

Sherri L. Brown

CURRICULUM VITA

College of Education and Human Development
University of Louisville
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ACADEMIC BACKGROUND

Doctor of Philosophy - 2002	University of Tennessee, Knoxville, Tennessee Concentration: Science Education Dissertation Abstracts International, 64, 845
Master of Science - 1996	University of Tennessee, Knoxville, Tennessee Major - Curriculum and Instruction TN Teaching Certification: Biology and Chemistry
Bachelor of Science - 1991	University of Tennessee, Knoxville, Tennessee Major - Biology (High Honors) Concentration - Organismal and Systems Biology

ACADEMIC EXPERIENCE

University of Louisville, Louisville, KY

2019-2020	Director of Educator Certification
2018-2019	Interim Department Chair, Early Childhood & Elementary Education
2010-2018	Assistant Department Chair, Early Childhood & Elementary Education
2008-2022	Associate Professor, Science Education
2002-2008	Assistant Professor, Science Education

University of Tennessee, Knoxville, TN

1999-2002	Graduate Teaching Assistant, Science Education
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HIGHER EDUCATION TEACHING EXPERIENCE

University of Louisville

August 2002-2024

College of Education and Human Development *Graduate Courses*

EDSP 597	International Teaching: Belize
EDAP 607/681	Teacher Leadership in Practice (Action Research)
EDAP 653	Instructional Procedures in Science at the Zoo
EDTP 605	P-5 Special Methods – Science
EDEM 657	Instructional Procedures in Science
EDTP 501	General Methods
EDAP 694	Physics for Teachers: How Things Work

EDAP 604	Science Beyond the Classroom
EDAP 663	Ethology for K-12 Science Teachers
EDAP 696	International Service Learning Project - Philippines

College of Education and Human Development *Undergraduate Courses*

EDTP 324	P-5 Science Methods
EDTP 101	Academic Orientation
EDTP 328	Building Learning Communities

AWARDS

- 2008 Kentuckiana Metroversity Award for Instructional Development (Grand Prize)
Proposal: Science Beyond the Classroom
- 2006 Kentuckiana Metroversity Award for Instructional Development
Proposal: Physics for Teachers: How Things Work

PUBLIC SCHOOL TEACHING EXPERIENCE

Jefferson Middle School, Oak Ridge Public Schools, Oak Ridge, TN

1996-1998 8th grade Physical Science Teacher

Farragut Middle & High School, Knox County Public Schools, Knoxville, TN

1995-1996 9th, 10th grade Biology and Chemistry Teacher

PUBLICATIONS

- Thornburg, W., & Brown, S.L. (2023). Measuring pre-service elementary teachers' changes in pedagogical orientation towards science teaching. *Kentucky Journal of Excellence in College Teaching and Learning*, 19, 104–118.
https://kjectl.eku.edu/sites/kjectl.eku.edu/files/files/KJECTL_Volume%2019_March%202023.pdf
- Brown, S. L., Gravil, M., & Jacobi-Vessels, J. (2022). Planning and building children's outdoor play zones for multiple affordances: A community-engaged process. *International Journal of Early Childhood Environmental Education*, 10(1), 3–13.
https://naturalstart.org/sites/default/files/journal/4._final_brown_gravil_jacobi-vessels.pdf
- Brown, S. L., Larson, A. E., & Smith, M. (2022). Teacher leaders during non-traditional instruction: Continuing with inquiry-based science. In N. Brond (Ed.), *The power of teacher leaders: their roles, influence, and impact* (2nd ed.). Kappa Delta Pi. (pp. 51–65).
<https://doi.org/10.4324/9781003123972-6>
- Howell, P. B., Laman, T. T., Gnau, A., Bay-Williams, J., Brown, S.L., & Finch, J. (2021). Exploring teachers' perspectives across multiple partnership schools: One university's work to design mutually beneficial partnerships. *School University Partnerships*, 14(1), 24–35.

