

Brian Abramowitz

Curriculum Vitae
<https://Brian.Abramowi.tz>

EDUCATION

- 2024 Doctor of Philosophy, Educational Technology
University of Florida
- 2015 Masters of Science in Education, Adolescent Special Education
Hunter College
- 2012 Bachelors of Arts, Secondary Education
Syracuse University
- 2012 Bachelors of Arts, Earth Sciences
Syracuse University

SCHOLARLY PUBLICATIONS

Refereed Publications

- Wusylko, C., Antonenko, P., **Abramowitz, B.**, Waisome, J., Perez, V., Killingsworth, S., & MacFadden, B. (2025). Supporting teachers to integrate AI and computer science through SharkAI: a middle school computer science and paleontology curriculum. *Journal of Technology and Teacher Education*, <https://doi.org/10.70725/161207qresyx>
- Wusylko, C., Antonenko, P., Still, R., **Abramowitz, B.**, MacFadden, B., Perez, V., & Waisome, J. (2025). Exploring Bias and Building AI Models: Data Science for Middle Schoolers. *Science Scope*.
- Abramowitz, B.**, Antonenko, P., Ennes, M., & Killingsworth, S. (2024). A Narrative Inquiry into Teacher Efficacy for Teaching Climate Science with Technology in a Scientist-Teacher Partnership Program. *Journal of Science Education and Technology*, <https://doi.org/10.1007/s10956-024-10169-x>
- Abramowitz, B.**, Ennes, M., Kester, B., & Antonenko, P. (2024). Scientist-School STEM Partnerships through Outreach in the USA: A Systematic Review. *International Journal of Science and Mathematics Education*, <https://doi.org/10.1007/s10763-024-10445-7>
- Rowell, M., Ennes, M., & **Abramowitz, B.** (2024). Co-Development of a Museum-Based Scientist-Teacher Partnership. *Connected Science Learning*. <https://doi.org/10.1080/24758779.2023.2296751>
- Wusylko, C., Weisberg, L., Opoku, R., **Abramowitz, B.**, Williams, J., Xing, W., Vu, T., & Vu., M. (2023). Using Machine Learning Techniques to Investigate Learner Engagement with TikTok Media Literacy Campaigns. *Journal of Research on Technology in Education*, <https://doi.org/10.1080/15391523.2023.2266518>
- Cheng, L., Umapathy, K., Rehman, M., Ritzhaupt, A., Antonyan, K., Shidfar, P., Nichols, J., Lee, M. & **Abramowitz, B.** (2023). Designing, Developing, and Validating a Measure of Undergraduate Students' Conceptions of Artificial Intelligence in Education. *Journal of Interactive Learning Research*, 34(2), 275-311.

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- Moore, R., Jiang, S., & **Abramowitz, B.** (2022). What would the Matrix do?: A systematic review of K-12 AI learning contexts and learner-interface interactions. *Journal of Research on Technology in Education*, <https://doi.org/10.1080/15391523.2022.2148785>
- Antonenko, P., & **Abramowitz, B.** (2022). In-service teachers' (mis)conceptions of artificial intelligence in K-12 science education. *Journal of Research on Technology in Education*, 1–15. <https://doi.org/10.1080/15391523.2022.2119450>
- Abramowitz, B.**, Ennes, M., Killingsworth, S., Antonenko, P., MacFadden, B., & Ivory, A. (2021). Science in School: Transforming K-12 Outreach through Scientist Teacher Partnerships. *Journal of STEM Outreach*, 4(1). <https://doi.org/10.15695/jstem/v4i1.14>
- Velan, V., Woods-Robinson, R., Case, E., Warner, I., Poppiti, A., & **Abramowitz, B.** (2021). The Federal Science Project: A Scientist in Every Classroom. *Shaping the Future of Science Policy*, 18(03). <https://doi.org/10.38126/jspg180308>
- MacFadden, B. J., Pirlo, J., **Abramowitz, B.**, Killingsworth, S., & Ziegler, M. (2020). Authentic field experiences for STEM teachers: Collecting Florida fossils. bioRxiv.

