Kathryn M. Bateman

Ph.D. Curriculum and Instruction (Science Education)
The Pennsylvania State University University Park, PA, May 2019
Academic Advisor: Dr. Scott McDonald
Dissertation Title: *Assembling policy dilemmas: Science teacher responses to educational policy*

Master of Education: Elementary Education
Holy Family University, Philadelphia, PA, May 2008

Bachelor of Science: Marine Science
Minors in Biology and Fine Arts/Theater
Rider University, Lawrenceville, NJ, May 2004

Professional Experience

Assistant Professor of Education — **August 2025 to present**
The Pennsylvania State University, Harrisburg

Professional Learning and Research Manager — **August 2022 to July 2025**
Youth Engineering Solutions

Research Associate — **August 2021 to August 2022**
Michigan State University, Create For STEM

Post-Doctoral Fellowship — **June 2019 to August 2021**
Temple University, Department of Psychology

Graduate Research Assistant — **August 2014 to May 2019**
The Pennsylvania State University, Department of Curriculum and Instruction

Teaching Experience – Higher Education

The Pennsylvania State University
University Park, PA
- SCIED 411- Secondary Science Methods I (Spring 2018, Spring 2025)
- SCIED 412 – Secondary Science Methods II (Fall 2017, 2018)
- Teacher in Residence Program, Math and Science Teachers (Spring 2025)

Elizabethtown College
Elizabethtown, PA
- Graduate and Professional School Adjunct Assistant Professor, STEM Endorsement Program

Commonwealth University

Lock Haven, PA

- Adjunct Assistant Professor, ECED 440 Science Methods for Early Childhood (K-4); (Fall 2024)

Temple University

Philadelphia, PA

- Adjunct Assistant Professor, Elementary Math and Science Pedagogical Content Knowledge (Fall 2020, Spring 2021)

Professional Learning and In-service Teacher Education

- Asset Mapping Professional Learning Community (2019-present)
- Teacher Professional Development, GEODE: Plate Tectonics Workshop (2018)
- Teacher Professional Development, Earth and Space Science Partnership: Water Workshop (2015)
- Upward Bound Math and Science (UBMS) Summer Mentor Pedagogy Training Leader (2015-2016)
- Teach for America – Summer Mentor Teacher (2014)

K-12 Education

- Mariana Bracetti Academy Charter School (2010- 2014): Philadelphia, PA
    - Science teacher grades 6 and 8
    - Science curriculum coordinator

- Murray Avenue School (2009- 2010): - Lower Moreland Township School District, PA
    - Science and math teacher grades 7 and 8
    - Homebound instructor- grade 8 Math and Science

- Saint David School (2007-2009): Teacher- Willow Grove, PA
    - Science, English Language Arts, religion, and art teacher grades 6-8
    - Science Chair of 4^{th}-8^{th} grade teachers

Curriculum Development

- GEODE Curriculum – The Pennsylvania State University/The Concord Consortium
    - Co-developed curricular materials for an online plate tectonics curriculum
    - Co-designed an online teacher guide to support implementation including differentiation strategies, sample responses, and extension activities
- Upward Bound Math and Science - The Pennsylvania State University: University Park, PA
    - Created Ambitious Science Teaching aligned units for students enrolled in the UpwardBound Math and Science summer program, for courses in Geological Processes and Ecology & Evolution

Grant Funding

The Dean's Emerging Seed Grant – The Ohio State University; $15,000 (2021-2022).
"Cultivating innovative methodologies and transdisciplinarity through dialogic reflexivity
PI: Sophia Jeong (The Ohio State University)
Co-PIs: Kathryn M. Bateman (Michigan State University); Brandon Sherman (Indiana University-Purdue University Indianapolis); Azita Manoucheri and Peter Sayer (The Ohio State University)

Fellowships, Scholarships and Awards

- Penn State College of Education Outstanding Graduate Student (2019)
- NARST Sandra K. Abell Institute for Doctoral Students (2017)
- NASA Pennsylvania SpaceGrant Fellowship (2016)
- Virginia and Vance Packard Endowment for Student Professional Development (2016)
- The Pennsylvania State University Graham Scholarship (2014)
- The Pennsylvania State University Vincent N. and Lois W. Lunetta Fellowship in Science Education (2014)
- National Gallery of Art Teacher Fellowship (2012) - to support attendance at the Summer 2012 Teacher Institute
- Pennsylvania Earth and Space Science Teachers' Association February 2013 PAESTAR (Teacher of the Month)