- Brown, S. L. (2020). Teaching science methods online during COVID-19: Instructor's segue into online learning. *Electronic Journal for Research in Science and Mathematics Education*, 24(3), 14–18. <https://ejrsme.icrsme.com/article/view/20394>
- Brown, S. L., Newman, C., Dearing-Smith, K., & Smith, S. (2016). Can a student really do what engineers do? Teaching second graders about properties using filter design within a 5E learning cycle. In L. Froschauer (Ed.), *Bringing STEM to the elementary classroom* (pp. 61–70). Washington, DC: NSTA Press.
- Brown, S. L., Drury, G., Gianelloni, M., & McCoy, D. (2015, April/May). What happens when an environment changes? Visually exploring interdependent relationships among animals, plants and fungi within students' local context. *Science and Children*, 52(8), 44–49.
- Ardasheva, Y., Tretter, T. R., Norton-Meier, L., & Brown, S. (2015). Integrating science and literacy for young English learners: A pilot study. *NYS TESOL Journal*, 2(1), 3–16 http://journal.nystesol.org/jan2015/Ardasheva_3-16_NYSTJ_Vol2Iss1_Jan2015.pdf
- Brown, S. L., Newman, C., Dearing-Smith, K., & Smith, S. (2014). Can a student really do what engineers do? Teaching second graders about properties using filter design within a 5E learning cycle. *Science and Children*, 51(9), 79–85.
- Brown, S. (2013). Science teacher educator's partnership experience teaching urban middle school students in multiple informal settings. In M. Diaz, C. Eick, & L. Brantley-Dias (Eds.), *Science teacher educators as K-12 teachers: Practicing what we teach* (pp. 149–168). New York: Springer.
- Brown, S. (2013). Does what I eat and drink affect my teeth? *Science and Children*, 50(6), 64–68.
- Tretter, T. R., Brown, S. L., Bush, W. S., Saderholm, J. C., & Holmes, V. L. (2013). Valid and reliable science content assessments for science teachers. *Journal of Science Teacher Education*, 24(2), 269–295.
- Brown, S. L., & Ronau, R. N. (2012). Students' perceptions of single-gender science and mathematics classroom experiences. *School Science and Mathematics Journal*, 112(2), 66–87.
- Ardasheva, Y., & Brown, S. L. (2011). Content-area teachers seeking ELL preparation: What motivates them? *Career Educator*, 1(1), 79–103.
- Brown, S. L., Votaw, N. L., & Tretter, T. R. (2010). Teachers connecting urban students to their environment. In A. M. Bodzin, B. S. Klein, & S. Weaver (Eds.), *The inclusion of environmental education in science teacher education* (pp. 191–208). New York: Springer.
- Brown, S. L., & Votaw, N. L. (2008). Liquid motion lamp: A learning cycle approach to solubility. *Science Activities*, 45(1), 29–34.
- Brown, S. L., & Melear, C. T. (2007). Preservice teachers' research experiences in scientists' laboratories. *Journal of Science Teacher Education*, 18(4), 573–597.
- Brown, S. L., & Melear, C. T. (2006). Investigation of secondary science teachers' beliefs and practices after authentic inquiry-based experiences. *Journal of Research in Science Teaching*, 43(9), 938–962.
- Brown, S. L. (2006, April/May). What's bugging you? *Science and Children*, 43, 45–49.
- Brown, S. L., & Lashley, T. L. (Fall 2001, Spring 2002). Appalachian rural systemic initiative: An account of a service learning collaboration of two science educators. *Tennessee Education*, 31(2)/32(1), 39–46.

GRANTS

Title	Type	Source/ Amount	Time-frame	My role
Collaborative Research: Science Inquiry Centered Argumentation Model (SciCAM): Enhancing science learning and reasoning for young children, including English Learners (ELs)	Teaching, Service	Pilot for 2023 NSF DRK-12 submission	2022-2024	Author, Teacher & Researcher
Mary K. Oxley Foundation Gift Grant – Signature Partnership Initiative (SPI) support	Teaching, Service, Research	Mary K Oxley Foundation & UoL Foundation	2014-2023	Researcher & Professor in Residence
CPE Cards to Create at Westport Middle School	Teaching, Service, Research	KY Council on Postsecondary Ed. \$500,000	2013-2014	Content Specialist
Hands-on, Minds-On Summer Science Camp S. Brown, P.I.	Teaching	GE Foundation and E.ON.US \$81,000	2005-2011	Author & Researcher
Groundwork Education in Mathematics and Science (GEMS) W. Williams, C. Rich, & JCPS, Co-P.I.s	Teaching	NSF Graduate Teaching Fellows in K-12 Education (GK-12) \$1,900,000	2004-2007	Researcher, Instructor, Pedagogical Mentor
Urban University Partnership for Math and Science Teacher I & II (U ² PMASST) W. Bush, P.I.	Research	NSF/ \$1,200,000	2003-2006	Researcher, Life Science Team Leader
Middle and Early High School Forces & Motion T. Tretter, S. Brown, Co-P.I.s	Teaching	Kentucky Dept. of Education/ \$60,000	2005	Instructor & Researcher
Single Gender Classroom for Secondary Science and Mathematics R. Ronau, P.I.	Teaching	JCPS/UofL Partnership/ \$11,500	2002	Researcher
Louisville Area Science and Mathematics Alliance for Recruitment in Teacher Education Reform (LA-SMARTER) R. Ronau, P.I.	Research	NSF/ \$850,000	2002-2005	How Things Work Course Co-Planner and Co-Instructor

