CURRICULUM VITAE

VICTOR SAMPSON

Last updated 8/29/2022

GENERAL INFORMATION

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Professional Preparation

9/2002 – 5/2007	*Doctor of Philosophy* Arizona State University Tempe, AZ Major: Curriculum and Instruction Concentration: Science Education Dissertation: The effects of collaboration on argumentation outcomes. Dissertation supervisors: Doug Clark (chair), Dale Baker, Sarah Brem, and James Middleton
9/1997 – 5/1999	*Master in Teaching* Seattle University Seattle, WA Major: Secondary Education Concentration: Science Education
9/1993 – 8/1997	*Bachelor of Arts* University of Washington Seattle, WA Major: Zoology

Professional Experience

8/2014 – Present

Associate Professor of STEM Education
Department of Curriculum and Instruction
College of Education
The University of Texas at Austin
Austin, TX

Responsible for teaching graduate and undergraduate level courses; conducting research and other scholarly activities; advising graduate students; performing service activities.

9/2015 – 10/2018

Director of the Center for STEM Education
The University of Texas at Austin
Austin, TX
https://stemcenter.utexas.edu

Responsible for the oversight of the research, service, financial, personnel, and administrative affairs of the center; communicating the mission and goals of the center to community and professional constituencies; fostering research in STEM education; obtaining public and private funds to support the goals of the center.

9/2013 – 8/2014

Director of the Center for Education Research in Mathematics, Engineering, and Science.
Florida State University
Tallahassee, FL

Responsible for recruiting faculty to join interdisciplinary research teams; helping teams of researchers develop new research agendas; supporting research teams as they write and submit grant proposals; assisting research teams as they write and submit articles to peer-reviewed journals; administrative duties.

4/2013 – 8/2014

Associate Professor of Science Education
School of Teacher Education and FSU-Teach
College of Education
Florida State University
Tallahassee, FL

Responsible for teaching graduate level courses for the School of Teacher Education and undergraduate level courses for the FSU-Teach program; conducting research and other scholarly activities; advising graduate students; performing service activities.

8/2007 – 4/2013

Assistant Professor of Science Education

School of Teacher Education and FSU-Teach
College of Education
Florida State University
Tallahassee, FL

Responsible for teaching graduate level courses for the School of Teacher Education and undergraduate level courses for the FSU-Teach program; conducting research and other scholarly activities; advising graduate students; performing service activities. Promoted to Associate Professor and awarded tenure on 4/1/2013.

8/2004 – 6/2007 *Technology-Enhanced Learning in Science Graduate Research Fellow*
National Science Foundation Grant 0334199: Technology Enhanced Learning in Science (TELS). Principal Investigator: Marcia Linn. University of California at Berkeley.

Responsible for conducting research on ways to promote and support argumentation in technology-enhanced learning environments; providing professional development for teachers.

8/2003 – 6/2007 *Science Teacher*
Jess Schwartz Community High School
Phoenix, AZ

Responsible for teaching high school science courses (10th Grade Chemistry, 11th Grade Biology, and 12th Grade Advanced Biology); developing new science curricula; advising students.

6/2004 – 8/2004 *Graduate Research Assistant*
Center for Research on Education in Science, Mathematics, Engineering, and Technology at Arizona State University (CRESMET)
Tempe, AZ

Responsible for assisting with research projects (data collection, data analysis, literature reviews, and manuscript preparation) conducted by the Technology Opening Diverse Opportunities for Science (TODOS) research group.

1/2004 – 5/2004 *Pre-Service Teacher Supervisor*
Arizona State University
Tempe, AZ

Responsible for supervising student teachers for the Teacher Education for Arizona Math and Science (TEAMS) program (a partnership between ASU and Chandler Unified School District).

8/2003 – 8/2005 *Instructor*
Arizona State University
Tempe, AZ

Responsible for teaching undergraduate science education courses for the Apprentice Teacher and the Initial Teacher Certification Programs.

8/2002 – 6/2003 *Science Teacher*
O'Connor High School
Deer Valley School District
Phoenix, AZ

Responsible for teaching high school science courses (10th grade Biology) and advising students.

8/1999 – 6/2002 *Science Teacher*
Lindbergh High School
Renton School District
Renton, WA

Responsible for teaching high school science courses (Biology and Advanced Biology); advising students; developing a new biology curriculum for the district; coaching basketball, tennis, and soccer.

8/1996 – 6/1997 *Teaching Assistant*
Evergreen Junior High School
Lake Washington School District
Redmond, WA

Responsible for assisting students with special needs in general and self-contained classrooms.

Honors and Awards

2020 *Outstanding Service as JRST Associate Editor Award*
Journal of Research in Science Teaching

2018 *Best Diversity Paper Award*
American Society of Engineering Education

This award recognizes highly impactful efforts by ASEE authors that broaden participation in engineering and influence the inclusive, diverse future of engineering.

2017 *NSTA Fellow*
National Science Teaching Association

This award recognizes NSTA members who have made extraordinary contributions to science education through personal commitment to education, specifically science teaching or science; educational endeavors and original work that position recipients as exemplary leaders in their field; significant contributions to the profession that reflect dedication to NSTA as well the entire educational community.

2013 *2013 Outstanding Adult Volunteer Award*
Leon County Schools

2013 *Top 25 Education Professors in Florida*
StateStats.org

2012 The *NARST Early Career Research Award*
National Association for Research in Science Teaching (NARST)

This award is given each year to a researcher who, within the first seven years after completion of a doctoral degree, has demonstrated the greatest potential to make outstanding and continuing contributions to research in science education.

2012 The *College of Education Faculty Research Award*
The Florida State University

This award is given each year to the faculty member with the best research presentation at the annual Marvalene Hughes Research in Education Conference.

2012 *Outstanding Adult Volunteer Award*
Leon County Schools

2008 The *NARST Outstanding Doctoral Dissertation Research Award*
National Association for Research in Science Teaching (NARST)

This award is given each year to the doctoral dissertation judged to have the greatest significance in the field of science education.

2007 The *Outstanding Teacher Award*
Jess Schwartz Community High School

2006 The *ASU Graduate College Award: Distinguished Work in Science Education*
Division of Curriculum & Instruction
Division of Graduate Studies
Arizona State University

2001	The *Spirit of Giving Faculty Award* Lindbergh High School

Fellowships

1/2021 – 5/2021	*Dean's Fellow* The University of Texas at Austin
9/2020 – 5/2021	*Elizabeth Glenadine Gibb Teaching Fellowship in Education* The University of Texas at Austin
9/2018 – 5/2019	*Elizabeth Shatto Massey Chair in Education Fellowship* The University of Texas at Austin
9/2017 – 5/2018	*Elizabeth Shatto Massey Chair in Education Fellowship* The University of Texas at Austin
9/2016 – 5/2017	*Elizabeth Shatto Massey Chair in Education Fellowship* The University of Texas at Austin
9/2015 – 5/2016	*Elizabeth Glenadine Gibb Teaching Fellowship* The University of Texas at Austin
9/2014 – 5/2015	*Elizabeth Glenadine Gibb Teaching Fellowship* The University of Texas at Austin
1/2007 – 5/2007	*Division of Graduate Studies Dissertation Completion Fellowship* Division of Graduate Studies Arizona State University
8/2004 – 1/2007	*Technology-Enhanced Learning of Science Graduate Fellowship* TELS Research Group University of California, Berkeley and Arizona State University
8/2003 – 5/2004	*Interdisciplinary Ph.D. Fellowship* Mary Lou Fulton College of Education Arizona State University

Membership in Professional Organizations

9/2002 – Present	American Educational Research Association (AERA)
9/2002 – Present	National Association for Research in Science Teaching (NARST)
9/2013 – Present	National Science Education Leadership Association (NSELA)

8/1999 – Present	National Science Teachers Association (NSTA)
9/2009 – 12/2012	Society for Research on Educational Effectiveness (SREE)
1/2009 – 12/2012	National Association of Biology Teachers (NABT)
9/2003 – 9/2007	Association for Science Teacher Education (ASTE)
9/2002 – 9/2007	International Society of the Learning Sciences (ISLS)

TEACHING

Courses Taught

The University of Texas at Austin

Fall 2022	EDC 365C: Knowing and Learning in STEM Education STM 390T: Research on Teaching and Teacher Education
Fall 2021	EDC 370E: Elementary Science Methods STM 390T: Research on Teaching and Teacher Education
Fall 2020	EDC 365D: Classroom Interactions STM 390T: Research on Teaching and Teacher Education
Summer 2020	STM 390T: Development of Instructional Materials in STEM Education
Spring 2020	EDC 365D: Classroom Interactions STM 390T: Research on Teaching and Teacher Education
Fall 2019	EDC 370E: Elementary Science Methods STM 390T: Argumentation in STEM Education
Spring 2019	EDC 370E: Elementary Science Methods STM 390T: Research on Teaching and Teacher Education
Fall 2018	EDC 365E: Project-Based Instruction
Spring 2018	EDC 365E: Project-Based Instruction STM 390T: Research on Teaching and Teacher Education
Fall 2017	EDC 365E: Project-Based Instruction
Spring 2017	STM 390T: Research on Teaching and Teacher Education
Fall 2016	EDC 365E: Project-Based Instruction

Spring 2016	EDC 365E: Project-Based Instruction EDC 365E: Project-Based Instruction
Fall 2015	STM 390T: Assessment of STEM Core Ideas and Practices EDC 365E: Project-Based Instruction
Summer 2015	STM 390: Equity in STEM Education
Spring 2015	EDC 365E: Project-Based Instruction
Fall 2014	EDC 365E: Project-Based Instruction

Florida State University

Summer 2014	SCE 5336: Instructional Strategies that Promote Learning in Science SCE 5935: Classroom Based Research SCE 5946: Supervised Teaching
Spring 2014	SCE 6761: Research and Recent Developments in Science Education SMT 4930: Apprentice Teaching Seminar
Fall 2013	SMT 4664: Project-Based Instruction SCE 5336: Instructional Strategies that Promote Learning in Science
Spring 2013	SMT 4664: Project-Based Instruction SCE 5910: Supervised Research – Argumentation in Science SCE 5946: Supervised Teaching
Fall 2012	SMT 4664: Project-Based Instruction SCE 5140: Curriculum in Science Education
Spring 2012	SMT 4664: Project-Based Instruction BSC 5936-5/4933: Assessment in Math and Science Education
Fall 2011	SMT 4664: Project-Based Instruction SMT 3100: Knowing and Learning
Spring 2011	SMT 4664: Project-Based Instruction SCE 4944: Student Teaching in Science Education SCE 4948: Classroom Management in Science Education
Fall 2010	SCE 6351: Curriculum Design in Science Education SMT 4664: Project-Based Instruction SCE 4363: Advanced Topics in Teaching and Learning Science
Summer 2010	SCE 5336: Instructional Strategies that Promote Learning in Science

	SCE 5895: The Nature of Science and Science Teaching (online)
Spring 2010	SCE 4944/5942: Student Teaching in Science Education SCE 4948/5331: Classroom Management in Science Education SCE 5140: Curriculum in Science Education SCE 6922/5921: Science Education Colloquium SCE 5910: Supervised Research – Assessment in Science Education SCE 5946: Supervised Teaching
Fall 2009	SCE 5332: Secondary Science Education Methods SCE 5147: Perspectives on Learning in Science Education SCE 6922/5921: Science Education Colloquium SCE 5905: Directed Individual Study – Curriculum Development
Spring 2009	SCE 6938: Advanced Seminar in Science Education SCE 5935(2): Assessment & Statistics in Science Education SCE 6922/5921: Science Education Colloquium SCE 5910: Supervised Research – Argumentation in Science Ed
Fall 2008	SCE 5935(4): Making Science Concepts Stick SCE 4362: Teaching and Learning Science
Spring 2008	SCE 5935: Statistics for Science Teachers SCE 4905r: Directed Individual Study
Fall 2007	SCE 4362/5362: Teaching & Learning Science
Summer 2007	SCE 5635 (6): Problems in Teaching Secondary School Science – Field Lab Internship (online) SCE 5635 (4): Problems in Teaching Secondary School Science – Making Science Concept Stick

Arizona State University

Summer 2005	EED 420: Elementary Science Methods, Assessment & Management
Fall 2004	EED 420: Elementary Science Methods, Assessment & Management
Spring 2004	EED 420: Elementary Science Methods, Assessment & Management
Fall 2003	EED 420: Elementary Science Methods, Assessment & Management

New Course Development

Florida State University

Fall 2009	SMT 4664: Project-Based Instruction

Spring 2009	SMT 3100: Knowing and Learning in Math and Science
Fall 2008	SCE 5147: Perspectives on Learning in Science Education SCE 5331: Management and Planning Science Teaching SCE 5332: Methods for Teaching Science in Secondary Schools SCE 5336: Instructional Strategies that Promote Learning SCE 5945: Initial Practicum – Teaching & Learning of Science SCE 5947: Final Practicum – Teaching & Learning of Science

New Program Development

Florida State University

Spring 2008	FSU-Teach (undergraduate)

Graduate Student Supervision

University of Texas at Austin

Chair of Doctoral Dissertation Supervisory Committees

4. Baze, Christina (2021). Doing STEM: Students' participation and experiences in Argument-Driven Engineering. Unpublished Doctoral Dissertation, The University of Texas at Austin, Austin, TX.
3. Lipscomb, K. (2020). *Designing for, learning with, and teaching using computational modeling.* Unpublished Doctoral Dissertation, The University of Texas at Austin, Austin, TX.
2. Chu, L. (2020). *Learning and identity development through integrated engineering instruction in secondary science classrooms*. Unpublished Doctoral Dissertation, The University of Texas at Austin, Austin, TX.
1. FitzPatrick, D. (2020). *Opportunities for powerful teaching and learning with the Argument-Driven Mathematics instructional model.* Unpublished Doctoral Dissertation, The University of Texas at Austin, Austin, TX.

Member of Doctoral Dissertation Supervisory Committees

10. Harris, Sarah (2021)
9. Torbey, Ryan (2021)
8. Doerr Morosky, Katharine (2020)
7. Joy Welch-Ptak, Jasmine (2019)
6. Lambert, Catherine (2019)
5. Lim, Wan Sin (2019)
4. Cheshire, Andy (2018)
3. Al Juwayr, Yousef (2018)
2. Mann, Deborah (2018)
1. You, Hye Sun (2016)

Florida State University

Chair of Doctoral Dissertation Supervisory Committees

2. Walker, Joi (2011). *Argumentation in undergraduate chemistry laboratories.* Unpublished

Doctoral Dissertation, The Florida State University, Tallahassee, FL. (Assistant Professor of Chemistry Education at East Carolina University)

1. Grooms, Jonathon (2011). *Using Argument-Driven Inquiry to Enhance Students' Argument Sophistication when Supporting a Stance in the Context of Socio-scientific Issues.* Unpublished Doctoral Dissertation, The Florida State University, Tallahassee, FL. (Assistant Professor of Science Education at George Washington University)

Member of Doctoral Dissertation Supervisory Committees

3. Roseler, Katrina (2013)
2. Enderle, Patrick (2012)
1. Golden, Barry (2011)

Chair of Master's Thesis Supervisory Committees

1. Gleim, Leeanne (2011). *The effect of peer and teacher feedback during a mini-unit about natural selection on student learning gains: A comparison study.* Unpublished Master's Thesis, The Florida State University, Tallahassee FL.

Member of Master's Thesis Supervisory Committees

4. Kurtek, Katrina (2010)
3. Hutner, Todd (2009)
2. King, Lance (2009)
1. Madden, Deborah (2008)

Chair of Master's Portfolio Supervisory Committees

4. Williams, Kiesha (2010)
3. Breman, Jacob (2010)
2. Gerbino, Francesa (2010)
1. Anderson, Brittany (2010)

Member of Master's Portfolio Supervisory Committees

5. Picotte, Katie (2010)
4. Pickford, Laura (2010)
3. Villa, Carlos (2009)
2. Lantz, Andrew (2008)
1. Suarez, Jennifer (2008)

Apprentice Teacher Supervision

<u>Florida State University</u>

8. Filler, Eric (Spring 2014)
7. Berman, Morgan (Spring 2014)
6. Filler, Tyler (Spring 2014)
5. Manges, Briana (Spring 2011)
4. Palmer, Whitney (Spring 2011)
3. Hamel, Helen (Spring 2011)
2. Picotte, Katie (Fall 2010)

1. Breman, Jacob (Spring 2010)

Arizona State University

3. Burk, Lisa (Spring 2004)
2. Ray, Hollie (Spring 2004)
1. Keane, Heather (Spring 2004)

SCHOLARLY OR CREATIVE ACTIVITIES

Publications

Refereed Journal Articles

53. Enderle, P., Grooms, J., Sampson, V., Sengul, O., & Koulagna, Y. (2022). How the co-design, use, and refinement of an instructional model emphasizing argumentation relates to changes in teachers' beliefs and practices. *International Journal of Science Education*, DOI: 10.1080/09500693.2022.2115324

52. Hutner, T., **Sampson, V.**, Baze, C., Chu, L., & Crawford, R. (2022). An exploratory study of the goals science teachers satisfy by integrating engineering core ideas and practices into the science curriculum. *International Journal of Science Education*, 44(1), 71-90.

51. Hutner, T., **Sampson, V.**, Chu, L., Baze, C., & Crawford, R. (2022). A case study of science teachers' goal conflicts arising when integrating engineering into science classes. *Science Education*, 106, 88-118.

