

**Shannon L. Navy (Dubois)**  
 School of Teaching, Learning, and Curriculum Studies  
 Kent State University  
 404 White Hall; Kent, OH 44242  
[snavy@kent.edu](mailto:snavy@kent.edu)

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### Education

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2011 – 2014	Ph.D., Science Education Department of Science and Mathematics Education, College of Education The University of Georgia, Athens, GA
2007 – 2011	M.A.T. in Secondary Education – Biology Department of Middle, Secondary, and K-12 Education, College of Education The University of North Carolina at Charlotte, Charlotte, NC North Carolina Standard Professional 2 (SP2) Professional Educator's License, Biology (9-12)
2003 – 2007	B.S. in Biology with honors, with a minor in Forensic Science, Syracuse University, Syracuse, NY <i>Summa cum laude</i>

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### Professional Experience

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2022 – present	<b>Associate Professor</b> , Science Education, School of Teaching, Learning, and Curriculum Studies, Kent State University, Kent, OH
2017 – 2022	<b>Assistant Professor</b> , Science Education, School of Teaching, Learning, and Curriculum Studies, Kent State University, Kent, OH
2015 – 2017	<b>Assistant Professor</b> , Science Education, Department of Education, Valparaiso University, Valparaiso, IN
2016 – 2017	<b>Director</b> , Woodrow Wilson Teaching Fellowship and Induction Programs Valparaiso University, Valparaiso, IN
2014 – 2015	<b>Postdoctoral Research Associate, Science Education</b> The University of Virginia, Charlottesville, VA
2011 – 2014	<b>Graduate Assistant</b> , Science Education, Department of Mathematics and Science Education, The University of Georgia, Athens, GA.
2010 – 2011	<b>Graduate Assistant</b> , Office of Disability Services The University of North Carolina at Charlotte, Charlotte, NC

2007 – 2010

**High School Science Teacher**

Charlotte-Mecklenburg School District, Charlotte, NC

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**Refereed Publications**

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- Luft, J.A., **Navy, S.L.**, Wong, S., & Hill, K. (2022). The first five years of teaching science: The beliefs, knowledge, practices, and opportunities to learn of secondary science teachers. *Journal of Research in Science Teaching*, 59(9), 1692-1725. <https://doi.org/10.1002/tea.21771>
- Novak, E., Soyuturk, I., & **Navy, S.L.** (2022). Development of the science teaching anxiety scale for preservice elementary teachers: A Rasch analysis. *Science Education*, 106(3), 739-764. <http://doi.org/10.1002/sce.21707>
- Navy, S.L.**, Jurkiewicz, M.A., & Kaya, F. (2022). Developmental journeys from teaching experiences to the teaching profession: Cases of new secondary science teachers. *Journal of Science Teacher Education*, 33(6), 664-682. [doi.org/10.1080/1046560X.2021.1978138](https://doi.org/10.1080/1046560X.2021.1978138)
- Navy, S.L.**, Heisler, J., Papa, J., & Gjurkovitsch, A. (2021). Conceptualizing Careers: Is There an Element of STEM in Every Profession? *School Science and Mathematics*, 121(7), 422-433. [doi.org/10.1111/ssm.12493](https://doi.org/10.1111/ssm.12493)
- Navy, S.L.**, Maeng, J.A., Bell, R.L., & Kaya, F. (2021). Beginning secondary science teachers' implementation of process skills, inquiry, and problem-based learning during the induction years: A randomised controlled trial. *International Journal of Science Education*, 43(9), 1483-1503. [doi.org/10.1080/09500693.2021.1919334](https://doi.org/10.1080/09500693.2021.1919334)
- Nixon, R.S., **Navy, S.L.**, Barnett, S., Johnson, M., & Larson, D. (2021). Pinning and planning: Five tips for using Pinterest to teach science. *Science and Children*, 58(3), 22-25.
- Navy, S.L.**, Kaya, F., Boone, B., Brewster, C., Calvelage, K., Ferdous, T., Hood, E., Sass, L., & Zimmerman, M. (2021). "Beyond an acronym, STEM is ...": Perceptions of STEM. *School Science and Mathematics*, 121, 36-45. <https://doi.org/10.1111/ssm.12442>
- Navy, S.L.**, & Kaya, F. (2020). PBL as a pedagogical approach for integrated STEM: Evidence from prospective teachers. *School Science and Mathematics*, 120(5), 285-296. [doi.org/10.1111/ssm.12408](https://doi.org/10.1111/ssm.12408) .
- Navy, S.L.**, Nixon, R.S., Luft, J.A., & Jurkiewicz, M.A. (2020). Accessed or latent resources? Exploring new secondary science teachers' networks of resources. *Journal of Research in Science Teaching*, 57(2), 184-208. [doi.org/10.1002/tea.21591](https://doi.org/10.1002/tea.21591)
- Wheeler, L. B., **Navy, S. L.**, Maeng, J.L., & Whitworth, B.A. (2019). Development and validation of the Classroom Observation Protocol for Engineering Design (COPED). *Journal of Research in Science Teaching*, 56(9), 1285-1305. [doi.org/10.1002/tea.21557](https://doi.org/10.1002/tea.21557)

