

Curriculum Vitae of
Kristin Leigh Cook, Ph.D.

kcook@bellarmine.edu

Bellarmino University
2001 Newburg Road
Louisville, KY 40205
(502) 272-8146

CV At-A-Glance

- **Ph.D.** in Curriculum and Instruction, Science Education, 2012, Indiana University
- \$999,400+ in externally and internally **Funded Projects** since 2006
- 60+ Peer-Reviewed **Manuscripts** and **Book Chapters** published or in-press since 2009
- 2 **Books** published since 2018
- 100+ Peer-Reviewed and Invited **Presentations** Nationally and Regionally since 2008
- Editorial Review Board, Strand Coordinator, Elections Committee **Professional Appointments** since 2013
- **Professional Developer** in Project/Problem-based Learning, NGSS, STEAM Education since 2012
- **Administrative Experience** as Associate Dean, Chair of Undergraduate Education Programs, and CAEP Accreditation Standard 1 since 2016

EDUCATION

2007-2012 *Ph.D. in Curriculum and Instruction – Secondary Education* (emphasis in Science Education) at Indiana University (IU), Bloomington, IN.

- Minor: *Environmental Science, School of Public and Environmental Affairs*
- Dissertation Title: *Can we really make a difference? Pre-service teachers' experience with socio-scientific issues aiming for democratic participation with scientists*

2000-2002 *Masters & Teaching Certification in Curriculum and Instruction – Secondary Education* (emphasis in Science Education) at Indiana University (IU), Bloomington, IN.

- State Certification to teach Biology and General Science (grades 5-12) #1051408
- Advisor: Dr. Hans Anderson
- GPA: 4.0/4.0

1995-1999 *Bachelor's Degree in Biology with Highest Distinction (1999), Area Certificate in Animal Behavior (1999), and Minor in Psychology (1999)* at Indiana University (IU), Bloomington, IN.

- Graduated on Dean's High Honors List
- GPA: 4.0/4.0

PROFESSIONAL EXPERIENCE

2019-present	Bellarmino University	Associate Dean, School of Education
2019-present	Alliance for Science Educators Toolkit	Professional Developer- <i>NGSS Curriculum Development</i>
2018-2019	Bellarmino University	Interim Associate Dean, School of Education

2016-2020	Bellarmino University	Chair of CAEP Accreditation Standard 1
2018-2019	Next Generation Leadership Academy	Professional Developer- <i>STEAM Education</i>
2016-2018	Bellarmino University	Chair of Undergraduate Education Programs
2015-2017	Bellarmino University	Project Director for Science, Technology, Engineering, Arts, Mathematics (STEAM) Academy
2015-present	Bellarmino University	Dissertation Chair and Committee Member
2012-present	Bellarmino University	Associate Professor of Science Education- <i>Elementary, Middle, & Secondary Science Methods, School Health, Mathematics & Science Methods, Junior Transcultural Experience, STEAM Education</i>
2012-present	Bellarmino University	Student Teacher Supervisor- <i>Pre-service Elementary and Middle School Teacher; International Liaison</i>
2013-2014	Kentucky Institute for International Studies	Course Developer for Costa Rica- Environmental Sustainability and Health & Wellness
2011-2012	Indiana University	Educational Consultant- <i>Socio-scientific Issues Curriculum Developer, Web Applications</i>
2011-2012	Indiana University	Research Associate- <i>Urban STEM Initiative</i>
2010-2012	Department of Education	Professional Developer- <i>Indiana Science Initiative, Literacy in Science through Notebooking</i>
2007-2012	Indiana University	Research Assistant- <i>Urban Project-based Learning: Power Up for Science</i>
2010-2011	Indiana University	Assistant Instructor- <i>Introduction to Scientific Inquiry</i>
2009-2010	Indiana Public Schools	Professional Developer- <i>Passport to Science: Infusing Inquiry into Elementary Science Curriculum</i>
2009-2010	Indiana University	Assistant Instructor- <i>Secondary Science Methods, Classroom Management</i>
2007-2008	Indiana University	Middle School Instructor- <i>Saturday Science</i>
2003-2007	Mooresville Public School	High School Biology Teacher – <i>Biology 1, Honors Biology, & Advanced Placement Biology</i>
2002-2003	Richland Beanblossom School	High School Science Teacher- <i>Life Science & Biology</i>
2000- 2002	Indiana University	Assistant Instructor- <i>Introduction to Scientific Inquiry</i>

COURSES TAUGHT

2021-2022	Dissertation course (graduate course), Bellarmine University
2020-present	Transdisciplinary Teaching through STEAM (graduate course), Bellarmine University
2019-2020	Designing Environmental Education Curricula for Students with Trauma (doctoral course), Bellarmine University
2018-2019	STEAM Curriculum Design (doctoral course), Bellarmine University
2018-2019	Photovoice Methodology (doctoral course), Bellarmine University
2017-2018	Exploring Student Experiences in STEAM (doctoral course), Bellarmine University
2015-2017	Best Practices in Integrated STEAM Instruction (graduate course), Bellarmine University
2013-2014	Mathematics & Science Methods (graduate course), Bellarmine University
2013-2017	University Supervisor, Bellarmine University
2013-present	Elementary Science Methods (undergraduate course), Bellarmine University
2012-present	Middle and Secondary Science Methods (graduate course), Bellarmine University
2012-present	School Health, Nutrition, & Physical Education (undergraduate course), Bellarmine University
2013-2014	Environmental Sustainability: Lessons from a Leader, Kentucky Institute for International Studies, KY (also coded as <i>Interdisciplinary Core (IDC): Junior Transcultural Experience</i> for Bellarmine University)
2013-2014	Pura Vida: Costa Rica's Approach to Health & Wellness, Kentucky Institute for International Studies, KY
2010-2011	Scientific Inquiry, Indiana University- Bloomington
2009-2010	Classroom Management, Indiana University- Bloomington
2009-2010	Secondary Science Methods, Indiana University- Bloomington
2008-2009	Saturday Science, Indiana University- Bloomington
2003-2007	Advanced Placement Biology, Honors Biology, & General Biology, Mooresville High School, Mooresville, IN
2002-2003	Biology and Life Science Teacher, Edgewood High School, Ellettsville, IN
2000-2002	Associate Instructor, Indiana University- Bloomington

SCHOLARSHIP

PUBLICATIONS

* Denotes current or past student as co-author (undergraduate, graduate or doctoral)

Refereed Manuscripts (accepted and published/in press)

Cook, K., Mahmood, A., *Nygard, C., Gentry-Johnson, M. & Blankenship, M. (in review). Impact of internship on undergraduate STEM students' interest in STEM teaching. *The Electronic Journal for Research in Science & Mathematics Education*.

Cook, K. & Wheeler, W. (in review). Using popular fiction to inspire scientific inquiry. *Journal of College Science Teaching*.

Cook, K., Mahmood, A., & *Nygard, C. (in review). Impact of internship on undergraduate STEM students' interest in STEM teaching.

Cook, K. & Ivy, J. (in review). I will survive: An engineering design challenge for the virtual classroom. *Science and Children*.

*Edelen, D., *Cox, R., Bush, S., & **Cook, K.** (in review). Centering students in transdisciplinary STEAM using positioning theory. *School Science and Mathematics*.

Bush, S. B., *Edelen, D., Roberts, T., Maiorca, C., Ivy, J. T., **Cook, K. L.**, Tripp, L. O. Burton, M., Alameh, S., Jackson, C., Mohr-Schroeder, M. J., Schroeder, D. C., McCurdy, R. P., *Cox Jr., R. (in review). The role of empathy in integrated STE(A)M instruction. *International Journal of STEM Education*.