Grant Activity

<u>Mary K. Oxley Foundation Gift Grant</u> Attend and participate in SPI meetings and research Collaborate weekly with Teacher in Residence Teach courses on site at Cochran Elementary School Supervisor student teachers at Cochran Elementary School Provide professional development and co-instruct lessons	Nov. 2014- June 2024
<u>CPE Cards to Create at Westport Middle School</u> Attended 6 th grade PLC science monthly meetings Co-taught physics and chemistry lessons with teacher Co-supervised science field trips	June 2013- Dec. 2014
<u>Hands-on, Minds-On Summer Science Camp</u> Collaborated with community organizations (e.g., LGE Power Plant Louisville Metropolitan Sewer District, Louisville Water Company, Bernheim Arboretum, The Louisville Zoo, Rauch Planetarium, and Mammoth Cave) and current science teachers to provide real world science connections to academically talented rising, low SES 7 th grade students recruited by the Lincoln Foundation	January 2006- August 2011
<u>U²PMAST Project</u> Collaborated with a team of science teacher educators, scientists, and science teachers to research and design diagnostic content assessments for middle grade science teachers	August 2002- August 2006
<u>Groundwork in Education in Mathematics and Science (GEMS) NSF GK-12 Program Grant</u> Co-planned and co-taught a 2-week Summer Course Workshop and 15 (2-hour) seminar meetings with A&S Mathematics and Chemistry faculty, JCPS Math/Science Specialists, and a mathematics teacher educator to provide professional development of science and mathematics Fellows and elementary teachers on using current NSF curricular materials	April 2004- June 2007
<u>Middle and Early High School Forces & Motion</u> Co-planned and co-taught a weekly summer institute for middle grade inservice teachers regarding motion and force concepts using the Cambridge Physical Outlet curriculum materials; teachers retained curriculum resources for use in their classrooms.	May 2005- June 2005
<u>Jefferson County Public Schools/U of L Partnership</u> Collaborated with Associate Dean for Research, a mathematics education doctoral candidate, and a high school physical science teacher to gather data on the possible effects of single gender math and science classes	May 2003- June 2004

LA-SMARTER

Collaborated with local middle school science faculty as a professional development team; co-designed and co-instructed a course to address teachers' content knowledge in physical science – *How Things Work*

Dec. 2002-
May 2006

Kentucky Education Professional Standards Board

Evaluated Kentucky Teacher Internship Program pilot portfolios; co-authored and presented technical report of findings to EPSB and UTK external evaluators

July 2003-
August 2005

Teacher Quality Enhancement Grant Committee

Faculty Leader for Teacher Performance Assessment (Strand 3)

January 2003-
May 2003

REFEREED PRESENTATIONS – INTERNATIONAL AND NATIONAL

- Brown, S.L., & Gravil, M. (2023, January 12-14). *Elementary pre-service science teachers' analysis of an outdoor play space for teaching science concepts* proposal. [Virtual Poster]. International Association for Science Teacher Education (ASTE), Salt Lake City, UT, United States.
- Gravil, M., Brown, S.L., & Jacobi-Vessels, J. (2022, May 9-12). *Creating a natural playground to support children's autonomy and independence*. [Virtual Poster]. Children and Nature Network Inside Out, Atlanta, GA, United States.
<https://www.childrenandnature.org/inside-out/gallery/virtual-poster-exhibit/>
- Brown, S. L., Larson, A. E., & Smith, M. (2022, March 4-6). *Supporting elementary teacher leaders with inquiry-based science during non-traditional instruction*. [Paper presentation]. American Association of Colleges for Teacher Education (AACTE), New Orleans, LA, United States.
- Brown, S. L., Gravil, M., Jacobi-Vessels, J., & Stephens, C. (2022, January 6-8). *Rationale, construction and use of outdoor spaces for science learning and play* [Paper presentation]. ASTE, Greenville, SC, United States.
- Brown, S. L., & Smith, M. (2021, March 28-31). *Continuing PDS collaborations within a pandemic: Pre-service science teachers' reflections on Non-Traditional Instructional (NTI) lessons within a Title I urban elementary PDS*. [Paper presentation]. Virtual National Association of Professional Development Schools (NAPDS).
- Brown, S. L., Leftwich, S. E., Grubb, S. J., & Fletcher, C. (2021, March 28-31). *A virtual reading retreat as innovative and reflective practice: Social justice*. [Paper presentation]. Virtual NAPDS.
- Brown, S. L. (2021, January 14-15). *Pandemic science methods instruction: What do pre-service elementary science teachers explore and learn from outdoor excursion?* [Paper presentation]. Virtual ASTE.
- Brown, S. L. (2020, February 13-15). *Sustained partnership with an urban elementary school* [Paper presentation]. NAPDS, Atlantic City, NJ, United States.