- Navy, S.L.,** Maeng, J.L., & Bell, R.L. (2019). Learning from a state professional development conference for science teachers: Beginning secondary science teachers' experiences. *Journal of Science Teacher Education*, 30(4), 409-428. doi.org/10.1080/1046560X.2019.1584512
- Luft, J.A., Whitworth, B.A., Berry, A., **Navy, S.**, & Kind, V. (2019). Science education trajectories: Charting the course for teachers, educators, researchers, and policymakers. *Journal of Science Teacher Education*, 30(1), 63-79. doi.org/10.1080/1046560X.2018.1535226
- Navy, S.**, Edmondson, E., Maeng, J., Gonczi, A., & Mannarino, A. (2019). How to create problem-based learning units: Understanding the PBL planning process. *Science and Children*, 56(5), 68-72.
- Edmondson, E., **Navy, S.**, Maeng, J., Gonczi, A., & Mannarino, A. (2019). Got energy? Fourth graders explore energy independence. *Science and Children*, 56(5), 49-55.
- Navy, S.L.**, Luft, J.A., Toerien, R., & Hewson, P.W. (2018) Practices influenced by policy? An exploration of newly hired science teachers at sites in South Africa and the United States, *International Journal of Science Education*, 40(8), 919-939. doi.org/10.1080/09500693.2018.1457814
- Maeng, J.L., Whitworth, B.A., Gonczi, A.L., **Navy, S.L.**, & Wheeler, L.B. (2017). Elementary science teachers' integration of engineering design into science instruction: Results from a randomised controlled trial. *International Journal of Science Education*, 39(11), 1529-1548. doi.org/10.1080/09500693.2017.1340688
- Luft, J.A., **Dubois, S.L.**, Kaufmann, J., & Plank, L. (2016). Science teacher leadership: Learning from a three-year leadership program. *Science Educator*, 25(1), 1-9.
- Luft, J.A., **Dubois, S.L.**, Nixon, R., & Campbell, B.K. (2015). Supporting newly hired teachers of science: Attaining teacher professional standards. *Studies in Science Education*, 51(1), 1-48. doi.org/10.1080/03057267.2014.980559.
- Dubois, S.L.**, & Luft, J.A. (2014). Science teachers without classrooms of their own: A study of the phenomenon of floating. *Journal of Science Teacher Education*, 25(1), 5-23. doi.org/10.1007/s10972-013-9364-x
- Luft, J.A., Nixon, R.S., **Dubois, S.L.**, & Campbell, B.K. (2014). Supporting newly hired science teachers: Using research to inform practice. *The Science Teacher*, 81(6), 67-71.

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### Books

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- Luft, J.A. & **Dubois, S.L.** (Eds.) (2015). *Newly Hired Teachers of Science: A Better Beginning*. Rotterdam: Sense.