Professional Affiliations and Certifications

Professional Memberships

- National Science Teacher Association (NSTA)
- NARST
- International Society of the Learning Sciences
- Pennsylvania Science Teacher Association (PSTA)
- Geological Society of American (GSA)
- American Geophysical Union (AGU)American Educational Research Association (AERA)
- Pennsylvania Earth Science Teacher Association (PAESTA)

Pennsylvania Teacher Certifications, Instruction Level II (2013) in

- Elementary (K-6) Education Certificate
- Middle Years (7-9): Science, Certificate, Mathematics Certificate, Language Arts Certificate, Social Studies Certificate
- Secondary Education (7-12): General Science Certificate, Earth and Space Science Certificate.

Highly Qualified Certification in Earth and Space Science, Pennsylvania State University (2012)

Presentations and Publications

*teacher collaborator; ^student collaborator

Journal Articles – Accepted/Published

Bateman, K.M. & Sherman, B.J. (in press). Planting the Seeds of Transdisciplinarity: Cultivating Wicked Solutions in Science Education through Dialogic Reflexivity. *Science & Education.*

Hooper, L.*, **Bateman, K.M.** & Miller, C.S. (accepted). STEM and social and emotional learning: Reciprocal support through engineering curricula. *Science and Children.*

Bateman, K. M., & Cunningham, C. M. (2025). Turning Failure into Success: How Engineering Challenges Build Resilience and Problem Solving Across Contexts. *Connected Science Learning*, 1–9. https://doi.org/10.1080/24758779.2025.2484352

Bateman, K.M, Conrath, B.^, Ham, J.^, Egger, A., St. James, K. & Shipley, T.F. (2024). Managing Disruptions and Dilemmas in Online Geoscience Instruction During the Early 2020 Covid-19 Pandemic. *Journal of Geoscience Education*.

Bateman, K.M. and McDonald, S. (2023). Science Teachers Play with Policy. *Disciplinary and Interdisciplinary Science Education 5*(14) 1-23. Special Issue: *Science Education Policy, Standards, and Teaching Materials*.

McCausland, J.D., & **Bateman, K.M.** (2023) Bringing the outside in: Using community mapping and tours to create community in science classrooms. *The Science Teacher 90* (7), 70-75.

McCausland, J., Jackson, J., McDonald, S., **Bateman, K**., Pallant, A., & Lee, H. S. (2023). Science Teachers' Negotiation of Professional Vision around Dilemmas of Science Teaching in a Professional Development Context. *Journal of Science Teacher Education*, *34*(7), 689-706.

Bateman, K.M., Ham, J.^, Barshi, N.^, Tikoff, B., and Shipley, T. (2023) Scaffolding geology content and spatial skills with playdough modeling in the field and classroom. *Journal of Geoscience Education 71* (1), 43-57.

Bateman, K.M., William, R. Shipley, T.F., Tikoff, B., Pavlis, T., Wilson, C.G., Cooke, M., & Fagereng, A. (2022) Strategies for effective UAV use in geological field studies based on cognitive science principles. *Geosphere,* 18 (6), 1958-1973.

Bateman, K.M., Wilson, C.G., Williams, R., Tikoff, B., and Shipley, T.F. (2022). Explicit instruction of scientific uncertainty in an undergraduate geoscience field-based course. *Science & Education,* 31, 1541–1566.

Bateman, K.M., Sherman, B., and Jeong, S. (2022) Ethics are not on the test: Diffraction and affect in education policy. *Cultural and Pedagogical Inquiry,* 14(1), 22-34.

Bateman, K.M., Altermatt, E., Egger, A., Iverson, E., Manduca, C., Riggs, E., St. James, K. and Shipley, T.F. (2022). Learning from the COVID-19 Pandemic: How Faculty Experiences Can Prepare Us for Future System-Wide Disruption. *GSA Today*, *32*(2), 36-27.

Bateman, K.M., Steele, D., & Sexton, C. M.^ (2021). Sustainability science education: Our animalistic response-ability. *Cultural Studies of Science Education*, *16*(3), 841-855.