50. Doabler, C., Therrien. W., Longhi, M., Roberts, G., Hess, K., Maddox, S., Uy, J., Lovette, G., Fall, A., Kimmel, G., Benson, S., VanUitert, V., Emily, S., Powell, S., **Sampson, V.** & Toprac, P. (2021). Efficacy of a second-grade science program: Increasing science outcomes for all students. *Remedial and Special Education*, 42(3), 140-154.

49. Hosbein, K., Alvarez-Bell, R., Callis-Duehl, K., **Sampson, V.**, Wolf, S. & Walker, J. (2021). Development of the Investigation Design, Explanation, and Argument Assessment for General Chemistry I Laboratory. *Journal of Chemical Education Research,* 98(2), 293-306.

48. Chu, L.; **Sampson, V.**, Hutner, T., Rivale, S., Crawford, R., Baze, C., & Brooks, H. (2019). Argument-Driven Engineering in middle school science: An exploratory study of changes in engineering identity over an academic year. *Journal of Pre-College Engineering Education Research (J-PEER),* 9(2), 72-84.

47. Hutner, T., **Sampson, V.**, Brooks, H., Baze C., Gregory, J., Sommerhauser, K. & Broadway, M. (2019). Developing a highway crash safety barrier. *Science Scope,* 43(1), 36-43.

46. Schellinger, J., Mendenhall, A., Alemanne, N., Southerland, S., **Sampson, V.**, & Marty, P. (2019). Using technology-enhanced inquiry-based instruction to foster the development of elementary students' views on the nature of science. *Journal of Science Education and Technology,* 28(4), 341-352.

45. Grooms, J., **Sampson, V**., & Enderle, P. (2018). How concept familiarity and experience with scientific argumentation are related to the way groups participate in an episode of argumentation. *Journal of Research in Science Teaching,* 55(9), 1264-1286.

44. Blanchard, M. and **Sampson, V**. (2018). Fostering Impactful Research Experiences for Teachers (RETs). *EURASIA Journal of Mathematics, Science and Technology Education,* 14(1), 447-465.

43. Schellinger, J., Mendenhall, A., Alemanne, N., Southerland, S., **Sampson, V.**, Douglas, I., Kazmer, M., & Marty, P. (2017). "Doing science" in elementary school: Using digital technology to foster the development of elementary students' understandings of scientific inquiry. *EURASIA Journal of Mathematics, Science and Technology Education,* 13(8), 4635-4649.

42. Strimaitis, A., Southerland, S., **Sampson, V.**, Enderle, P., & Grooms J. (2017). Promoting equitable biology lab instruction by engaging all Students in a broad range of science practices: An exploratory study. *School Science and Mathematics,* 117(3-4), 92-103.

41. Walker, J., **Sampson, V.**, Southerland, S., & Enderle, P. (2016). Using laboratory to engage students in science practices. *Chemistry Education Research and Practice*, 17, 1098-1113.

40. Kazmer, M., Alemanne, N., Mendenhall, A., Marty, P., Southerland, S., **Sampson, V.**, Douglas, I., Clark, A., & Schellinger, J. (2016). "A good day to see a bobcat": Elementary students' online journal entries during a structured observation visit to a wildlife center. *First Monday, 21*(4).

39. Grooms, J., Enderle, P, & **Sampson, V.** (2015). Coordinating scientific argumentation and the Next Generation Science Standards through Argument-Driven Inquiry. *Science Educator,* 24(1), 45-50.

38. Grooms, J., **Sampson, V.**, & Golden, B. (2014). Comparing the effectiveness of verification and inquiry laboratories in supporting undergraduate science students in constructing arguments around socioscientific issues. *International Journal of Science Education*, 36(9), 1412-1433.

37. Strimaitis, A., Schellinger, J., Grooms, J. & **Sampson, V.** (2014). Development of an instrument to assess student knowledge necessary to critically evaluate scientific claims in the popular media. *Journal of College Science Teaching*, 43(5), 55-68.

36. Marty, P., Alemanne, N., Mendenhall, A., Maurya, M., Southerland, S., **Sampson, V.**, Douglas, I., Kazmer, M., Clark, A. & Schellinger, J. (2013). Scientific inquiry, digital literacy and mobile computing in informal learning environments. *Learning, Media, and Technologies,* 38(4), 407-428.

35. Marty, P., Mendenhall, A., Douglas, I., Southerland, S., **Sampson, V.**, Kazmer, M., Alemanne, N., Clark, A, & Schellinger, J. (2013). The iterative design of a mobile learning application to support scientific inquiry. *Journal of Learning Design,* 6(2), 41 - 66.

34. Walker, J. & **Sampson, V.** (2013). Argument-Driven Inquiry: Using the laboratory to improve undergraduates' science writing skills through meaningful science writing, peer-review, and revision. *Journal of Chemical Education,* 90(10), 1269-1274.

33. **Sampson, V.,** Enderle, P., Grooms, J., & Witte, S. (2013). Writing to learn and learning to write during the school science laboratory: Helping middle and high school students develop argumentative writing skills as they learn core ideas. *Science Education*, 97(5), 643-670.

32. **Sampson, V.**, Enderle, P., & Grooms, J. (2013). Argumentation in science and science education. *The Science Teacher,* 80(5), 30-33.

31. Walker, J. & **Sampson, V.** (2013). Learning to argue and arguing to learn in science: Argument-Driven Inquiry as a way to help undergraduate chemistry students learn how to construct arguments and engage in argumentation during a laboratory course. *Journal of Research in Science Teaching*, 50(50), 561-596

30. **Sampson, V.**, Enderle, P., & Grooms, J. (2013). The development and initial validation of the Beliefs About Reformed Science Teaching and Learning (BARSTL) questionnaire: An instrument that measures the beliefs of elementary school science teachers. *School Science and Mathematics*, 113(1), 3-15.

29. **Sampson, V.** and Blanchard, M. (2012). Science teachers and scientific argumentation: Trends in views and practice. *Journal of Research in Science Teaching*, 49(9), 1122-1148.

28. Granger, E., Bevis, T., Saka, Y., Southerland, S., **Sampson, V.**, & Tate. R. (2012). The efficacy of student-centered instruction in supporting science learning. *Science*, 338(105), 105-108.

27. **Sampson, V.** and Walker, J. (2012). Argument-Driven Inquiry as a way to help undergraduate students write to learn by learning to write in chemistry. *International Journal of Science Education*, 34(10), 1443-1485.

26. Walker, J., **Sampson, V.,** Grooms, J., Anderson, B., & Zimmerman, C. (2012). Argument-Driven Inquiry in undergraduate chemistry labs: The impact on students' conceptual understanding, argument skills, and attitudes towards science. *Journal of College Science Teaching,* 41(4), 82-89.

25. Golden, B., Grooms, J., **Sampson, V.,** & Oliveri, R. (2012). Generating arguments about climate change. *The Science Scope*, 35(7), 26-35.

24. Walker, J., **Sampson, V.**, Zimmerman, C., & Grooms, J. (2011). A performance-based assessment for limiting and excess reactants. *Journal of Chemical Education*, 88(9), 1243-1246

23. Walker, J., **Sampson, V.**, & Zimmerman, C. (2011). Argument-Driven Inquiry: An introduction to a new instructional model for use in undergraduate chemistry labs. *Journal of Chemical Education*, 88(8), 1048-1056.

22. Dentzau, M. and **Sampson, V.** (2011). Fire and the role of ecological disturbance: A 5E lesson to address an important misconception. *The Science Teacher,* 78(4), 44-50.

21. **Sampson, V.**, Grooms, J., & Walker, J. (2011). Argument-Driven Inquiry as a way to help students learn how to participate in scientific argumentation and craft written arguments: An exploratory study. *Science Education*, 95(2), 217-257.

20. Williams, K., Kurtek, K., & **Sampson, V.** (2011). The Affective Elements of Science Learning: A questionnaire to assess and improve student attitudes toward science. *The Science Teacher,* 78(1), 40-45.

19. **Sampson, V.** and Clark, D. (2011). A comparison of the collaborative scientific argumentation practices in two high and two low performing groups. *Research in Science Education*, 41(1), 63-97.

18. Maguire, L., Myerowitz, L., & **Sampson, V.** (2010). Exploring osmosis and diffusion: A guided-inquiry activity for biology classes developed through the lesson-study process. *The Science Teacher,* 77(8), 55-60.

17. **Sampson, V.** and Gerbino, F. (2010). Two instructional models that teachers can use to promote and support scientific argumentation in the biology classroom. The *American Biology Teacher,* 72(7), 427-431.

16. Blanchard, M., Southerland, S., Osborne, J., **Sampson, V.**, Annetta, L., & Granger, E. (2010). Is inquiry possible in light of accountability? A quantitative comparison of the relative effectiveness of guided inquiry and traditional verification laboratory instruction. *Science Education*, 94(4) 577-616.

15. **Sampson, V.** and Grooms, J. (2010). Generate an argument: An instructional model. *The Science Teacher,* 77(5), 33-37.

14. **Sampson, V.**, Grooms, J., & Walker, J. (2009). Argument-Driven Inquiry: A way to promote learning during laboratory activities. *The Science Teacher*, 76(8), 42-47.

13. **Sampson, V.** and Gleim, L. (2009). Argument-Driven Inquiry to promote the understanding of important concepts and practices in biology. *The American Biology Teacher*, 71(8), 471-477.

12. Dial, K., Riddley, D., Williams, K., & **Sampson, V.** (2009). Addressing misconceptions: A demonstration to help students understand the law of conservation of mass. *The Science Teacher,* 76(7), 54-57.

11. **Sampson, V.** and Grooms, J. (2009). Promoting and supporting scientific argumentation in the classroom: The evaluate alternatives instructional model. *The Science Scope,* 33(1), 67-73.

10. Hall, C. and **Sampson, V.** (2009). Inquiry, argumentation, and the phases of the moon: Helping students learn important concepts and practices. *The Science Scope*, 32(7), 30-35.

9. **Sampson, V.** and Clark, D. (2009). The impact of collaboration on the outcomes of scientific argumentation. *Science Education*, 93(3), 448-484.

8. Dlugokienski, A. and **Sampson, V.** (2008). Learning to write and writing to learn in science: Refutational texts and analytical rubrics. *The Science Scope,* 32(3), 14-19.

7. **Sampson, V.** and Clark, D. (2008). Assessment of the ways students generate arguments in science education: Current perspectives and recommendations for future directions. *Science Education*, 92(3), 447-472.

6. Clark, D. and **Sampson, V.** (2008). Assessing dialogic argumentation in online environments to relate structure, grounds, and conceptual quality. *Journal of Research in Science Teaching*, 45(3), 293-321.

5. Clark, D., **Sampson, V.**, Weinberger, A., & Erkens, G. (2007). Analytic frameworks for assessing dialogic argumentation in online learning environments. *Educational Psychology Review,* 19(3), 343-374.

4. **Sampson, V.** and Clark, D. (2007). Incorporating scientific argumentation into inquiry based activities with online personally-seeded discussions. *The Science Scope*, 30(6), 43-47.

3. Clark, D. and **Sampson, V.** (2006). Personally-seeded discussions to scaffold online argumentation. *International Journal of Science Education*, 29(3), 253-277.

2. **Sampson, V.** (2006). Two-tiered assessment. *The Science Scope*, 29(5), 46-49.

1. **Sampson, V.** (2004). The science management observation protocol. *The Science Teacher,* 71(10), 30-33.

Refereed Books

22. Gray, R., Campbell, T., & **Sampson, V.** (in press). *Model-Based Inquiry in Biology.* Arlington, VA: NSTA Press.

21. **Sampson, V.**, Hutner, T. Grooms, J., Kaszuba, J., & Burt, C. (2020). *Student Workbook for Argument-Driven Inquiry in 5th Grade Science: Three-dimensional investigations that integrate literacy and mathematics.* Arlington, VA: NSTA Press.

20. **Sampson, V.**, Hutner, T. Grooms, J., Kaszuba, J., & Burt, C. (2020). *Argument-Driven Inquiry in 5th Grade Science: Three-dimensional investigations that integrate literacy and mathematics.* Arlington, VA: NSTA Press.

19. Hutner, T., **Sampson, V.**, Grooms, J., LaMee, A. & FitzPatrick, D. (2020). *Student Lab Manual for Argument-Driven Inquiry in Physics Volume 2: Electricity and magnetism lab investigations for grades 9-12.* Arlington, VA: NSTA Press.

18. Hutner, T., **Sampson, V.**, Grooms, J., LaMee, A. & FitzPatrick, D. (2020). *Argument-Driven Inquiry in Physics Volume 2: Electricity and magnetism lab investigations for grades 9-12.* Arlington, VA: NSTA Press.

17. **Sampson, V.** and Murphy, A. (2019). *Student Workbook for Argument-Driven Inquiry in 4th Grade Science: Three-dimensional investigations that integrate literacy and mathematics.* Arlington, VA: NSTA Press.

16. **Sampson, V.** and Murphy, A. (2019). *Argument-Driven Inquiry in 4th Grade Science: Three-dimensional investigations that integrate literacy and mathematics.* Arlington, VA: NSTA Press.

15. **Sampson, V.** and Murphy, A. (2019). *Student Workbook for Argument-Driven Inquiry in 3rd Grade Science: Three-dimensional investigations that integrate literacy and mathematics.* Arlington, VA: NSTA Press.

14. **Sampson, V.** and Murphy, A. (2019). *Argument-Driven Inquiry in 3rd Grade Science: Three-dimensional investigations that integrate literacy and mathematics.* Arlington, VA: NSTA Press.

13. **Sampson, V.**, Murphy, A., Lipscomb, K., and Hutner, T. (2018). *Student Lab Manual for Argument-Driven Inquiry in Middle School Earth Space Science: Lab investigations for grades 6-10.* Arlington, VA: NSTA Press.

12. **Sampson, V.**, Murphy, A., Lipscomb, K., and Hutner, T. (2018). *Argument-Driven Inquiry in Middle School Earth Space Science: Lab investigations for grades 6-10.* Arlington, VA: NSTA Press.

11. **Sampson, V.**, Hutner, T., FitzPatrick, D., LaMee, A. & Grooms, J. (2017). *Student Lab Manual for Argument-Driven Inquiry in Physics Volume 1: Mechanics lab investigations for grades 9-12.* Arlington, VA: NSTA Press.

10. **Sampson, V.**, Hutner, T., FitzPatrick, D., LaMee, A. & Grooms, J. (2017). *Argument-Driven Inquiry in Physics Volume 1: Mechanics lab investigations for grades 9-12.* Arlington, VA: NSTA Press.

9. Grooms, J., Enderle, P., Murphy, A., Hutner, T., & **Sampson, V.** (2016). *Student Lab Manual for Argument-Driven Inquiry in Physical Science: Lab investigations for grades 6-8.* Arlington, VA: NSTA Press.

8. Grooms, J., Enderle, P., Murphy, A., Hutner, T., & **Sampson, V.** (2016). *Argument-Driven Inquiry in Physical Science: Lab investigations for grades 6-8.* Arlington, VA: NSTA Press.

7. Enderle, P., Gleim, L., Granger, E., Grooms, J., Hester, M., Murphy, A., **Sampson, V.**, & Southerland, S. (2016). *Student Lab Manual for Argument-Driven Inquiry in Life Science: Lab investigations for grades 6-8*. Arlington, VA: NSTA Press.

6. **Sampson, V.**, Carafano, P., Enderle, P. Fannin, S., Grooms, J., Southerland, S., Stallworth, C., & Williams, K. (2016). *Student Lab Manual for Argument-Driven Inquiry in Chemistry: Lab investigations for grades 9-12*. Arlington, VA: NSTA Press.

5. **Sampson, V.**, Enderle, P., Gleim, L., Grooms, J., Hester, M., Southerland, S. & Wilson, K. (2015). *Student Lab Manual for Argument-Driven Inquiry in Biology: Lab investigations for grades 9-12*. Arlington, VA: NSTA Press.

4. Enderle, P., Gleim, L., Granger, E., Grooms, J., Hester, M., Murphy, A., **Sampson, V.**, & Southerland, S. (2015). *Argument-Driven Inquiry in Life Science: Lab investigations for grades 6-8.* Arlington, VA: NSTA Press. [2016 REVERE Award Finalist, PreK-12 Learning Group, Association of American Publishers]

3. **Sampson, V.**, Carafano, P., Enderle, P. Fannin, S., Grooms, J., Southerland, S., Stallworth, C., & Williams, K. (2014). *Argument-Driven Inquiry in Chemistry: Lab investigations for grades 9-12*. Arlington, VA: NSTA Press.

2. **Sampson, V.**, Enderle, P., Gleim, L., Grooms, J., Hester, M., Southerland, S. & Wilson, K. (2014). *Argument-Driven Inquiry in Biology: Lab investigations for grades 9-12*. Arlington, VA: NSTA Press. [2015 REVERE Award Finalist, PreK-12 Learning Group, Association of American Publishers; Editor's Choice in the 2015 edition of the AAAS's Science Books and Films]

1. **Sampson, V.**, and Schleigh, S. (2012). *Scientific Argumentation in Biology: 30 classroom activities*. Arlington, VA: NSTA Press.

<u>Refereed Books in Review or Preparation</u>

1. Campbell, T., Gray, R., & **Sampson, V.** (under contract). *Model-Based Inquiry in Chemistry.* Arlington, VA: NSTA Press.

Refereed Book Chapters

6. Callahan, R., **Sampson, V.**, and Rivale, S. (2019). Activating Bilingual English Learners Strengths in Science: The Pedagogy and Potential of Argument-Driven Inquiry (ADI). In de Oliveira, L.C., Obenchain, K, Kenney, R., & Oliveira, A.W. (Eds.), *Teaching the Content Areas to English Language Learners in Secondary Schools* (pp. 183 – 197). Switzerland: Springer International Publishing AG.