Thomas, K., Ivy, J., **Cook, K.**, & Kelley, R. (in review). The impact of a GenCyber camp on inservice teachers' TPACK. *Journal of Cybersecurity Education, Research and Practice*.

Cook, K., Alameh, S., Tripp, L., Maiorca, C., Schroeder, C., & Mohr-Schroeder, M. (2021). Reimagining the five practices for effective and equitable discourse: An example from a virtual STEM experience. *Connected Science Learning* 3(3).
<https://www.nsta.org/connected-science-learning/connected-science-learning-may-june-2021/reimagining-5-practices>

Ivy, J., Kelley, R., **Cook, K.**, & Thomas, K. (2020). Incorporating cyber principles into middle and high school curriculum. *International Journal of Computer Science Education in Schools*, 3-23.

*Waters, C. & **Cook, K.** (2020). Designing environmental science curriculum with photovoice to engage non-science majors. *Journal of College Science Teaching*, 49, 5, 28-35.

Bush, S.B., **Cook, K.L.**, *Edelen, D., *Cox, R. (2020). Elementary students' STEAM perceptions: Extending frames of reference through transformative learning experiences. *The Elementary School Journal*, 120, 4, 692-714. doi:
<https://doi.org/10.1086/708642> (~15% acceptance, IF: 1.140)

Bush, S., Mohr-Schroeder, M., **Cook, K.**, Rakes, C., Ronau, R., & Saderholm, J. (2020).

Structuring integrated STEM education professional development: Challenges revealed and insights gained from a cross-case synthesis. *Electronic Journal for Research in Science & Mathematics Education*, 24, 1, 26-55. (~20% acceptance, no IF)

Cook, K. L., Bush, S. B., *Cox, R., & *Edelen, D. (2020). Development of elementary teachers' science, technology, engineering, arts, and mathematics planning practices. *School Science and Mathematics*, 120, 197–208. (~20% acceptance, no IF)

*Edelen, D., Bush, S. B., **Cook, K. L.**, *Cox, R. (2020). The power of building empathy in STEAM. *The Elementary STEM Journal*, 23(4), 10-13.

*Edelen, D., Bush, S. B., Simpson, H., **Cook, K. L.**, Abassian, A. (2020). Moving towards shared realities through empathy in mathematical modeling: An ecological systems theory approach. *School Science and Mathematics*, 120(3), 144-152. doi: <https://doi.org/10.1111/ssm.12395> (~20% acceptance, no IF)

Franz, C. & **Cook, K.** (2020). Utilization of social determinants of health to improve education among youth in Dominican baseball academies. *Health and Social Care in the Community*, 28, 423–430.

*Cox, R., Hunter, K., **Cook, K. L.**, & Bush, S. B. (2019). Problem-based paleontology: A STEAM exploration for fourth graders. *Science and Children*, 56(5), 42-48.

Bush, S. B. & **Cook, K. L.** (2018). K-12 STEM and STEAM education in the United States: Vision and best practices. *Teachers College Record*. Record Number: 22533. (~8% acceptance, IF: 1.072)

Owen, K. D., Kaiser, L. J., Bush, S. B., & **Cook, K. L.** (2018). A STEAM investigation: Making giant strides. *Teaching Children Mathematics*. 25(2), 122-125.

Bush, S. B., **Cook, K. L.**, Ronau, R. N., Rakes, C. R., Mohr-Schroeder, M. J., & Saderholm, J. (2018). A highly structured collaborative STEAM program: Enacting a professional development framework. *Journal of Research in STEM Education* 2(2), 106-125.

Cook, K. L., Bush, S. B., & *Cox, R. (2018). Establishing a STEAM learning environment, Partnering for successful STEAM teaching and learning, Administrator checklist for supporting STEAM, and STEAM video. *Association for Supervision and Curriculum Development (ASCD) myTeachSource® online professional development platform*. Alexandria, VA: Association for Supervision and Curriculum Development.

Cook, K. & Bush, S. (2018). Design thinking in integrated STEAM learning: Surveying the landscape and exploring exemplars in elementary grades. *School Science and Mathematics*, 118, 3-4, 93-103.

****This article was 2019 Most Downloaded Articles for SSM**

Kaiser, L., Owen, K., **Cook, K.** & Bush, S. (2018). The giant problem: Using design thinking to explore thermal conductivity. *Science and Children*, 55, 8, 71-75.

Bush, S., Karp, K., *Cox, R., **Cook, K.**, Albanese, J., & Karp, M. (2018). Design thinking framework: Shaping powerful mathematics. *Mathematics Teaching in the Middle School*, 23(4), e1-e5.

- Hunter, K., *Cox, R. Bush, S., & **Cook, K.**, & Jamner, J. (2017). A paleontology investigation: Unearthing the mathematics. *Teaching Children Mathematics*, 23, 7, 438-441.
- Cook, K. L.**, Bush, S. B., & *Cox, R. (2017). From STEM to STEAM: Incorporating the arts in roller coaster engineering. *Science and Children*, 54, 6, 86-93.
- Bush, S. B., & **Cook. K. L.** (2016). Constructing authentic and meaningful STEAM experiences through university, school, and community partnerships. *Journal of STEM Teacher Education*, 51(1), 57-69.
- Bush, S. B., *Cox, R., & **Cook, K.** (2016). Building a prosthetic hand: Math matters. *Teaching Children Mathematics*, 23, 2, 110-114.
- Cook, K.** & Block, C. (2016). Complementing connections among curricula: Integrating science and social studies for fourth graders. *Science and Children*, 54, 2, 36-42.
- Cook, K.**, Bush, S., & Karp, K. (2016). Clarifying confusing science rules, vocabulary, and diagrams. *The American Biology Teacher*, 78, 8, 676-678.
- Cook, K.**, Brown, A., & Ballard, G. (2016). Using photovoice to explore environmental sustainability across languages and cultures. *Discourse and Communication for Sustainable Education*, 7, 49-67.
- Oliveira, A. & **Cook, K.** (2016). Student visual communication of evolution. *Research in Science Education*, 46, 1-20.
- Cook, K.**, Bush, S. B., & *Cox. R. (2016, invited). Engineering encounters: Creating a prosthetic hand. Reprinted from an article in *Science and Children*, in L. Froschauer (Ed.) *Bringing STEM to the Elementary Classroom*. Arlington, VA: NSTA Press. ****Our book was the Top Pick of NSTA Recommendations**
- Buck, G., **Cook, K.**, & Carter, I. (2016). Attempting to make place-based pedagogy on environmental sustainability integral to teaching and learning in middle school: An instrumental case study. *Electronic Journal of Science Education*, 20, 2, 32-47.
- Cook, K.** (2016). Discussions on STEAM. Bellarmine Magazine: The Pineapple Podcast. Bellarmine University.
- Cook, K.** (2015, invited). K-12 teachers' responsibility in informed dialogue about the care of our planet: A comment on the Pope's encyclical. Bellarmine Magazine.
- Cook, K.** & Oliveira, A. (2015). Communicating evolution: An exploration of students' skills in an essential practice of science. *Electronic Journal of Science Education*, 19, 5, 1-23.
- Cook, K.**, Bush, S., & *Cox, R. (2015). Creating a prosthetic hand: 3D printers innovate and inspire a maker movement. *Science and Children*, 53, 65-71.
- Cook, K.** (2015). Grappling with wicked problems: Exploring photovoice as a decolonizing methodology in science education. *Cultural Studies of Science Education*, 10, 3, 581-592.