Sherman, B. J., **Bateman, K. M.,** Jeong, S., & Hudock, L. A. (2021). Dialogic meta-ethnography: Troubling methodology in ethnographically informed qualitative inquiry. *Cultural Studies of Science Education*, *16*(1), 279-302.

McDonald, S., **Bateman, K.,** Gall, H., Tanis-Ozcelik, A., Webb, A., & Furman, T. (2019). Mapping the increasing sophistication of students' understandings of plate tectonics: A learning progressions approach. *Journal of Geoscience Education*, *67*(1),83-96.

Bateman, K., McDonald, S., Gall, H., Tanis-Ozcelik, A., Webb, A. & Furman, T. (2018). Pushing the limits of earth science. *Science Scope,* 42(2).

Journal Articles – Requested Revisions

Bateman, K.M., Kelly, G.K., Licona, P.R. & Cunningham, C.M. (Requested Revisions). Discourse moves to promote a culture of translanguaging in elementary STEM. *Science Education.*

Lott, J.*, **Bateman, K.M.,** & Shah, D. (Requested Revisions). Thinking Critically about Data Visualizations Includes the Algorithm, Too. *Science Scope.*

Book Chapters

Bateman, K., McCausland, J., & Sherman, B. (in press, 2025). Wicked Orientations in Teacher Preparation: The Complexity of Cultivating Anti-Racist Science Teachers. In Kreps Frisch, J. & Mason, D.A. (Eds.) *Wicked Problems in PreK-12 Science Education.* Taylor & Francis.

Bateman, K.M., McCausland, J.D., & Walsh, N.* (2025). Who gets to swim in the Hudson? Exploring human impact on the Hudson River over time and space. In Steele, D. & Mercier, A. *Justice-Oriented Anchoring Phenomena.* Springer.

Duschl R., **Bateman, K.M.,** Meang, S. & McDonald, S. (2024) Learning Progressions in Earth Sciences. In Jin, H., Yan, D., & Krajcik, J. (2024). *Handbook of Research on Science Learning Progressions*. Routledge, Taylor & Francis Group.

Bateman, K.M. & Hooper, L.* (2023). Commentary: Negotiation of Meaningful Literacy. In Jeong, S.K., Tippins, D., Bryan, L. & Sexton. C. (Eds.) *Navigating Elementary Science Teaching and Learning: Cases of Classroom Practices and Dilemmas*. Springer.

Jeong, S., **Bateman, K.,** Aslan-Tutak, F., Akaygun, S., & Safak, R. (2023). Entanglement of the United States and Turkish science and mathematics educators' becomings in different educational contexts: Conceptualizing STEM education using a Bakhtinian dialogic approach. In Al-Balushi, S.M., Martin-Hansen, L., & Song, Y. (Eds.) *Reforming Science Teacher Education Programs in the STEM Era: International practices.* Palgrave Macmillian.

McDonald, S., **Bateman, K.,** & McCausland, J. (2020). Ch. 10: Practice-Embedded Methods Courses for Preservice Teachers. In Stroupe, D., Hammerness, K., & McDonald, S. (Eds.) *Preparing Science Teachers through Practice-Based Teacher Education.* Harvard Education Press.

Book Reviews

Bateman, K. (2019) Book Review – *None of the Above: The Untold Story of the AtlantaPublic Schools Cheating Scandal, Corporate Greed, and the Criminalization of Educators*, by Shani Robinson and Anna Simonton. American Journal of Education Forum.

Bateman, K. (2019) Book Review – *Demoralized: Why Teachers Leave the ProfessionThey Love and How They Can Stay*, by Doris Santoro. American Journal of Education Forum.

Bateman, K. (2017). Book review – *The Smartest Kids in the World,* by Amanda Ripley. American Journal of Education Forum.

American Journal of Education Forum Website Publications

McCausland, J. & **Bateman, K.,** (2018). The gun violence problem in Black and white:Racial biases in response to rampage school shootings. American Journal of Education Forum.

Deane, S. & **Bateman, K.,** (2018), Becoming sensitive to gun violence. American Journal of Education Forum.

Bateman, K. & McCausland J. (2018). Mental health: Red herring or cause in schoolshootings? American Journal of Education Forum.