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### Book Chapter Publications

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- Navy, S.L.,** Luft, J.A., & Msimanga, A. (2022). Turning challenges into opportunities: The learning and experiences of newly hired teachers of science during the induction years. In J.A. Luft and M. G. Jones (Eds.), *Handbook of Research on Science Teacher Education*.
- Navy, S.L.** (2020). Theory of human motivation: Abraham Maslow. In B. Akpan and T. Kennedy (Eds.) *Science Education in Theory and Practice*. (pp. 17-28). Cham, Switzerland: Springer.
- Luft, J.A., & **Dubois, S.L.** (2017). Pedagogical strategies in effective science teaching. In B. Akpan (Ed.) *Science Education: An International Comprehensive Course Companion*. London: Routledge.
- Tippins, D., Rudolph, H., & **Dubois, S.** (2015). Culturally relevant pedagogy in 21st century science education. In R. Gunstone (Ed.), *Encyclopedia of Science Education*. Dordrecht, the Netherlands: Springer.

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### Presentations

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#### *Invited Presentations*

- Navy, S.L.** (May, 2022). *Teacher Retention*. An invited presentation for the Association for Science Teacher Education (ASTE) Graduate Student Forum's Mini in May. Conference virtual.
- Navy, S.L.** (May, 2022). *Publishing and Developing Scholarship During the Ph.D. Study*. An invited presentation for the University of Georgia's College of Education. Presentation virtual.

#### *International Refereed Presentations*

- Navy, S.L.,** & Novak, E. (March, 2022). *3D Printing with Preservice Teachers: Implementation, Effects, and Future Directions*. A paper presented at the annual meeting of the National Association for Research in Science Teaching (NARST) Conference in Vancouver, British Columbia (Conference hybrid due to COVID-19).
- Navy, S.L.,** Luft, J.A., & Msimanga, A. (August/September, 2021). *The Opportunities to Learn of Newly Hired Teachers of Science*. A paper presented at the bi-annual meeting of the European Science Education Research Association (ESERA) Conference (Conference virtual due to COVID-19).
- Navy, S.L.,** Nixon, R., Luft, J., & Jurkiewicz, M. (April, 2019). *Activation and interaction of a network of resources by new teachers*. A paper presented at the annual meeting of the American Educational Research Association (AERA) Conference in Toronto, Canada.

### *National Refereed Presentations*

Novak., E., Mulvey, B., **Navy, S.**, Hopkins, A., Kunkle, K., Van Der Watt, L., & Oyatokun, W. (September, 2022). *3D Printing in a 2<sup>nd</sup> Grade Science Classroom: Dinosaurs Come Alive*. A presentation at the annual Make: Education Forum (Conference virtual).

**Navy, S.L.**, & Beaver, B. (January, 2022). *Failure as a Process and a Product: Preservice Elementary Teachers Fears and Views of Failure*. A paper presented at the annual meeting of the Association for Science Teacher Education (ASTE) Conference in Greenville, SC (Conference hybrid due to COVID-19).

Beaver, B., & **Navy, S.L.** (January, 2022). *Climate Change Educational Resources at National Parks*. A poster presented at the annual meeting of the Association for Science Teacher Education (ASTE) Conference in Greenville, SC (Conference hybrid due to COVID-19).

**Navy, S.L.**, & Nixon, R.S. (April, 2021). *Beyond Cute: Examining the Quality of Pinterest as a Resource for Science Teachers*. A paper presented at the annual meeting of the American Educational Research Association (AERA) Conference (Conference virtual due to COVID-19).

**Navy, S.L.**, Maeng, J.A., Bell, R.L., & Kaya, F. (April, 2021). *Science Teachers' Process Skills, Inquiry, and Problem-Based Learning During Induction: A Randomized Controlled Trial*. A paper presented at the annual meeting of the National Association for Research in Science Teaching (NARST) Conference (Conference virtual due to COVID-19).

Nixon, R.S., & **Navy, S.L.** (April, 2021). *Pinterest as a Resource for Elementary Science Teachers: A Comparison of Two Science Topics*. A paper presented at the annual meeting of the National Association for Research in Science Teaching (NARST) Conference (Conference virtual due to COVID-19).

**Navy, S.L.**, Gjurkovitsch, A., Heisler, J., & Papa, J. (January, 2021). *What is a STEM Career?: STEM Teachers' Conceptions of STEM Careers*. A paper presented at the annual meeting of the Association for Science Teacher Education (ASTE) Conference (Conference virtual due to COVID-19).