- Howell, P., Brown, S., Laman, T., Bay-Williams, J., Finch, J., & Gnau, A. (2019, April 5-9). *Recommendations for professional development schools related to preservice teachers, teacher roles, and the partnership* [Paper presentation]. American Educational Research Association (AERA) Annual Meeting, Toronto, Canada.
- Brown, S. L., Putman, S., & Foster, T. (2018, March). *Collaboration for effective professional Development* [Paper presentation]. NAPDS, Jacksonville, FL, United States.
- Brown, S. L., Laman, T. T., Seely-Flint, A., Davis, T., Overstreet, M., Dumas, T., Jett, P. M., & Finch, J. (2017, March 2-4). *Clinical models across early childhood and elementary settings: Posing problems, reflecting on practice, and effecting change* [Paper presentation]. AACTE, Tampa, FL, United States.
- Brown, S. L., Thornburgh, W., & Jett, P. M. (2016, January 7-9). *Pre-service elementary teachers' science content conceptions and views change* [Paper presentation]. ASTE, Reno, NV, United States.
- Tretter, T. R., Ardasheva, Y., Norton-Meier, L., & Brown, S. L. (2014, April). *Science inquiry centered argumentation model (SCICAM) for young English language learners change* [Poster presentation]. National Association for Research in Science Teaching (NARST) Annual Conference, Pittsburgh, PA, United States.
- Norton-Meier, L. A., Ardasheva, Y., Tretter, T. R., & Brown, S. L. (2014, April). *Science Inquiry Centered Argumentation Model (SciCAM) for Young English Language Learners change* [Paper presentation]. AERA Annual Meeting, Philadelphia, PA, United States.
- Eick, C., Dias, M., Meadows, L., Jablon, P., Akerson, V., Guy, M., Lott, K., Weinburgh, M., & Brown, S. (2013, January). *Teaching science to K-12 students as professional development for science teacher educators: An interactive panel discussion on various approaches, goals, and benefits* [Conference session]. ASTE, Charleston, SC, United States.
- Tretter, T. R., Philipp, S. B., & Brown, S. L. (2012, March). *Characteristics of teachers and professional development that predict growth in life science content knowledge change* [Paper presentation]. NARST, Indianapolis, IN, United States.
- Brown, S. L. (2012, January). *Outcomes of four environmental science institutes on urban middle school students change* [Paper presentation]. ASTE, Clearwater, FL, United States.
- Brown, S. L. (2011, January). *Outcomes of three environmental science institutes on urban middle school students change* [Paper presentation]. ASTE, Minneapolis, MN, United States.
- Brown, S. L. (2010, January). *Impact of environmental education summer science institute on teacher-leader's content knowledge and pedagogy change* [Paper presentation]. ASTE, Sacramento, CA, United States.
- Brown, S. L. (2010, May). *Outcomes of two environmental science institutes on urban middle school students change* [Paper presentation]. AERA, Denver, CO, United States.
- Brown, S. L. (2010, May). *Impact of environmental education summer science institute on teacher-leader's content knowledge and pedagogy change* [Paper presentation]. AERA, Denver, CO, United States.
- Jett, P. M., Brown, S. L., & Tretter, T. R. (2010, May). *Elementary science teachers' value and implementation of formative assessment strategies change* [Paper presentation]. AERA, Denver, CO, United States.

- Brown, S. L. (2010, January). *Outcomes of two environmental science institutes on urban middle school students change* [Paper presentation]. ASTE, Sacramento, CA, Unites States.
- Brown, S. L. (2010, January). *Impact of environmental education summer science institute on teacher-leader's content knowledge and pedagogy change* [Paper presentation]. ASTE, Sacramento, CA, Unites States.
- Jett, P. M., Brown, S. L., & Tretter, T. R. (2010, January). *Elementary science teachers' value and implementation of formative assessment strategies change* [Paper presentation]. ASTE, Sacramento, CA, United States.
- Tippins, D., Brown, S., & Eick, C. (2010, January). *Scholarship and publication in science teacher education: A dialogue for graduates students and early career professors*. [Committee/forum invited discussion] ASTE, Sacramento, CA, Unites States.
- Brown, S. L., Votaw, N. L., & Tretter, T. R. (2009, April). *Outcomes of summer science institutes on urban middle school students change* [Paper presentation]. AERA, San Diego, CA, Unites States.
- Ardasheva, Y. Y., & Brown, S. L. (2009, April). *Content area teachers and ESL preparation: Motivational considerations change* [Paper presentation]. AERA, San Diego, CA, Unites States.
- Brown, S. L., Votaw, N. L., & Tretter, T. R. (2009, January). *Outcomes of two science institutes on urban middle school students change* [Paper presentation]. ASTE, Hartford, CT, Unites States.
- Votaw, N. L., Brown, S. L., & Tretter, T. R. (2009, January). *Impact of a summer science institute on teachers' content knowledge and pedagogy change* [Paper presentation]. ASTE, Hartford, CT, United States.
- Eick, C., Tippins, D., Brown, S., Smolleck, L., Koehler, C., & Mueller, M. (2009, January). *Science education scholarship for new professors: Defining and doing it for successful promotion and tenure change* [Poster presentation]. ASTE, Hartford, CT, Unites States.
- Brown, S. L., Votaw, N. L., & Tretter, T. R. (2008, March). *Impact of a summer science institute on urban middle school students' perceptions of science. (Year II)* [Paper presentation]. AERA, New York, NY, Unites States.
- Ardasheva, Y. Y., & Brown, S. L. (2008, January). *Motivation of K-12 teachers seeking training in educating English Language Learners* [Paper presentation]. ASTE, St. Louis, MO, Unites States.
- Brown, S. L., Votaw, N. L., & Tretter, T. R. (2008, January). *Impact of a summer science institute on urban middle school students' perceptions of science. (Year II)* [Paper presentation]. ASTE, St. Louis, MO, Unites States.
- Brown S. L. (2007, April). *Change in fellows' beliefs, attitudes, and self-efficacy and change in elementary teachers' content knowledge as a result of collaborative experiences in an urban elementary school setting* [Paper presentation]. NARST, New Orleans, LA, United States.
- Tretter, T. R., Brown, S. L., Saderholm, J. C., Wilson, V. L., Moore, B. D., & Bush, W. S. (2007, April). *Valid and reliable physical, life, and earth science content assessments for middle school teachers* [Poster presentation]. NARST, New Orleans, LA, Unites States.
- Tretter, T. R., Brown, S. L., Saderholm, J. C., Wilson, V. L., Moore, B. D., & Bush, W. S. (2007, April). *Valid and reliable physical, life, and earth science content assessments for middle school teachers* [Paper presentation]. AERA, Chicago, IL, United States.