5. Southerland, S. A. and **Sampson, V.** (2012). Creating effective school leaders for 21st century science. In George Theoharis and Jeffrey Brooks (Eds.), *What Every Principal Needs to Know: Instructional Leadership for Equitable and Excellent Schools* (pp. 54-70). New York, NY: Teachers College Press

4. **Sampson, V.**, Enderle, P. & Walker J. (2011). The development and validation of the Assessment of Scientific Argumentation in the Classroom (ASAC) observation protocol: A tool for evaluating how students participate in scientific argumentation. In M. Kline (Ed.), *Perspectives in Scientific Argumentation: Theory, Practice and Research* (pp. 235-264). New York, NY: Springer.

3. Clark, D., **Sampson, V.**, Chang, H.-Y., Chiu, J., Schwendimann, B., Tate, E., & Zhang, H. (2011). Research on critique and argumentation from the Technology Enhanced Learning in Science Center. In M. Kline (Ed.), *Perspectives in Scientific Argumentation: Theory, Practice and Research* (pp. 157-199). New York, NY: Springer.

2. Jeong, A., Clark, D., **Sampson, V.**, & Mushin M. (2011). Assessing and comparing dialogical scientific argumentation across asynchronous online discussion environments with sequential analysis. In S. Puntambekar, C. Hmelo-Silver, & G. Erkens (Eds.), *Analyzing Interactions in CSCL: Methodology, approaches, and issues* (pp. 207 – 233). New York, NY: Springer.

1. Clark, D. B., **Sampson, V.,** Stegmann, K., Marttunen, M., Kollar, I., Janssen, J., Weinberger, A., Menekse, M., Erkens, G., & Laurinen, L. (2010). Online learning environments, scientific argumentation, and 21st century skills. In B. Ertl (Ed.), *E-Collaborative Knowledge Construction: Learning from Computer-Supported and Virtual Environments* (pp. 1 – 39). Hershey, PA: IGI Global.

Invited Book Chapters

2. **Sampson, V.** (2011). The problem with science fairs: They don't do what they are supposed to do. In J. Settlage and S. Southerland, *Teaching Science to Every Child Using Culture as the Starting Point*, 2nd Edition (pp. 117-119). New York, NY: Routledge.

1. **Sampson, V.**, Simon, S., Amos, R., & Evagorou, M. (2011). Engaging students in scientific and socio-scientific argumentation. In T. Sadler (Ed.), *Socio-Scientific Issues in the Classroom: Teaching, Learning and Research* (pp. 193-200). Dordrecht, Netherlands: Springer

Refereed Conference Proceedings

10. Baze, C., Hutner. T., Crawford, R., Sampson, V., Chu, L., Rivale, S., & Brooks, H. (2018). An Instructional Framework for the Integration of Engineering into Middle School Science Classrooms. *Proceedings of American Society for Engineering Education (ASEE) annual Conference and Exposition.* Salt Lake City, UT: ASEE.

9. Brooks, H., Hutner. T., Sampson, V., Chu, L., Crawford, R., Rivale, S., & Baze, C. (2018). Tensions Arising When Teaching Scientific Disciplinary Core Ideas via Engineering Practices. *Proceedings of American Society for Engineering Education (ASEE) annual Conference and Exposition*. Salt Lake City, UT: ASEE.

8. Chu, L., Sampson, V., Hutner. T., Rivale, S., Crawford, R., Baze, C., & Brooks, H. (2018). Argument-driven Engineering in Middle School Science Classrooms: The Study of Engineering Attitudes and Efforts to Broaden Engineering Participation by Exposing All Students to Multiple Engineering Design Tasks. *Proceedings of American Society for Engineering Education (ASEE) annual Conference and Exposition*. Salt Lake City, UT: ASEE.

7. Alemanne, N., Marty, P., Douglas, I., Southerland, S., Sampson, V., Kazmer, M., Clark, A., & Mendenhall, A. (2012). Habitat Tracker: Engaging Students with Scientific Inquiry Through Technology and Curriculum Support. *Proceedings of ASIST 2012*. Silver Springs, MD: ASIST.

6. Marty, P.F., Douglas, I., Southerland, S.A., Sampson, V., Alemanne, N.D., Clark, A., Mendenhall, A., de la Paz, A., & Yu, C. (2012). Habitat Tracker: Learning About Scientific Inquiry Through Digital Journaling in Wildlife Centers. *Proceedings of iConference 2012* (pp. 560-562). Toronto: ACM Press.

5. Clark, D., **Sampson, V**., Weinberger, A., & Erkens, G., (2007). Evaluating the Quality of Dialogical Argumentation in CSCL: Moving Beyond an Analysis of Formal Structure. In C. Chinn, G. Erkens, & S. Puntambekar (Eds.) *Computer-Supported Collaborative Learning: Mice, Minds, and Society. Proceedings of the Seventh International Computer Supported Collaborative Learning* (pp. 11-20). New Brunswick, NJ: ISLS.

4. Weinberger, A., Clark, D., Dillenbourg, P., Diziol, D., **Sampson, V.**, Stegmann, K., Rummel, N., Hong, F., Spada, H., McLaren, B., Brahm, T., & Fischer, F. (2007). Orchestrating learning activities on the social and the cognitive level to foster CSCL. In C. Chinn, G. Erkens, & S. Puntambekar (Eds.) *Computer-Supported Collaborative Learning: Mice, Minds, and Society. Proceedings of the Seventh International Computer Supported Collaborative Learning Conference* (pp 36-45). New Brunswick, NJ: ISLS.

3. **Sampson, V.** and Clark, D. (2006). Assessment of argument in science education: A critical review of the literature. In S. A. Barab, K. E. Hay, & D. T. Hickey (Eds.), *Proceedings of the Seventh International Conference of the Learning Sciences – Making a Difference* (pp. 655-661). Mahwah, NJ: Lawrence Erlbaum Associates.

2. Weinberger, A., Clark, D., Erkens, G., **Sampson, V.**, Stegmann, K., Fischer, F., Janssen, J., Jaspers, J., & Kanselaar, G. (2006). Argumentative knowledge construction in CSCL. In S. A. Barab, K. E. Hay, & D. T. Hickey (Eds.), *Proceedings of the Seventh International Conference of the Learning Sciences – Making a Difference* (pp. 1094-1100). Mahwah, NJ: Lawrence Erlbaum Associates

1. Clark, D. and **Sampson, V.** (2005). The quality of argumentation supported by personally-seeded discussions. In T. Koschmann, T. W. Chan, & D. Suthers (Eds.), *Computer Supported Collaborative Learning 2005: The Next 10 Years* (pp. 76-85). Mahwah, NJ: Lawrence Erlbaum Associates.

Non-Refereed Journal Articles

1. Hutner, T. L. & Sampson, V. (2015). New ways of teaching and observing science class. *Phi Delta Kappan,* 96(8), 52-56.

Presentations

Invited Keynote and Plenary Presentations at Conferences

10. **Sampson, V.** (2021, June). Towards a better theoretical understanding of how groups and individuals negotiate meaning during an episode of scientific argumentation. Keynote given at the 2021 International Science Education Conference 2021. National Institute of Education, Singapore.

9. **Sampson, V.** (2019, November). The importance of giving students opportunities to participate in the practices of science. Keynote given at the Near East South Asia Council of Overseas Schools (NESA) 2019 Fall Training Institute. Bahrain.

8. **Sampson, V.** (2019, March). The benefits of peer review in science classrooms. Keynote given at the 2019 Peer Grade Conference. Copenhagen, Denmark.

7. **Sampson, V.** (2018, November). How children learn to figure out how the world works: Five key findings from research. Plenary given at the 2018 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

6. **Sampson, V.** (2017, August). More and less productive views and teaching practices for fostering scientific and mathematical thinking inside the classroom. Keynote given at the 2017 Round Rock ISD Innovative Mindsets Conference. Round Rock, TX.

5. **Sampson, V.** (2016, May). Promoting Science Proficiency by Closing the Opportunity Gaps in our Schools. Keynote given at the 2016 Region 6 Education Service Center Mini-Cast. Huntsville, TX.

4. **Sampson, V.** (2016, February). Argument-Driven Inquiry: A way to transform laboratory experiences. Keynote given at the 2016 Minnesota Science Teacher Association Conference. Duluth, MN.

3. **Sampson, V.** (2015, July). Argument-Driven Inquiry: A way to transform laboratory experiences so students can reach the performance expectations of the NGSS and the CCSS-ELA. Keynote given at the 2015 National Science Education Leadership Association 2015 Summer Leadership Institute. Tampa, FL.

2. **Sampson, V.** (2014, February). Scientific argumentation in science classrooms. Plenary presentation given at the 2014 Korean Association for Science Education International Conference. Daegu, South Korea.

1. **Sampson, V.** (2013, July). Argument-Driven Inquiry: A way to help students achieve science literacy. Plenary Presentation given at the 2013 National Science Education Leadership Development Forum. Alexandria, VA.

Invited Panels at National or International Events

1. **Sampson, V.** (2021, October). Teacher education. Panel discussion at the Taking Stock of Science Standards Implementation: A summit. *National Academics of Science, Engineering, and Medicine*, Washington, D.C.

Refereed Papers Presented at National or International Conferences

60. González-Howard, M., **Sampson, V.** & *Baze, C*. (2021, April). *Factors impacting teachers' understanding and experiences supporting student epistemic agency during STEM design challenges.* Paper presented virtually at the annual meeting of the National Association for Research in Science Teaching.

59. **Sampson, V.** (2020). Research on student learning during Argument-Driven Inquiry: Some findings from studies conducted in middle and high school classrooms. Paper accepted for presentation at the 2020 Biennial Conference on Chemical Education of the *American Chemical Society* (ACS). Corvallis, OR. [Conference canceled due to COVID-19]

58. **Sampson, V.** (2020). Argument-driven inquiry instructional model: A brief overview, its origin, and some ways it has been refined over time. Paper accepted for presentation at the 2020 Biennial Conference on Chemical Education of the *American Chemical Society* (ACS). Corvallis, OR. [Conference canceled due to COVID-19]

57. Hutner, T., **Sampson, V.**, Chu, L., Baze, C., & Crawford (2020). What goals do science teachers satisfy by integrating engineering design in the science curriculum? Paper accepted for presentation at the 2020 international conference of the *American Educational Research Association* (AERA). San Francisco, CA. [Conference changed to a virtual format due to COVID-19]

56. González-Howard, M., **Sampson, V.**, Sosa-Ramirez, J., & Baze, C. (2020). Teachers' experience understanding and supporting student agency. Paper accepted for presentation at the 2020 international conference of the *American Educational Research Association* (AERA). San Francisco, CA. [Conference changed to a virtual format due to COVID-19]

55. Chu, L., **Sampson, V**., Hutner, T., Crawford, R., González-Howard, M., Baze, C., & Riegle-Crumb, C. (2020). Assessing Student Learning of Core Ideas and Practices from Participating in an Integrated Engineering Framework. Paper accepted for presentation at the 2020 international conference of the *National Association for Research in Science Teaching* (NARST). Portland, OR. [Conference canceled due to COVID-19]

54. Hutner, T., **Sampson, V**., Baze, C., Chu, L., & Crawford, R. (2020). Science teachers' goal conflicts when integrating engineering into science classes. Paper accepted for presentation at the 2020 international conference of the *National Association for Research in Science Teaching* (NARST). Portland, OR. [Conference canceled due to the spread of COVID-19]

53. Baze, C., Hutner, T., **Sampson, V**., González-Howard, M., Riegle-Crumb, C., & Crawford, R. (2020). Girls constructing engineering identities through STEM design challenges. Paper accepted for presentation at the 2020 international conference of the *National Association for Research in Science Teaching* (NARST). Portland, OR. [Conference canceled due to COVID-19]

52. González-Howard, M., **Sampson, V.**, Baze, C., Chu., L., Hutner, T., & Crawford, R. (2020). Developing epistemic agency: Students' perspectives on and experiences with argumentation during STEM design challenges. Paper accepted for presentation at the 2020 international conference of the *National Association for Research in Science Teaching* (NARST). Portland, OR. [Conference canceled due to COVID-19]

51. Murphy, A., Harris, S., & **Sampson, V.** (2017, April). Some Factors that Constrain the Emergence of Epistemic Discourse in Science Classrooms. Paper presented at the 2017 international conference of the *National Association for Research in Science Teaching* (NARST). San Antonio, TX.

50. Enderle, P., Sengul, O., Koulagna, Y., Grooms, J., & **Sampson, V.** (2017, April). The Impact of Implementing and Refining an Argumentation Instructional Model on Science Teachers' Beliefs. Paper presented at the 2017 international conference of the *National Association for Research in Science Teaching* (NARST). San Antonio, TX.

49. Strimaitis, A., Enderle, P., Grooms, J., & **Sampson, V.** (2016, April). Comparing Laboratory Instruction for Differently Tracked Groups of Students. Paper presented at the 2016 international conference of the *National Association for Research in Science Teaching* (NARST). Baltimore, MD.

48. **Sampson, V.** (2016, April). Advancing students' argumentation: Moving beyond structure. Paper presented at the 2016 international conference of the *American Educational Research Association* (AERA). Washington, D.C.

47. Strimaitis, A., Enderle, P., Grooms, J., & **Sampson, V.** (2015, April). Validation of new biology instruments that assess three aspects of science proficiency. Paper presented at the 2015 international conference of the *National Association for Research in Science Teaching* (NARST). Chicago, IL.

46. Strimaitis, A., Enderle, P., Grooms, J., & **Sampson, V.** (2015, April). The influence of one teacher's framing and instructional actions on students' scientific argumentation. Paper presented at the 2015 international conference of the *National Association for Research in Science Teaching* (NARST). Chicago, IL.

45. Walker, J., Enderle, P., Southerland, S., & **Sampson, V.** (2015, April). Laboratory as Community: Equity and efficacy with reformed instructional practices. Paper presented at the 2015 international conference of the *National Association for Research in Science Teaching* (NARST). Chicago, IL.

44. Mendenhall, A., Schellinger, J., Alemanne, N., Clark, A., Southerland, S., **Sampson, V.**, Kazmer, M., & Marty, P. (2015, April). Using technology-rich inquiry-based instruction to foster the development of elementary students' views on the nature of science. Paper presented at the 2015 international conference of the *American Educational Research Association* (AERA). Chicago, IL.

43. Gooden, S., Schellinger J., A, Grooms, J., Enderle, P., & **Sampson, V.** (2015, April). The impact of teacher framing and instructional action on student growth in scientific argumentation. Paper presented at the 2015 international conference of the *American Educational Research Association* (AERA). Chicago, IL.

42. Strimaitis, A., Enderle, P., Grooms, J., **Sampson, V.**, & Bremer, M. (2015, April). How teachers promote scientific argumentation between students during school science laboratories. Paper presented at the 2015 international conference of the *American Educational Research Association* (AERA). Chicago, IL.

41. Strimaitis, A., Southerland, S., Grooms, J., Enderle, P., & **Sampson, V.** (2015, April). Structuring chemistry laboratories around argumentation: Examining the effectiveness of argumentation in fostering science for all. Paper presented at the 2015 international conference of the *American Educational Research Association* (AERA). Chicago, IL.

40. Southerland, S., Strimaitis, A, Enderle, P., Grooms, J., & **Sampson, V.** (2014, April). The effectiveness of argumentation in fostering science for all: Examining the effects of challenging instruction in biology laboratories. Paper presented at the 2014 international conference of the *American Educational Research Association* (AERA). Philadelphia, PA.

39. Southerland, S., Mendenhall, A., Schellinger, J., Alemanne, N., Clark, A., **Sampson, V.**, Douglas, I., Kazmer, M., & Marty, P. (2014, April). Fostering Elementary Students' Understanding of Scientific Inquiry: Leveraging Informal Settings and Digital Technology. Paper presented at the 2014 international conference of the *American Educational Research Association* (AERA). Philadelphia, PA.

38. Schellinger, J., Mendenhall, A., Southerland, S., Alemanne, N., **Sampson, V.**, & Marty, P. (2014, April). Fostering elementary students' understanding of scientific inquiry: Leverage

informal setting and digital technology. Paper presented at the 2014 international conference of the *American Educational Research Association* (AERA). Philadelphia, PA.

37. Enderle, P., Strimaitis, A., Grooms, J., & **Sampson, V.** (2014, March). Validation of new chemistry instruments that assess three aspects of science proficiency. Paper presented at the 2014 international conference of the *National Association for Research in Science Teaching* (NARST). Pittsburgh, PA.

36. Grooms, J., Enderle, P. & **Sampson, V.** (2014, March). How content knowledge and past experiences can influence an episode of argumentation. Paper presented at the 2014 international conference of the *National Association for Research in Science Teaching* (NARST). Pittsburgh, PA.

35. Southerland, S., Enderle, P., **Sampson, V.**, & Grooms, J. (2013, April). Teacher beliefs and the implementation of curriculum focusing on the practices of science. Paper presented at the 2013 international conference of the *National Association for Research in Science Teaching* (NARST). Rio Grande, Puerto Rico.

34. Clark, A., Southerland, S., Marty, P., **Sampson, V.**, & Mendenhall, A. (2013, April). Use of a technology-based elementary curriculum focused on scientific inquiry: Unexpected barriers in a high stakes world. Paper presented at the 2013 international conference of the *National Association for Research in Science Teaching* (NARST). Rio Grande, Puerto Rico.

33. Grooms, J., Enderle, P., & **Sampson, V.** (2013, April). A comparative study of the development of science proficiency in high school chemistry. Paper presented at the 2013 international conference of the *National Association for Research in Science Teaching* (NARST). Rio Grande, Puerto Rico.