Bateman, K. (2017). The place of research in practice. American Journal of EducationForum.

Bateman, K. (2017). Save the science! A look at Pennsylvania's ESSA plan's inequity. American Journal of Education Forum.

Conference Presentations

Science Education Conferences

Bateman, K.M., & Miller, C.S. (March, 2025). *A Framework for Examining the Interconnectedness of STEM and SEL.* Paper presented at the annual meeting of NARST, Washington, D.C.

Bateman, K.M., Kelly, G.K., Licona, P.R., and Cunningham, C.M. (March, 2025). *I think I'm going to be an ingeniero: Translanguaging and engineering identity development.* Paper presented at the annual meeting of NARST, Washington, D.C.

Bateman, K.M., and Sherman, B.J. (April, 2023). *Working Wickedly: Wicked Problems, Transdisciplinarity, and Dialogic Reflexivity.* Presented as part of the symposium *Measurement, Methodologies, and Methods in Science Education Research* at the annual meeting of NARST, Chicago, IL.

Bateman, K.M., and McCausland, J. (April 2023). *Designing a More Socially Just Science Through Community Mapping.* Presented as part of the related paper set *Asset Perspectives of In-Service Teacher Education Towards Equitable Teaching* at the annual meeting of NARST, Chicago, IL.

Miller, C.S., **Bateman, K.M.,** and Krajcik, J. (April, 2023) *Adapting Designed Curriculum to Local Contexts through Professional Learning Communities.* Presented as part of the related paper set *Asset Perspectives of In-Service Teacher Education Towards Equitable Teaching* at the annual meeting of NARST, Chicago, IL.

Walsh, N.*, Shipman, J.*, Lucas, S.*, Shultz, N.*, Bevilacqua, S.*, Camplese, C.*, Mowatt, M.*, Toney, K.*, McCausland, J., and **Bateman, K.** (April, 2023) *Using Community Tours and Mapping To Develop a Culturally Relevant Pedagogy.* A poster presented at the annual NARST meeting, Chicago, IL.

Bateman, K.M., McCausland, J.D., and Walsh, N.* (April, 2023). *Teachers Negotiating Professional Vision around Equity through Material Representations.* A poster presented at the annual NARST meeting, Chicago, IL.

Bateman, K.M., and Miller E. (March, 2022). *Understanding opportunities for adaptation of project-based learning as culturally relevant adaptation.* Paper presented at the annual meeting of NARST, Vancouver, BC.

Bateman, K.M., Conrath, B.^, Ham, J.^, Altermatt, E., Egger, A., Iverson, E., Manduca, C., Riggs, E., St. James, K. and Shipley, T. (March, 2022). *Managing disruptions and dilemmas in online geoscience instruction during the COVID-19 pandemic.* Paper presented at the annual meeting of NARST, Vancouver, BC.

Conrath, B.^, **Bateman, K.M.,** McDonald, S., Lee, H.S. and Pallant, A. (March, 2022). *Argumentation with Summary Tables in Geoscience Learning*. Paper presented at the annual meeting of NARST, Vancouver, BC.

Jeong, S., **Bateman, K.M.,** Sherman, B., and Steele, D. (March, 2022) *Re-thinking Science Education Using Non-linear Theories: Implications of Posthumanism on Ethics, Policy, and Practice.* Paper presented at the annual meeting of NARST, Vancouver, BC.

Bateman, K.M., and McDonald, S. (April, 2021). *Using Assemblage Theory to Develop New Ideas for Science Teacher Learning.* Paper presentation at the annual meeting of NARST, Orlando, FL (virtual).

McDonald, S., Wray, K., McCausland, J.D., **Bateman, K.M.,** Pallant, A., and Lee, H. (April, 2021). *Supporting progressive discourse in epistemically authentic geoscience investigations.* Paper presentation at the annual meeting of NARST, Orlando, FL (virtual).

Bateman, K.M., Shipley, T.F., Tikoff, B., Williams, R. and Wilson, C. (October, 2020). *Teaching uncertainty in a geological field course.* Paper presented at the Geological Society of America Annual Meeting, Virtual.