- Bush, S., Dinkins, E., & **Cook, K.** (2015). Connecting young adult literature, literacy, and STEM. *Association for Middle Level Education (AMLE) Magazine*, 2(9), 14-16.
- Cook, K.** & Dinkins, E. (2015). Using popular text to develop inquiry projects: Supporting pre-service teachers' knowledge of disciplinary literacy. *Journal of College Science Teaching*, 44(6), 44-50.
- Cook, K.** & Bush, S. (2015). Structuring a science-mathematics partnership to support pre-service teacher's data analysis and interpretation skills. *Journal of College Science Teaching*, 44, 5, 46-52.
- Cook, K.** & Dinkins, E. (2015). Building disciplinary literacy through popular fiction. *Electronic Journal of Science Education*, 19(3), 1-24.
- Cook, K.** & Buck, G. (2014). Pre-service elementary teachers' experience in a community of practice through a place-based inquiry. *International Journal of Environmental and Science Education*, 9(3), 111-132.
- Cook, K.** (2014). Beginning a classroom inquiry: Using photovoice to connect college students to community science. *Journal of College Science Teaching*, 43(6), 22-27.
- Cook, K.** (2014). What's the skinny? Evaluating the effects of instituting a 'fat tax' in America. *Education and Health*, 32(1), 14-18.
- Cook, K.**, Keller, D., & Myers, A. (2014). Bioethics in The Hunger Games: Evaluating the effects of genetic engineering through popular fiction. *The Science Teacher*, 81(1), 3-9.
- Buck, G., **Cook, K.**, Quigley, C., Prince, P., & Lucas, Y. (2014). Seeking to improve young African American girls' attitudes toward science: A participatory action research study. *The Elementary School Journal*, 114(3), 431-453.
- Cook, K.** & Weiland, I. (2013). Dialogue among educators: Understanding the intended goals and perceived roles within a nonformal and formal educator partnership. *Journal of Sustainability Education*, 5. Retrieved from http://www.jsedimensions.org/wordpress/content/dialogue-among-educators-understanding-the-intended-goals-and-perceived-roles-within-a-non-formal-and-formal-educator-partnership_2013_05/
- Cook, K.** & Buck, G. (2013). Pre-service teachers' understanding of the nature of science through socio-scientific inquiry. *Electronic Journal of Science Education*, 17(1), 1-24.
- Cook, K.** & Quigley, C. (2013). Connecting to our community: Utilizing photovoice as a pedagogical tool to connect college students to science. *International Journal of Environmental and Science Education*, 8(2), 339-357.
****This paper won the ASTE Innovations in Teaching Science Teachers Award**
- Cook, K.**, Buck, G., & Park Rogers, M. (2012). Preparing educators to teach evolution in a project-based approach. *The Science Educator*, 21, 44-56.
- Oliveira, A., **Cook, K.**, & Buck, G. (2011). Framing evolution discussion intellectually. *Journal for Research in Science Teaching*, 48(3), 257-280.

- Quigley, C., Rodriguez, A., **Cook, K.**, & Buck, G. (2011). Pictures of real life: Kindergartners use photography to explore science in their surroundings. *Science and Children*, 48, 47-51.
- Cook, K.** & Buck, G. (2010). Photovoice: A community-based socioscientific pedagogical tool. *Science Scope*, 33, 35-39.
- Cook, K.** & Weiland, I. (2010). A suggested project-based environmental unit for middle school: Teaching content through inquiry. *Science Scope*, 33, 46-50.
- Cook, K.** (2009). A suggested project-based evolution unit for high school: Teaching content through application. *The American Biology Teacher*, 71, 95-100.
- Buck, G., **Cook, K.**, Quigley, C., Eastwood, J., & Lucas, Y. (2009). Profiles of urban, low SES, African American girls' attitudes toward science: A sequential explanatory mixed-methods study. *Journal of Mixed Methods Research*, 3(4), 386-410.

Refereed Books and Book Chapters (accepted and published)

- Oliveira, A. & **Cook, K.** (Eds.) (2019). *Evolution education and the rise of the creationist movement in Brazil*. Lanham, MD: Lexington Books.
- Bush, S. B., & **Cook, K. L.** (2019). *Step into STEAM, grades K-5: Your standards-based action plan for deepening mathematics and science learning*. Thousand Oaks, CA: Corwin and Reston, VA: National Council of Teachers of Mathematics.
- Bush, S. B. & **Cook, K. L.** (2019). Structuring STEAM inquiries: Lessons learned from practice. In M. S. Khine & S. Areepattamannil (Eds.), *STEAM Education: Theory and Practice*. pp. 19-35. Cham, Switzerland: Springer Nature Switzerland.
- Olivera, A. & **Cook, K.** (2018). The rise of the creationist movement in Brazil. In L. Borderding & H. Deniz (Ed.) *Evolution Education around the Globe*. New York: Springer.
- Cook, K.** & Buck, G. (2016). Our neighborhood: A place for heightening emotional energy in science education. In A. Bellochi & C. Quigley (Ed.) *Exploring Emotions Aesthetics and Wellbeing in Science Education Research*. New York: Springer.
- Cook, K.** (2014). Democratic participation with scientists through socioscientific inquiry. In M. Mueller & D. Tippins (Ed.) *EcoJustice, Citizen Science and Youth Activism: Situated Tensions for Science Education*. New York: Springer.
- Weiland, I., Pokral, E., & **Cook, K.** (2014). Using project-based learning to teach sustainability issues to elementary students. In K. Thomas & H. Muga (Ed.) *Cases on Pedagogical Innovations for Sustainable Development*. New York: Springer.
- Eastwood, J.L., Schlegel, W.M., & **Cook, K.** (2011). Effects of an interdisciplinary program on students reasoning with socioscientific issues and perceptions of their college experience. In T.D. Sadler (Ed.) *Socio-scientific Issues in Science Classrooms: Teaching, Learning and Research*. New York: Springer.

Multi-Media Appearances

- Cook, K.** (2021, July). Reimagining the five practices for effective and equitable discourse: An example from a virtual STEM experience. Invited Virtual Chat with Authors hosted by the National Science Teachers Association (NSTA).
https://twitter.com/search?q=%40nstachat&src=typed_query
- Bush, S.B. & **Cook, K.L.** (2019). STEAM learning experiences: Thinking beyond a makerspace. Corwin Connect. Retrieved at: <https://corwin-connect.com/2019/07/steam-learning-experiences-thinking-beyond-a-makerspace/>
- Cook, K.L.** & Bush, S. B. (2019). STEAM education for each and every student. Corwin Connect. Retrieved at: <https://corwin-connect.com/2019/06/steam-education-for-each-and-every-student/>
- Cook, K. L.** & Bush, S. B. (2017). *JCPS students show off intellectual skills at STEAM Maker Faire*. WDRB News. Louisville, KY. Retrieved at: <http://www.wdrb.com/story/35215522/jcps-students-show-off-intellectual-skills-at-steam-maker-faire>
- Cook, K.**, Bush, S., Owen, K., & Kaiser, L. (2016). STEAM in our community. Dawne Gee Show. Wave TV. Retrieved at: <https://www.wave3.com/clip/12620170/the-steam-project-at-bellarmino-university/>