Novak, E., **Navy, S. L.** & Kaya, F. (April, 2020) *The Relationship Between Science Teaching Anxiety and Science Teaching Self-Efficacy in Preservice Elementary Teachers* [Roundtable Session]. AERA Annual Meeting San Francisco, CA  
<http://tinyurl.com/tka5e62> (Conference canceled due to COVID-19)

**Navy, S.L.**, Maeng, J.L., Bell, R.L., & Kaya, F. (March, 2020). *Beginning Secondary Science Teachers' Contextualized and Decontextualized Inquiry Implementation: A Randomized Controlled Trial*. A paper accepted to be presented at the annual meeting of the National Association for Research in Science Teaching (NARST) Conference in Portland, OR. (Conference canceled due to COVID-19)

- Kaya, F., Borgerding, L., & **Navy, S.** (March, 2020). *Preservice Teachers' Self-Efficacy Beliefs about Scientific Practices: Validation of the Science and Engineering Self-efficacy Instrument*. A paper accepted to be presented at the annual meeting of the National Association for Research in Science Teaching (NARST) Conference in Portland, OR. (Conference canceled due to COVID-19)
- Navy, S.L.**, Kaya, F., Boone, B., Brewster, C., Calvelage, K., Ferdous, T., Hood, E., Sass, L., & Zimmerman, M. (January, 2020). *"Beyond an Acronym, STEM is ...": Perceptions of STEM and STEM Education*. A paper presented at the annual meeting of the Association for Science Teacher Education (ASTE) Conference in San Antonio, TX.
- Navy, S.L.**, Maeng, J.L., Bell, R.L. (March, 2019). *Confidence, understandings, and practices of new secondary science teachers: A randomized controlled trial investigation*. A paper presented at the annual meeting of the National Association for Research in Science Teaching (NARST) Conference in Baltimore, MD.
- Wheeler, L., **Navy, S.**, Maeng, J.L. & Whitworth, B.A. (March, 2019). *Classroom Observation Protocol for Engineering Design (COPED): Instrument development, validation, and implications for use*. A paper presented at the annual meeting of the National Association of Research in Science Teaching (NARST) Conference in Baltimore, MD.
- Jurkiewicz, M.A., Luther, V., Youngbauer, V., Keesbury, S., Augustine, S., Lacefield, W., **Navy, S.** & Morrissey, S. (2019, January). *The Stories of Title I Students Returning as Teachers to High-Needs Schools*. A poster presented at the annual meeting of the Association for Science Teacher Education (ASTE) in Savannah, GA.
- Navy, S.L.**, Nixon, R., Luft, J.A., & Jurkiewicz, M.A. (March, 2018). *Availability and activation of contextual resources by new secondary science teachers*. A paper presented at the annual National Association for Research in Science Teaching (NARST) Conference in Atlanta, GA.
- Navy, S.L.**, & Jurkiewicz, M.A. (January, 2018). *Transitioning from scientist to teacher: Coherences and tensions experienced by science content experts and career changers becoming teachers*. A paper presented at the annual Association for Science Teacher Education (ASTE) Conference in Baltimore, MD.
- Wheeler, L.B., **Navy, S.L.**, Maeng, J.L., & Whitworth, B.A. (January, 2018). *Development and Validation of the Classroom Observation Protocol for Engineering Design (COPED)*. A paper presented at the annual Association for Science Teacher Education (ASTE) Conference in Baltimore, MD.
- Luft, J.A., Whitworth, B.A., Berry, A., Kind, V., & **Navy, S.L.** (January, 2018). *Supporting teacher development: Science teacher trajectories*. A paper presented at the annual Association for Science Teacher Education (ASTE) Conference in Baltimore, MD.

