

CURRICULUM VITAE
Louis S. Nadelson, Ph.D.

RESEARCH INTERESTS

- STEM Education – All areas
- Quantitative Research Methods
- Teacher Development and Instructional Practices
- Affective, Cognitive, and Cultural Influences on Learning
- Inquiry and Design Curriculum and Instruction
- Conceptual Change
- Innovation in Education

EDUCATION

- 2007 Ph.D. University Nevada, Las Vegas. Educational Psychology. Dissertation: *Preservice Teachers' Understanding of Evolution, Nature of Science, and Situations of Chance*. Chair: Dr. Gale M. Sinatra.
- 2001 Ed.D. Portland State University (**course work completed only**). Curriculum and Instruction concentration on science and mathematics in teacher education.
- 1991 M.Ed. Western Washington University. Educational administration, concentration in instructional technology and curriculum development. *A Hypercard Stack for Teaching Physics*. Chair: Dr. Anthony Jongajan.
- 1987 B.A. The Evergreen State College. Concentrations: computing, mathematics and physics.
- 1986 Secondary Teaching Certificate. University of Puget Sound.
- 1983 B.S. Colorado State University. Majors: biological science, physical science. Minors: chemistry, biochemistry.

PROFESSIONAL HISTORY

Post-secondary Experience

- 2017-pres. Director of Sponsored Programs and Academic Research, Colorado Mesa University, Grand Junction, CO
- 2016-2017 Instructor, Computer Science, Mathematics and Statistics, Colorado Mesa University, Grand Junction, CO
- 2014-2016 Director, Center for the School of the Future, Emma Eccles Jones College of Education and Human Services, Utah State University, Logan, UT.
- 2014-2016 Associate Professor, Teacher Education and Leadership, Emma Eccles Jones College of Education and Human Services, Utah State University, Logan, UT.
- 2012- 2014 Associate Professor, Curriculum Instruction Foundational Studies, College of Education, Boise State University, Boise, ID. MS STEM Education program coordinator, facilitator STEM Education Research Scholar Group, Associate Director - Center for School Improvement and Policy Studies.
- 2011-2014 Director, IDoTeach, Colleges of Education, Arts and Sciences, and Engineering, Boise State University, Boise, ID.
- 2008-2012 Assistant Professor, Curriculum Instruction Foundational Studies, College of Education Boise State University, Boise, ID.
- 2007-2008 Assistant Professor, College of Education, University of Central Florida, Orlando, FL.
- 2002-2007 Part Time Instructor, The University of Nevada Las Vegas, NV, mathematics and statistics.
- 1994-2001 Adjunct Faculty, The Evergreen State College, Olympia, WA, mathematics, statistics, and physics.

2000- 2001 Director, Quantitative Reasoning Center, The Evergreen State College, Olympia, WA.

1998-2001 Adjunct Faculty, Curriculum Developer, University of Washington, Seattle, WA, K-12 mathematics and science.

K-12 Experience

2006-2007 Coordinator Magnet Programs, Clark County School District, Las Vegas, NV. Management of aviation and medical magnet programs for 800 students in a 3200 student high school.

2002-2006 Secondary Teacher, Clark County School District, Las Vegas, NV. Instructor of Physics, AP Physics, and Earth Science.

1993-1994 Secondary Teacher, Upward Bound, The Evergreen State College. Instructor of science and computers for college bound at risk minority students.

1987-2001 Secondary Teacher, Chehalis School District, Olympia School District. Instructor of science, mathematics, and computer science, district and regional staff development instructor.

GRANT ACTIVITY

Funded (Total since 2008 = \$10,725,111)