PRESENTATIONS

Refereed International and National Meetings

- Bush, S. B., *Edelen, D., Roberts, T., Maiorca, C., Ivy, J. T., **Cook, K. L.**, Tripp, L. O. Burton, M., Alameh, S., Jackson, C., Mohr-Schroeder, M. J., Schroeder, D. C., McCurdy, R. P., *Cox Jr., R. (2022, January-under review). The role of empathy in integrated STE(A)M instruction. Presentation at the International Association for Science Teacher Education (ASTE). Greenville, SC.
- Cook, K.**, Mahmood, A., *Nygard, C., Gentry-Johnson, M. & Blankenship, M. (2022, January-under review). Impact of internship on undergraduate STEM students' interest in STEM teaching. Presentation at the International Association for Science Teacher Education (ASTE). Greenville, SC.
- Cook, K. L.** & Cox, R. (2021, July). Step into STEAM. Invited Elementary STEM Showcase Presentation at the STEM Forum & Expo hosted by the National Science Teachers Association (NSTA). Virtual Conference.
- Cook, K.** & Alameh, S., Mohr-Schroeder, M., Maiorca, C., Schroeder, C., & Tripp, O. (2021, July). Reimagining the five practices for effective and equitable discourse: An example from a virtual STEM experience. Presentation to be given at the STEM Expo and Forum hosted by the National Science Teachers (NSTA). Virtual Conference.
- Bush, S. B., *Edelen, D., Roberts, T., Maiorca, C., Ivy, J. T., **Cook, K. L.**, Tripp, L. O. Burton, M., Alameh, S., Jackson, C., Mohr-Schroeder, M. J., Schroeder, D. C., McCurdy, R. P., & Cox Jr., R. (2021, October). The role of empathy in integrated STE(A)M

instruction. Presentation to be given at the School Science and Mathematics Association (SSMA) Annual Convention. Virtual.

Bush, S. B., **Cook, K. L.**, Edelen, D., & Cox, R. (2021, October). Elementary students' STEAM perceptions. Presentation to be given at the School Science and Mathematics Association (SMMA) Annual Convention. Virtual.

Cook, K. & Mahmood, A. (2021, May). Strengthening STEM teacher education pathways in Kentucky with collaborative partnerships. STEM for ALL Showcase sponsored by the National Science Foundation (NSF). Online Conference.

Thomas, K., Ivy, J., **Cook, K.**, & Kelley, R. (2020, December). The impact of a GenCyber camp on inservice teachers' TPACK. International Society for Technology in Education (ISTE). Online Conference.

Cook, K. L., & Mahmood, A. (2020, August). Strengthening STEM teacher education pathways in Kentucky with collaborative partnerships. Presentation given at the Virtual Noyce Summit hosted by the National Science Foundation (NSF). Online Conference.

Ivy, J., Kelley, R., **Cook, K.**, Thomas, K., Wong, E., & *Burton, P. (2020, July). Arming the next generation of cyber knights. Presentation to be given at the 9th Annual STEM Expo and Forum hosted by the National Science Teachers (NSTA). Louisville, KY.

Mahmood, A., **Cook, K.** & *Nygard, C. (2020, July). Strengthening STEM teacher education pathways: Inspiring STEM students to pursue a career in STEM teaching through internships. Presentation to be given at the 9th Annual STEM Expo and Forum hosted by the National Science Teachers (NSTA). Louisville, KY.

Cook, K. L., & Mahmood (2020, May). Strengthening STEM teacher education pathways in Kentucky with collaborative partnerships. Presentation given at the STEM for ALL Showcase sponsored by the National Science Foundation (NSF). Online Conference.

Cook, K., Bush, S., *Cox, R., & *Edelen, D. (2020, January). Development of elementary teachers' STEAM planning practices. Presentation at the International Association for Science Teacher Education (ASTE). San Antonio, TX.

Oliveira, A. & **Cook, K.** (2020, January). Evolution education and the rise of the creationist movement in Brazil: A Book Preview. Presentation at the International Association for Science Teacher Education (ASTE). San Antonio, TX.

*Waters, C. & **Cook, K.** (2019, October). Designing curriculum to engage young people in environmental dialogue. North American Association for Environmental Education (NAAEE). Lexington, Kentucky.

*Waters, C. & **Cook, K.** (2019, August). Using photovoice to engage non-major undergraduate students in ecology topics. Ecological Society of America (ESA). Louisville, KY.

Cook, K. L. & Bush, S. B. (2019, July). Teaching STEAM through a problem-based paleontology exploration. Presentation to be given at the 8th Annual STEM Expo and Forum hosted by the National Science Teachers (NSTA). San Francisco, CA.

- Cook, K. L.** & Bush, S. B. (2019, July). Step into STEAM. Invited Elementary STEM Showcase Presentation at the STEM Forum & Expo hosted by the National Science Teachers Association (NSTA). San Francisco, CA.
- Bush, S. B. & **Cook, K. L.** (2019, April). Authentic STEAM instruction to support and challenge each and every learner. Presentation to be given at the annual meeting of the National Council of Supervisors of Mathematics (NCSM). San Diego, CA.
- Bush, S. B., **Cook, K.**, *Edelen, D., & *Cox, R. (2019, January). Elementary students' perceptions of STEAM learning. Presentation to be given at the annual meeting of the International Association for Science Teacher Education (ASTE), Savannah, GA.
- *Cox, R. **Cook, K.**, & Bush, S. (2019, January). Fresh thinking for students through STEAM. Presentation to be given at the annual meeting of the International Association for Science Teacher Education (ASTE), Savannah, GA.
****National Technology Leadership Initiative Award Finalist**
- Cook, K.**, Bush, S., Mohr-Schroeder, M., Rakes, C., Ronau, R., & Saderholm, J. (2019, January). Highly-structured integrated STEM professional development: Challenges and insights gained from a cross-case analysis. Roundtable presentation at the International Association for Science Teacher Education (ASTE), Savannah, GA.
- Bush, S. B., **Cook, K. L.**, & *Cox, R. (2018, April). Authentically and meaningfully integrating the "M" in STEAM: The mathematics matters! Presentation to be given at the National Council of Teachers of Mathematics (NCTM) Research Conference. Washington, DC.
- Ronau, R. N., Bush, S. B., Rakes, C. R., Mohr-Schroeder, M., **Cook, K.**, & Saderholm, J. (2018, April). PrimeD: A Framework to Guide PD, Embed Evaluation, and Structure Research. Research Symposium presentation given at the National Council of Teachers of Mathematics (NCTM) Research Conference. Washington, DC.
- Oliveira, A., & **Cook, K.** (2018, April). Public evolution education and the rise of the creationist movement in Brazil. Paper presentation at the American Educational Research Association (AERA), New York City, NY.
- Cook, K.**, Rakes, C., Saderholm, J., Bush, S., Mohr-Schroeder, M., & Ronau, R. (2018, January). PrimeD: A professional development framework to build partnerships and empower teachers. Paper presentation at the International Association for Science Teacher Education (ASTE), Baltimore, MD.
- Cook, K.**, Bush, S., Saderholm, J., Rakes, C., Ronau, R., & Mohr-Schroeder, M. (2018, January). A structured and collaborative STEAM program: Operationalizing a professional development framework. Paper presentation at the International Association for Science Teacher Education (ASTE), Baltimore, MD.
- Bush, S. B., **Cook, K. L.**, & *Cox, R. (2017, July). Math matters: A closer look at the "M" in STEAM. Paper presentation at the STEM Forum & Expo hosted by the National Science Teachers Association (NSTA). Orlando, FL.
- Cook, K. L.**, Bush, S. B., & *Cox, R. (2017, July). Elementary STEM Showcase, Science and

Children Engineering Encounters: Roller Coasters. Presentation at the STEM Forum & Expo hosted by the National Science Teachers Association (NSTA). Orlando, FL.

Cook, K., Bush, S. & *Cox, R. (2017, July). Bringing STEM to the elementary classroom. Invited paper presentation at the STEM Forum & Expo hosted by the National Science Teachers Association (NSTA), Orlando, FL.