Book Chapters

- Ennes, M., Jones, M. G., Cian, H., Dou, R., **Abramowitz, B.**, Bordewieck, K., Ideus, K. (2023). Family Influence and STEM Career Aspirations. In R. Tierney, F. Rizvi and K. Ercikan (Eds). *International Encyclopedia of Education 4e* (pp. 370-381). Elsevier. <https://doi.org/10.1016/B978-0-12-818630-5.13022-2>

GRANTS/FUNDRAISING

- 2022 **Smallwood Foundation** (\$32,000) Co-participated (wrote, stewarded board members) for funding an undergraduate Smallwood Environmental Leadership Fellowship opportunity
- 2022 **National Science Foundation - Collaborative Research: Silk Protein Innovation and Novelty (SPIN)** (\$1,387,894) *Other Personnel*. Assisted with recruiting teachers, development and implementation, and evaluation of the teacher professional development workshop.
- 2022 **National Science Foundation - Collections Grant** (\$659,591) *Other Personnel*. Assisted with recruiting teachers and development and implementation of the teacher professional development workshop.
- 2022 **Smallwood Foundation** (\$32,000) Co-participated (wrote, stewarded board members) for funding the salary and continued support of a Scientist in Residence supporting students with science fair within the Marion and Levy County (FL) school districts.
- 2022 **The Paleontological Society** (\$2,500) Facilitated relationships between undergraduates and science teachers to strengthen science communication and content expertise, respectively
- 2022 **National Science Foundation - Innovative Technology Experiences for Students and Teachers (ITEST)** (\$1,275,109) *Senior Personnel* Served as senior personnel for Broaders Impacts portion of grant by supporting teacher recruitment, facilitating workshops, and maintaining teacher/expert relationships.
- 2021 **Smallwood Foundation** (\$31,000) Co-participated (wrote, stewarded board members) for funding the hiring of a Scientist in Residence to be embedded within the Marion and Levy County (FL) school districts.

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- 2021 **Graig D. Shaak Staff Enrichment Program** (\$175) Recipient of funding opportunity to finance the registration of the International Society for Technology in Education conference.
- 2018 **Uplift Education Continuous Learner Grant** (\$3,000) Received a teacher professional development award. Funding supported a trip to the Amazon Rainforest to explore the region. Develop further science and environmental value systems content to make real world connections with the curriculum.

AWARDS

- 2023 University of Florida College of Education's 2022-2023 Outstanding Graduate Student Award in Research

PROFESSIONAL PRESENTATIONS

Presentations:

- Haire, G., Antonenko, P., Wusylko, C., Killingsworth, S., Abramowitz, B., & Waisome, J. (2025, June). Exploring Student Self-Efficacy in AI Through Model Building Artifacts. Paper presented at the American Society for Engineering Education Annual Conference & Exposition. Montreal, Canada.
- Ennes, M., **Abramowitz, B.**, Giangreco, M., Mills, S. (2025, March). Using natural history museums as professional development for elementary teachers. Paper presented at the National Association for Research in Science Teaching. National Harbor, MD.
- Carstens, J., Killingsworth, S., **Abramowitz, B.**, & Ennes, M. (2025, January). An Atmospheric Scientist in Every Florida School. American Meteorological Society (New Orleans, LA).
- Wusylko, C., Antonenko, P., **Abramowitz, B.**, Waisome, J., Perez, V., Killingsworth, S., & MacFadden, B. Supporting Teachers to Integrate AI and Computer Science Through SharkAI: A Middle School Computer Science and Paleontology Curriculum (2024, September 25-26). SITE Interactive, Online.
- Wusylko, C., Weisberg, L., Opoku, R., **Abramowitz, B.**, Williams, J., Xing, W., Vu, T., & Vu, M. (2024, April). Media Literacy Education on TikTok: Investigating Learner Engagement Using Machine Learning. Roundtable Session presented at the Annual American Educational Research Association (Philadelphia, PA).
- Ramirez-Salgado, A., Zhen, X., Wusylko, C., **Abramowitz, B.**, & Antonenko, B. (2024, April). Understanding Engineering Identity in K-12 Education: A Systematic Literature Review. Paper presented at the Annual American Educational Research Association (Philadelphia, PA).
- Waisome, J., **Abramowitz, B.**, Parnell, D., MacFadden, B., & Antonenko, P. (2024, April). Promoting In-Service Teacher Self-Efficacy Through Artificial Intelligence Professional Development. Paper presented at the Annual American Educational Research Association (Philadelphia, PA).
- Abramowitz, B.**, Antonenko, P., Atkins, M., Waisome, J., Perez, V., Parnell, D., & MacFadden, B. (2024, April). Investigating the Barriers to the Implementation of Artificial Intelligence in Middle School Science Education. Poster presented at the Annual American Educational Research Association (Philadelphia, PA).
- Abramowitz, B.** (2023, October). Teaching Middle School Students AI Fundamentals Using Fossil Shark Teeth. Paper presented at 2023 Global Online Conference | Empowering Learners for the Age of AI (Virtual)