32. **Sampson, V.**, Grooms, J., & Enderle, P. (2012, April). Using laboratory activities that emphasize argumentation and argument to help high school students learn how to engage in scientific inquiry and understand the nature of scientific inquiry. Paper presented at the 2012 international conference of the *National Association for Research in Science Teaching* (NARST). Indianapolis, IN.

31. Grooms, J., **Sampson, V.**, & Carafano, P. (2012, April). The impact of a new instructional model on high school science writing. Paper presented at the 2012 international conference of the *American Educational Research Association* (AERA). Vancouver, Canada.

30. **Sampson, V.**, Enderle, P., Hester, M., & Grooms, J. (2012, April). The development of science proficiency through argument focused lab instruction in high school biology. Paper presented at the 2012 international conference of the *American Educational Research Association* (AERA). Vancouver, Canada.

29. Enderle, P., **Sampson, V.**, and Campbell, H. (2012, April). The impact of a new instructional model on middle school science writing. Paper presented at the 2012

international conference of the *American Educational Research Association* (AERA). Vancouver, Canada.

28. Marty, P., Douglas, I., Southerland, S., **Sampson, V.**, Alemanne, N., Clark, A., Mendenhall, A., de la Paz, A., & Yu, C. (2012, February). Habitat Tracker: Learning about scientific inquiry through digital journal in wildlife centers. Paper presented at *iConference 2012*. Toronto, Canada

27. Enderle, P., Grooms, J., & **Sampson, V.** (2012, January). The importance of using multiple measures to assess science proficiency. Paper presented at the 2012 international conference of the *Association for Science Teacher Education* (ASTE). Clearwater, FL.

26. **Sampson, V.**, Grooms, J., Enderle, P. (2011, September). New instruments that can be used by researchers to assess three different aspects of science proficiency. Paper presented at the *Fall 2011 Conference of the Society for Research on Education Effectiveness*. Washington, D.C

25. Walker, J. and **Sampson, V.** (2011, June). Learning to argue and arguing to learn: Argument-Driven Inquiry as a way to help undergraduate chemistry students learn how to construct arguments and engage in argumentation during a laboratory course. Paper presented at the *Gordon Research Conference: Chemistry Education Research and Practice*. Davidson, North Carolina.

24. Kurtek, K., Southerland, S. A., & **Sampson, V.** (2011, April). For whom does science education reform work? Examining the effectiveness of reform-oriented instruction on mainstream and nonmainstream learners. Paper presented at the 2011 international conference of the *American Educational Research Association* (AERA). New Orleans, LA.

23. **Sampson, V.**, Enderle, P., and Walker, J. (2011, April). An instrument that can be used to evaluate the cognitive, epistemic, and social aspects of an episode of argumentation: Introducing the Assessment of Scientific Argumentation in Classroom observational protocol. Paper presented as part of the symposium, "*Exploring Classroom Based Scientific Argumentation: A Methodological Discussion"* (L. Berland and V. Sampson, organizers and chairs), at the 2011 international conference of the *American Educational Research Association* (AERA). New Orleans, LA.

22. Blanchard, M. R., & **Sampson, V.** (2011, April). Take 10 teachers, add 2 scientists, stir in the national reform goals, and let marinate for 6 weeks – Is this a good recipe for an effective RET program? Paper presented as part of the symposium, "Implications of Research on K-12 Student and Teacher, and Undergraduate Apprenticeships for Science Teaching and Learning" at the 2011 International Conference of the *National Association for Research in Science Teaching* (NARST), Orlando, FL.

21. Walker, J., **Sampson, V.**, & Zimmerman, C. (2011, March). Argument based instruction in undergraduate chemistry labs: A comparative study. Paper presented as part of a

symposium, "Meaningful learning from laboratory work: Evidence and assessment" at the 2011 International Conference of the *American Chemical Society* (ACS), Anaheim, CA.

20. Gleim, L., **Sampson, V.,** Hester, M., Williams, K., Sanchez, J. & Button, E. (2010, March). How middle school students and high school students evaluate the arguments found within articles written for the popular press: A comparison study. Paper presented at the 2010 International Conference of the *National Association of Research in Science Teaching* (NARST). Philadelphia, PA.

19. Walker, J., **Sampson, V.,** Grooms, J., Anderson, B., & Zimmerman, C. (2010, March). Argument-Driven Inquiry: An instructional model for use in undergraduate chemistry labs. Paper presented at the 2010 International Conference of the *National Association of Research in Science Teaching* (NARST). Philadelphia, PA.

18. **Sampson, V.,** Walker, J., Dial, K., & Swanson, J. (2010, March). Learning to write in undergraduate chemistry: The impact of Argument-Driven Inquiry. Paper presented at the 2010 International Conference of the *National Association of Research in Science Teaching* (NARST). Philadelphia, PA.

17. Enderle, P., Walker, J., Dorgan, C, & **Sampson, V.** (2010, March). Assessment of Argumentation: An Observation Protocol. Paper presented at the 2010 International Conference of the *National Association of Research in Science Teaching* (NARST). Philadelphia, PA.

16. Hutner, T., Southerland, S., & **Sampson, V.** (2010, March). Teachers goals for education and the confluence of beliefs, the national reform documents, and accountability. Paper presented at the 2010 International Conference of the *National Association of Research in Science Teaching* (NARST). Philadelphia, PA.

15. **Sampson, V.** (2009, September). Argument-Driven Inquiry and the development of science proficiency in the laboratory. Paper presented at the 2009 Biannual International Meeting of the *European Science Education Research Association,* Istanbul, Turkey.

14. Blanchard, M.R., Southerland, S. A., Osborne, J. W., & **Sampson, V.** (2009, September). A Comparative Study of the Effectiveness of Inquiry vs. Deductive Laboratory Instruction in Middle and High School Science Classrooms. Paper presented at the 2009 Biannual International Meeting of the *European Science Education Research Association*, Istanbul, Turkey.

13. **Sampson, V.** (2009, April). Science teachers and scientific argumentation: Trends in practice and beliefs. Paper presented at the 2009 International Conference of the *National Association of Research in Science Teaching* (NARST). Garden Grove, CA.

12. Grooms, J., **Sampson, V.,** and Gross, L. (2009, April). What makes a scientific argument persuasive? How middle and high school students' view different types of arguments.

Paper presented at the 2009 International Conference of the *National Association of Research in Science Teaching* (NARST). Garden Grove, CA.

11. Hutner, T., Southerland, S. and **Sampson, V.** (2009, April). The Development and Validation of the Teachers' Goals for Science Education Scale: Moving toward understanding teachers' interpretation of policy. Paper presented at the 2009 International Conference of the *National Association of Research in Science Teaching* (NARST). Garden Grove, CA.

10. **Sampson, V.** and Clark, D. (2008, April). The effects of collaboration on argument quality and learning. Paper presented at the 2008 International Conference of the *American Educational Research Association* (AERA). New York, NY.

9. Clark, D., Menekse, M., D'Angelo, C., and **Sampson, V.** (2008, April). Improving the quality of student argumentation through the initial structuring of online discussions. Paper presented at the 2008 International Conference of the *American Educational Research Association* (AERA). New York, NY.

8. **Sampson, V**. and Grooms, J. (2008, April). Science as Argument-Driven Inquiry: The impact on students' conceptions of NOS. Paper presented at the 2009 International Conference of the *National Association of Research in Science Teaching* (NARST). Baltimore, MD.

7. **Sampson, V**. and Clark, D. (2008, April). Differences in the ways more and less successful groups engage in argumentation: A case study. Paper presented at the 2008 International Conference of the *National Association of Research in Science Teaching* (NARST). Baltimore, MD.

6. **Sampson, V**. and Clark, D. (2006, June). Assessment of argument in science education: A critical review of the literature. Paper presented at the *7th International Conference of the Learning Sciences* (ICLS). Bloomington, Indiana.

5. **Sampson, V**. and Clark, D. (2006, April). The development and validation of the Nature of Science as Argument Questionnaire (NSAAQ). Paper presented at the 2006 International Conference of the *National Association of Research in Science Teaching* (NARST). San Francisco, CA.

4. Clark, D. and **Sampson, V.** (2006, April). Characteristics of students' argumentation practices when supported by online personally-seeded discussions. Paper presented as part of the symposium*, "International perspectives on argumentation research in science education: Achievements, current boundaries, and next steps*" (D. Clark and V. Sampson, organizers and chairs), at the 2006 International Conference of the *National Association of Research in Science Teaching* (NARST). San Francisco, CA.

3. **Sampson, V**. and Benton, A. (2006, January). Development and validation of the Beliefs About Reformed Science Teaching and Learning (BARSTL) questionnaire. Paper

presented at the 2006 International Conference of the *Association of Science Teacher Education* (ASTE). Portland, OR.

2. Clark, D. and **Sampson, V.** (2005, June). The quality of argumentation supported by personally-seeded discussions. Paper presented at *the 2005 International Conference of Computer Supported Collaborative Learning. Taip*ei, Taiwan.

1. Clark, D. and **Sampson, V.** (2005, April). The conceptual quality of student argumentation in online discussions. Paper presented at the 2005 International Conference *of the National Association for Research in Science Teaching* (NARST). Dallas, TX.

Refereed Papers Presented at Regional or State Events

1. Kostka, B. & **Sampson, V.** (2011, October). High school students' ideas about claims, evidence, and arguments in biology. Paper presented at the 2011 Conference of the *Southeastern Association for Science Teacher Education* (SASTE). Athens, GA

Invited Papers at National or International Symposia

1. Clark, D., **Sampson, V.,** Stegmann, K., Marttunnen, M., Kollar, I., Jannsen, J., Weinberger, A., Menekse, M., Erkens, G. and Laurinen, L. (2009). Scaffolding Scientific Argumentation Between Multiple Students in Online Learning Environments to Support the Development of 21st Century Skills. Paper presented at the *National Academies' Board on Science Education* workshop on Exploring the Intersection of Science Education and 21st Century Skills, Washington, D.C.

Refereed Presentations at National or International Conferences

23. **Sampson, V.** (2021, March). How to integrate engineering into the science curriculum in a meaningful, rigorous, and equitable way using Argument-Driven Engineering. Presentation given at the 2021 NSTA STEM Forum conference of the *National Science Teaching Association* (NSTA). [Conference held online due to COVID-19]

22. **Sampson, V.** (2021, March). How to give students more opportunities to design solutions to meaningful problems with Argument-Driven Engineering. Presentation given at the 2021 NSTA STEM Forum conference of the *National Science Teaching Association* (NSTA). [Conference held online due to COVID-19]

21. **Sampson, V.** (2021, March). Argument-Driven Inquiry in grades 9-12. Presentation given at the 2021 NSTA Engage conference of the *National Science Teaching Association* (NSTA). [Conference held online due to COVID-19]

20. **Sampson, V.** (2021, March). How to integrate science and literacy in the service of sense-making using Argument-Driven Inquiry. Presentation given at the 2021 NSTA Engage conference of the *National Science Teaching Association* (NSTA). [Conference held online due to COVID-19]

19. **Sampson, V.** (2021, March). Argument-Driven Inquiry in grades 6-8. Presentation given at the 2021 NSTA Engage conference of the *National Science Teaching Association* (NSTA). [Conference held online due to COVID-19]

18. **Sampson, V.** (2021, March). How to make learning experiences meaningful, rigorous, and equitable with Argument-Driven Inquiry. Presentation given at the 2021 NSTA Engage conference of the *National Science Teaching Association* (NSTA). [Conference held online due to COVID-19]

17. **Sampson, V.** (2021, March). Argument-Driven Inquiry in grades 3-5. Presentation given at the 2021 NSTA Engage conference of the *National Science Teaching Association* (NSTA). [Conference held online due to COVID-19]

16. **Sampson, V.** (2020, November). How to make learning experiences rigorous and equitable with Argument-Driven Inquiry. Presentation given at the 2020 NSTA Engage conference of the *National Science Teaching Association* (NSTA). [Conference held online due to COVID-19]

15. Gray, R., Campbell, T., & **Sampson, V.** (2020, April). Supporting three-dimensional learning through Model-Based Units and Resources. Presentation given at the 2020 conference of the *National Science Teaching Association* (NSTA). Boston, MA. [Conference canceled due to COVID-19]

14. **Sampson, V.** (2019, January). Argument-Driven Inquiry in Primary School. Presentation given at the 2019 conference of the *Association for Science Education* (ASE). Birmingham, United Kingdom.

13. **Sampson, V.** (2018, January). Argument-Driven Inquiry: Promoting Science Proficiency by Transforming Lab Activities. Presentation given at the 2018 conference of the *Association for Science Education* (ASE). Liverpool, United Kingdom.

12. **Sampson, V.,** Murphy, A., & Enderle, P. (2016, April). Helping Students Learn to Argue from Evidence with Argument-Driven Inquiry. Presentation given at the 2016 National Conference of the *National Science Teachers Association* (NSTA). Nashville, TN.

11. **Sampson, V.,** Murphy, A., & Enderle, P. (2016, April). Helping Students Learn to Obtain, Evaluate, and Communicate Information Through Reading and Writing with Argument-Driven Inquiry. Presentation given at the 2016 National Conference of the *National Science Teachers Association* (NSTA). Nashville, TN.

10. **Sampson, V.,** Murphy, A., & Enderle, P. (2016, April). Making Science Instruction More Equitable with Argument-Driven Inquiry. Presentation given at the 2016 National Conference of the *National Science Teachers Association* (NSTA). Nashville, TN.

9. Jimenez-Aleixandre, M. & **Sampson, V**. (2015, April). Supporting student argumentation. Presentation given as part of the workshop, Key Challenges and Future Directions for

Research on Scientific Argumentation at the 2015 international conference of the *National Association of Research in Teaching*.

8. Grooms, J. and **Sampson, V.** (2015, March). Argument-Driven Inquiry: A way to transform laboratory experiences. Presentation given at the 2015 Professional Development Institute of the *National Science Education Leadership Association*. Chicago, IL.

7. Walker, J. and **Sampson, V.** (2012, July). Argumentation in Undergraduate chemistry laboratories. Presentation given at the 2012 *Biennial Conference on Chemical Education* (BCCE). University Park, PA

6. **Sampson, V.**, Wicker, L., Hester, M., Carafano, P., Enderle, P., & Grooms, J. (2012, April). Large-scale implementation of the Argument-Driven Inquiry (ADI) instructional model. Presentation given at the 2012 International Conference of the *International Association of Laboratory and Charter Schools*. Tallahassee, FL

5. Clark, A., Marty, P., Southerland, S., **Sampson, V.**, Douglas, I., Mendenhall, A., & Alemanne, N. (2011, October). Habitat Tracker: Learning about scientific inquiry through digital journaling in wildlife centers. Presentation given at the *E-Learn 2011 World Conference on E-Learning in Corporate, Government, Healthcare and Higher Education*. Honolulu, HI

4. Mendenhall, A., Marty, P., Southerland, S., **Sampson, V.**, Douglas, I., Clark, A., & Alemanne, N. (2011, October). Usability study of mobile learning technology: A holistic evaluation of a field observation experience. Presentation given at the *E-Learn 2011 World Conference on E-Learning in Corporate, Government, Healthcare and Higher Education*. Honolulu, HI

3. Mendenhall, A., Marty, P., Southerland, S., **Sampson, V.**, Douglas, I., Clark, A., & Alemanne, N. (2011, October). Promoting scientific inquiry through mobile learning technology at a wildlife center. Presentation given at the *E-Learn 2011 World Conference on E-Learning in Corporate, Government, Healthcare and Higher Education*. Honolulu, HI

2. Kostka B., Walker, J., Golden, B., Grooms, J., & **Sampson, V.** (2011, March). Investigating climate change and evolution across deep time through Argument-Driven Inquiry. Presentation given at the annual national conference of the *National Science Teachers Association* (NSTA). San Francisco, CA

1. Clark, D., **Sampson, V.**, and Lemanowski, V. (2005, April). Discourse participation in thermodynamics: Technology Opening Diverse Opportunities for Science (TODOS). Presentation given at the annual international conference of the *American Educational Research Association* (AERA). Montreal, Canada.

Refereed Presentations at National or International Symposia

10. **Sampson., V**. (2020). Researchers and practitioners collaborating to make change through

the development and refinement of new instructional models. Accepted to be presented as part of the symposium, "Translating your research into forms that useful for K-12 educators" (N. Lederman, chair) at the 2020 international conference of the *National Association of Research in Science Teaching* (NARST). Boston, MA. [Conference canceled due to COVID-19]

9. Enderle, P., Grooms, J., & **Sampson, V.** (2012). Argument-Driven Inquiry in middle school. Presentation given as part of the symposium, "Argument focused instruction and science proficiency" (V. Sampson, chair) at the 2012 international conference of the *National Association of Research in Science Teaching* (NARST). Indianapolis, IN.

8. Grooms, J., Enderle, P., & **Sampson, V.** (2012). Argument-Driven Inquiry in high school. Presentation given as part of the symposium, "Argument focused instruction and science proficiency" (V. Sampson, chair) at the 2012 international conference of the *National Association of Research in Science Teaching* (NARST). Indianapolis, IN.

7. Walker, J. and **Sampson, V.** (2012). Argument-Driven Inquiry in undergraduate chemistry. Presentation given as part of the symposium, "Argument focused instruction and science proficiency" (V. Sampson, chair) at the 2012 international conference of the *National Association of Research in Science Teaching* (NARST). Indianapolis, IN.

6. **Sampson, V.** (2009, April). The impact of Argument-Driven Inquiry on three scientific practices. Presentation given as part of the symposium, "*Critique to Learn in Science"* (M. Linn, chair), at the 2009 international conference of the *National Association of Research in Science Teaching* (NARST). Garden Grove, CA.