Cook, K. L., & Bush, S. B. (2017, May). Full STEAM ahead: PD model for best practices in integrated STEAM instruction. Presentation given at the STEM for ALL Showcase sponsored by the National Science Foundation (NSF). Online Conference. ****Our presentation was the Featured Video Showcase**

Cook, K.L. & Bush, S.B. (2017, May). Full STEAM ahead: Best practices for integrated STEAM instruction. NSF STEM for All Video Showcase: Research & Design for Impact. Retrieved at:
https://stemforall2017.videohall.com/presentations/896?highlight=posts_12630&panel=mc

Ronau, R. N., Rakes, C. R., Bush, S. B., Mohr-Schroeder, M., Saderholm, J., & **Cook, K. L.** (2017, April). PrimeD: A PD Framework to Build Partnerships and Empower Teachers. Presentation to be given at the National Council of Teachers of Mathematics (NCTM) Research Conference. San Antonio, TX.

Cook, K. & Bush, S. (2016, July). Structuring an interdisciplinary STEM unit to support students' data analysis and interpretation skills. Paper presentation at the STEM Forum & Expo hosted by the National Science Teachers Association (NSTA), Denver, CO.

Cook, K., Bush, S., & *Cox, R. (2016, July). Bringing STEM to the elementary classroom. Invited paper presentation at the STEM Forum & Expo hosted by the National Science Teachers Association (NSTA), Denver, CO.

Cook, K. & *Cox, R. (2016, April). Engineering encounters: Creating a prosthetic hand. Invited workshop presentation at the Elementary STEM Showcase at the National Science Teachers Association (NSTA), Nashville, TN.

Cook, K., Brown, A., & Ballard, G. (2016, January). Using photovoice to explore environmental sustainability across cultures. Paper presentation at the International Association for Science Teacher Education (ASTE), Reno, NV.

Cook, K. & Buck, G. (2016, January). Our neighborhood: A place for heightening emotional energy in science education. Roundtable presentation at the International Association for Science Teacher Education (ASTE), Reno, NV.

Cook, K. & Oliveira, A. (2015, April). High school students' public communication about evolution. Paper presentation at the American Educational Research Association (AERA), Chicago, IL.

Cook, K. & Dinkins, E. (2015, April). Building disciplinary literacy through popular fiction. Paper presentation at the American Educational Research Association (AERA), Chicago, IL.

- Cook, K.** (2015, March). Should America enforce a fat tax? Paper presentation at the National Science Teachers Association (NSTA), Chicago, IL.
- Oliveira, A. & **Cook, K.** (2015, January). Communicating evolution to the public: A communicative approach to controversial science instruction. Paper presentation at the International Association for Science Teacher Education (ASTE), Portland, OR.
- Cook, K.** & Dinkins, E. (2015, January). Teaching pre-service teachers disciplinary literacy through popular fiction. Paper presentation at the International Association for Science Teacher Education (ASTE), Portland, OR.
- Dinkins, E. & **Cook, K.** (2014, November). Meeting in the Third Space: Teacher educators explore ways to teach science disciplinary literacy. Paper presentation at the Association of Literacy Educators and Researchers (ALER), Del Ray Beach, FL.
- Weiland, I. & **Cook, K.** (2014, April). Utilizing a claims, evidence, reasoning framework to integrate K-5 instruction. Paper presentation at the National Association for Research in Science Teaching (NARST), Pittsburgh, PA.
- Buck, G., **Cook, K.**, & Weiland, I. (2014, April). Making place-based SSI instruction discernible to urban middle school science teachers. Interactive poster/paper presentation at the National Association for Research in Science Teaching (NARST), Pittsburgh, PA.
- Cook, K.** & Buck, G. (2014, April). The effects of socioscientific inquiry on nature of science conceptions. Paper presentation at the American Educational Research Association (AERA), Philadelphia, PA.
- Cook, K.**, Buck, G., & Weiland, I. (2014, January). Preparing teachers to integrate place-based socioscientific issues in urban classrooms. Paper presentation at the International Association for Science Teacher Education (ASTE), San Antonio, TX.
- Cook, K.** (2013, April). Utilizing photovoice to empower learners to connect with and care about socio-scientific issues. Poster presentation at the National Association for Research in Science Teaching (NARST), Rio Grande, Puerto Rico.
- Cook, K.** (2013, April). Engaging pre-service teachers in a community of practice through socio-scientific inquiry. Paper presentation at the National Association for Research in Science Teaching (NARST), Rio Grande, Puerto Rico.
- Cook, K.** & Weiland, I. (2013, January). Dialogue among educators: Understanding the intended goals and roles within a nonformal and formal educator partnership. Paper presentation at the International Association for Science Teacher Education (ASTE), Charleston, SC.
- Cook, K.** & Quigley, C. (2013, January). Utilizing photovoice as a tool to connect learners to science. Paper presentation at the International Association for Science Teacher Education (ASTE), Charleston, SC.
- **National Technology Leadership Initiative Award Finalist**

- Cook, K.,** Quigley, C. & Buck, G. (2012, March). Using to tool of photovoice to engage students in place-based socio-scientific inquiry. Paper presentation at the National Science Teachers Association (NSTA), Indianapolis, IN.
- Cook, K. & Quigley, C.** (2012, March). Using photovoice to empower pre-service teachers to connect science to their daily lives. Paper presentation at the National Association for Research in Science Teaching (NARST), Indianapolis, IN.
- Cook, K. & Buck, G.** (2012, March). The effect of studying socio-scientific issues on pre-service teachers' understanding of the nature of science. Paper presentation at the National Association for Research in Science Teaching (NARST), Indianapolis, IN.
- Cook, K. & Buck, G.** (2012, April). Pre-service teachers' experience in a community of practice through a place-based socio-scientific inquiry. Paper presentation at the American Educational Research Association (AERA), Vancouver, Canada.
- Cook, K. & Buck, G.** (2012, April). Democratic participation with scientists through place-based socio-scientific inquiry. Paper presentation at the American Educational Research Association (AERA), Vancouver, Canada.
- Cook, K. & Weiland, I.** (2011, April). An exploration of the science collaboration between a non-formal and formal educator in an elementary classroom: Do our goals overlap? Paper presentation at the National Association for Research in Science Teaching (NARST), Orlando, FL.
- Cook, K., Oliveira, A., & Buck, G.** (2011, April). Framing evolution discussion intellectually. Paper presentation at the National Association for Research in Science Teaching (NARST), Orlando, FL.
- Buck, G., **Cook, K.,** & Quigley, C. (2011, April). The effects of becoming a science-focus school in regards to urban, low SES, African American Girls' Emotional Engagement with Science. Paper presentation at the National Association for Research in Science Teaching (NARST), Orlando, FL.
- Cook, K. & Buck, G.** (2010, October). Listening to the learners: Proposing the tool of photovoice for engaging students in community-based socioscientific inquiry. International Center for Service-Learning in Teacher Education's Conference (ICSLTEC), Indianapolis, IN.
- Eastwood, J., **Cook, K.,** Sherwood, R., & Schlegel, W. (2010, April). Impact of an interdisciplinary undergraduate human biology program on socioscientific reasoning. National Association for Research in Science Teaching (NARST), Philadelphia, PA.
- Buck, G., Trauth-Nare, A., **Cook, K.,** & Hudson, S. (2010, April). Forging the relationship to science content for adolescents in problem-based learning. National Association for Research in Science Teaching (NARST), Philadelphia, PA.
- Buck, G.A. & **Cook, K.** (2010, April) Investigating soil degradation: Using the tool of photovoice to engage students in community-based inquiry. National Science Teachers Association (NSTA), Philadelphia, PA.