- Brown, S. L., Tretter, T. R., Votaw, N. L., & Stauble, K. R. (2007, January). *Impact of a summer science institute on urban middle school students' perceptions of science* [Paper presentation]. ASTE, Clearwater, FL, Unites States.
- Brown S. L., & DeNeve, L. (2007, January). *Change in fellows' beliefs, attitudes, and self-efficacy and change in elementary teachers' content knowledge as a result of collaborative experiences in an urban elementary school setting* [Paper presentation]. ASTE, Clearwater, FL, Unites States.
- Tretter, T. R., Brown, S. L., Saderholm, J. C., Wilson, V. L., Moore, B. D., & Bush, W. S. (2007, January). *Valid and reliable physical, life, and earth science content assessments for middle school teachers* [Paper presentation]. ASTE, Clearwater, FL, United States.
- Brown, S. L., & Ronau, R. N. (2006, April). *Urban public high school students' perceptions of single-gender science and mathematics classroom experiences* [Paper presentation]. AERA, San Francisco, CA, United States.
- Brown, S. L., & Ronau, R. N. (2006, April). *Attitudes and learning scales of urban public high school students with regard to single-gender integrated science and mathematics class experiences* [Poster presentation]. NARST, San Francisco, CA, Unites States.
- Brown, S. L., Davis, K., Van Sickle, M., & Weiss, T. (2006, April). *Fellows, teachers and students making connections* [Related paper set presentation]. NARST, San Francisco, CA, United States.
- Brown, S. L., Tretter, T. R., Bush, W. S., Saderholm, J. C., Moore, B. D., & Kemp, A. C. (2006, April). *Valid and reliable physical, life, and earth science content assessments for middle school teachers*. Paper presented at the annual meeting of NARST, San Francisco, CA.
- Brown, S. L., & Ronau, R. N. (2006, January). *Attitudes and learning scales of urban public high school students with regard to single-gender integrated science and mathematics class experiences* [Paper presentation]. ASTE, Portland, OR, Unites States.
- Brown, S. L. (2006, January). *Change in beliefs, attitudes, and self-efficacy of post-secondary science and mathematics students immersed in urban elementary teaching experiences* [Paper presentation]. ASTE (formerly AETS), Portland, OR, United States.
- Tretter, T. R., Votaw, N. L., & Brown, S. L. (2006, January). *Focused professional development to enhance specific teacher content knowledge* [Paper presentation]. AETS , Portland, OR, Unites States.
- Brown, S. L., & Ronau, R. N. (2005, April). *Students' and teacher's attitudes of single gender science classes in an urban public high school* [Paper presentation]. NARST, Dallas, TX, United States.
- Brown, S. L., & McNall, R. L. (2005, April). *Teaching science with technology for grades K-8* [Paper presentation]. National Science Teaching Association (NSTA), Dallas, TX, United States.
- Brown, S. L., & Ronau, R. N. (2005, January). *Study of the effects of single gender mathematics and science classes on students' attitudes in an urban public high school*[Paper presentation]. AETS Annual Meeting, Colorado Springs, CO, United States.
- Tretter, T. R., Brown S. L., & Saderholm, J. C. (2005, January). *Structure and characteristics of physical science assessments designed for middle school teachers* [Paper presentation]. AETS, Colorado Springs, CO, United States.
- Brown, S. L., & Kemp, A. C. (2004, January). *Diagnostic teacher assessments for middle grades science teachers* [Paper presentation]. AETS, Nashville, TN, United States. Melear, C.,

- Baird, B., Bricker, P., Guffey, S., Stinger-Barnes, P., Brown, S., Howick, T., & Melear, N. (2004, January). *Situated wilderness education on an ocean beach: Meeting national standards goals for scientific and environmental literacy with funding opportunity for AETS Members* [Paper presentation]. AETS, Nashville, TN, United States.
- Brown, S. L., Melear, C.T., & Suters, L. A. (2003, April). *Teachers' beliefs and classroom practice after completing an authentic research-based inquiry course* [Paper presentation]. NARST, Philadelphia, PA, United States.
- Lucy E., Melear, C., Gilmer, P., Wilson, J., Westerland J., Schwartz, R., & Brown, S. (2003, April). *Where is the science in science teacher education and science teaching?* [Conference session]. AETS, St. Louis, MO, United States.
- Brown, S. L., & Lashley, T. (2002, April). *Appalachian rural systemic initiative: An account of a service learning collaboration of two science educators* [Paper presentation]. AERA, New Orleans, LA, United States.
- Melear, C. T., Suters, L. A., & Brown, S. L. (2002, April). *Community agency–Field experiences followed by co-teaching in the urban secondary science classroom* [Poster presentation]. AERA, New Orleans, LA, United States.
- Brown, S. L., Bolton, K., Chadwell, N., & Melear, C. T. (2002, April). *Pre-service secondary science teacher apprenticeship experience with scientists* [Paper presentation]. NARST, New Orleans, LA, United States.
- Suters, L. A., Brown, S. L., & Melear, C. T. (2002, April). *Preparing for urban science classrooms by community immersion, co-teaching and co-generative dialogue* [Paper presentation]. NARST, New Orleans, LA, United States.
- Brown, S. L., Bolton, K., Chadwell, N., & Melear, C. T. (2002, January). *Preservice secondary science teacher apprenticeship experience with scientists* [Paper presentation]. AETS, Charlotte, NC, United States.
- Melear, C. T., Suters, L. A., & Brown, S. L. (2002, January). *Community agency field experiences followed by co-teaching in the urban science classroom* [Paper presentation]. AETS, Charlotte, NC, United States.