- Dubois, S.L.** (January, 2017). *Learning to teach science through problem-based learning: Prospective elementary teachers' experiences*. A paper presented at the annual Association for Science Teacher Education (ASTE) Conference in Des Moines, IA.
- Maeng, J.L., Whitworth, B.A., **Dubois, S.L.**, & Wheeler, L.B. (January, 2017). *Incorporating engineering design into elementary science instruction: Frequency, content, and process*. A paper presented at the annual Association for Science Teacher Education (ASTE) Conference in Des Moines, IA.
- Dubois, S.L.**, Maeng, J.L., & Bell, R.L. (April, 2016). *A statewide support program for beginning secondary science teachers: Results form a randomized-controlled trial investigation*. A paper presented at the annual National Association for Research in Science Teaching (NARST) Conference in Baltimore, MD.
- Luft, J.A., Whitworth, B.A., **Dubois, S.L.**, Kind, V., & Berry, A. (April, 2016). *Trajectories of science teacher learning: Charting the course for policy makers, researchers, educators, and teachers*. A paper presented at the annual National Association for Research in Science Teaching (NARST) Conference in Baltimore, MD.
- Dubois, S.L.**, Maeng, J.L., & Bell, R.L. (January, 2016). *Learning from a state professional development conference for science teachers: Beginning secondary science teachers' experiences*. A paper presented at the annual Association for Science Teacher Education (ASTE) Conference in Reno, NV.
- Dubois, S.L.**, Maeng, J.L., & Bell, R.L. (April, 2015). *Learning reform-based science instruction: Results from a statewide professional development program for beginning science teachers*. Poster presented at the annual National Association for Research in Science Teaching (NARST) Conference in Chicago, IL.
- Dubois, S.L.**, Toerien, R., Luft, J.A., & Hewson, P.W. (April, 2015). *Policy and instruction: A study of South African and United States beginning science teachers*. Paper presented as part of a related paper set for the annual National Association for Research in Science Teaching (NARST) Conference in Chicago, IL.
- Luft, J.A., **Dubois, S.**, Nixon, R., & Campbell, B. (April, 2015). *Supporting newly hired teachers of science: Attaining teacher professional standards*. Paper presented at the annual National Association for Research in Science Teaching (NARST) Conference in Chicago, IL.
- Dubois, S.L.** (March, 2014). *The global to local continuum: A cross-national comparative study of beginning teachers' cycle of instruction in South Africa and the United States*. Poster presented at the Sandra K. Abell poster session at the annual National Association for Research in Science Teaching (NARST) Conference in Pittsburgh, PA.
- Luft, J.A., Kauffman, J., Plank, L. Koba, S., & **Dubois, S.** (March, 2014). *Science teacher leadership: Learning from a three-year leadership program*. Paper presented at the

annual National Association for Research in Science Teaching (NARST) Conference in Pittsburgh, PA.

**Dubois, S.L.**, Jurkiewicz, M.A., Brennan, A., Campbell, B., & Luft, J.A. (January, 2014). *The point of Punnett squares: Early career biology teachers' approaches to teaching heredity*. Paper presented at the annual Association for Science Teacher Education (ASTE) Conference in San Antonio, TX.

Nixon, R. S., **Dubois, S. L.**, Jurkiewicz, M. A., Toerien, R., Campbell, B. K., & Luft, J. A. (January, 2014). *Science knowledge for teaching: Characterizations from biology and chemistry teachers*. Paper presented at the annual Association for Science Teacher Education (ASTE) Conference in San Antonio, TX.

Luft, J.A., Campbell, B., **Dubois, S.L.**, & Nixon, R. (January, 2014). *Newly qualified science teachers: What the research says*. Paper presented at the annual Association for Science Teacher Education (ASTE) Conference in San Antonio, TX.

Hodges, G.W., Oliver, J.S., Rogers, W., Kwong, K., Raven, S., Jurkiewicz, M., & **Dubois, S.** (January, 2014). *A longitudinal study of teaching the cell unit in introductory high school biology*. Paper presented at the annual Association for Science Teacher Education (ASTE) Conference in San Antonio, TX.

**Dubois, S.L.**, & Luft, J.A. (April, 2013). *A science teacher without a room: The affordances and constraints of floating*. Paper presented at the annual National Association for Research in Science Teaching (NARST) Conference in Puerto Rico.

Jurkiewicz, M.A., **Dubois, S.L.**, Ntemngwa, C., Park, Y.S., Luft, J.A., Hewson, P. (January, 2013). *International early career secondary science teacher education part I: Brazil, Cameroon, Korea, and the United States*. Symposium conducted at the annual Association for Science Teacher Education (ASTE) Conference in Charleston, SC.

**Dubois, S.L.**, Jurkiewicz, M.A., Fazio, X., Namdar, B., Sung, S., Toerien, R., Luft, J.A., & Hewson, P. (January, 2013). *International early career secondary science teacher education part II: Canada, Taiwan, Turkey, and South Africa*. Symposium conducted at the annual Association for Science Teacher Education (ASTE) Conference in Charleston, SC.