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- Abramowitz, B.**, Antonenko, P., MacFadden, B., Perez, B., & Waisome, J. (2023, October). Teaching Middle School Students AI Fundamentals Using Fossil Shark Teeth. Paper presented at 2023 Association of Educational Technology Conference (Orlando, Florida)
- Rehman, M., Antonyan, K., Cheng, L., Shidfar, P., Lee, M., **Abramowitz, B.**, Nichols, J., Umapathy, K., Ritzhaupt, A. (2023, October). Exploring Undergraduate Students' Conceptions of Artificial Intelligence (AI) in Education: A Drawing Analysis. Paper presented at 2023 Association of Educational Technology Conference (Orlando, Florida)
- Wusylko, C., Weisberg, L., Opoku, R., **Abramowitz, B.**, Williams, J., Xing, W., Vu, T., & Vu., M. (2023, October). Using Machine Learning Techniques to Investigate Learner Engagement with TikTok Media Literacy Campaigns. Poster presented at 2023 Association of Educational Technology Conference (Orlando, Florida)
- Waisome, J. A. M., Parnell, D. R., Antonenko, P., **Abramowitz, B.**, & Perez, V. (2023, June), Board 385: Shark AI: Teaching Middle School Students AI Fundamentals Using Fossil Shark Teeth Paper presented at 2023 ASEE Annual Conference & Exposition, Baltimore, Maryland. <https://peer.asee.org/43089>
- Rehman, M., Antonenko, P., Antonyan, K., Shidfar, P., **Abramowitz, B.** (2023, April). Monitoring the Impact of VR Learning Environments on Usability, Cognitive Load, and Visuospatial Working Memory. Paper presented at the Annual American Educational Research Association (Chicago, IL)
- Rehman, M., Antonenko, P., Antonyan, K., Shidfar, P., **Abramowitz, B.** (2022, October). Monitoring the Impact of VR Learning Environments on Usability, Cognitive Load, and Visuospatial Working Memory. Paper presented at the Association for Educational Communication & Technology (Las Vegas, NV).
- Li, C., Antonyan, K., Rehman, M., Shidfar, P., Lee, M., Nichols, J., **Abramowitz, B.**, Karthik, U., Ritzhaupt, A., & Antonenko, P. (2022, October). Measuring undergraduate students' conceptions of artificial intelligence in education using a convergent mixed-method approach. Paper presentation at Association for Educational Communications and Technology. Las Vegas, NV.
- Abramowitz, B.**, & Antonenko, P. (2022, May) In-service Teachers' (Mis)Conceptions of AI in K-12 Education. Poster presentation at AI in Education Mini-Symposium. Gainesville, FL.
- MacFadden, B., Antonenko, P., Magruder, J., Perez, V., **Abramowitz, B.**, & Killingsworth, S. (2022, May). Integrating AI Machine Learning into the Teaching of Paleontology Using Fossil Shark Teeth in Middle Schools. Poster presentation at AI in Education Mini-Symposium. Gainesville, FL.
- Abramowitz, B.**, Lee, M., & Antonenko, P. (2022, May). A Bibliometric Analysis of Trends and Issues in Educational AI. Poster presentation at AI in Education Mini-Symposium. Gainesville, FL.
- Abramowitz, B.** Ennes, M., Kester, B., & Antonenko, P. (2022, May). Comprehensive Literature Review of Scientist-School Partnerships through School Outreach. Poster presentation at Advancing Research Impact in Society. Virtual Conference.
- Abramowitz, B.**, Lee, M., & Antonenko, P. (2022, April). A Bibliometric Analysis of Trends and Issues in Educational AI. Virtual paper presentation at the American Educational Research Association 2022 Annual Meeting.
- Abramowitz, B.**, & Antonenko, P. (2022, March). In-service Teachers' (Mis)Conceptions of Artificial Intelligence in K-12 Science Education. Paper presentation at National Association for Research in Science Teaching. Vancouver, CA.