- Cook, K.,** Buck, G.A., & Park Rogers, M. (2009, April) Exploring cognitive engagement in students learning evolution in a project-based approach. National Association for Research in Science Teaching (NARST), Garden Grove, CA.
- Buck, G.A., **Cook, K.,** Quigley, C.F., & Eastman, J. (2009, April) Exploring how urban African-American girls position themselves in science learning: A sequential explanatory mixed-methods study. National Association for Research in Science Teaching (NARST), Garden Grove, CA.
- Weiland, I., **Cook, K.,** & Pokral, E. (2009, April). Integrating project-based learning into a non-formal environmental education program. Paper presented at the research symposium of the annual conference of the North American Association of Environmental Education (NAAEE), Portland, OR.

Refereed Regional Conferences

- Cook, K.** & Mahmood, A. (2021, February). Community college collaboration in supporting future science and math teachers. Midwest Annual Robert Noyce Teacher Scholarship Program Conference. Sponsored by the National Science Foundation (NSF). Online Conference.
- Cook, K.** & Mahmood, A. (2019, November). Strengthening STEM teacher education pathways in Kentucky with collaborative partnerships. Presentation at the Midwest Annual Noyce Conference, St. Louis, MO.
- *Gibbons, S., *Nygard, C. **Cook, K.,** & Mahmood, A. (2019, November). Summer internship experience at the Kentucky Science Center for STEM students. Poster presentation at the Kentucky Academy of Science, Berea, KY.
- *Hissong, G., *Nygard, C., **Cook, K.,** & Mahmood, A. (2019, November). Building community partnership with the Kentucky Science Center: Inspiring STEM students to pursue a career in STEM teaching. Poster presentation at the Midwest Annual Noyce Conference, St. Louis, MO.
- Cook, K.** & *Cox, R. (2018, November). Design thinking in STE(A)M learning. Paper presentation at the Kentucky Science Teachers Association (KSTA), Lexington, KY.
- Cook, K.** (2018, April). Researching design thinking in STEAM. A Celebration of Faculty Achievement. Bellarmine University, Louisville, KY.
- Cook, K.** & Bush, S. (2018, February). A structured and collaborative STEAM program: Operationalizing a professional development framework. Invited presentation at the Pennsylvania Training and Technical Assistance Network (PaTTAN), Hershey, PA.
- Bush, S. & **Cook, K.** (2018, February). Authentic STEAM instruction to support and challenge each and every learner. Invited presentation at the Pennsylvania Training and Technical Assistance Network (PaTTAN), Hershey, PA.
- Bush, S., **Cook, K.** & *Cox, R. (2017, November). Authentically and meaningfully integrating the "M" in STEAM: The mathematics matters! Paper presentation at the NCTM Regional Conference & Exposition hosted by the National Council of Teachers of Mathematics (NCTM), Chicago, IL.

- Bush, S., **Cook, K.** & *Cox, R. (2017, October). Authentically and meaningfully integrating the "M" in STEAM: The mathematics matters! Paper presentation at the NCTM Regional Conference & Exposition hosted by the National Council of Teachers of Mathematics (NCTM), Orlando, FL.
- Cook, K.** (2017, April). Power of play in STEM. Invited panel presentation at the Girls STEM Collaborative Conference hosted by the Kentucky Science Center, Louisville, KY.
- Cook, K.** (2017, March). Lesson planning for the Kentucky science assessment system. Invited presentation for Bullitt County Instructional Coaches, Mt. Washington, KY.
- Dinkins, E. & **Cook, K.** (2015, October). Embracing the space between: Leveraging the third space to promote student engagement and critical understanding. Student Success Conference. Bellarmine University, Louisville, KY.
- Cook, K.** (2015, May). How to use photovoice to conduct cross-cultural studies. Invited professional development for faculty. Centre College, Danville, KY.
- Cook, K.** (2015, April). Using photovoice to explore environmental sustainability across cultures. A Celebration of Faculty Achievement. Bellarmine University, Louisville, KY.
- Cook, K.** (2014, April). Pre-service teachers' use of photovoice to dialogue with and impact scientists in their community. International Congress of Qualitative Inquiry. University of Illinois at Urbana-Champaign, Champaign, IL.
- Cook, K.** (2014, March). How should we respond to climate change? Ethics panel on climate change. Ethics and Social Justice Center, Bellarmine University, Louisville, KY.
- Cook, K.** (2014, February). Making the transition from graduate student to tenure-track faculty. Annual School of Education Research Symposium. Indiana University, Bloomington, IN.
- Keller, D., **Cook, K.**, & Myers, A. (2014, February). Bioethics in The Hunger Games: Evaluating the effects of genetic engineering through popular fiction. Hoosier Association of Science Teachers, Inc. (HASTI), Indianapolis, IN.
- Cook, K.** (2013, December). Reconnaissance in Costa Rica: Quality Enhancement Plan. Bellarmine University, Louisville, KY.
- Cook, K.** (2013, November). Innovative methods for exploring environmental sustainability. University of Louisville, Louisville, KY.
- Bulinski, K. & **Cook, K.** (2013, November). An innovation in pre-service teacher training: Designing a college-level earth science course using The Next Generation Science Standards. Kentucky Academy of Science (KAS), Morehead, KY.
- Buck, G., Trauth-Nare, A., **Cook, K.**, & Hudson, S. (2012, February). Forging the relationship to science content for adolescents in problem-based learning. Curriculum & Instruction Research and Creative Activity Symposium, Bloomington, IN.

- Cook, K.** (2012, September). Climate change symposium: Dealing with controversial issues in the classroom. Bellarmine University, Louisville, KY.
- Cook, K.** (2012, 2011). Science notebooking specialist: Professional development for elementary in-service teachers. Bloomington, IN.
- Cook, K.** (2012, 2011, 2010). Indiana Science Initiative: Professional development for K-12 teachers for I-STEM. Bloomington, Spencer, IN.
- Cook, K. & Weiland, I.** (2010, March). An exploration of the science collaboration between a non-formal and formal educator in an elementary classroom: Do our goals overlap? Science Education Research Symposium, Bloomington, IN.
- Cook, K., Quigley, C. & Rodriguez, A.** (2009, August). Science & art connections- Listening to the learners: Proposing the tool of photovoice for engaging students in community-based socioscientific inquiry. Gary, IN.
- Cook, K., Buck, G.A., & Park Rogers, M.** (2009, March) E. Wayne Gross Grant recipient- Students' cognitive engagement in a project-based approach to teaching evolution. Science Education Research Symposium, Bloomington, IN.
- Buck, G.A. & Cook, K.** (2009, February). Teacher created problem-based science units for middle school. Hoosier Association of Science Teachers in Indiana (HASTI), Indianapolis, IN.
- Cook, K. & Buck, G.A.** (2008, December). Evolution teaching practices: Striving for scientific literacy. National Science Teachers Association (NSTA), Cincinnati, OH.
- Cook, K., Trauth-Nare, A., & Park Rogers, M.** (2008, October). Formative assessment strategies for environmental education. Environmental Education Association of Indiana (EEAI), Indianapolis, IN.
- Cook, K.** (2008, 2009, 2010). Passport to Science. Indiana Public School Corporation (IPS), Indianapolis, IN.