Thomson, N.F., Tippins, D., **Dubois, S.L.**, Bloch, L. (January, 2013). *Advancing pre-service teachers knowledge of climate change and evolution: What do science educators need to know and do*. Poster presented at the annual Association for Science Teacher Education (ASTE) Conference in Charleston, SC.

**Navy, S.L.** (October, 2017). *PBL and STEM: Integration or isolation?* A paper presented at the annual STEM Education Conference in West Lafayette, IN.



Luft, J.A., **Dubois, S.L.**, Nixon, R.S., & Campbell, B.K. (March, 2015). *Supporting new science teachers: What the research says about how to support new science teachers*. Session to be presented at the annual National Science Teacher Association (NSTA) Conference in Chicago, IL.

#### *Regional Refereed*

Luft, J.A., **Dubois, S.**, Whitworth, B.A., Kind, V., & Berry, A. (October, 2016). *What can I do and how can I get there? Trajectories of science teacher learning*. A paper presented at the regional National Science Teachers Association Area Conference in Minneapolis, MN.

**Dubois, S.L.**, Nixon, R.S., Campbell, B.K., & Luft, J.A. (April, 2014). *Research to strengthen and support induction science teachers: Building the capacity of science teachers*. Poster presented at the annual University of Georgia's College of Education Graduate Student and Faculty Research Conference in Athens, GA.

Roulston, K., Bignell, W., Breslin, D., Curry, D., Vaughn, S., Cox, A., **Dubois, S.**, Guyotte, K., Powell, R., & Wilson, G. (April, 2014). *Transitioning to bended delivery in a qualitative data analysis course*. Poster presented at the annual University of Georgia's College of Education Graduate Student and Faculty Research Conference in Athens, GA.

Tippins, D., Thomson, N., Bloch, L., & **Dubois, S.L.** (April, 2012). *Linking climate change and evolution in pre-service science teacher education: What is its' current status and where do we need to go?* Paper presented at the Regional STEM Conference in Athens, GA.

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#### **Workshops**

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**Navy, S.L.**, & Maeng, J.L. (November, 2019) *Strategies for Planning Problem-Based Learning Units*. Workshop presented at the regional National Science Teaching Association meeting in Cincinnati, OH.

**Navy, S.L.** (October, 2016). *Co-teaching: Myths, strategies, and opportunities*. Workshop presented at Michigan City High School in Michigan City, IN.

**Navy, S.L.** (August, 2016). *Mentoring teachers in their first three years of teaching: A training workshop for mentors as coaches*. Workshop presented at Valparaiso University in Valparaiso, IN.

**Navy, S.L.** (August, 2016). *Co-teaching: Myths, strategies, and opportunities*. Workshop presented at Merrillville High School in Merrillville, IN.

Luft, J.A., & **Dubois, S.L.** (January, 2015). *Supporting newly hired science teachers: Research and future directions*. Workshop presented at the annual meeting of the Association for Science Teacher Education (ASTE) Conference in Portland, OR.

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### Funded Grants

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**Navy, S.L.**, Idsardi, R., Luft, J.A., & Borgerding, L. Resources Accessed to Cultivate and Enhance Resilience (RACER). (October 2021). National Science Foundation: \$1,000,000 over 4 years. Funded.

Novak, E., Mulvey, B.K., **Navy, S.L.**, & Poole, T.. Elementary 3D Printing for STEM. (May 2021). Martha Holden Jennings Foundation: \$29,978 over two years. Funded.

**Navy, S.L.**, & Kane-Sutton, M. Women in STEM Mentoring Program: It is Never Too Late. (January 2019). Kent State University. \$5,000 over two years. Funded.