5. **Sampson, V.** (2007, July). Analytic frameworks that focus on the nature of reasoning during argumentation in CSCL environments. Presentation given as part of the symposium, "*Evaluating the Quality of Dialogical Argumentation in CSCL: Moving beyond an Analysis of Formal Structure"* (D. Clark and V. Sampson, co-chairs), at the 2007 international *Computer Supported Collaborative Learning* (CSCL) conference. New Brunswick, NJ.

4. Clark, D. and **Sampson, V.** (2007, July). Fostering productive argumentation in online environments: Strategies for grouping students in discussion forums. Presentation given as part of the symposium, "*Orchestrating learning activities on the social and the cognitive level to foster CSCL"* (A. Weinberger, chair), at the 2007 international *Computer Supported Collaborative Learning* (CSCL) conference. New Brunswick, NJ.

3. Clark, D., **Sampson, V.**, and Menekse, M. (April, 2007). Scaffolding students' debates about the implications of simulations. Presentation given as part of the symposium, "*Using Technology-Mediated Visualizations to Support Chemistry Learning"* (R. Kozma, Discussant and M. Linn, Chair), at the annual international conference of the *American Educational Research Association* (AERA). Chicago, IL.

2. Clark, D. and **Sampson, V.** (2006, June). Evaluating argumentation in science education: New assessment tools. Presentation given as part of the symposium, "*Argumentative*

Knowledge Construction in CSCL" at the *7th International Conference of the Learning Sciences* (ICLS). Bloomington, Indiana.

1. Clark, D. and **Sampson, V.** (2006, April). Promoting high quality dialogical argumentation in online environments: Optimizing scaffolding for students' initial comments. Presentation given as part of the symposium, "*Using Computers and Online Environments to Support Argumentation"* (D. Clark and V. Sampson, co-chairs), at the annual international conference of the *American Educational Research Association* (AERA). San Francisco, CA.

Refereed Presentations at Regional or State Conferences

23. **Sampson, V.** (2021, July). Argument-Driven Mathematics: A introduction to a new instructional model. Presentation given at Conference for the Advancement of Mathematics Teaching. [Conference held online due to COVID-19]

22. **Sampson, V.** (2021, February). Argument-Driven Engineering: A introduction to a new instructional model. Presentation given at Texas STEM Conference of the Texas STEM Coalition. [Conference held online due to COVID-19]

21. **Sampson, V.** (2021, February). Giving students opportunities to design solutions to meaningful problems. Presentation given at Texas STEM Conference of the Texas STEM Coalition. [Conference held online due to COVID-19]

20. **Sampson, V.** (2020, November). Argument-Driven Inquiry in high school. Presentation given at CAST 2020 of the Science Teachers Association of Texas (STAT). [Conference held online due to COVID-19]

19. **Sampson, V.** (2020, November). Argument-Driven Inquiry in middle school. Presentation given at CAST 2020 of the Science Teachers Association of Texas (STAT). [Conference held online due to COVID-19]

18. **Sampson, V.** (2020, November). How make learning experiences rigorous and equitable with Argument-Driven Inquiry. Presentation given at CAST 2020 of the Science Teachers Association of Texas (STAT). [Conference held online due to COVID-19]

17. **Sampson, V.** (2020, November). Giving students a reason to argue from evidence with Argument-Driven Inquiry. Presentation given at CAST 2020 of the Science Teachers Association of Texas (STAT). [Conference held online due to COVID-19]

16. **Sampson, V.** (2019, November). Argument-Driven Engineering in Grades 6-8: STEM Design Challenges. Presentation given at CAST 2019 of the Science Teachers Association of Texas (STAT). Fort Worth, TX.

15. **Sampson, V.** (2019, November). Argument-Driven Inquiry in Science for Leaders: Three-Dimensional Investigations that Integrate Science, Literacy and Mathematics. Presentation given at CAST 2019 of the Science Teachers Association of Texas (STAT). Fort Worth,

TX.

14. **Sampson, V.** (2019, November). Argument-Driven Inquiry in Grades 3-5: Three-Dimensional Investigations that Integrate Science, Literacy and Mathematics. Presentation given at CAST 2019 of the Science Teachers Association of Texas (STAT). Fort Worth, TX.

13. **Sampson, V.** (2019, November). Argument-Driven Inquiry in the Life, Physical, and Earth-Space Sciences: Lab Investigations for Grades 6–8. Presentation given at CAST 2019 of the Science Teachers Association of Texas (STAT). Fort Worth, TX.

12. **Sampson, V.** (2019, November). TABT Presents: Argument-Driven Inquiry in Biology and Life Science. Presentation given at CAST 2019 of the Science Teachers Association of Texas (STAT). Fort Worth, TX.

11. **Sampson, V.** (2019, October). Argument-Driven Engineering. Presentation given at 2019 California Science Teachers Association Conference. San Jose, CA.

10. **Sampson, V.** (2019, October). Argument-Driven Inquiry in grades 3-5. Presentation given at 2019 California Science Teachers Association Conference. San Jose, CA.

9. **Sampson, V.** (2018, November). Argument-Driven Engineering: A New Instructional Model for Teaching Texas Essential Knowledge and Skills (TEKS) using Engineering Practices. Presentation given at CAST 2018 of the Science Teachers Association of Texas (STAT). Dallas, TX.

8. **Sampson, V.** (2018, November). Transforming your Lab Activities in Elementary School with Argument-Driven Inquiry. Presentation given at CAST 2018 of the Science Teachers Association of Texas (STAT). Dallas, TX.

7. **Sampson, V.** (2018, November). Transforming your Lab Activities in Middle School with Argument-Driven Inquiry. Presentation given at CAST 2018 of the Science Teachers Association of Texas (STAT). Dallas, TX.

6. **Sampson, V.** (2018, November). Transforming your Lab Activities in High School with Argument-Driven Inquiry. Presentation given at CAST 2018 of the Science Teachers Association of Texas (STAT). Dallas, TX.

5. **Sampson, V.** (2018, April). Argument-Driven Inquiry as a way to transform laboratory experiences. Presentation given at 2018 STEMCON Conference. Chicago, IL.

4. **Sampson, V.** (2016, October). Argument-Driven Inquiry as a way to transform laboratory experiences. Presentation given at 2016 Texas Charter School Conference. Austin, TX.

3. **Sampson, V.** (2015, November). Argument-Driven Inquiry as a way to transform laboratory experiences. Presentation given at CAST 2015 of the Science Teachers

Association of Texas (STAT). Fort Worth, TX.

2. **Sampson, V.,** Hutner, T. & Enderle, P. (2014, November). Argument-Driven Inquiry as a way to transform laboratory instruction. Presentation given at CAST 2014 of the Science Teachers Association of Texas (STAT). Dallas, TX.

1. **Sampson, V.** and Clark, D. (2005, November). Examining the connection between students' epistemological commitments and scientific argumentation using the NSAAQ. Presentation given at the inaugural conference of the *Southwest Consortium for Innovations in Psychology in Education* (SCIPIE). Las Vegas, NV.

Invited Presentations at National or International Conferences

23. **Sampson, V.** (2021, July). How to maximize the benefits and limit the challenges of integrating engineering into the science curriculum using Argument-Driven Engineering. Presentation given at the 2021 National Conference of the *National Science Educators Leadership Association* (NSELA). [Conference held online due to COVID-19]

22. **Sampson, V.** (2020, April). NSTA Press Session: Argument-Driven Inquiry in Grades 3-5. Presentation scheduled to be given at the 2020 National Conference of the *National Science Teaching Association* (NSTA). Boston, MA. [Conference canceled due to COVID-19]

21. **Sampson, V.** (2020, April). NSTA Press Session: Argument-Driven Inquiry in Biology, Chemistry, and Physics. Presentation scheduled to be given at the 2020 National Conference of the *National Science Teaching Association* (NSTA). Boston, MA. [Conference canceled due to COVID-19]

20. **Sampson, V.** (2020, March). Argument-Driven Inquiry in grades 3-5. Presentation scheduled to be given at the *National Science Education Leadership Association* (NSELA) 2020 conference. Boston, MA. [Conference canceled due to COVID-19]

19. **Sampson, V.** (2019, July). Argument-Driven Inquiry in grades 3-5. Presentation given at the ChemEd 2019 conference. Naperville, IL.

18. **Sampson, V.** (2019, July). Argument-Driven Inquiry in High School Chemistry. Presentation given at the ChemEd 2019 conference. Naperville, IL.

17. **Sampson, V.** (2019, April). NSELA Sponsored Session: Fostering Meaningful PLC Meetings. Presentation given at the 2019 National Conference of the *National Science Teachers Association* (NSTA). St. Louis, MO.

16. **Sampson, V.** (2019, April). Argument-Driven Engineering. Presentation given at the 2019 National Conference of the *National Science Teachers Association* (NSTA). St. Louis, MO.

15. **Sampson, V.** (2019, April). NSTA Press Session: Argument-Driven Inquiry in Grades 3-5. Presentation given at the 2019 National Conference of the *National Science Teachers Association* (NSTA). St. Louis, MO.

14. **Sampson, V.** (2019, April). NSTA Press Session: Argument-Driven Inquiry in Biology, Chemistry, and Physics. Presentation given at the 2019 National Conference of the *National Science Teachers Association* (NSTA). St. Louis, MO.

13. **Sampson, V.** (2018, July). NSTA Press Session: Argument-Driven Inquiry in the Elementary Classroom. Presentation given at the 2018 National Science Teachers Association (NSTA) STEM Forum and Expo. Philadelphia, PA.

12. **Sampson, V.** (2018, July). NSTA Press Session: Argument-Driven Inquiry in the Life, Physical, and Earth/Space Sciences. Presentation given at the 2018 National Science Teachers Association (NSTA) STEM Forum and Expo. Philadelphia, PA.

11. **Sampson, V.** (2018, March). NSTA Press Session: Argument-Driven Inquiry in the Life, Physical, and Earth/Space Sciences. Presentation given at the 2018 National Conference of the *National Science Teachers Association* (NSTA). Atlanta, GA.

10. **Sampson, V.** (2018, March). NSTA Press Session: Argument-Driven Inquiry in Biology, Chemistry, and Physics. Presentation given at the 2018 National Conference of the *National Science Teachers Association* (NSTA). Atlanta, GA.

9. **Sampson, V.** (2017, April). NSTA Press Session: Argument-Driven Inquiry in Life Science and Physical Science. Presentation given at the 2017 National Conference of the *National Science Teachers Association* (NSTA). Los Angeles, CA.

8. **Sampson, V.** (2017, April). NSTA Press Session: Argument-Driven Inquiry in Biology, Chemistry, and Physics. Presentation given at the 2017 National Conference of the *National Science Teachers Association* (NSTA). Los Angeles, CA.

7. Grooms, J. and **Sampson, V.** (2015, March). NSTA Press Session: Argument-Driven Inquiry as a way to transform laboratory instruction. Presentation given at the 2015 National Conference of the *National Science Teachers Association* (NSTA). Chicago, IL.

6. **Sampson, V.** and Schleigh, S. (2015, March). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation given at the 2015 National Conference of the *National Science Teachers Association* (NSTA). Chicago, IL.

5. **Sampson, V.** (2014, July). Argumentation in science education: A way to help students learn science and develop literacy skills at the same time. Presentation given at the *Smithsonian Science Education Center's 2014 K-12 Science Education Strategic Planning Institute*. Alexandria, VA.

4. **Sampson, V.** (2014, June). Argumentation in science education: A way to help students learn science and develop literacy skills at the same time. Presentation given at the *Smithsonian Science Education Center's 2014 Science Education Institute for Leadership Development and Strategic Planning*. Albuquerque, NM.

3. **Sampson, V.**, Grooms, J., & Enderle, P. (2013, April). NARST Session: Argument-Driven Inquiry as a way to help students learn how to engage in scientific inquiry and understand the nature of scientific inquiry. Presentation given on behalf of the *National Association of Research in Science Teaching* (NARST) at the 2013 National Conference of the *National Science Teachers Association (*NSTA). San Antonio, TX.

2. **Sampson, V.** & Schleigh, S. (2013, April). NSTA Press: Teaching and learning biology through scientific argumentation. Presentation given 2013 National Conference of the *National Science Teachers Association* (NSTA). San Antonio, TX.

1. **Sampson, V.** (2006, February). Collaborative knowledge construction during scientific argumentation in technology enhanced learning environments. Presentation given at the *National Science Foundation's Center for Learning and Teaching (CLT) Principal Investigators Meeting*, Washington D.C.

Invited Presentations at National or International Symposia

1. **Sampson, V.** (2009, August). Promoting and supporting scientific argumentation in the classroom: The development of new instructional approaches and the assessment of student learning. Presentation given at the 1st doctoral symposium on science education at the 2009 meeting of the *European Science Education Research Association,* Istanbul, Turkey.

Invited Presentations at Regional or State Conferences

94. **Sampson, V.** (2021, February). How to make learning experiences rigorous and equitable with Argument-Driven Inquiry. Presentation given at the 2021 Conference of the Hoosier Association of Science Teacher (HASTI). [Conference held online due to COVID-19].

93. **Sampson, V.** (2021, February). Argument-Driven Inquiry in remote and in-person contexts. Presentation given at the 2021 Conference of the Hoosier Association of Science Teacher (HASTI). [Conference held online due to COVID-19].

92. **Sampson, V.** (2021, February). Argument-Driven Inquiry in grades 3-5. Presentation given at the 2021 Conference of the Hoosier Association of Science Teacher (HASTI). [Conference held online due to COVID-19].

91. **Sampson, V.** (2021, February). How to make learning experiences rigorous and equitable with Argument-Driven Inquiry. Presentation given at the 2021 Conference of the Georgia Science Teacher Association (GSTA). [Conference held online due to COVID-19].

90. **Sampson, V.** (2021, February). Argument-Driven Inquiry in remote and in-person contexts. Presentation given at the 2021 Conference of the Georgia Science Teacher Association (GSTA). [Conference held online due to COVID-19].

89. **Sampson, V.** (2021, February). Argument-Driven Inquiry in grades 3-5. Presentation given at the 2021 Conference of the Georgia Science Teacher Association (GSTA). [Conference held online due to COVID-19].

88. **Sampson, V.** (2020, October). Argument-Driven Engineering. Presentation given at the 2020 Conference of the Oregon Science Teacher Association (OSTA) and Washington Science Teachers Association (WSTA). [Conference held online due to COVID-19].

87. **Sampson, V.** (2020, October). Argument-Driven Inquiry in grades 9-12. Presentation given at the 2020 Conference of the Oregon Science Teacher Association (OSTA) and Washington Science Teachers Association (WSTA). [Conference held online due to COVID-19].

86. **Sampson, V.** (2020, October). Argument-Driven Inquiry in grades 6-8. Presentation given at the 2020 Conference of the Oregon Science Teacher Association (OSTA) and Washington Science Teachers Association (WSTA). [Conference held online due to COVID-19].

85. **Sampson, V.** (2020, October). Argument-Driven Inquiry in grades 3-5. Presentation given at the 2020 Conference of the Oregon Science Teacher Association (OSTA) and Washington Science Teachers Association (WSTA). [Conference held online due to COVID-19].

84. **Sampson, V.** (2019, November). Argument-Driven Engineering. Presentation given at the 2019 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

83. **Sampson, V.** (2019, November). Argument-Driven Inquiry in grades 9-12. Presentation given at the 2019 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

82. **Sampson, V.** (2019, November). Argument-Driven Inquiry in grades 6-8. Presentation given at the 2019 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

81. **Sampson, V.** (2019, November). Argument-Driven Inquiry in grades 3-5. Presentation given at the 2019 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

80. **Sampson, V.** (2019, March). Argument-Driven Inquiry in grades 9-12. Presentation given at the 2019 Regional Conference of the Science Teachers Association of New York State (STANYS). Suffolk, NY.

79. **Sampson, V.** (2019, March). Argument-Driven Inquiry in grades 6-8. Presentation given at the 2019 Regional Conference of the Science Teachers Association of New York State (STANYS). Suffolk, NY.

78. **Sampson, V.** (2019, March). Argument-Driven Inquiry in grades 3-5. Presentation given at the 2019 Regional Conference of the Science Teachers Association of New York

State (STANYS). Suffolk, NY.

77. **Sampson, V.** (2019, March). Integrating Literacy into 3D Instruction. Presentation given at the 2019 Michigan Science Teachers Association (MSTA) Conference. Grand Rapids, MI.

76. **Sampson, V.** (2019, March). Argument-Driven Inquiry in Grades 3-5. Presentation given at the 2019 Michigan Science Teachers Association (MSTA) Conference. Grand Rapids, MI.

75. **Sampson, V.** (2019, March). Argument-Driven Inquiry in Biology, Chemistry, and Physics. Presentation given at the 2019 Michigan Science *Teachers Association* (MSTA) Conference. Grand Rapids, MI.

74. **Sampson, V.** (2019, March). Argument-Driven Inquiry in Life Science, Physical Science, and Earth-Space Science. Presentation given at the 2019 Michigan Science Teachers Association (MSTA) Conference. Grand Rapids, MI.

73. **Sampson, V.** (2019, February). Argument-Driven Engineering. Presentation given at the 2019 Georgia Science Teachers Association (GSTA) Conference. Columbus, GA.

72. **Sampson, V.** (2019, February). Argument-Driven Inquiry in Grades 3-5. Presentation given at the 2019 Georgia Science Teachers Association (GSTA) Conference. Columbus, GA.