Barshi, N.^, Ham, J.^, **Bateman, K.M**., Tikoff, B., Shipley, T.F., and Ormand, C. (October,2020). *Modeling 3D structures with playdough enhances spatial thinking skills.* Paper presented at the Geological Society of America Annual Meeting, Virtual.

McDonald, S., **Bateman, K.M.,** and Tanis Ozcelik, A. (March, 2020). *Instructional Differences in the Support of System-Level Mechanistic Models of Plate Tectonics.* Paper presentation at the annual meeting of NARST, Portland, OR. [Canceled due to COVID-19.]

Bateman, K.M. and McDonald, S. (March, 2020). *Principals as policy players: How leadership practices impact science instruction.* Paper presentation at the annual meeting of NARST, Portland, OR. [Canceled due to COVID-19.]

Bateman, K.M. and McDonald, S. (April, 2019). Science Teacher Learning and Educational Policies. Paper presented at the annual meeting of NARST, Baltimore, MD.

McCausland, J., McDonald, S., and **Bateman, K.M.** (April, 2019). Making the designexplicit: Preparing teachers to learn ambitious science teaching. Paper presented at theannual meeting of NARST, Baltimore, MD.

Bateman, K. (April, 2018). Exploring the influence of policy messages on teachers' instructional choices. Poster presented at the annual meeting of NARST, Atlanta, GA.

Webb, A., McDonald, S., Furman, T., Gall, H., **Bateman, K.** & Tanis Ozcelik, A. (April, 2018). Quantifying a Plate Tectonics Learning Progression using Rasch Modeling. Paper presented at the annual meeting of NARST, Atlanta, GA.

McDonald, S., **Bateman, K.M.,** Gall, H., Tanis Ozcelik, A., Webb, A., & Furman, T.(April, 2016). *A learning progression in plate tectonics,* presented as part of the symposium *Methodological Approaches to the Development of Earth and Space ScienceLearning Progressions* at the National Research in Science Teaching Conference, San Antonio, TX.

Geoscience Conferences

Bateman, K.M, and Sherman, B.J. (December, 2022). *Cultivating Transdisciplinary Research Relationships For Geoscience Education's Wicked Problems*. Paper presented at the annual meeting of the American Geophysical Union, Chicago, IL (virtual).

Bateman, K.M., Altermatt, E., Egger, A., Iverson, E., Manduca, C., Riggs, E., St. James, K. and Shipley, T. (December, 2021). *Geoscience in the Time of Covid-19: Lessons learned*

from the early days of the pandemic. Paper presented at the annual meeting of the American Geophysical Union, New Orleans, LA (virtual).

Furman, T., McDonald, and **Bateman, K.** (December, 2019). *Plate tectonics in three dimensions: Lessons learned.* Poster presented at the American Geophysical Union Annual Meeting, San Francisco, CA.

Bateman, K., Shipley, T.F., and Davatzes, A.E. (December, 2019). *What spatial skills do geologists need?* Poster presented at the American Geophysical Union Annual Meeting, San Francisco, CA.

Bateman, K., McDonald, S., Pallant, A., and Lee, H. (December, 2019). *Guiding students' developing understanding in Geosciences: The use of summary tables as a formative assessment tool.* Poster presented at the American Geophysical Union AnnualMeeting, San Francisco, CA.

Bateman, K.M., Pallant, A., McDonald, S., and Lord, T. (September, 2019). *Exploring plate tectonics with models and an online curriculum.* Paper presented at the Geological Society of America Annual Meeting, Phoenix, AZ.

Pallant, A. and **Bateman, K.M.** (September, 2019). *Transforming geoscience educationwith interactive models for exploring plate tectonics.* Paper presented at the Geological Society of America Annual Meeting, Phoenix, AZ.

Wilson, C.G., Shipley, T.F., **Bateman, K.M.,** Tikoff, B., Williams, R.T., Davatezes, A.K., Barshi, N., Hsieh, M.A., Kumar, A., Cooke, M., and Fagereng, A. (September, 2019). *In situ utility of unmanned aerial vehicles (drones) for geological field work.* Poster presented at the Geological Society of America Annual Meeting, Phoenix, AZ.

Furman, T., McDonald, S., Gall, H., **Bateman, K.,** Tanis Ozcelik, A., & Webb, A. (July, 2016). *Research on student conceptions of plate tectonics – implications for instruction.*Poster presented at the Earth Educators Rendezvous.