REFEREED PRESENTATIONS – REGIONAL

- Brown, S.L., & Grivil, M. (2023, September 21-22). *Elementary pre-service science teachers' analysis of an outdoor play space for teaching science concepts* proposal. [Paper presentation]. Mid-Atlantic Association for Science Teacher Education (MA-ASTE), Kingsport, TN, United States.
- Brown, S.L., Grivil, M., Jacobi-Vessels, J., & Stephens, C. (2021, September). *Rationale, construction and use of outdoor spaces for science learning and play* [Paper presentation]. MA-ASTE, Blowing Rock, NC, United States.
- Brown, S. (2020, October). *Pandemic science methods instruction: What do pre-service elementary science teachers explore and learn from outdoor excursion* [Virtual Conference Session] MA-ASTE. <https://ma.theaste.org/2020-ma-aste-virtual-conference-program/>
- Brown, S. L., & Jackel, D. (2017, September). *Providing effective professional development for an urban elementary school's entire teaching staff* [Conference session]. MA-ASTE in Prestonsburg, KY, United States.

- Thornburgh, W. R. & Brown, S. L. (2016, September). *Science teaching orientations: How do pre-service elementary teachers' orientations change over the course of a semester-long science methods class?* [Paper presentation]. Mid-Atlantic ASTE, Gatlinburg, TN, United States.
- Thornburgh, W., Brown, S. L., & Jett, P. M. (2015, October). *Pre-Service Teachers' Changes in Attitude Toward Teaching Science Using the POSTT* [Poster presentation] MA-ASTE, Lore City, OH, United States.
- Jett, P. M., & Brown, S. L. (2014, September). *Designing an elementary science methods course: A self study* [Paper presentation]. MA-ASTE, Blowing Rock, NC, United States.
- Tretter, T. R., Brown, S. L., Shirley, M. L., & Weiland, I. S. (2012, October). *Is a PhD in science education the right next step for me?* [Conference session]. National Science Teachers Association (NSTA), Louisville, KY, United States.
- Jones, B., & Brown, S. L. (2009, September). *Impact of environmental education summer Science institute on a teacher-leader's content knowledge and pedagogy.* [Poster presentation]. MA-ASTE, Shawnee State Park, OH, United States.
- Sanders, J., Drury, G., & Brown, S. (2008, December). *Connecting science to real-world conservation application.* [Conference session]. Regional NSTA, Cincinnati, OH, United States.
- Ardasheva, Y. Y., & Brown, S. L. (2008, September). *Motivation of K-12 teachers seeking training in educating English Language Learners* [Paper presentation]. Southeast Teachers of English to Speakers of Other Languages (SETESOL), Birmingham, AL, United States.
- Ardasheva, Y. Y., & Brown, S. L. (2007, April). *Mainstream classroom teachers seeking training in educating English language learners: A case study* [Poster presentation] Spring Research Conference, Lexington, KY, United States.
- Votaw, N. L., Tretter, T. R., & Brown, S. L. (2005, October). *Professional development targeting teachers' physical science content and pedagogical knowledge of motion and forces* [Paper presentation]. MA-ASTE, Breaks Interstate Park, VA, United States.
- Brown, S. L. (2005, October). *Change in beliefs, attitudes, and self-efficacy of post-secondary science and mathematics students immersed in urban elementary teaching experiences* [Paper presentation]. MA-ASTE, Breaks Interstate Park, VA, United States.
- Moore, B. D., Tretter, T. R., Brown, S. L., & Saderholm, J.C. (2005, October). *Development of content knowledge assessments for science teachers: Ensuring validity* [Paper presentation]. MA-ASTE, Breaks Interstate Park, VA, United States.
- Brown, S. L. (2004, November). *Using science notebooks as an assessment tool* [Paper presentation]. Regional NSTA, Indianapolis, IN, United States.
- Brown, S. L. (2004, October). *Students' attitude of single gender science and mathematics classes in an urban public high school* [Paper presentation]. MA-ASTE, Roane Mountain, TN, United States.
- Tretter, T. R., Moore, B. D., Brown, S. L., Kemp, A. C., Saderholm, J. C., & Bush, W. S. (2004, October). *What middle school teachers need to know about physical science* [Paper presentation]. MA-ASTE, Roane Mountain, TN, United States.
- Brown, S. L., & Kemp, A. C. (2003, October). *Designing science content tests for middle grade teachers* [Paper presentation]. MA-ASTE, Lake Lure, NC, United States.