71. **Sampson, V.** (2019, February). Argument-Driven Inquiry in Biology, Chemistry, and Physics. Presentation given at the 2019 Georgia Science Teachers Association (GSTA) Conference. Columbus, GA.

70. **Sampson, V.** (2019, February). Argument-Driven Inquiry in Life Science, Physical Science, and Earth-Space Science. Presentation given at the 2019 Georgia Science *Teachers Association* (GSTA) Conference. Columbus, GA.

69. **Sampson, V.** (2018, December). NSTA Press Session: Argument-Driven Inquiry in Life Science, Physical Science, and Earth-Space science. Presentation given at the 2018 Central Region Conference of the *National Science Teachers Association* (NSTA). Charlotte, NC.

68. **Sampson, V.** (2018, November). NSTA Press Session: Argument-Driven Inquiry in Grades 3-5. Presentation given at the 2018 Central Region Conference of the *National Science Teachers Association* (NSTA). Charlotte, NC.

67. **Sampson, V.** (2018, November). NSTA Press Session: Argument-Driven Inquiry in Biology, Chemistry and Physics. Presentation given at the 2018 Central Region Conference of the *National Science Teachers Association* (NSTA). Charlotte, NC.

66. **Sampson, V.** (2018, November). NSTA Press Session: Argument-Driven Inquiry in Life Science, Physical Science, and Earth-Space Science. Presentation given at the 2018 Eastern

Region Conference of the *National Science Teachers Association* (NSTA). National Harbor, MD.

65. **Sampson, V.** (2018, November). NSTA Press Session: Argument-Driven Inquiry in Grades 3-5. Presentation given at the 2018 Eastern Region Conference of the *National Science Teachers Association* (NSTA). National Harbor, MD.

64. **Sampson, V.** (2018, November). NSTA Press Session: Argument-Driven Inquiry in Biology, Chemistry and Physics. Presentation given at the 2018 Eastern Region Conference of the *National Science Teachers Association* (NSTA). National Harbor, MD.

63. **Sampson, V.** (2018, November). Three dimensional science instruction. Presentation given at Colorado Science Conference. Denver, CO.

62. **Sampson, V.** (2018, November). Argument-Driven Inquiry in the High School Classroom. Presentation given at Colorado Science Conference. Denver, CO.

61. **Sampson, V.** (2018, November). Argument-Driven Inquiry in the Middle School Classroom. Presentation given at Colorado Science Conference. Denver, CO.

60. **Sampson, V.** (2018, November). Argument-Driven Inquiry in the Elementary Classroom. Presentation given at Colorado Science Conference. Denver, CO.

59. **Sampson, V.** (2018, November). Argument-Driven Inquiry in grades 3-5. Presentation given at the 2018 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

58. **Sampson, V.** (2018, November). Argument-Driven Inquiry as a way to transform high school labs. Presentation given at the 2018 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

57. **Sampson, V.** (2018, November). Argument-Driven Inquiry as a way to transform middle school labs. Presentation given at the 2018 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

56. **Sampson, V.** (2018, October). NSTA Press Session: Argument-Driven Inquiry in Life Science, Physical Science, and Earth-Space Science. Presentation given at the 2018 Western Region Conference of the *National Science Teachers Association* (NSTA). Reno, NV.

55. **Sampson, V.** (2018, October). NSTA Press Session: Argument-Driven Inquiry in Grades 3-5. Presentation given at the 2018 Western Region Conference of the *National Science Teachers Association* (NSTA). Reno, NV.

54. **Sampson, V.** (2018, October). NSTA Press Session: Argument-Driven Inquiry in Biology, Chemistry and Physics. Presentation given at the 2018 Western Region Conference of the

National Science Teachers Association (NSTA). Reno, NV.

53. **Sampson, V.** (2017, December). NSTA Press Session: Argument-Driven Inquiry in Biology. Presentation given at the 2017 Southern Region Conference of the *National Science Teachers Association* (NSTA). New Orleans, LA.

52. **Sampson, V.** (2017, December). NSTA Press Session: Argument-Driven Inquiry in Chemistry. Presentation given at the 2017 Southern Region Conference of the *National Science Teachers Association* (NSTA). New Orleans, LA.

51. **Sampson, V.** (2017, December). NSTA Press Session: Argument-Driven Inquiry in Physical and Life Science. Presentation given at the 2017 Southern Region Conference of the *National Science Teachers Association* (NSTA). New Orleans, LA.

50. **Sampson, V.** (2017, November). NSTA Press Session: Argument-Driven Inquiry in Biology. Presentation given at the 2017 Central Region Conference of the *National Science Teachers Association* (NSTA). Milwaukee, WI.

49. **Sampson, V.** (2017, November). NSTA Press Session: Argument-Driven Inquiry in Chemistry. Presentation given at the 2017 Central Region Conference of the *National Science Teachers Association* (NSTA). Milwaukee, WI.

48. **Sampson, V.** (2017, November). NSTA Press Session: Argument-Driven Inquiry in Physical and Life Science. Presentation given at the 2017 Central Region Conference of the *National Science Teachers Association* (NSTA). Milwaukee, WI.

47. **Sampson, V.** (2017, November). Argument-Driven Inquiry in grades 3-5. Presentation given at the 2017 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

46. **Sampson, V.** (2017, November). Argument-Driven Inquiry as a way to transform labs. Presentation given at the 2017 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

45. **Sampson, V.** (2017, February). Argument-Driven Inquiry as a way to transform labs. Presentation given at the 2017 Conference of the Georgia Science Teacher's Association (GSTA). Stone Mountain, GA.

44. **Sampson, V.** (2016, December). NSTA Press Session: Argument-Driven Inquiry in Biology. Presentation given at the 2016 Eastern Region Conference of the *National Science Teachers Association* (NSTA). Columbus, OH.

43. **Sampson, V.** (2016, December). NSTA Press Session: Argument-Driven Inquiry in Chemistry. Presentation given at the 2016 Eastern Region Conference of the *National Science Teachers Association* (NSTA). Columbus, OH.

42. **Sampson, V.** (2016, December). NSTA Press Session: Argument-Driven Inquiry in Physical and Life Science. Presentation given at the 2016 Eastern Region Conference of the *National Science Teachers Association* (NSTA). Columbus, OH.

41. **Sampson, V.** (2016, November). NSTA Press Session: Argument-Driven Inquiry in Biology. Presentation given at the 2016 Western Region Conference of the *National Science Teachers Association* (NSTA). Portland, OR.

40. **Sampson, V.** (2016, November). NSTA Press Session: Argument-Driven Inquiry in Chemistry. Presentation given at the 2016 Western Region Conference of the *National Science Teachers Association* (NSTA). Portland, OR.

39. **Sampson, V.** (2016, November). NSTA Press Session: Argument-Driven Inquiry in Physical and Life Science. Presentation given at the 2016 Midwest Region Conference of the *National Science Teachers Association* (NSTA). Portland, OR.

38. **Sampson, V.** (2016, October). NSTA Press Session: Argument-Driven Inquiry in Biology. Presentation given at the 2016 Midwest Region Conference of the *National Science Teachers Association* (NSTA). Minneapolis, MN.

37. **Sampson, V.** (2016, October). NSTA Press Session: Argument-Driven Inquiry in Chemistry. Presentation given at the 2016 Midwest Region Conference of the *National Science Teachers Association* (NSTA). Minneapolis, MN.

36. **Sampson, V.** (2016, October). NSTA Press Session: Argument-Driven Inquiry in Physical and Life Science. Presentation given at the 2016 Eastern Region Conference of the *National Science Teachers Association* (NSTA). Minneapolis, MN.

35. **Sampson, V.** (2016, October). Argument-Driven Inquiry as a way to transform laboratory experiences. Presentation given at the 2016 Arkansas Department of Education Conference. Little Rock, AR.

34. **Sampson, V.** (2016, September). Argument-Driven Inquiry in Life and Physical Science. Presentation given at the Zoo-Nique 2 SOS Science Conference. Kansas City, MO.

33. **Sampson, V.** (2016, February). Developing local assessments with increased validity. Presentation given at the 2016 Conference of the *Texas Science Education Leadership Association* (TSELA). Austin, TX.

32. **Sampson, V.** (2015, October). NSTA Press Session: Scientific Argumentation in Biology. Presentation given at the 2015 Western Region Conference of the *National Science Teachers Association* (NSTA). Reno, NV.

31. **Sampson, V.** (2015, October). NSTA Press Session: Argument-Driven Inquiry in Biology and Chemistry. Presentation given at the 2015 Western Region Conference of the *National Science Teachers Association* (NSTA). Reno, NV.

30. **Sampson, V.** (2015, February). NSTA Press Session: Argument-Driven Inquiry as a way to transform laboratory instruction. Presentation given at the 2015 Southern Region Conference of the *National Science Teachers Association* (NSTA). Orlando, FL.

29. **Sampson, V.** & Schleigh, S. (2015, February). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation given at the 2015 Southern Region Conference of the *National Science Teachers Association* (NSTA). Orlando, FL.

28. **Sampson, V.** (2014, December). NSTA Press Session: Argument-Driven Inquiry as a way to transform laboratory instruction. Presentation given at the 2014 Western Region Conference of the *National Science Teachers Association* (NSTA). Long Beach, CA.

27. **Sampson, V.** & Schleigh, S. (2014, December). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation given at the 2014 Western Region Conference of the *National Science Teachers Association* (NSTA). Long Beach, CA.

26. **Sampson, V.** (2014, October). Helping students learn the practices, crosscutting concepts and the core ideas of science: What does current research suggest. Presentation given at the *Smithsonian Science Education Center's 2014 Laser I3 SPI*. Greensboro, NC.

25. **Sampson, V.** (2014, October). NSTA Press Session: Argument-Driven Inquiry as a way to transform laboratory instruction. Presentation given at the 2014 Eastern Region Conference of the *National Science Teachers Association* (NSTA). Richmond, VA.

24. **Sampson, V.** & Schleigh, S. (2014, October). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation given at the 2014 Eastern Region Conference of the *National Science Teachers Association* (NSTA). Richmond, VA.

23. **Sampson, V.** (2014, September). Argument-Driven Inquiry as a way to transform laboratory instruction. Presentation given at the 2014 Biology Round Robin PDA of the *Texas Regional Collaborative* (TRC). Austin, TX.

22. **Sampson, V.** (2014, February). Argument-Driven Inquiry: A way to foster argumentation inside classroom and foster the development of science proficiency. Presentation given at the 2014 Conference for Nebraska Educational Service Unit 13. Scottsbluff, NE.

21. **Sampson, V.** (2014, February). Writing refutational texts in science: Why is it important and how we can help students learn how to do it better. Presentation given at the 2014 Conference for Nebraska Educational Service Unit 13. Scottsbluff, NE.

20. **Sampson, V.** and Schleigh, S. (2013, December). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation given at the 2013 Central Region Conference of the *National Science Teachers Association* (NSTA). Denver, CO.

19. Schleigh, S. and **Sampson, V.** (2013, November). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation at the 2013 Eastern Region Conference of the *National Science Teachers Association (*NSTA). Charlotte, NC.

18. **Sampson, V.** and Schleigh, S. (2013, October). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation given at the 2013 Western Region Conference of the *National Science Teachers Association* (NSTA). Portland, OR.

17. **Sampson, V.** (2013, October). Argumentation in science classrooms: A way to help students develop science proficiency. Presentation given at the 2013 Conference of the *Florida Association of Science Supervisors* (FASS). Miami, FL.

16. Enderle, P., Grooms, J., & **Sampson, V.** (2012, December). Argumentation and Argument-Driven Inquiry in High School. Presentation given at the Third Florida Center for Research in Science, Technology, Engineering, and Mathematics (FCR-STEM) Conference. St. Petersburg, FL.

15. Grooms, J., Enderle, P., & **Sampson, V.,** (2012, December). Argumentation and Argument-Driven Inquiry in Middle School. Presentation given at the Third Florida Center for Research in Science, Technology, Engineering, and Mathematics (FCR-STEM) Conference. St. Petersburg, FL.

14. Schleigh, S. and **Sampson, V.** (2012, December). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation at the 2012 Western Regional Conference of the *National Science Teachers Association (*NSTA). Phoenix, AZ.

13. **Sampson, V.** and Schleigh, S. (2012, November). NSTA Press Session: Teaching and learning biology through scientific argumentation. Presentation given at the 2012 Southern Region Conference of the *National Science Teachers Association (*NSTA). Atlanta, GA.

12. **Sampson, V.**, Grooms, J., & Enderle, P. (2012, November). NARST Session: Argument-Driven Inquiry as a way to help students learn how to engage in scientific inquiry and understand the nature of scientific inquiry. Presentation given on behalf of the *National Association of Research in Science Teaching* (NARST) at the 2012 Southern Region Conference of the *National Science Teachers Association (*NSTA). Atlanta, GA.

11. Schleigh, S. and **Sampson, V.** (2012, October). NSTA Press: Teaching and learning biology through scientific argumentation. Presentation given at the 2012 Northern Region Conference of the *National Science Teachers Association (*NSTA). Louisville, KY.

10. **Sampson, V.**, Enderle, P., Hester, M., & Grooms, J. (2012, March). The development of science proficiency through argument focused lab instruction in high school biology. Presentation given at the Marvalene Hughes Research in Education Symposium held at Florida State University. Tallahassee, FL.

9. Enderle, P., Grooms, J., & **Sampson, V.** (2011, December). Argumentation and Argument-

Driven Inquiry in High School. Presentation given at the Second Florida Center for Research in Science, Technology, Engineering, and Mathematics (FCR-STEM) Conference. Destin, FL.

8. Grooms, J., Enderle, P., & **Sampson, V.,** (2011, December). Argumentation and Argument-Driven Inquiry in Middle School. Presentation given at the Second Florida Center for Research in Science, Technology, Engineering, and Mathematics (FCR-STEM) Conference. Destin, FL.

7. **Sampson, V.** (2009, December). NARST Session: Science teachers and scientific argumentation - Trends in practice and beliefs. Presentation given on behalf of the *National Association of Research in Science Teaching* (NARST) at the 2009 Western Region conference of the *National Science Teachers Association (*NSTA). Phoenix, AZ.

6. Gaboardi, M. and **Sampson, V.** (2009, October). Hot topics in science education. Presentation given at the 2009 Leadership in Mathematics and Science Curriculum, Instruction, & Assessment State Conference sponsored by the Florid Center for Research in Science Technology Engineering and Mathematics (FCR-STEM). Jacksonville, Fl.

5. **Sampson, V.** and Lanier, K. (2009, October). Advanced CPALMS. Presentation given at the at the 2009 Leadership in Mathematics and Science Curriculum, Instruction, & Assessment State Conference sponsored by the Florid Center for Research in Science Technology Engineering and Mathematics (FCR-STEM). Jacksonville, Fl.

4. Razzouk, R., Sheridan, D., Cornwell, S., **Sampson, V.,** & Lanier, K. (2009, October). The Florida Standards Database and CPALMS. Presentation given at the 2009 Leadership in Mathematics and Science Curriculum, Instruction, & Assessment State Conference sponsored by the Florid Center for Research in Science Technology Engineering and Mathematics (FCR-STEM). Jacksonville, Fl.

3. **Sampson, V.** (2009, May). Chemistry in the Home: A new high school curriculum module developed by the Florida Department of Health (FDOH). Presentation given at Mulberry High School for Polk County Public Schools. Mulberry, FL.

2. Razzouk, R., **Sampson, V.,** Sheridan, D, & Lanier, K. (2009, May). CPALMS. Presentation given at the annual meeting of the Florida Association of Science Supervisors (FASS). Orlando, FL.

1. Sheridan, D. and **Sampson, V.** (2007, November). Florida Center for Research in Science, Technology, Engineering, and Mathematics (FCR-STEM) and the new Sunshine State Science Standards. Presentation given at the 39th Annual Conference of the Florida Association of District Instructional Material Administrators (FADIMA). St. Augustine, Florida.

Invited Workshops

73. **Sampson, V.** (2019, November). An introduction to Argument-Driven Inquiry. A two-day

teacher professional development workshop provided at Near East South Asia Council of Overseas Schools (NESA) 2019 Fall Training Institute. Bahrain.

73. **Sampson, V.** (2019, November). An introduction to Argument-Driven Inquiry. A one-day teacher professional development workshop provided at the 2019 Conference of the Science Teachers Association of New York State (STANYS). Rochester, NY.

72. **Sampson, V.** (2019, July). Argument-Driven Inquiry and Argument-Driven Mathematics. A two-day teacher professional development workshop provided for California State University-Chico. Chico, CA.

71. **Sampson, V.** (2019, June). Argument-Driven Mathematics. A two-day teacher professional development workshop provided for Manor ISD. Manor, TX.

70. **Sampson, V.** (2019, March). Writing Argument-Driven Engineering Design Challenges. A three-day teacher professional development workshop provided for Round Rock ISD. Round Rock, TX.

69. **Sampson, V.** (2019, March). Argument-Driven Engineering. A two-day teacher professional development workshop provided for Round Rock ISD. Round Rock, TX.

68. **Sampson, V.** (2019, February). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Twin Rivers USD. Sacramento, CA.

67. **Sampson, V.** (2019, February). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Surrey Schools. Surrey, British Columbia, Canada.

66. **Sampson, V.** (2019, February). Argument-Driven Engineering. A one-day teacher professional development workshop provided for Round Rock ISD. Round Rock, TX.

65. **Sampson, V.** (2018, November). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Region School District 10. Burlington, CT.

64. **Sampson, V.** (2018, September). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Wentzville School District. Wentzville, MO.

63. **Sampson, V.** (2018, July). Argument-Driven Inquiry. A four-day teacher professional development workshop provided for Lee County School District. Fort Myers, FL.