Bateman, K.M., McDonald, S., & Furman, T. (October, 2015). *The challenge of assumptions: A comparison of curricular materials and empirical learning progressionsin middle grades plate tectonics.* Paper presented at the Geological Society of America Annual Meeting, Baltimore, MD.

McDonald, S., **Bateman, K.M.,** Tanis Ozcelik, A., Gall, H., Webb, A., & Furman, T. (October, 2015). *Understanding students' ideas about plate tectonics: A learning progressions approach.* Paper presented at the Geological Society of America Annual Meeting, Baltimore, MD.

Webb, A., McDonald, S., Furman, T., Gall, H., **Bateman, K.M**. & Tanis Ozcelik, A. (October 2015). *Plate tectonics multiple choice assessment: A pilot.* Paper presented at the Geological Society of America Annual Meeting, Baltimore, MD.

Published Proceedings

Bateman, K.M., Conrath, B.^, McDonald, S. and Pallant, A., (June 2022). Argumentation with Summary Tables in Geoscience Learning. Paper presented at the annual meeting of the International Society of the Learning Sciences, Hiroshima, Japan (virtual).

Miller, E., Li, T., **Bateman, K.M.,** Akgun, S., Makori, H., Codere, S., Danzinger, S., and Krajcik, J. (June, 2022). Adaptation Principles to Foster Engagement and Equity in Project-based Science Learning. Paper presented at the annual meeting of the International Society of the Learning Sciences, Hiroshima, Japan (virtual).

Bateman, K.M., Ham, J.^, Shipley, T.F., Tikoff, B., Barshi, N., and Ormand, C. (June, 2020). Playdough modeling in geological field work to support spatial skills. Paper presented at the semi-annual meeting of the International Conference of the Learning Sciences, Nashville, TN (virtual).

Bateman, K.M. and McCausland, J.D. (June, 2020). Designing for educational equity through community mapping. Paper presented at the semi-annual meeting of the International Conference of the Learning Sciences, Nashville, TN (virtual).

McDonald, S., **Bateman, K.,** McCausland, J., Wray, K., Pallant, A., Lee, H. (June, 2020). Taking up the mantle of knowing: Exploring middle school student engagementin progressive scientific discourse. Paper presented at the semi-annual meeting of the International Conference of the Learning Sciences, Nashville, TN (virtual).

Bateman, K. and McDonald, S. (June, 2018). Science Teachers' Communities of Practice and Policy Implementation. Paper presented at the semi-annual meeting of the International Conference of the Learning Sciences, London, UK.

Other Conferences

Bateman, K.M. (March, 2025). *Harnessing Computer Science Skills for Enhanced 3D Learning.* Workshop presented at the National Science Teacher Association Meeting, Philadelphia, PA.

Miller, C.S. and **Bateman, K.M.** (March, 2025). *Learning to care in STEM: Socio-emotionally Informed Science and Engineering Practices.* Workshop presented at the National Science Teacher Association Meeting, Philadelphia, PA.

Bateman, K.M., & Klixbull, S. (March, 2025). *Engineering for Environmental Literacy in K-5.* Workshop presented at the National Science Teacher Association Meeting, Philadelphia, PA.

Bateman, K.M., and Sherman, B. (April, 2024). *Complexity, Equity, and Working Wickedly.* Paper presented at the annual meeting of the American Education Research Association, Philadelphia, PA.

Bateman, K.M., Kelly, G.K., Licona, P.R., and Cunningham, C.M. (April, 2024). *Examining the Affordances of Engineering and Curricular Supports for Learning Among.* Paper presented at the annual meeting of the American Education Research Association, Philadelphia, PA.

McCausland, J.D. and **Bateman, K.M.** (April, 2024). *Whiteness at Work in Learning to Teach Science in Justice-Oriented Ways.* Paper presented at the annual meeting of the American Education Research Association, Philadelphia, PA.

Bartz, K., Bradford, L.J., Schneider, B. Miller, S.C., and **Bateman, K.M.** (April, 2023). *Optimal learning moments in elementary science using in situ surveys: A repeated measures and validation study.* Paper presentation as part of the symposium *How can Elementary Science Curriculum Support Student Learning, Teacher Practices, and Inclusiveness in Classrooms* at the annual meeting of the American Education Research Association, Chicago, IL.