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- Abramowitz, B.,** Lee, M., & Antonenko, P. (2022, April). Trends & Issues in AI-enabled STEM Education. Paper presentation at National Association for Research in Science Teaching. Vancouver, CA.
- Abramowitz, B.** Ennes, M., Kester, B., & Antonenko, P. (2021, November). Comprehensive Literature Review of Scientist-School Partnerships through School Outreach. Paper presentation at Florida Educational Research Association. Tampa, FL.
- Abramowitz, B.** (2021, November). *Covidence Overview*. Invited Presentation for the Fall 2021 Foundations of Research in Curriculum and Instruction graduate course. University of Florida. Gainesville, FL.
- Abramowitz, B.,** & Killingsworth, S. (2021, October). Implementing Machine Learning and AI to Advance Science Curriculum. Paper presentation at Florida Association of Science Teachers. St. Augustine, FL.
- Ivory, A., **Abramowitz, B.,** & Killingsworth, S. (2021, October). The Water that Connects Us. Paper presentation at Florida Association of Science Teachers. St. Augustine, FL.
- Abramowitz, B.,** Ennes, M., Killingsworth, S., Antonenko, P., MacFadden, B., Ivory, A. (2021, October). Engaging scientists in outreach to support Florida teachers. Paper presentation at the Southeast Association of Science Teacher Education. Tampa, FL.
- Abramowitz, B.** (2021, September). *K-12 Broader Impacts*. Invited Presentation for the Fall 2021 Broader Impacts of Science on Society graduate course. University of Florida. Gainesville, FL.
- Abramowitz, B.** (2021, March). *Structuring an Authentic Teacher Professional Development Experience*. University of Florida. Gainesville, FL.
- Abramowitz, B.,** Killingsworth, S., Valle-Levinson, A. (2020, October). Exploring air, water, land and life with Scientist in Every Florida School. Virtual paper presentation at Florida Association of Science Teachers.
- Abramowitz, B.,** MacFadden, B. (2019, October). Florida's Earth systems and the future. Paper presentation at Florida Association of Science Teachers. St. Augustine, FL.
- Abramowitz, B.** Killingsworth, S. (2019, September). *K-12 Outreach; Moonshot Project*. Invited Presentation for the Fall 2020 Broader Impacts of Science on Society graduate course. University of Florida. Gainesville, FL.
- MacFadden, B., **Abramowitz, B.** Killingsworth, S. (2020, September). *TESI and Scientist in Every Florida School*. Invited Presentation for the Fall 2020 Geology Seminar Series. University of Florida. Gainesville, FL.
- Abramowitz, B.** (2019, October). *How to get Involved in K-12 Educational Outreach*. Invited Presentation for the Fall 2020 Instructional and Communications Technology in Agriculture and Natural resources graduate course. University of Florida. Gainesville, FL.
- Abramowitz, B.** Killingsworth, S. (2019, September). *K-12 Outreach; Moonshot Project*. Invited Presentation for the Fall 2019 Broader Impacts of Science on Society graduate course. University of Florida. Gainesville, FL.

PROFESSIONAL EXPERIENCE

- 2025 - Present Coordinator of Instructional Technology, Northern Essex Community College – Haverhill, MA
- 2019-2025 K-12 Education & Outreach Coordinator, Thompson Earth Systems Institute, University of Florida – Gainesville, FL

Brian Abramowitz

- 2015-2019 High School Science Teacher, Uplift Education (Luna) – Dallas, TX.
2014-2015 Middle School Special Education Teacher, School of the Future – New York, NY.