REFEREED PRESENTATIONS – STATE

- Phillipson-Mower, T., Griffin, D., Brown, S., Drury, G., Crimm, L., & Sanders, J. (2007, November). *Literacy through science and environmental education* [Conference session]. Kentucky Science Teachers' Association (KSTA), Lexington, KY, United States.
- Brown, S. L., & Tretter, T. R. (2006, November). *Going with the flow: Activities to teach fluid flow* [Conference session]. KSTA Lexington, KY, United States.
- Votaw, N. L., Tretter, T. R., & Brown, S. L. (2005, November). *Gravity with breakfast* [Conference session]. KSTA, Lexington, KY, United States.
- Kemp, A. C., Huddleston, L. E., Kemp, H., & Brown, S. L. (March 2004). *Literacy and Science: Making the connection in intermediate grades* [Conference session]. Kentucky Teaching and Learning Conference (KTLC) Louisville, KY, United States.
- Brown, S. L. (2003, November). *Entomology in the classroom* [Conference session]. KSTA, Lexington, KY, United States.

INVITED PRESENTATIONS AND SCHOLARSHIP

- Brown, S.L. (2019, April). *Navigating negativity* [Roundtable session]. UofL Women's Network, Louisville, KY, United States.
- Brown, S. L. (2020, July). *NSTA Elementary STEM Showcase* [Conference session]. *Chapter 7 Bringing STEM to the Elementary Classroom* at the annual meeting of National Science Teachers' Association STEM Forum & Expo, Louisville, KY, United States.
- Brown, S. L. (2016, July). *NSTA Elementary STEM Showcase* [Conference session]. *Chapter 7 Bringing STEM to the Elementary Classroom* at the annual meeting of National Science Teachers' Association STEM Forum & Expo, Denver, CO, United States.
- Brown, S. L. (2014, February). Filtering through engineering practices. *Kentucky Department of Education's Science Connection*, (1)3, 1-2.
- Gianelloni, M., & Brown, S. L. (2011). The Louisville Zoo. In T. Phillipson-Mower, K., Mountain, & S. Brown (Eds.), *What Should Environmental Educators Know about Jefferson County?*
- Brown, S. L., & Hunt, K. (2005, October). *Possibilities and Capabilities of Electronic Portfolios for Faculty and Students* [Conference session] Delphi Celebration of Teaching and Learning Facilitating Student Success, Louisville, KY, United States.
- Martin, N., Ivey, E., & Brown, S. L. (2005, May). Topic: *Women in Science*. State of Affairs Program Broadcast, WFPL Public Radio Station, Louisville, KY, United States.
- Brown, S. L. (2004, June). *Use of technical drawings and assessing science notebooks*. Teaching Science in the Elementary and Middle Schools. University of Tennessee, Knoxville, TN. Middle Schools. University of Tennessee, Knoxville, TN.
- Brown, S. L. (2002, July). *Theory to practice: Science teachers' pedagogical practices as measured by the science teacher analysis matrix (STAM) and as related to their preservice preparation, personal philosophy, and years experience*. Dupont Corporation Symposium on Inquiry-Based Instruction in Science and Mathematics, Knoxville, TN, United States.

NATIONAL SERVICE

Council for the Accreditation of Educator Preparation (CAEP)

Trained Site Visitor, 2020-2023

National Virtual Visit, 2021

State Virtual Visit (Std. III), 2021

National Virtual Visit (Std. III), 2020-2021

Association for Science Teacher Educators (ASTE)

Elected Board of Directors-At-Large, 2014-2017

Chair Conference Program Committee, 2014-2017

Chair Elections Committee, 2012-2013

Elected Regional/Mid-Atlantic Director, 2011-2014

Co-chair Elections Committee, 2011-2012

Conference Thread Co-Coordinator, 2012

Membership Committee Session Organizer 2010

Membership Committee Conference Presenter, 2008 & 2009

Conference Proposal Reviewer, 2005-2007, 2021

American Education Research Association (AERA)

SIG Science Teaching and Learning Chair 2010-2011

SIG Science Teaching and Learning Chair Elect 2009-2010

SIG Science Teaching and Learning Program Chair, 2008-2009

SIG Science Teaching and Learning Program Co-Chair, 2007-2008

SIG STL Proposal Reviewer and Session Discussant, 2007

Co-Chair Division C Graduate Student Research Award, 2006-2008

National Association for Research in Science Teaching (NARST)

Strand 3A (Teaching Elementary) Co-Coordinator, 2005 & 2006

Conference Chair/Discussant, 2005-2007

Conference Proposal Reviewer, 2005-2007

JOURNAL REVIEWEREditorial Review Board

Theory into Practice

Journal of Science Teacher Education

Electronic Journal of Science Education

Guest Reviewer

Journal of Science Teacher Education

Journal of Research in Science Teaching

Science Education

School Science and Mathematics

Date

June 2014-2024

June 2015-2018

August 2014-2017

May & Nov. 2006, Feb. 2005

March 2009

Feb. & August 2008

March & Sept. 2007

October 2006

November 2007

April 2011, Dec. 2017

GRANT/AWARD REVIEWER

	<u>Date</u>
National Science Foundation	
Presidential Award for Excellence in Mathematics and Science Teaching National Selection Committee	August 2009
Innovative Technology Experiences for Students and Teachers (ITEST) Grant Reviewer	April 2010