- Co-PI Advancing Informal STEM Education (NSF AISL). Submitted with Samford, L. (PI) & Mahoney, R. (Co-PI). *Advancing STEM Learning by Developing and Fostering Expertise in Media Making*. \$174,151, Awarded August 2017.
- PI Research on the Formation of Engineers (NSF RFE). With Bouwma-Gearhart, J. (Co-PI) & Villanueva, I. (Co-PI). *Collaborative Research: The Making of Engineers: Influence of Makerspaces on the Preparation of Engineers*. \$399,995, Awarded April 2017.
- PI Utah Governor's Office of Economic Development. *Utah STEM Action Center Technology Evaluation*. March 2016 – July 2016, \$457,000.
- Co-PI STEM +C, National Science Foundation. With Tofel-Gruhl, C. (PI). *Integration of Computing with Electronic Textiles to Improve Teaching and Learning of Electronics in Secondary Science*. Sept. 2015, \$1,078,533.
- Co-PI Idaho State Department of Education Math Science Partnership (ISDOE MSP). With Hamilton, M. (PI), Parratt, W. (Co-PI), Seifert, A. (Co-PI), & Hall, C. (Co-PI). *Integrated STEM Innovation, Idaho Core Standards and Practices, and Place-based Learning; A Statewide Plan for the i-STEM Professional Development*. June 2016- Sept 2018, \$485,000.
- Co-PI Idaho National Laboratory. *i-STEM Summer Institute*. Donation, 2015, \$185,000.
- PI Idaho National Laboratory. *STEM –U! Summer Institute*. Donation, 2015, \$20,000.
- Co-PI GEM USU. With Larese-Casanova, M. (PI) *Assessing Academic, Stewardship, and Behavioral Benefits of Nature-Based STEM Education*. Jan 2015- Dec 2016, \$10,000.
- Co-PI ISDOE MSP. With Parratt, W. (PI) & Seifert, A. (Co-PI). *Integrated STEM, 21st Century Skills, and Place-Based Learning: A Statewide Plan for the i-STEM Professional Development Initiative*. May 2015- Sept 2016, \$375,000.
- PI ISDOE, *Family Math Professional Development*, 2014, \$25,000.
- PI Micron Foundation, *IDo-Teach*. Donation, 2014, \$300,000.
- PI - ISDOE MSP. With Seifert, A. (Co-PI). *Integrated STEM, 21st Century Skills, and Place-Based Learning: A Statewide Plan for the i-STEM Professional Development Initiative*. 2014, \$420,000.
- PI – Idaho National Laboratory, *i-STEM Summer Institute*. Donation, December 2013, \$190,000.
- Co-PI NSF REU –With Ubic, R. (PI). *Summer Research in Material Sciences at Boise State University for First Year Undergraduates*. 2013-2015, \$200,000.

- Co-PI CS 10 K- Submitted with Joshi A. (PI), Jain, A. (Co-PI), & Anderson, T. (Co-PI). *IDoCode: A Sustainable Model for Computer Science in Idaho High Schools*. 2013-2017, \$1,000,000.
- PI ISDOE MSP. With Seifert, A. (Co-PI). *Integrated STEM, 21st Century Skills, and Place-Based Learning: A Statewide Plan for the i-STEM Professional Development Initiative*. 2013, \$375,000.
- PI Idaho National Laboratory, *i-STEM Summer Institute*. Donation, June 2012, \$240,000.
- PI NSF Noyce II. With Brown, E. (Co-PI) & Moll, A. (Co-PI). *Noyce Phase II: Trajectory to Teaching from Sparking Interest to Fostering Induction*. 2012-2016, \$799,732.
- Co-Director — Submitted with Cavey L. *IDo-Teach – Micron Foundation*. 2011-2013, \$300,000.
- PI Idaho National Laboratory, *i-STEM Summer Institute*. Donation, 2011, \$170,000.
- Co-PI NSF Innovation through Institutional Integration - I³. With Andrews, S. (PI), McGuire, S. (Co-PI), Viskupic, K. (Co-PI), Schrader, C. (Co-PI), Pyke, P. (SI), & Morgan, B. (SI). *Boise State University STEM Central STATION Strategic Transformation Aligning Teaching, Immersion, Outreach and kNowledge*. 2009-2016, \$1,250,000.
- PI Idaho National Laboratory, *i-STEM Summer Institute*. Donation, 2010, \$175,000.
- Co-PI NSF REU – With Warner, D. (PI) & Brown, E. (Co-PI). *Summer Research in Chemistry at Boise State University for First Year Undergraduates*. 2009-2011, \$200,000.
- Co-PI Boise State University College of Health Science, Department of Nursing. With Nadelson, S. (PI) & Veltman, M. (Co-PI). *Understanding and supporting undergraduate and graduate nursing student needs in developing eportfolios at Boise State University*. 2010, \$1700.
- PI ISDOE MSP. With Seifert, A. (Co-PI), Moll, A. (Co-PI), Bonneville School District (LEA), Caldwell School District (LEA), Meridian School District (LEA), and Plummer Worley School District (LEA). *Enhancing Teacher Pedagogical Content Knowledge of Inquiry-Based STEM Curriculum and Instruction: An i-STEM Initiative*. 2010-2012, \$645,000.
- Co-PI NSF MSP – START. With Moll, A. (PI), Pyke, P. (Co-PI), Morgan, B. (Co-PI), Barney, K. (Co-PI) & Schrader, R. (Co-PI). *STEM Education for All: Building a Vision for Sustaining Innovation and Prosperity*. 2009-2011, \$300,000.
- PI NSF NOYCE –Supplemental award request. August 2009, \$96,000.
- Co-PI US Department of Education. With Callahan, J. (PI). *The Idaho SySTEMic Solution*. 2008, \$191,000, 2009, \$190,000, 2010, \$390,000.
- PI Kauffman– Campbell Collaboration, *A Meta-Analysis of the Influence of Inquiry-Based Science Interventions on Middle School Students' Cognitive, Behavioral, and Affective Outcome*. 2008-2010, \$55,000.