GRANTS

- Mahmood, A., **Cook, K.**, & Ivy, J. (in preparation, Co-Investigator). Noyce Knights; Increasing Highly Effective Science and Mathematics Teachers in Kentucky. (2022-2027). National Science Foundation (NSF): Robert Noyce Teacher Scholarship Program. Estimated \$1.45 million. (submission due August 25, 2021)
- Ivy, J. & **Cook, K.** (in review, Co-Investigator). Collaborative research: Developing and Testing Innovations: STEM within: Promoting positive identities through anti-racist and gender-inclusive virtual integrated STEM experiences. (2021- 2024). National Science Foundation (NSF): Innovative Technology Experiences for Students and Teachers (ITEST). Jackson, C. (Overall PI), Mohr-Schroeder, M. (UK PI), Bush, S. B. (UCF PI), Ivy, J (BU PI), Maiorca, C. (UC-LB PI), Roberts, T. (BG PI), & Burton, M. (AU PI). Estimated \$1,500,000. (BU portion = \$136,152. Cook 50% effort). (submitted August 14, 2021)
- Kelley, R., Lein, A., & **Cook, K.** (Co-Investigator), 2022. GenCyber Knights

Middle School Student Camps. GenCyber Grant. National Security Agency (NSA) & National Science Foundation (NSF). \$116,558. Funded.

Dobbins, J., Challener, R., Robinson, D., Courington, D. & **Cook, K.** (Co-Investigator), 2021. Amgen Biotech Experience-Kentucky. Amgen Foundation. \$118,668. Funded.
<https://amgenbiotechexperience.net/kentucky/>

Ivy, J., Kelley, R., **Cook, K.**, & Thomas, K. (Co-Investigator), 2021. GenCyber Knights High School Teacher Camps. GenCyber Grant. National Security Agency (NSA) & National Science Foundation (NSF). \$99,807. Funded.

Cook, K. (Primary Investigator), 2020. Education in the Dominican Republic: Joining forces cross departmentally to extend international offerings in education. Office of Academic Affairs & Study Abroad and International Learning. \$2200. Funded.

Mahmood, A. & **Cook, K.** (Primary Co-Investigator), 2019. Strengthening STEM teacher education pathways in Kentucky with collaborative partnerships. Robert Noyce Capacity Building Grant. National Science Foundation (NSF). \$125,000. Funded.
<https://www.bellarmino.edu/education/noyce-capacity-building-project/>

Ivy, J., Kelley, R., **Cook, K.**, & Thomas, K. (Co-Investigator), 2019. GenCyber Knights High School Teacher Camps. GenCyber Grant. National Security Agency (NSA) & National Science Foundation (NSF). \$100,000. Funded.
<https://www.bellarmino.edu/education/genocyber/>

Cook, K. (Primary Investigator), 2019. Reconnaissance in Dominican Republic: Development of an education Program. Office of Academic Affairs & Study Abroad and International Learning. \$1775. Funded.

Cook, K. (Primary Investigator), 2018. Bloom elementary safe and fun playground. Lowe's Toolbox for Education. \$5,000. Funded.

Cook, K. (Primary Investigator), 2017. Researching design thinking in STEAM. Faculty Development Funding. \$3,000. Funded.

Cook, K. & Bush, S. (Primary Co-Investigator), 2015-2017. Full STEAM ahead: Preparing elementary teachers to implement best-practices in integrated STEAM instruction. Mathematics and Science Partnership Grant (MSP), Kentucky Department of Education. federal funding with state flow-through, Award ID: #S366B150018. B \$400,000. Funded.

Cook, K. & Bush, S. (Primary Co-Investigator), 2014. Supporting pre-service teachers with the integration of mathematics and technology in scientific engineering practices. Toyota Foundation. \$100,667. Not Funded.

Cook, K. (Primary Investigator), 2014. Using photovoice to explore environmental sustainability across cultures. Faculty Development Funding. \$3,000. Funded.

Cook, K. (Primary Investigator), 2013. Reconnaissance in Costa Rica: the development of two courses for Bellarmine University. Quality Enhancement Plan (QEP). \$2,200. Funded.

- Cook, K.** (Primary Investigator), 2010. Can we *really* make a difference? Pre-service teachers' experience with socio-scientific issues & the nature of science through legitimate participation. Daisy Jones Fellowship. \$5,000. Funded.
- Cook, K. & Weiland, I.** (Co-Investigators), 2009. Students' cognitive engagement in a problem-based environmental unit. E. Wayne Gross Fellowship. \$3,000. Funded.
- Cook, K.** (Primary Investigator), 2008. Evolution teaching practices: Striving for scientific literacy. E. Wayne Gross Fellowship. \$4,000. Funded.
- Cook, K.** (Primary Investigator), 2007. Green thinking: An exploration into positive impacts humans make on the environment. Eli Lilly Pharmaceuticals. \$8,000. Funded.
- Cook, K.** (Primary Investigator), 2006. Environmental service learning project, Mooresville Consolidated School Corporation. \$2,000. Funded.

SERVICE TO THE PROFESSION

Service to Professional Organizations

a. Elected Positions

Elections Committee, Association for Science Teacher Education, 2019-2021

b. Appointed Positions

Education Professional Standards Board (EPSB) Program Review Committee 2020-present

c. Editorial Review Board

Innovations in Science Teacher Education, 2016-2019

Journal for Science Teacher Education, 2013-2016

d. Strand Coordinator: Equity & Diversity

Association for Science Teacher Education, 2014, 2015, 2016, 2017 & 2018 Conference

e. Invited Manuscript Reviewer

Journal of Biological Education, 2021-present

Investigations in Mathematics Learning: M within Integrated STEM, 2020-present

The Journal of Science Teacher Education: Pre-Service Teacher Education Strand, 2010-present

International Journal of Environmental and Science Education: Teaching and Teacher Education Strand, 2012-present

Elementary Science Teacher Education (ESTE) within the Journal of Science Teacher Education, 2013

Science Education: Socio-scientific Issues Strand, 2013

f. Invited Conference Proposal Reviewer

The Association of Independent Liberal Arts Colleges for Teacher Education (AILACTE): Annual Conference, 2014

American Educational Research Association (AERA): Annual Meeting, Division C: Learning and Instruction/Section 3a: Learning Environments Strand, 2013- present

The Association for Science Teacher Education, Annual Meeting: Pre-Service Teacher Education Strand, 2010-present

National Association of Research in Science Teaching: Annual Conference: Environmental Education Strand, 2009-2012

National Association of Research in Science Teaching: Annual Conference: Pre-Service Teacher Education Strand, 2009-2012

American Education Research Association (AERA): Annual Meeting, Division K: Teaching and Teacher Education, Sections 1 & 7, 2008, 2009

Service to Academia and Community

- 2020-present Kentucky Information Technology in Educator Committee
- Represented Bellarmine on the KITEP committee, a working subgroup of Kentucky Association of Colleges for Teacher Education (KACTE) focused on the collection, management and reporting of data for assessment, reporting and accountability purposes.
- 2020-2021 Transfer Review Committee
- Assisted in the development of a revised university-wide transfer policy
- 2020-2021 Module Course Delivery Committee
- Assisted in the development of a university-wide policy on offering module courses
- 2019-present Institutional Effectiveness Committee; Chair of Subcommittee
- Oversee university policies and practices on Institutional Effectiveness
 - Serve as Chair of Integrity, Mission, Governance, and Transparency for SACSCOC-related initiatives
- 2020-present Virtual STEM Camp STEM Collaboration with University of Kentucky
- Co-developed and implemented a Virtual STEM Camp Summer for 300+ students nationally
- 2020-2021 COVID-19 Health and Wellness subcommittee, Bellarmine University
- Developed plans and implemented supports for supporting faculty and staff health and wellness during COVID-19
- 2020-present Program and Content Reviewer for Education Professional Standards Board
- Supported accreditation efforts of EPSB by reviewing Kentucky universities' education programs
- 2019-present International Liaison for the Office of International Studies, Bellarmine University
- Support student and faculty international travel
- 2019-present Kentucky Science Center Board Member, Louisville, KY
- Currently serve on board as an ambassador to science education
 - Co-Chair of Visitor Experience and Operations Committee