62. **Sampson, V.** (2017, November). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for Lee County School District. Fort Myers, FL.

61. **Sampson, V.** (2017, October). Argument-Driven Inquiry. A one-day teacher professional

development workshop provided for the Denver Museum of Nature and Science. Denver, CO.

60. **Sampson, V.** (2017, August). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for the University of New England. Portland, ME.

59. **Sampson, V.** (2016, November). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Vancouver Public Schools. Vancouver, WA.

58. **Sampson, V.** (2016, October). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for ESC 4. Houston, TX.

57. **Sampson, V.** (2016, October). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Blue Springs School District. Blue Springs, MO.

56. **Sampson, V.** (2016, October). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Fulton County Schools. Atlanta, GA

55. **Sampson, V.** (2016, October). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Aldine ISD. Houston, TX.

54. **Sampson, V.** (2016, August). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Lovejoy ISD. Lovejoy, TX.

53. **Sampson, V.** (2016, August). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Clayton County Schools. Atlanta, GA.

52. **Sampson, V.** (2016, June). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Orange County Schools. Huntington Beach, CA.

51. **Sampson, V.** (2016, June). Argument-Driven Inquiry. A four-day teacher professional development workshop provided for Fulton County Schools. Atlanta, GA.

50. **Sampson, V.** (2016, June). Argument-Driven Inquiry. A four-day teacher professional development workshop provided for Clayton County Schools. Atlanta, GA.

49. **Sampson, V.** (2016, March). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Fulton County Schools. Atlanta, GA.

48. **Sampson, V.** (2016, January). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for Charlotte County Schools. Fort Myers, FL.

47. **Sampson, V.** (2015, October). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Region 13 Education Service Center. Austin, TX.

46. **Sampson, V.** (2015, October). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for Charlotte County Schools. Fort Myers, FL.

45. **Sampson, V.** and Grooms, J. (2015, August). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Coppell Independent School District. Coppell, TX.

44. **Sampson, V.** (2015, August). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for McKinney ISD. McKinney, TX.

43. **Sampson, V.** and Grooms, J. (2015, August). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for Amarillo Independent School District. Amarillo, TX.

42. **Sampson, V.** (2015, August). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for Region 13 Education Service Center. Austin, TX.

41. **Sampson, V.** and Enderle, P. (2015, July). Argument-Driven Inquiry. A four-day teacher professional development workshop provided for Hillsborough County Public Schools. Tampa, FL

40. **Sampson, V.** (2015, June). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for McKinney ISD. McKinney, TX.

39. **Sampson, V.** and Grooms, J. (2015, June). Argument-Driven Inquiry in Elementary Schools. A two-day teacher professional development workshop provided for Atlanta Public Schools. Atlanta, GA.

38. **Sampson, V.** (2015, June). Argument-Driven Inquiry. A three-day teacher professional development workshop provided for the Texas Regional Collaboratives. Austin, TX.

37. **Sampson, V.,** Grooms, J. and Enderle P. (2015, May). Argument-Driven Inquiry. A thee-day teacher professional development workshop provided for Atlanta Public Schools. Atlanta, GA.

36. **Sampson, V.** (2015, May). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for McKinney ISD. McKinney, TX.

35. **Sampson, V.** (2015, May). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for Clear Creek ISD. Houston, TX.

34. **Sampson, V.** (2015, February). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for the Texas Science Education Leadership Association. Austin, TX.

33. **Sampson, V**. (2014, December). Argument-Driven Inquiry in High School Science. A two-

day teacher professional development workshop provided for the Genesee Intermediate School District. Flint, Michigan.

32. **Sampson, V**. (2014, December). Argument-Driven Inquiry in Middle School Science. A two-day teacher professional development workshop provided for the Genesee Intermediate School District. Flint, Michigan.

31. **Sampson, V.** (2014, November). Introduction to Argument-Driven Inquiry. A one-day teacher professional development workshop provided for the Arizona Science Education Leadership Association, Arizona Science Teachers Association, and the Arizona Department of Education. Phoenix, AZ.

30. **Sampson, V.** & Enderle, P. (2014, August). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for Old Dominion University. Norfolk, VA.

29. **Sampson, V**. and Grooms, J. (2014, July). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for the Leon County School District. Tallahassee, FL.

28. **Sampson, V.** (2014, July). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for Old Dominion University. Norfolk, VA.

27. **Sampson, V**., Enderle, P., and Grooms, J. (2014, June). Argument-Driven Inquiry. A four-day teacher professional development workshop provided for Hillsborough County Schools. Tampa, FL.

26. **Sampson, V**., Enderle, P., and Grooms, J. (2014, June). Argument-Driven Inquiry. A four-day teacher professional development workshop provided for Hillsborough County Schools. Tampa, FL.

25. **Sampson, V.** (2014, April). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for Hillsborough County Schools. Tampa, FL.

24. **Sampson, V.** (2014, April). Argument-Driven Inquiry. A two-day teacher professional development workshop provided for the Rialto School District. Rialto, CA.

23. **Sampson, V.**, Enderle, P., and Grooms (2014, March). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for the Polk County School District. Lakeland, FL.

22. **Sampson, V.**, Enderle, P., and Grooms (2013, December). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for the Polk County School District. Lakeland, FL.

21. **Sampson, V.** (2013, November). Argumentation in Biology. A one day professional development workshop provided for the Miami-Dade school District. Miami, FL.

20. **Sampson, V.** & Grooms, J. (2013, November). Improving the teaching and learning of science in elementary classrooms. A two-day teacher professional development workshop provided for the Leon County School District. Tallahassee, FL.

19. **Sampson, V.** & Enderle, P. (2013, October). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for the Volusia County School District. Daytona Beach, FL.

18. **Sampson, V.** & Stramitis, A. (2013, September). Argument-Driven Inquiry in Middle School Science Classrooms. A two-day teacher professional development workshop provided for the Leon County School District. Tallahassee, FL.

17. **Sampson, V.** & Enderle, P. (2013, September). Argument-Driven Inquiry in Chemistry and Physics Classrooms. A two-day teacher professional development workshop provided for the Leon County School District. Tallahassee, FL.

16. **Sampson, V.** (2013, June). Developing valid, reliable, and useful formative assessments. A one day professional development workshop provided for the Leon County School District. Tallahassee, FL.

15. **Sampson, V.** and Grooms, J. (2013, May). Argument-Driven Inquiry. A one-day teacher professional development workshop provided for the Volusia County School District. Daytona Beach, FL.

14. **Sampson, V.**, Grooms, J., & Enderle, P. (2013, January). Argument-Driven Inquiry for Science Achievement. A two-day teacher professional development workshop provided for the Leon County School District. Tallahassee, FL.

13. **Sampson, V.** & Enderle, P. (2012, August). Writing and thinking in science. A four-day teacher professional development workshop provided for the Leon County School District. Tallahassee, FL.

12. **Sampson, V.** (2012, July). Developing valid, reliable, and useful formative assessments. A two-day professional development workshop provided for the Leon County School District. Tallahassee, FL.

11. **Sampson, V.,** Southerland, S., Grooms, J., & Enderle, P. (2012, May). *Improving the teaching and learning of Biology.* A series of six one-day professional development workshops provided for the Leon County School District. Tallahassee, FL.

10. **Sampson, V.** (2011, July). *How to use the Science Writing Heuristic and Argument-Driven Inquiry to Promote Learning in the Science Classroom.* A three-day professional development workshop provided for the Leon High School Science Department (Leon County School District). Tallahassee, FL.

9. **Sampson, V.** (2011, June). *How to use the Science Writing Heuristic and Argument-Driven Inquiry to Promote Learning in the Science Classroom.* A three-day professional development workshop provided for the Godby High School Science Department (Leon County School District). Tallahassee, FL.

8. **Sampson, V.** (2010, August). *How to use the Science Writing Heuristic and Argument-Driven Inquiry to Promote Learning in the Science Classroom.* A three-day professional development workshop provided for the Godby High School Science Department (Leon County School District). Tallahassee, FL.

7. **Sampson, V.** (2010, July). *How to use technology and reform-based instructional models such as Argument-Driven Inquiry to improve student learning in science.* A two-week professional development workshop provided for the Panhandle Area Education Consortium. Tallahassee, FL.

6. **Sampson, V.** (2010, June). *Writing and Learning in the Science Classroom: Two instructional models.* A two-day professional development workshop provided for the Cobb Middle School Science Department (Leon County School District). Tallahassee, FL.

5. **Sampson, V.** (2009, June). *How to Promote and Support Writing and Learning in the Science Classroom*. A one-week professional development workshop provided for the Leon County School District. Tallahassee, FL.

4. **Sampson, V.** (2008, June). *Modeling Scientific Argumentation in the Classroom*. A one-day professional development workshop provided for the Leon County School District. Tallahassee, FL.

3. **Sampson, V.** (2005, March). *Web-based Instruction in Science Education using WISE*. A one-day professional development workshop provided for the Dysart School District, Phoenix, Arizona.

2. **Sampson, V.** (2002, June). *Teaching Science through Inquiry*. A one-week teacher professional development workshop provided for the Kent School District. Kent, Washington.

1. **Sampson, V.** (2001, January). *Technology Integration in Student-Centered Classrooms*. A one-day teacher professional development workshop provided for the Renton School District. Renton, Washington.

Refereed Workshops

5. Tippens, D. Bryan, L., Zeidler, D., vanDriel, J., Sampson, V., Schwarz, C., Moore, F., and Varelas, M. (2018, April). Scholarly Writing for Early Career Scholars. A one-day workshop presented at the 2018 international conference of the *National Association of Research in Teaching*. Atlanta, GA.

4. **Sampson, V**., Grooms, J., Hutner, T. & Murphy, A. (2017, March). Argument-Driven

Inquiry: Transforming Laboratory Experiences So Students Can Use Core Ideas, Crosscutting Concepts, and Science Practices to Make Sense of Natural Phenomena. A one-day workshop presented at the 2017 national conference of the *National Science Teacher Association*. Los Angeles, CA.

3. **Sampson, V**., Enderle, P., & Murphy, A. (2016, March). Argument-Driven Inquiry: Transforming Laboratory Experiences So Students Can Use Core Ideas, Crosscutting Concepts, and Science Practices to Make Sense of Natural Phenomena. A one-day workshop presented at the 2016 national conference of the *National Science Teacher Association*. Nashville, TN

2. Berland, L., Gotwals, A., Henderson, B., Jimenez-Aleixandre, M., Knight, A., McNeill, K., Osborne, J., **Sampson, V**., & Zembal-Saul, C. (2015, April). Key Challenges and future directions for research on scientific argumentation. A one-day workshop presented at the 2015 international conference of the *National Association of Research in Teaching*. Chicago, IL.

1. **Sampson, V.** & McClellan, M. (2001, July). *Using Modeling to Meet the Science EALRs*. A one-day teacher professional development workshop presented at the 2001 Washington State Science Teacher Association Conference. Seattle, WA.

Invited Lectures

23. **Sampson, V.** (2015, October). Assessing argumentation in the classroom: Challenges and opportunities. *Cary Institute of Ecosystem Studies*. Millbrook, NY.

22. **Sampson, V.** (2015, September). Assessing argumentation in the classroom: Challenges and opportunities. *ReSTEM Institute at University of Missouri*. Columbia, MO.

21. **Sampson, V.** (2015, September). Research the can promote and support the development of science proficiency. *Dean's Advisory Board, College of Education, University of Texas at Austin*. Austin, TX.

20. **Sampson, V.** (2015, February). Scientific Argumentation: Helping students identify, evaluate, and support claims. *Smithsonian Science Education Center*. Alexandria, VA

19. **Sampson, V.** (2014, July). Science: What should students know about it and how can we help students understand it better? *National High Magnetic Field Laboratory at Florida State Universi*ty. Tallahassee, FL.

18. **Sampson, V.** (2013, June). Science: What should students know about it and how can we help students understand it better? *National High Magnetic Field Laboratory at Florida State University*. Tallahassee, FL.

17. **Sampson, V.** (2013, May). Improving instruction and assessment in science. *Leon County School District*. Tallahassee, FL.

16. **Sampson, V.** (2012, August). Argument-Driven Inquiry as a way to promote the development of science proficiency. *Leon County School District*. Tallahassee, FL.

15. **Sampson, V.** & Grooms, J. (2012, March). Assessment that can promote and support student learning in Biology. *Leon County School District*. Tallahassee, FL.

14. **Sampson, V.** (2011, October). Inquiry in science education. *Florida Center for Research in Science, Technology, Engineering, and Mathematics education* (FCR-STEM) at Florida State University. Tallahassee, FL.

13. **Sampson, V.** (2011, July). Inquiry in science education. *National High Magnetic Field Laboratory at Florida State University*. Tallahassee, FL.

12. **Sampson, V.** (2011, June). Transforming traditional laboratory activities using the Argument-Driven Inquiry instructional model. *Panhandle Area Educational Consortium*. Chipley, FL. Available to view on the Florida Education Channel (FEC) at http://www.fec.tv/.

11. **Sampson, V.** (2011, May). Argument-Driven Inquiry in the middle and high school laboratory: The further development and refinement of an instructional model. *Learning System Institute at Florida State University*. Tallahassee, FL.

10. **Sampson, V.** (2011, February). The Argument-Driven Inquiry instructional model. *Department of Instructional Systems at Florida State University*. Tallahassee, FL.

9. **Sampson, V.** (2010, October). Classroom management and inquiry-based instruction: Challenges and solutions. National Science Teacher Association (NSTA) Web Seminar on classroom management sponsored by the *NSTA New Science Teacher Academy*, Arlington, VA.

8. **Sampson, V.** (2010, September). Argument-Driven Inquiry in the middle and high school laboratory: A research project. *FSUS Board of Directors*. Tallahassee, FL.

7. **Sampson, V.** (2010, February). Argument-Driven Inquiry: Current Research and Future Directions. *Friday Institute for Educational Innovation* and the *College of Education* at *North Carolina State University*. Raleigh, NC.

6. **Sampson, V.** (2009, September). Classroom management and inquiry-based instruction: Challenges and solutions. National Science Teacher Association (NSTA) Web Seminar on classroom management sponsored by the *NSTA New Science Teacher Academy*, Arlington, VA.

5. **Sampson, V.** (2009, September). Argument-Driven Inquiry and Science Proficiency: Current Research and Future Directions. *Department of Teaching & Learning* in the *College of Education* at *The University of Iowa*. Cedar Rapids, IA.

4. **Sampson, V.** (2009, September). Learning from and about argumentation with Argument-Driven Inquiry. *FSUS Board of Directors*. Tallahassee, FL.

3. **Sampson, V.** (2009, June). Inquiry in science education. *National High Magnetic Field Laboratory* at Florida State University. Tallahassee, FL.

2. **Sampson, V.** (2009, June). The role of explanation and argumentation in Science. *Young Scholars Program at Florida State University*. Tallahassee, FL.

1. **Sampson, V.** (2008, September). Inquiry-based instruction and classroom management: Challenges and solutions. National Science Teacher Association (NSTA) Web Seminar on classroom management sponsored by the *NSTA New Science Teacher Academy*, Arlington, VA.

Curriculum Development

Face-to-Face

2. Walker, J., Zimmerman, C. & **Sampson, V.** (2009). *General Chemistry I Laboratory (CHM 1045L).* Developed in collaboration with faculty in the Division of Math and Science at Tallahassee Community College, Tallahassee, FL

1. **Sampson, V.** (2009). *Chemistry in the Home: Potential Hazards and Solutions*. Developed for the Florida Department of Health (FDOH).