SCHOLARLY PUBLICATIONS (*denotes graduate student, ** denotes undergraduate student)

Refereed

- Bartholomew, S., Reeve, E., Goodridge, W., Stewardson, G., Lee, V., Nadelson, L. (In Press). Mobile devices, self-directed learning, and achievement in Technology and Engineering Education classrooms during a STEM activity. *Journal of Technology Education*.
- Bartholomew, S., Nadelson, L. S., Goodridge, W., & Reeve, E. (2018) Adaptive Comparative Judgment as a tool for assessing open-ended design problems and model eliciting activities. *Educational Assessment*. Online -First

- Bartholomew, S. R., Reeve, E., Veon, R., Goodridge, W., Lee, V. R., & Nadelson, L. (2017). Relationships Between Access to Mobile Devices, Student Self-Directed Learning, and Achievement. *Journal of Technology Education*, 29(1), 2.
- Nadelson, L. S., **Berg, W., **Fox, B., **Grandbouche, P., **Harris, M., **Kroschel, T. L., & **Sandoval, S. (2017). Snap, tweet and post: College student social media perceptions and heutagogic practices and uses. *International Journal of Higher Education*, 6(4), 11-27.
- *Smith, J. L. & Nadelson, L. S. (2017). Finding alignment: Perceptions and integration of the NGSS practices by elementary teachers. *School Science and Mathematics Journal*, 117(5), 194-203.
- Villanueva, I. & Nadelson, L.S. (2017). Are we preparing our students to become engineers of the future or the past? *International Journal of Engineering Education* 33(2), 639-652.
- Christiansen, M. A., Nadelson, L., Cuch, M. M., Etchberger, L. H., Kingsford, T. A., & Woodward, L. O. (2017). Flipped learning in synchronously-delivered, geographically-dispersed general chemistry classrooms. *Journal of Chemical Education*, 94(5), 662-667.
- Christiansen, M. A., Nadelson, L. S. & Kingsford, T. A. (2017). Using synchronous videoconferencing to flip a general chemistry course at multiple geographic sites. *Journal of Chemical Education*
- Tofel-Gruhl, C., Callahan, C., M., & Nadelson, L. S. (2017). Comparative analyses of discourse in specialized STEM school classes. *Journal of Educational Research*. 110(3), 294-307.
- Nadelson, L. S., & Seifert, A. L. (2017). Integrated STEM defined: Contexts, challenges and the future. *Journal of Educational Research*, 110(3), 221-223.
- Nadelson, S., Nadelson, L., Scadden, M., Zigmond, T., & Thomas, H. (2017). Nursing advising using a MOOC: A case study. *Current Issues in Emerging eLearning*, 4(2), 1.
- Christiansen, M. A.; Lambert, A. M.; Nadelson, L. S.; Dupree, K. M.; Kingsford, T. A. (2017). In-class versus at-home quizzes: Which is better? A flipped learning study in a two-site synchronously-broadcast organic chemistry course. *Journal of Chemical Education*, 94(2), 157-163.
- *Sias, C. M., Nadelson, L. S. *Juth, S., & Seifert, A. L. (2016). The best laid plans: Educational innovation in elementary teacher generated integrated STEM lesson plans. *Journal of Educational Research*, 110(3), 227-238.
- Nadelson, L.S. & Jones, S. H. (2016). One mission, two systems, and a big gap: The interaction of K-12 and post-secondary educators to support Common Core State Standards. *Teacher Education and Practice*, 29(1), 76-89.
- Nadelson, L. S., *Arp, M., *Campbell, J., *Dupree, K., *Durfee, M., *Poll, T., *Schoepf, S., & *Thronsen, J. (2016). Are they using the data? Teacher perceptions of, practice with, and preparation to use assessment data. *International Journal of Education*, 8(3), 50-70.
- Nadelson, S., Nadelson, L., Zygmund, T., Scadden, M., & Collins, C. (2016). Fostering caring in undergraduate nursing students: An integrative review. *The Journal of Nursing Education and Practice*, 6(11), 7-14.
- Nadelson, L. S. & Mahoney, R. (2016). Talk on the wide side: Professional development for wildlife and science filmmakers. *Journal of Science Communication*, 15(4), C05.