LOCAL SERVICE

GCCS Professional Development – 2nd grade Filter lesson (n=75) FSES, 2022
 Metro United Way *Build-a-Bed* Project, 2019
 Assisted with Cochran Elementary Passport to Literacy Night, 2016, 2017
 Co-taught weekly at Cochran Elementary Science Camp, January-April, 2014
 Built Literacy Kits for Metro United Way, April 2014
 Co-taught Filter Unit, 2nd grade Cochran Elementary, December 2013
 OVEC Science Standard Teacher Leader Network, September 2013-2015
 Presenter at *Science Day* for K-5 students at Maryville Elementary, 2011
 Bernheim Forrest BugFest Festival Volunteer Educator, 2010, 2011
 JCPS Elementary Redesign Team Member, 2009-2012
 Preservice Redesign Research & Development Team Member, 2006-2011
 Meyzeek Middle School Science Fair Judge, 2003-2006
 Newburg Middle School Science Fair Judge, 2007 & 2008
 Wheeler Elementary School Science Fair Judge, 2005
 Junior Science and Humanities Symposium Judge, 2004 & 2005
 JCPS Technology Alliance Co-Coordinator, 2002-2006

UNIVERSITY SERVICE

UofL Sustainability Council Green Unit Teams for Sustainability (GUTS) &
 Departmental Liaison, 2018-2024
 Co-developer Employee Resource Group (ERG) - Older Adults Caregiver Support
 (OACS), 2019
 University's Strategic Planning *Great Place to Learn* Work Group, 2019
 UofL Women's Network Round Table Discussion Presenter, 2019
 Faculty Senate, 2016-2019
 Faculty Senate Executive Committee, 2018-2019
 Committee on Committees and Credentials, 2018-2019
 Recruitment/Retention Proposals Subcommittee (reviewer), 2018, 2019
 Graduate Council Committee Member, 2009-2015
 Scholarship and Awards Committee Member, 2012-2015
 Honorary Degree Committee Member, 2009-2012
 Search Committee Member, A&S Biology Teacher Educator, 2014
 Co-Director of Junior Science and Humanities Symposium, 2012-2013
 Critical Thinking Rubric Trainer for Engineering Fundamentals Dpt., 2009
 Undergraduate Council Committee Member, 2007-2009

General Education Assessment Rubric and Training Committee, 2007-2017
General Education Curriculum Committee, 2005-2006
Table Leader/Trainer General Education Course Evaluation, 2005-2006

COLLEGE SERVICE

Grawemeyer Award in Education Faculty Review Committee, 2023-2024
Research and Professional Development Committee, 2022-2024
Technology Committee, 2020-2024
CAEP Standard I Committee Advisor, 2021
CAEP Standard II Committee Advisor, 2021
Nystrand Center of Excellence in Education Field & Clinical Advisory Board, 2010-2021
Grawemeyer Award in Education Faculty Review Committee, 2019-2020
Faculty Advisory Council, 2018-2019
Policy and Review Committee, 2014-2018
CAEP Standard 2 Committee Co-Chair, 2015-2016
Chair Faculty Advisory Council, 2012-2013
Signature Partnership Initiative Committee Member, 2013-2020
College Educator Preparation Committee Member, 2011-2020
Planning and Budget Committee Member, 2011-2014
Research and Faculty Development Committee, 2007-2010 (Co-chair 2009-2010)
Standards and Admissions Committee, 2003-2009
NCATE Standard 1 Committee Chair and Author, 2008
NCATE Standard 1 Committee Member, 2004-2007
NCATE Program Review Document (x3) Author, 2006-2007

DEPARTMENT SERVICE

Chair Advanced Program Curriculum Committee, 2019-2020
Chair Initial Teacher Certification Committee, 2019-2020
Search Committee Nystrand Center Recruiter, 2019
Search Committee for Academic Coordinator Sr., 2019
Interim OEDCP Elementary Placement Coordinator, 2018
Search Committee EASS advisor, 2018
Search Committee Co-Chair for Science Educator, 2014-2015
Ad-Hoc Field and Clinical Committee Member, 2012-2020
Ad-Hoc M.Ed. Teacher Leader Committee, 2011-2013
T&L Leadership Committee, 2010-2020
Department Personnel Committee, 2010-2023
Elementary and Early Childhood Program Director, 2009-2020
Instructional Technology Program Director, 2007-2009
Honors and Awards Committee Chair, 2007-2008
Honors and Awards Committee Member, 2005-2007
Nominator/Organizer for Faculty Advising Award, 2004-2007
Search Committee Member for Term Positions, 2012
Search Committee Co-Chair for Science Educator, 2006-2007

Search Committee for Planetarium Director, 2007-2008
Search Committee for Science Educator, 2006-2007
Search Committee for Technology Educator, 2005-2006
Search Committee for Planetarium Science Educator, 2005-2006
Search Committee for Mathematics Educator, 2003-2004
Elementary Program Committee Member, 2002-2023

ADMINISTRATION

2019-2020	Director of Educator Certification
2018-2019	Interim Department Chair, Early Childhood & Elementary Ed.
2010-2018	Assistant Department Chair, Early Childhood & Elementary Ed.

Doctoral Committees (Graduation Date)

Breanna Ausbrooks (anticipated Spring 2024)	William Thornburg (May 2017)
Stephanie Philipp (August 2013)	Pamela Jett (May 2009) – Co-Chair
Nikki Votaw (August 2008) – Co-Chair	Leslie Wigglesworth (May 2008)
Jon Saderholm (August 2007)	Art Thacker (August 2006)