- 2018-2019 Search Committee Member for University Marketing Company, Bellarmine University
- Assisted in review and election process for new marketing group
- 2016-2018 Committee Member for Playground Initiative, Bloom Elementary
- Grant writing team member to secure funding to improve urban playground space for local school.
- 2016-2018 Chair of Undergraduate Program, Bellarmine University
- Conduct administrative responsibilities assigned by the Dean and Provost, maintain standards of the discipline, and meet the professional expectations of the departmental faculty.
- 2015-present CAEP Accreditation for Annsley Frazier Thornton School of Education: Standard 1 Chair, Bellarmine University
- Organize initial certification program review and oversee updates to program changes per accreditation guidelines
- 2015-present Doctoral Chair and Doctoral Committee Member, Bellarmine University & Clemson University
- Patrick Englert; Bellarmine University: Committee Member, Complete
 - Heidi Cian; Clemson University: Committee Member, Complete
 - Richard Cox; Bellarmine University: Doctoral Chair, Complete
 - Kathleen Sanchez; Bellarmine University: Doctoral Chair, In Progress
 - Carolyn Waters; Bellarmine University: Doctoral Chair, In Progress
 - Liz Byron; Bellarmine University: Committee Member, Complete
- 2015-2019 Advisory Council Member for Family Resource Center, Jefferson County Public School
- Service includes presenting research-based practices for elementary practitioners to council.
- 2015-2017 Search Chair for Mathematics Education, Special Education Faculty Hire, and Faculty Secretary, Bellarmine University
- Assisted in organized position posting and recruitment efforts, phone and on-site interviews, and election process for new faculty
- 2014-2016 Student Conduct Officer, Bellarmine University
- Served on a panel to review and evaluate misconduct cases for Bellarmine students.
- 2014-2017 University Committee on External Awards, Bellarmine University
- Recruit and coach students in developing applications for funding through awards such as the Fulbright, Truman, Cralle, Udall, and Goldwater.
- 2015-2016 Science Task Force, Archdiocese of Louisville
- Assisted and consulted in district considerations concerning science reform.
- 2014-2015 Undergraduate Programs Review Project, Bellarmine University
- Contributed to design of modified undergraduate program for pre-service teacher educators.

- 2013-2015 Wilson Wyatt Fellowship of Academic Excellence Committee Member, Bellarmine University
- Served as a reviewer for the prestigious Wyatt Fellowship, which recognizes a graduating senior's sustained intellectual distinction
- 2012-2015 Search Committee Member for Teacher Leader, Special Education, and Data Analyst, Bellarmine University
- Assisted in organized position posting and recruitment efforts, phone and on-site interviews, and election process for new faculty
- 2013-2014 Development of Physics Certification for School of Education, Bellarmine University
- Sought and secured EPSB approval for an initial certification for physics to be added to Bellarmine's Master of Arts in Teaching (MAT) degree offerings
- 2013-2014 Alignment of Science Education Courses to Science Courses, Bellarmine University
- Worked with geology and biology professor to align course offerings for education majors and to update courses according to new science standards
- 2013-2014 MAT Benchmark Assessment Committee, Bellarmine University
- Redeveloped benchmark assessment and rubric for required MAT progression
- 2013-2014 Study Abroad Course Developer & Recruiter, Bellarmine University
- Developed Study Abroad course and worked alongside the International Programs for Study Abroad office and the Kentucky Institute for International Studies to recruit Bellarmine University students to study abroad
- 2013-2014 Curriculum Vitae Committee Member, Bellarmine University
- Assigned to design a common template for faculty curriculum vitae for purposes of cohesion and streamlining tenure rank and promotion goals
- 2012-2014 Dissertation Proposal Reviewer, Bellarmine University
- Guided the development of research proposals for dissertation work
- 2012-2013 Climate Symposium for Community, Bellarmine University
- Hosted professional development for K-12 teachers on dealing with socially controversial topics in the science classroom
- 2012-2013 National Council for Accreditation of Teacher Education (NCATE) Committee Member, Bellarmine University
- Served on the Hospitality and Exhibit committees for the NCATE accreditation visitation
- 2011-2012 Co-Founder of School of Education Green Team, Indiana University
- Worked with staff, faculty, and students to propose and facilitate sustainability-related projects at the School of Education
- 2011-2012 Goodwill Ambassador, Indiana University
- Served as the liaison and representative for the Curriculum and Instruction department for the School of Education

- 2007-2012 Curriculum Developer, Bloomington, IN
 - Education consultant and curriculum developer for PBS website for grades 2-6, STEM education for K-12, and SSI-based instructional tools for K-12
- 2008-2009 Graduate and Professional Student Organization
 - Contributed graduate student perspective to curriculum and instruction issues
- 2008-2009 Beechler Award Committee
 - Reviewed and selected award recipients for pre-dissertation research award
- 2008-2009 Department Chair Search Committee for Curriculum and Instruction
 - Interviewed and selected nominees for Curriculum and Instruction department chair position
- 2008-2009 Publications Board Organizer, Indiana University, Bloomington, IN
 - Maintained publications board for faculty and graduate students
- 2007-2008 Education Consultant, Bloomington, IN
 - Assisted as an education consultant for animated short film for grades 3-5
- 2005-2007 Science Club Sponsor, Mooresville High School, Mooresville, IN
 - Led science and ecology club on campus for two years
- 2004-2005 UNITY sponsor and event coordinator, Mooresville High School, Mooresville, IN
 - Led anti-smoking & alcohol student group, led summer workshops
- 2004-2005 Textbook Adoption Committee Team Member, Mooresville High School, Mooresville, IN
 - Reviewed & selected textbook for Biological Sciences

AWARDS

Bellarmino University *Faculty Travel Award* (2020, 2019, 2013)
National Technology Leadership Initiative Award Finalist (2018, 2014)
Presidential Merit Award Winner (2014, 2015, 2016, & 2017)
Ambassador of Science Literacy (2015)
 Bellarmine University Dean's Award for *Excellence in Scholarship* (2014 & 2015)
Innovations in Teaching Science Teachers Award Winner (2014)
Outstanding Paper Award Nominee NARST Conference (2013)
 Phi Mu's Favorite Teacher Nominee (2013)
National Technology Leadership Initiative Award Finalist (2013)
 Herman B. Wells Graduate Fellowship Nominee (2012)
 Goodwill Ambassador for Curriculum & Instruction (2011)
 Daisy Jones Fellowship (2010)

E. Wayne Gross Fellowship (2009)
Project Learning Tree Program Facilitator (2008)
E. Wayne Gross Fellowship (2008)
Eli Lilly Endowment for Teacher Creativity (2007)
Excellence in Teaching Award (2006)
Academic Achievement Award (1999)
Alpha Lambda Delta Honors Society (1997)
Fernandus and Elizabeth Payne Academic Scholarship (1996)
Phi Eta Sigma Freshman Honors Society (1995)

AFFILIATIONS

American Education Research Association (AERA)
Membership with Association for Science Teacher Education (ASTE)
Membership with National Science Teachers Association (NSTA)
Kentucky Academy of Science (KAS)
Kentucky Science Teachers Association (KSTA)
Kentucky Association of Colleges for Teacher Education (KACTE)
Kentucky Information Technology in Educator Committee (KITEP)
Kentucky Science Center (KSC)