- *Smith, J. L. & Nadelson, L. S. (2016). Learning for you and learning for me: Mentoring as professional development for mentor teachers. *Mentoring & Tutoring: Partnership in Learning*, 24(1), 59-72.
- Nadelson, L. S. & Seifert, A. L. (2016). Putting the pieces together: A model of K-12 teachers' innovation implementation behaviors. *Journal of Research in Innovative Teaching*, 9(1), 49-69.
- Nadelson, L. S. (2016). Developing educational research expertise in STEM faculty. *Journal of STEM Education: Innovations and Research*, 17(1), 44-51.
- Nadelson, L. S., Seifert, A. L., & *Sias, C. M. (2015). To change or not to change: Indicators of K-12 teacher engagement in innovative educational practices. *International Journal of Innovation in Education*, 3(1), 45-61.
- Nadelson, L. S., *Sias, C. M., *Matyi, J., *Morris, S. R., *Cain, R., *Cromwell, M., *Lund, E. M., *Furse, J., *Johnson, M., *Hofmannova A., *Seegmiller, J. & *Xie, T. (2016). College student' motivations and practices in their self-determined information seeking. *International Journal of Higher Education*, 5(1), 220-231.
- Nadelson, L. S., Warner, D. & Brown, E. (2015). Life's lessons in the lab: A summer of learning from undergraduate research experiences. *Journal of STEM Education*, 16(3), 5-12.
- Nadelson, L. S. & Hardy, K. (2015). Trust in science and scientist and the acceptance of evolution. *Evolution: Education and Outreach*, 8(9), 1-9.
- Nadelson, L. S. McGuire, S., Davis, K., Farid, A., Hardy, K., Hsu, Y., Kaiser, U., Nagarajan, R. & Wang, S. (2015) Am I a STEM professional? Documenting STEM student professional identity development. *Studies in Higher Education, on-line first*.
- Nadelson L. S., Cornell, K., Jarrett-Smith, M., Jorcyk, C., Matson, S., & Yang, D. (2015). What good is it for me? The development and validation of the individual science usefulness survey – the ISUS. *Journal of Higher Education Theory and Practice*, 15(3), 65-76.
- Nadelson, L. S., *Pfiester, J., Callahan, J. & Pyke, P. (2015). Who is doing the engineering, the student or teacher? The development and use of a rubric to categorize level of design for the elementary classroom. *Journal of Technology Education*, 26(2), 22-45.
- Nadelson, L. S. & Finnegan, J. (2014). A path less traveled: Fostering STEM majors' professional identity development through engagement as Learning Assistants. *Journal of Higher Education Theory and Practice*, 14(5), 29-41.
- Nadelson, L. S., Scraggs, J., Sheffield, C., & McDougal, O. (2014). The integration of video based demonstrations to prepare students for the organic chemistry laboratory. *Journal of Technology in Science*, 24, 476-483.
- Nadelson, L. S., *Pluska, H., *Moorcroft, S. * Jeffery, A. & * Woodard, S. (2014). Educators' perceptions and knowledge of the Common Core State Standards. *Issues in Teacher Education*, 23(2), 47-66.
- Nadelson, S., & Nadelson, L. (2014). Evidence-based practice article reviews using CASP tools: A method for teaching EBP. *Worldviews of Evidence Based Nursing*, 11(5), 344-346.
- Nadelson, L.S., Cornell, K., Hustings, V., Jarrett-Smith, M., Jorcyk, C., Matson, S., Yang, D. (2014). I just don't trust them: The development and validation of an assessment instrument to measure trust in science and scientists. *School Science and Mathematics*. 114(2), 76-86.