Sherman, B., **Bateman, K.**, and Steele, D. (April 2023). *Turning to Dialogic Reflexivity: An Approach to Fostering Transdisciplinary Research.* Symposium conducted at the annual meeting of the American Education Research Association, Chicago, IL

Bateman, K.M., and McCausland, J.D. (April, 2021). *Developing Inservice STEM Teachers' Counter-Narratives Through Mapping with Communities.* Paper presentated at the

annual meeting of the American Education Research Association, Orlando, FL (virtual).

Walsh, N.*, Mancini, A.,* Vaishamayan, A.*, McCausland, J.D., and **Bateman, K.M**. (February, 2020). Community walks and mapping towards culturally relevant pedagogies. Paper presented at the 41st Annual Ethnography in Education ResearchForum, Philadelphia, PA.

Bateman, K.M., and McCausland, J.D. (February, 2020). *Community asset mapping.* Data analysis session at the 41st Annual Ethnography in Education Research Forum, Philadelphia, PA.

Bateman, K. (April, 2018). *Teaching in the time of testing and technology: An ethnographic approach.* In K. Bateman and B. Sherman (Chairs) Aspects of learning cultures: A dialogic approach to meta-ethnography of learning and teaching. Symposium conducted at the annual meeting of the American Education Research Association, New York, NY.

Bateman, K.M. (April 2016). *Getting below the surface: Comparing hypothetical curricular materials and empirical learning progressions in plate tectonics*. Paper presented at the Pennsylvania State University College of Education Graduate ResearchSymposium.

Bateman, K.M. (April, 2015). *Scientific literacy in publication: What does the term mean to researchers, practitioners, and policy makers?* Paper presented at the Harvard University Graduate School of Education Student Research Conference.

Bateman, K.M. (October, 2013) *Scaffolding Claims, Evidence and Reasoning in themiddle school classroom*. Workshop presented at the Pennsylvania Earth Science Teacher Association Annual Conference.

Invited Talks and Professional Learning

- MSELA Presents: Answering the Call, Elementary Science Matters: Episode #1 Making Time for Science, October 2024 (virtual)
- AR STEM Model Program: Youth Engineering Solutions: High Quality Engineering Curriculum for K-8 STEM Schools. Arkansas Department of Education, October 2024 (virtual)
- Penn State University Martinson Grant Summer Workshop, August 2024
- Engineering Pathways at Oklahoma University, July 2024 (virtual)
- New Mexico Highlands University, Problems of Practice Summit, June 2024
- Montgomery County Intermediate Unit, STEELS Symposium, March 2024
- Arcadia University, Engineering Professional Learning Workshop, December 2022
- ASTE Graduate Student Forum, Mini-in-May Conference, May 2021 (virtual)
- ASET Graduate Student Forum, Mini-in-May Conference, May 2022 (virtual)
- AMS/AGU Heads and Chairs Meeting, "Geoscience in the Time of Covid-19," October 9, 2020 (virtual)

Professional and University Service

Reviewer

- Journal of Research in Science Teaching
- Science & Education
- Science Education
- Journal of Geoscience Education
- American Journal of Education
- Disciplinary and Interdisciplinary Science Education
- NARST Conference
- AERA Conference

- International Conference of the Learning Sciences
- 9th Annual Conference on Equity and Social Justice

Professional Service

Pennsylvania Department of Education/Data Recognition Corporation

- 8th Grade Science PSSA Item Analysis Committee (2013)
- 4th and 8th Grade Science PSSA Item Review Committee (2014)
- 5th Grade Science PSSA Rangefinding Committee (2024)
-

American Journal of Education Student Forum **2014-2019**

38th Annual Ethnography in Education Research Forum Volunteer **2017**

- Center for Urban Ethnography, University of Pennsylvania, Philadelphia

Pennsylvania Junior Academy of Science Judge **2009, 2015, 2016**

University Service

Penn State Curriculum and Instruction Graduate Student Council **2014-2019**

- President (2017-2018)
- General member (2014-2019)

Penn State College of Education Graduate Student Council – Secretary **2016-2017**

Penn State Curriculum and Instruction Orientation **2015-2018**