TEACHING EXPERIENCE

- 2023 (Fall) **University of Florida** Taught Designing Integrated Media Environments (Adjunct Professor)
2022 (Fall) **University of Florida** Taught Broader Impacts of Science on Society (Teaching Assistant)
2015-2019 **Luna High School** Taught science courses including biology, advanced placement biology, advanced placement environmental science, IB Environmental Systems and Society at Luna High School (urban public school). As the science department chair and instructional coach, guided a team of four teachers in strengthening their pedagogical skills and ultimately student achievement. (High School Teacher)
2014-2015 **School of the Future** Served as 6th-grade learning specialist through integrated co-teaching model. (Middle School Teacher)

RESEARCH EXPERIENCE

University of Florida

- 2022 Monitoring the Impact of Virtual Reality Based Learning Environments on Usability, Cognitive Load, and Visuospatial Working Memory Capacity
2022-2024 NSF ITEST: Stimulating AI Learning in K-12 with Fossil Sharks
2022 Measuring Undergraduate Students' Conceptions of Artificial Intelligence in Education: The Development and Validation of an Instrument
2021 Adaptations, Evolution and Climate Change Teacher Professional Development
2021 Measuring Undergraduate Students' Conceptions of Artificial Intelligence in Education: The Development and Validation of an Instrument
2021 Investigating pre-service and in-service teachers' (mis)conceptions of Artificial Intelligence and Education
2021 Exploring the Effects of AI Focused Professional Development for Teachers
2019 Examining the Impacts of the Scientist in Every Florida School Moonshot Initiative (2019-Current)
2019 STEM Teacher Professional Development (PD) General Evaluation: Scientist in Every Florida School

SERVICE

- 2024 Student Panelist at the UF College of Education Stakeholder's Day

Brian Abramowitz

- 2023 Session Facilitator at the UF College of Education Artificial Intelligence Symposium
- 2023 UF Visual Brand Ambassador
- 2023 Reviewer for *Journal of Science Education and Technology*
- 2022 – 2023 Volunteer for the Graduate Student Committee’s Scholarship Subcommittee (National Association of Research in Science Teaching)
- 2022 Judged UF College of Education Core Value competition
- 2022 Served on the search committee for UF College of Education Associate Dean for Faculty Affairs, Diversity, Equity, and Inclusion
- 2021 Reviewer for *Journal of Computing in Higher Education*
- 2021 Volunteer at the Florida Educational Research Association Conference
- 2021 – 2022 President of University of Florida’s Student Alliance of Graduates in Education
- 2020 – 2021 Membership Chair of Climate Reality Project (Gainesville, FL)

OUTREACH

- 2023 Volunteer for Rawlings Elementary School STEAM Night
- 2023 Volunteer for Chiles Elementary School STEAM Night
- 2020 Chiles Elementary School Science Night, Gainesville, FL
- 2019 Uplift Education Science Fair, Dallas, TX
- 2018 Uplift Education Science Fair, Dallas, TX

CERTIFICATES

- 2024 Preparing Future Faculty Certificate
- 2021 ISTE-GM Hands-On AI Projects Workshop (International Society for Technology in Education)
- 2021 Multicultural Mentoring (University of Florida)
- 2021 Google Project Management: by Google on Coursera
- 2021 Research Integrity and the Responsible Conduct of Research (University of Florida)
- 2021 An Introduction to Peer Review
- 2021 Artificial Intelligence Explorations and Their Practical Use in School Environments (International Society for Technology in Education)
- 2020 National Network for Oceans and Climate Change Interpretation

PROFESSIONAL MEMBERSHIPS

- Advancing Research Impact in Society
- American Alliance of Museums

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Association for Educational Communications and Technology
American Educational Research Association
Florida Association of Science Teachers
Florida Educational Research Association
Florida Marine Science Educators Association
International Society for Technology in Education
National Association of Research in Science Teaching
National Network for Ocean and Climate Change Interpretation
Society for Learning Analytics Research
Southeastern Association of Science Teacher Education