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.

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.

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)

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.

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

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

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

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