, MAT, 2016*
85. Cailen O'Shea, MAT, 2016
86. Tracy Owens, MAT, 2016
87. Kathy Poehling, MAT, 2016
88. Anessa Price, MAT, 2016
89. Breanna Prochnow, MAT, 2016
90. Mary Quandt, MAT, 2016
91. Lindsey Roorda, MAT, 2016*
92. Terri Sanchez, MAT, 2016
93. Karrie Seibel, MAT, 2016
94. Kati Stauffer, MAT, 2016
95. Kristin Strader, MAT, 2016
96. Alyssa Straube, MAT, 2016
97. Ashley Struebing, MAT, 2016
98. Kerry Stull, MAT, 2016
99. Eryn Surprenant, MAT, 2016*
100. Jared Wadell, MAT, 2016
101. Chelsie Weinandt, MAT, 2016
102. Courtney Wichman, MAT, 2016
103. Kirsten Wieman, MAT, 2016
104. Jason Wunderlich, MAT, 2016
105. Lee Plath, MAT, 2015
106. Kristy Lee, MAT, 2015*
107. Sondra Bravo, MAT, 2015*
108. Amy Smith, MAT, 2015*
109. Molly Mertz, MAT, 2015*
110. Mariel Kloppenborg, MAT, 2015*
111. Heather Osborne, MAT, 2015
112. Maggie Douglas, MAT, 2015
113. Tom Gamble, MAT, 2015
114. Amy Swartzendruber, MAT, 2015
115. Tracy Larson, MAT, 2015*
116. Hannah Lee (Holguin), MAT, 2015*
117. Virginia Yuhas, MAT, 2015*
118. Karen Mohrbutter, MAT, 2015*
119. Julie Preston, MAT, 2015*
120. James Cattau, MAT, 2015
121. Wade Anderson, MAT, 2015
122. Lindsay Larsen, MAT, 2015
123. Kenzi Medeiros, MAT, 2015
124. Jen Olsen, MAT, 2015
125. Donnita Coulter, MAT, 2015
126. Dawn McKain, MAT, 2015

127. Richard (RJ) Kammandel, MAT, 2015
128. Patricia Krause, MAT, 2015
129. Heather Waddell, MAT, 2015
130. Tyler Copsey, MAT, 2015
131. Emily Romkema, MAT, 2015
132. Sam Robb, MAT, 2015
133. April Sypal, MAT, 2015
134. Anthony Jacobson, MAT, 2015
135. Keith Schroetlin, MAT, 2015
136. Melissa Kosch, MAT, 2015
137. Lindsey Harders, MAT, 2015
138. Carol Goans, MAT, 2015
139. Stefanie Edwards, MAT, 2015
140. Duncan Davidson, MAT, 2015
141. Scott Rice, MAT, 2015
142. Alexandra Sitko, MAT, 2015
143. Emily Kroenke, MAT, 2015
144. Erin Carder, MAT, 2015
145. Kimberly McCoy, MAT, 2015
146. Daniel Martin, MAT, 2014
147. Tiffany Powers, MAT, 2014
148. Shannon Wiig, MAT, 2014
149. Kelli Roeber Schoening, MAT, 2014
150. Kyle Schwaninger, MAT, 2014
151. Jennifer Kreifels, MAT, 2014
152. Courtney Beach, MAT, 2014
153. Tiffany Ogden, MAT, 2014
154. Karen Clinch, MAT, 2014
155. Laura Novak, MAT, 2014
156. Mitchell Fricke, MAT, 2014
157. Amanda Kehm, MAT, 2014
158. Jeff DeVries, MAT, 2014
159. Bret Beerman, MAT, 2013
160. Chara Guthrie, MAT, 2013
161. Carrie Kopf, MAT, 2013
162. Megan Lund, MAT, 2013
163. Matthew James, MAT, 2013
164. Kathryn Niedbalski, MAT, 2013
165. Kimberly Ocampo, MAT, 2013
166. Heather Peters, MAT, 2013
167. Sarah Scofield, MAT, 2013
168. John Sweeney, MAT, 2013
169. Gina Vifquain, MAT, 2013
170. Anthony Hoffman, MAT, 2012
171. Jared Vitosh, MAT, 2012
172. Amber Vlasnik, MAT, 2012
173. Julie Lodes, MAT, 2012
174. Jeremy Long, MAT, 2012
175. Tahma Kuck, MAT, 2012*

Masters' Supervisory Committee Member, TLTE (*advisor/chair)

1. Jenna Foiles, MA, expected 2021*, MA

2. Peter Kosch, MA, 2019, MAst program
3. Delfina Hernandez, MA, 2018, MAst program
4. Ian Meador, MA, 2018, MAst program
5. Stacey Cleveland, MA, 2014*
6. Nichole Binderrup, MA, 2014, MAst program
7. Alison Dean, MA, 2014, MAmt program
8. Leo Fogel, MA, 2014, MAmt program
9. Cory Johnson, MA, 2014, MAst program
10. Jessica Packard, MA, 2014, MAmt program
11. Rachel Von Kampen, MA, 2014, MAmt program
12. Sarah Fischbein, MA, 2012*, MAmt program
13. Megan Fleishman, MA, 2012

Undergraduate Honor's Thesis Advisor

1. Chris Beeman (co-advise w/ Dr. Nathan Wakefield), May 2017 graduation (with highest distinction)