Online

2. Clark, D, & **Sampson, V.** (2007). *Thermodynamics: Probing Your Surroundings* (Physical Science). Developed as part of the Technology-Enhanced Learning in Science (TELS) Project, National Science Foundation Grant 0334199. Available online at http://wise.berkeley.edu

1. Clark, D, & **Sampson, V.** (2007). *What about the Wolves?* (Biology). Developed as part of the Technology-Enhanced Learning in Science (TELS) Project, National Science Foundation Grant 0334199. Available online at http://wise.berkeley.edu

Contracts and Grants

17. **Title:** Supplement to Promoting Scientific Explorers Among Students with Learning Disabilities: The Design and Testing of a Grade 2 Science Program Focused on Earth's Systems
Source: National Science Foundation, Discovery Research K-12 competition. (Award Number: NSF 1720958; OSP Number: 201603954-001)
Purpose: Research
PI: Christian Doabler
Co-PIs: Sarah Powell, William Therrien (UVA), and **Victor Sampson**
Award Amount: $752,993 (additional funding awarded on 7/3/2019)
Project Period: 7/2019-5/2021

16. **Title:** Supplement to Promoting Scientific Explorers Among Students with Learning Disabilities: The Design and Testing of a Grade 2 Science Program Focused on Earth's Systems
Source: National Science Foundation, Discovery Research K-12 competition. (Award Number: NSF 1720958; OSP Number: 201603954-001)
Purpose: Research
PI: Christian Doabler (UT-Austin)
Co-PIs: Sarah Powell, William Therrien (UVA), and Victor Sampson
Award Amount: $591,865 (additional funding awarded on 5/10/2019)
Project Period: 5/2019-5/2021

15. **Title:** Promoting Scientific Explorers Among Students with Learning Disabilities: The Design and Testing of a Grade 2 Science Program Focused on Earth's Systems
Source: National Science Foundation, Discovery Research K-12 competition. (Award Number: NSF 1720958; OSP Number: 201603954001)
Purpose: Research
PI: Christian Doabler
Co-PIs: Sarah Powell, William Therrien (UVA), and Victor Sampson
Award Amount: $1,141,108
Project Period: 6/2017-5/2021

14. **Title:** Supplement to The Development of a New Instructional Approach to Teach Engineering in Middle School Science Classrooms
Source: National Science Foundation, EEC Program (Award Number: NSF 1607916; OSP Number: 2-1503424-001)
Purpose: Research
PI: Victor Sampson
Co-PIs: María Gonzáles-Howard, Catherine Riegle-Crumb, and Richard Crawford
Award Amount: $68,288 (additional funding awarded on 9/27/2018)
Project Period: 9/2018-8/2019

13. **Title:** 2017-2018 Texas Mathematics and Science Partnership (TxMSP) Professional Development Network, Cycle 2
Source: Texas Education Agency (TEA), Mathematics and Science Partnerships (MSP) Program (OSP Number: 201700692-001)
Purpose: Service
PI: Victor Sampson
Co-PIs: Carol Fletcher and Amy Werst
Award Amount: $15,683,704
Project Period: 2/2017-9/2018

12. **Title:** The Development of a New Instructional Approach to Teach Engineering in Middle School Science Classrooms
Source: National Science Foundation, EEC Program (Award Number: NSF 1607916; OSP Number: 2-1503424-001)
Purpose: Research

PI: Victor Sampson
Co-PIs: Stephanie Rivale, Todd Hutner, and Richard Crawford
Award Amount $349,712
Project Period: 9/2016-8/2018

11. **Title:** 2016-2017 Texas Mathematics and Science Partnership (TxMSP) Professional Development Network, Cycle 2
Source: Texas Education Agency (TEA), Mathematics and Science Partnerships (MSP) Program (OSP Number: 201503977-001)
Purpose: Service
PI: Victor Sampson
Co-PIs: Carol Fletcher (UT-Austin) and Amy Werst (UT-Austin)
Award Amount $15,015,460
Project Period: 1/2016-8/2017

10. **Title:** Integration of Environmental Chemistry and Computing to Advance Evidence-based Reasoning, Problem Solving, and Computational Thinking in Middle School Students
Source: National Science Foundation, STEM+C Program (Award Number: NSF 1543022; OSP Number: 201501196-001)
Purpose: Research
PI: Deborah Tater (Virginia Tech)
Co-PIs: Victor Sampson, Stephanie Rivale, and F. Etzkorn (Virginia Tech)
Award Amount: $1,400,000 ($640,163 subcontract to UT-Austin)
Project Period: 9/2015-8/2017

9. **Title:** 2015-2016 Texas Mathematics and Science Partnership (TxMSP) Professional Development Network, Cycle 2
Source: Texas Education Agency (TEA), Mathematics and Science Partnerships (MSP) Program (OSP Number: 2014034080-061)
Purpose: Service
PI: Victor Sampson
Co-PIs: Carol Fletcher and Amy Werst
Award Amount $11,311,813
Project Period: 11/2015-9/2016

8. **Title:** Argument-Driven Inquiry in the Middle and High School Laboratory: The refinement and further development of a new instructional model
Source: Institute of Education Science (U.S. Department of Education), Mathematics and Science Education Program (Award Number: R305A100909)
Purpose: Research
PI: Victor Sampson
Co-PIs: Sherry Southerland (FSU) and Ellen Granger (FSU)
Award Amount: $1,062,214
Project Period: 7/2010-6/2014

7. **Title:** Habitat Tracker: Learning about Scientific Inquiry through Digital Journaling in Wildlife Centers
Source: Institute of Education Science (U.S. Department of Education), Education Technology Program (Award Number: R305A100782)
Purpose: Research
PI: Paul Marty (FSU)
Co-PIs: Victor Sampson, Sherry Southerland (FSU), and Ian Douglas (FSU)
Award Amount: $1,156,500
Project Period: 7/2010-6/2014

6. **Title:** Learning to Teach for Equity in Science and Mathematics Classrooms: The Florida State University Noyce Scholarship Program
Source: National Science Foundation NOYCE Scholarship Program (Award Number: 0934702)
Purpose: Research
PI: Joe Travis (FSU)
Co-PIs: Victor Sampson, Katy Clark (FSU), Sherry Southerland (FSU), and Ellen Granger (FSU)
Award Amount: $726,260
Project Period: 9/2009-8/2014

5. **Title:** Science Teachers and Scientific Argumentation
Source: FSU Council on Research and Creativity (CRC), First Year Assistant Professor (FYAP) Program
Purpose: Research
PI: Victor Sampson
Award Amount: $16,000
Project Period: 5/2008-8/2008

4. **Title:** Mobile Multi-Media Decision Theater
Source: Salt River Project (SRP) Learning Grant Program
Purpose: Service
PI: Victor Sampson
Award Amount: $5,000
Project Period: 9/2006-6/2007

3. **Title:** Enhancing the Science Curriculum of Lindbergh High School through the use of Technology and Inquiry-Based Instruction
Source: Boeing's "Flight to the Future" Grant Program
Purpose: Service
PI: Victor Sampson
Award Amount: $15,000
Project Period: 9/2001-6/2002

2. **Title:** The Lindbergh High School Teacher Leadership Project
Source: Bill and Melinda Gates Foundation

Purpose: Service
PI: Victor Sampson
Award Amount: $10,000
Project Period: 9/2000-6/2001

1. **Title:** Family Science Nights
Source: Washington Mutual Mini-grant Program
Purpose: Service
PI: Victor Sampson
Award Amount: $1,000
Project Period: 9/1999-6/2000

SERVICE

The University of Texas at Austin

University

8/2019	Member, Internal Review Committee: 2019 NSF Advancing Informal STEM Learning, Office of the Vice President for Research

College of Education

1/2016 – 4/2016	Member, 2016 Office of Education Research Services (OERS) Evaluation Committee

Department of Curriculum and Instruction

9/2021 – 12/2021	Member, 2021 STEM Faculty Search Committee
9/2021 – 9/2023	Member, Executive Committee
9/2020 – 5/2021	Co-Chair, Merit Revision Committee
9/2020 – 9/2021	Chair, Travel Awards Committee
9/2019 – 9/2021	Member, Executive Committee
9/2019 – 3/2020	Co-Chair, 2019 STEM Faculty Search Committee
9/2017 – 9/2019	Member, Executive Committee
9/2017 – 9/2019	Member, Travel Awards Committee
9/2016 – 3/2017	Member, 2016 STEM Faculty Search Committee
9/2015 – 3/2016	Chair, 2015 STEM Faculty Search Committee

9/2015 – 9/2017	Member, Executive Committee
8/2014 – 9/2017	Member, Programs and Courses Committee

UTeach Program

9/2018 – Present	Member, Steering Committee
6/2015 – Present	Member, Appeals Committee
8/2014 – 9/2016	Member, Steering Committee

Florida State University

University

8/2012 – 6/2013	Member, Quality Enhancement Plan Committee
2/2012	Panelist, Academic Honor Policy Hearing Panel

College of Education

1/2013 – 4/2013	Member, 2013 Office of Research Editor Search Committee
8/2012 – 8/2014	Member, Review Committee for the COE Planning Grant and Multidisciplinary Grant programs
8/2012 – 8/2014	Member (STE representative), Council of Research in Education
8/2011 – 8/2014	Mentor, COE Voluntary Research Collaborator Program
8/2009 – 9/2011	Member, FSUS Advisory Committee
11/2008 – 5/2010	Commencement Marshal

School of Teacher Education

8/2013 – 8/2014	Member, Curriculum Committee
8/2012 – 8/2014	Coordinator, Science Education Major
8/2012 – 8/2014	Member, Graduate Studies Committee
8/2011 – 8/2012	Member, Student Life Committee
8/2010 – 8/2011	Member, Budget Committee
1/2009 – 6/2010	Member, Appeals Committee
8/2007 – 8/2011	Coordinator, Science Education Doctoral Program

10/2007 – 1/2009	Member, On Campus Master's Degree Program Revision Project

FSU-Teach Program

9/2012 – 2/2013	Member, 2012 FSU-Teach Math Education Search Committee
8/2008 – 8/2014	Member, Steering Committee
4/2010 – 6/2010	Chair, 2010 FSU-Teach Master Teacher Search Committee
10/2009 – 8/2011	Chair, New Interdisciplinary Ph.D. Program in Mathematics and Science Education Development Project
2/2008 – 8/2008	Data Liaison to the UTeach Institute

Arizona State University

University

8/2005 – 6/2006	Mentor, Preparing Future Faculty Program

Department of Curriculum and Instruction

5/2004 – 12/2005	Committee Member, Elementary Science Methods Curriculum Development Project

University of Washington

College of Education

8/2001 – 6/2002	Cooperating Teacher, Teacher Education Program

The Profession

Editorships

3/2016 – Present	Coeditor of the Learning Section for *Science Education*
1/2015 – 1/2019	Associate Editor for the *Journal of Research in Science Teaching*

Editorial Board Memberships

4/2013 – 1/2015	*Journal of Research in Science Teaching* (JRST)
7/2013 – 3/2016	*Science Education* (SE)
4/2009 – 4/2012	*Journal of Research in Science Teaching* (JRST)
8/2008 – 8/2010	*American Education Research Association* (AERA) Division C, Section 4 (Science)

Reviewer for Refereed Journals

9/2013 – Present	Educational Researcher (ER)
1/2011 – Present	International Journal of Science Education (IJSE)
8/2010 – Present	Instructional Science (IS)
2/2010 – Present	Eurasian Journal of Educational Research (EJER)
12/2009 – Present	Research in Science Education (RiSE)
10/2007 – 6/2013	Science Education (SE)
6/2003 – Present	Journal of Research in Science Teaching (JRST)

Advisory Board Memberships

9/2017 – Present	XLABs (East Carolina State University)
9/2017 – Present	Learning through Collaborative Design (Florida State University)
9/2017 – 8/2021	Project: DiaLOG (Arizona State University and UC-Berkeley)
9/2014 – 8/2018	Mission Hydroscience Project (University of Missouri)
7/2011 – 6/2015	Constructing and critiquing arguments: Diagnostic assessment for information and action systems project (Lawrence Hall of Science at UC-Berkeley and Boston College)
2/2011 – 8/2016	Center for Integrating Research and Learning (FSU Magnet Lab)

External Tenure Reviews

2020	University of Arkansas
2019	Arizona State University Northern Arizona University Oregon State University
2017	Northern Arizona University
2014	West Virginia University

External Examiner for PhD Thesis

2019	University of Alberta

Professional Association Committee Memberships

1/2020 - present	Member, Planning Committee of the Taking Stock of Science Standards Implementation: A summit for the *National Academics of Science, Engineering, and Medicine* (NASEM).
1/2016 – 12/2018	Member, Early Career Research Award Committee for the *National Association of Research in Science Teaching* (NARST)
1/2015 – 12/2018	Member, National Science Teacher Association (NSTA) Committee on Research in Science Education.
4/2009 – 4/2012	Member of the Outstanding Doctoral Research Award Committee for the *National Association of Research in Science Teaching* (NARST)

Review Panels

2020	National Science Foundation (NSF) IUSE program. National Science Foundation (NSF) DRK-12.
2019	National Science Foundation (NSF) IUSE program.
2014	National Science Foundation (NSF) CAREER program.
2012	National Science Foundation (NSF) DRK-12 program.

Other Service to Professional Associations

3/2014	Discussant for the related paper set, *Building Learning Progression for Scientific Argumentation*. Session held at the 2014 International Conference of the National Association of Research in Science Teaching (NARST). Pittsburg, PA.
4/2013	Discussant for the related paper set, *Assessing Scientific Argumentation: Challenges and Future Directions*. Session held at the 2013 International Conference of the National Association of Research in Science Teaching (NARST). Rio Grande, Puerto Rico.
4/2012	Chair of the symposium: Argument focused instruction and science proficiency. Symposium held at the 2012 international conference of the *National Association of Research in Science Teaching* (NARST). Indianapolis, IN.
4/2011	Organizer and Chair (along with Leema Berland) of the symposium, Exploring Classroom Based Scientific Argumentation: A Methodological Discussion. Symposium held at the Annual International Conference of the American Education Research Association (AERA), New Orleans, LA.

4/2009	Presider of SC-*Paper Set*: *Development of Critical Thinking Skills in Secondary Science*. Session held at the Annual International Conference of the National Association of Research in Science Teaching (NARST). Garden Grove, CA.
4/2009	Presider of SC-*Paper Set*: *Teaching and Learning Chemistry: Lessons from the Field*. Session held at the Annual International Conference of the National Association of Research in Science Teaching (NARST). Garden Grove, CA.
5/2007	Organizer and Chair (along with Douglas Clark) of the symposium, *Evaluating the Quality of Dialogical Argumentation in CSCL: Moving beyond an Analysis of Formal Structure*. Symposium held at the 2007 Computer Supported Collaborative Learning (CSCL) conference, New Brunswick, NJ.
5/2006	Organizer and Chair (along with Douglas Clark) of the symposium, *Using Computers and Online Environments to Support Argumentation*. Symposium held at the Annual Conference of the American Education Research Association (AERA), San Francisco, CA.
5/2006	Organizer and Chair (along with Douglas Clark) of the symposium, *International perspectives on argumentation research in science education: Achievements, current boundaries, and next steps*. Symposium held at the Annual Conference of the National Association for Research in Science Teaching (NARST), San Francisco, CA.
4/2006	Round Table Discussion Presider of *Session 12A*: *Argumentation Research in Science Education*. Session held at the Annual Conference of the National Association for Research in Science Teaching (NARST), San Francisco, CA.
9/2005	Proposal Reviewer for the 2006 Annual Meeting of the American Educational Research Association.

Public Schools

8/2011 – 5/2014	Organizer of a tutoring program in partnership with Godby High School (Leon School District). As part of the program, approximately 50 FSU-Teach students spend at least four hours each semester tutoring students who are performing poorly in math or science.
5/2010	Member of the Science Selection Committee for the *2010 Presidential Teaching Awards*.

10/2008 – 5/2009 Advisor for professional development activities for the science department at Rickards High School.

9/2008 – 5/2009 Advisor for professional development activities for the science department at Lincoln High School.

9/2001 – 6/2002 Member of the Office of the Superintendent for Public Instruction (OSPI) Performance Assessment Development Cadre (State of Washington Office of the Superintendent for Public Instruction).

Consultation

6/2015 – 5/2018 *Building Bridges.* Funded by the Virginia Department of Education. Role: **Science Teacher Professional Development Provider**. The goal of this project is to provide professional development for 3 cohorts of elementary school from Hampton city Schools about Argument-Driven Inquiry. PI: Joanna Garner, Old Dominion University.

6/2014 – 5/2015 *Discourse and Argumentation (D'N'A)*. Funded by the Virginia Department of Education. Role: **Science Teacher Professional Development Provider**. The goal of this project is to provide professional development for 54 middle school teachers from two high-needs divisions about Argument-Driven Inquiry. PI: Joanna Garner, Old Dominion University.

9/2011 – 8/2017 *Columbus Region Academy of Future teachers of STEM (CRAFT-STEM)*. Funded by the National Science Foundation – Noyce Scholarship Program. Role: **External Evaluator**. This program was awarded $1,196,790.00 to increase the number of students graduating in STEM disciplines with middle grades or secondary teaching certification. PI: Timothy Howard, Columbus State University.

8/2010 – 7/2011 *STEM21id²: SySTEMic Change to implement 21st Century Instructional Design and Delivery.* Funded by the Florida Department of Education – Enhancing Education Through Technology (EETT) Program. Role: **Science Teacher Professional Development Provider**. This program was awarded $750,000.00 to help high school science teachers in high-needs, rural Local Education Agencies (LEAs) in the big bend region acquire the technological resources and skills need to implement the Next Generation Sunshine State Standards. PI: Anthony Cooley, Panhandle Area Educational Consortium (PAEC).

1/2010 – 12/2013 *The Noyce Scholars Program for Mathematics Teaching at Hofstra University*. Funded by the National Science Foundation – Noyce Scholarship Program. Role: **External Evaluator**. This program was awarded $898,976.00 to increase the number of qualified and capable

	new mathematics teachers teaching in New York. PI: Blidi Stemm, Hofstra University.
7/2010 – 12/2010	Educational Software Development: *BUC Technologies LLC*
1/2010 – 5/2010	State K-12 Science Standards Revision: *Massachusetts Department of Education.*
1/2010	Workshop development: Using writing to teach science. *Michigan Math Science Centers Network.*
11/2009	Summit on Mathematics and Science Education: "Addressing the Crisis of Mathematics and Science Achievement in Florida and the Nation." Hosted by the Lastinger Center for Learning in the College of Education at the University of Florida.
9/2008 – 1/2010	*Florida Partnership to Rejuvenate and Optimize Math and Science Education (PROMiSE)*. Funded by the Florida Department of Education Mathematics and Science Partnership – Solutions for Florida's Future Grant Program. Role: **Science Specialist** for the Curriculum Planning and Learning Management System (CPALMS) project. Florida Promise was awarded $8,000,000.00 to address the need to improve the mathematics and science achievement of students through professional development. PI: Gladis Kersaint, University of South Florida.
9/2008	Assessment Instrument Development: Florida Teacher Competency Exam (FTCE). *Evaluation Systems of Group of Pearson*.
7/2008	Reviewer: PROMiSE 6-8 Science Teacher Professional Development Module. Partnership to Rejuvenate and Optimize Mathematics and Science Education in Florida (PROMiSE).
4/2008	Assessment Instrument Development: Florida Teacher Competency Exam (FTCE). *Evaluation Systems of Group of Pearson*.
4/2008	New Curriculum Development: PROMiSE Teacher Professional Development Module. Partnership to Rejuvenate and Optimize Mathematics and Science Education in Florida (PROMiSE).