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### Teaching and Advising

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#### *Courses Taught*

##### Kent State University

ADED 42292 *Field Work Practicum*; Undergraduate (Fall 2019, 2020)

ECED 40114 *Teaching Science in the Early Years*; Undergraduate (Fall 2017, 2018, 2019; Spring 2018, 2019, 2020)

ECED 40304 *Teaching Science in the Elementary Years*; Undergraduate (Spring 2021)

C&I 61134/71134 *Research Trends in Science Education*; Graduate (Spring 2018, 2020, 2022)

C&I 47505/57505 *Core/Differentiated Instruction for Social Studies and Science*; Undergraduate and Graduate (Fall 2018, 2020)

C&I 87001 *Theory and Research in Curriculum*; Graduate (Fall 2020, 2021, 2022)

##### Valparaiso University

ED 304 *Educational Psychology*; Undergraduate (Fall 2015)

ED 323 *Elementary Science Methods*; Undergraduate (Spring 2016, 2017)

ED 384/584 *Secondary Science Methods*; Undergraduate and Graduate (Fall 2016; Spring 2016)

ED 390/591 *Investigation of Contemporary Topics in Science*; Undergraduate and Graduate (Fall 2015, 2016)

ED 435/635 *Student Teaching Supervision*; Undergraduate and Graduate (Fall 2015, 2016; Spring 2016, 2017)

ED 631 *STEM Learning Community*; Graduate (Fall 2015, 2016; Spring 2016, 2017)

ED 632 *Community Resources*; Graduate (Spring, 2017)

#### *Dissertations/Doctoral Committees*

##### Advisory Committees:

##### Ph.D. Program

Fatma Kaya (2017-2019)

Jeffrey Papa (2018-2020)

Jennifer Heisler (2019-2022)

Barbara Currey (2020-present)  
 Breanna Beaver (2020-2022)  
 Karen Plaster (2021-present)  
 Adepeju Prince (2021-present)

Ed.D. Program

Leah Bradley (2020-2022)  
 Kristin Clark (2020-2022)  
 Emily Donley (2022 – present)  
 Daniel Lemon (2021 – present)

Dissertation Committees

Ph.D. Program

Fatma Kaya, co-directed (2019 – 2020)  
 Mustary Mariyam, committee member (2021 – present)  
 Breanna Beaver, co-directed (2022 – present)  
 Jennifer Heisler, co-directed (2022 – present)

Ed.D. Program

Leah Bradley, directed (2022 – present)  
 Kristin Clark, directed (2022 – present)  
 Christopher Baker, committee member (2022 – present)

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**Service and Citizenship**

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*Service to Profession*

Reviewer for National Science Foundation (NSF) grant panel (Fall 2022)  
 Program strand co-coordinator, National Association for Research in Science Teaching Conference, Strand 1: Science Learning: Development of Student Understanding, 2022 – 2023.  
 Program strand co-coordinator, National Association for Research in Science Teaching Conference, Strand 4: Science Teaching – Middle and High School Grades (5-12), 2020 – 2022.  
 Journal Reviewer, *Journal of Teacher Education*, 2019 – present.  
 Journal Reviewer, *Science Education*, 2019 – present.  
 Proposal Reviewer, American Educational Research Association, 2019 – present  
 Committee Member, Induction Position Statement, National Science Teachers Association, 2018.  
 Editorial Review Board Member, *Journal of Science Teacher Education*, 2018 – present.  
 Science Education Delegate to Cuba with the People to People® Citizen Ambassador program, Cuba, November 2014.  
 Proposal reviewer. Association for Science Teacher Education Conference, 2013 – present.  
 Journal Reviewer, *Journal of Research in Science Teaching*, 2013 – present.  
 Proposal reviewer, National Association for Research in Science Teaching Conference, 2012 – present.

*Service to College and University*

Committee Member, Honors Committee, College of Education, Health, and Human Services, Kent State University, 2022 – present.

Committee Member, Graduate Appeals, College of Education, Health, and Human Services, Kent State University, Spring 2022

Committee Member, Earth Month Planning Committee, Kent State University, 2019 - present

Committee Member, Climate Committee, College of Education, Health, and Human Services, Fall 2020-present

Leader, Faculty Learning Community, Mindsets: Moving Students from a Fixed to a Growth Mindset, Valparaiso University, 2016-2017.

Faculty Advisor, Service Learning Trip to the Rosebud Reservation in Mission, SD, March 2016.

Member, University Teacher Education Committee, Valparaiso University 2016-2017.

#### *Service to Department/School*

Member, Faculty Advisory Committee (FAC), At-Large representative, School of Teaching Learning, and Curriculum Studies, Kent State University, 2022 – 2023.

Member, Search Committee for Middle Childhood generalist tenure-track faculty position, School of Teaching Learning, and Curriculum Studies, Kent State University, 2022.

Member, Student Academic Complaint Committee, School of Teaching, Learning, and Curriculum Studies, Kent State University, 2021 – present.

Member, Search Committee for Early Childhood literacy tenure-track faculty position, School of Teaching Learning, and Curriculum Studies, Kent State University, 2019-2020.

Mentor for Saudi Arabian students, Building Leadership for Change through School Immersion (BLCSI) program, School of Teaching, Learning, and Curriculum Studies, Kent State University, 2019 – 2020.

Member, Scholarship Committee, School of Teaching, Learning, and Curriculum Studies, Kent State University, 2018 - 2021.

Member, Grants Committee, Education Department, Valparaiso University 2016-2017.

Member, Professional Educator Partnership Middle School Committee, Education Department, Valparaiso University 2016-2017.

Member, Leadership Team, Mathematics and Science Education Enrollment and Development (MSEED) program, Education Department, Valparaiso University, 2015 – 2017.

President, Awesome Graduate Students in Science Education Promoting Togetherness (AGSSEPT), Department of Mathematics and Science Education, Athens, GA, 2012 – 2013.

#### *Service to Local Community*

Park Board Appointed Member, City of Hudson, April 2020-present, Hudson, OH.

Volunteer, Akron Public Schools' Science Technology, Engineering and Math EXPO, January 2019, Akron, OH.

Mentor, STEM Women Mentoring Program, May 2018, 2019, Akron, OH.

Faculty Coordinator for Science Day, Canton Country Day School, April 2018, 2019, Canton, OH.

Science Fair Judge, Akron Public Schools' Science, Technology, Engineering, and Math EXPO, January 2018, 2020, 2021 Akron, OH.

Faculty Advisor and Education Liaison for an Environmental Protection Agency (EPA) water quality monitoring grant, Portage School District, September 2015 – 2017, Portage, IN.

Faculty Coordinator for STEM Family Night, John Simatovich Elementary School, April 2016, Valparaiso, IN.

Member, conference planning committee, Southeastern Association for Science Teacher Education (SASTE), EcoJustice, Citizen Science, and Youth Activism, October 2011, Athens, GA.

#### *Membership in Professional Organizations*

European Science Education Research Association (ESERA)	since 2021
Science Education Council of Ohio (SECO)	since 2019
Virginia Association of Science Teachers (VAST)	2014-2015
School Science and Mathematics (SSMA)	since 2014
American Educational Research Association (AERA)	since 2013
National Science Teachers Association (NSTA)	since 2013
Association of Science Teacher Education (ASTE)	since 2011
National Association for Research in Science Teaching (NARST)	since 2011

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#### **Awards and Honors**

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Wiley and *School Science and Mathematics* top 10 most downloaded article among work published between January 1, 2019 – December 31, 2020 for lead author publication, “Beyond an Acronym, STEM is ...”: Perceptions of STEM,’ June 2022.

Kent State University’s New Faculty Outstanding Research and Scholarship Award, May 2022.

Kent State University’s College of Education, Health, and Human Services Outstanding Research Award – Early Career, May 2022.

Kent State University’s College of Education, Health, and Human Services Outstanding Teaching Award – Early Career, May 2021.

National Association for Research in Science Teaching (NARST) Research Worth Reading Award, April 2021.

American Educational Research Association (AERA) First Place Dissertation Award in Research on Teacher Induction, April 2015.

Sandra K. Abell Summer Research Institute, Selected Participant, Washington, DC, July 2013.

South Africa Research School for Science, Mathematics and Technology Graduate Students, Rawsonville, Invited Participant, South Africa, June, 2013

The University of Georgia Graduate School Assistantship Award, Athens, GA, 2011 – 2013.

Teacher Incentive Fund – Leadership for Educators’ Advanced Performance (TIF-LEAP) performance-based compensation award, Charlotte, NC, 2009-2010.

Syracuse University Honors and Honors Thesis Awards, Syracuse, NY, 2007.

Syracuse University Chancellor’s Award for Public Service and Engagement, Syracuse, NY, 2007.

Syracuse University Remembrance Scholar, Syracuse, NY, 2006 – 2007.