- Nadelson, L.S., *Bennett, D., *Gwilliam, E., *Howlett, C., *Oswalt, S., & *Sand, J. (2013). The intersection of preservice teachers' confidence, perceptions, and ideas for using instructional technology for learning. *International Journal of Higher Education*, 2(4), 77-90.
- Nadelson, L. S. (2013). Who is watching and who is playing: Parental engagement with children at a hands-on science center. *Journal of Educational Research*, 106(6), 478-484.
- Nadelson, L. S., Seifert, A. L. & *Chang, C. (2013). The perceptions, engagement, and practices of teachers seeking professional development in place-based integrated STEM. *Teacher Education and Practice*, 26(2), 242-265.
- *Heddy, B. C. & Nadelson, L. S. (2013). The variables related to public acceptance of evolution in the United States. *Evolution: Education and Outreach*, 6(3), 1-14.
- Nadelson, L. S., Shadle, S., & *Hettinger, J. (2013). A journey toward mastery teaching: STEM faculty engagement in a year-long faculty learning community. *Learning Communities Journal*, 5, 97-122.
- Nadelson, L. S., *Campbell, D., *Haskell, C., *Konkol, D., *McCulley, M. & *Villagómez, A. (2013). Messages are everywhere: Reading perception, habits, and preferences of undergraduates. *Journal of College Reading and Learning*, 43(2), 70-90.
- Nadelson, L. S., Callahan, J, Pyke, P. Hay, A. & *Dance, M. P. (2013). Teacher STEM perceptions and preparation: Inquiry-based STEM professional development for elementary teachers. *Journal of Educational Research*, 106, 157-168.
- Nadelson, L. S., *Featherstone, M., *Fuhriman, C., *Martinez, G., *Sell, A. & *Semmelroth, C. (2013). A new reality: The influences and expectations of first year students college experience. *Higher Education Studies*, 3(1), 50-62.
- Olafson, L., Schraw, G., Nadelson, L. S., Nadelson, S., & Kehrwald, N. (2012). Exploring the judgment-action gap: College students and academic dishonesty. *Ethics & Behavior*. 23(2), 148-162.
- Nadelson, L. S., *Croft, G. *Ennis, K., *Harm, E., *McClay, K. & *Winslow, R. (2012). It takes a school: Exploring the relationship between professional learning communities and student achievement. *Teacher Education and Practice*, 25(3), 402-421.
- *Heddy, B. & Nadelson, L. S. (2012). A global perspective of the variables associated with acceptance of evolution. *Evolution: Education and Outreach*, 5, 412-418.
- Nadelson, L. S. Seifert, A. L., *Hettinger, J. K. & *Coats, B. (2012). Where they go for help: Teachers' pedagogical and content support seeking practices and preferences. *Teacher Education and Practice*, 26(1), 82-98.
- Nadelson, S. & Nadelson, L. (2012). Finding the right book: What influences the selection of a common read. *Journal of College Reading and Learning*, 43(1), 60-66.
- Nadelson, L.S., *Briggs, P., *Bubak, K., *Fuller, M., *Hammons, D., & *Sass, M. (2012). The tension between teacher accountability and flexibility: The paradox of standards based reform. *Teacher Education and Practice*, 25(3), 196-220.
- Nadelson, L. S., Seifert, A., Moll, A. & * Coats, B. (2012). i-STEM summer institute: An integrated approach to teacher professional development in STEM. *Journal of STEM Education: Innovation and Outreach*, 13(2), 69-83.

- Nadelson, L. S. & Southerland, S. A. (2012). A more fine-grained measure of students' acceptance of evolution: Development of the Inventory of Student Evolution Acceptance– I-SEA. *International Journal of Science Education*, 24(11), 1637-1666.
- Southerland, S. A., Nadelson, L. S., Sowell, S., Kahveci, M., Saka, Y., & Granger, D. E. (2012). Measuring one aspect of teachers' affective states: Development of the Science Teachers' Pedagogical Discontentment Scale. *School Science and Mathematics Education*, 112(8), 483, 494.
- Nadelson, L. S. & Jordan, R. (2012). Student attitudes toward and recall of Outside Day: An environmental science field trip. *Journal of Educational Research*, 105(3), 220-231.
- Nadelson, L. S., et al. (2012). A shifting paradigm: Preservice teachers' multicultural attitudes and efficacy. *Journal of Urban Education*, 47(6), 1190-1205.
- *Luckey, K. & Nadelson, L. S. (2011). Developing a life skills evaluation tool for assessing children ages 9-12. *Journal of Youth Development*, 6(1), 105-124.
- Nadelson, L. S. & Callahan, J. (2011). A comparison of two engineering outreach programs for adolescents. *Journal of STEM Education: Innovation and Outreach*, 12(1 & 2), 43-54.
- Nadelson, L. S. & Viskupic, K. (2010). Perceptions of the nature of science by geoscience students experiencing two different courses of study. *Journal of Geoscience Education*, 58(5), 213-220.
- Nadelson, L. & Sinatra, G. (2010). Shifting acceptance of evolution: Promising evidence of the influence of the understanding evolution website. *The Researcher*, 23(1), 13–29.
- Nadelson, S. G., Nadelson, L. S., & Osguthorpe, R. (2010). Students as carers across disciplines: Quantifying student caring in high education. *The Researcher*, 23(1), 59-73.
- Nadelson, L. S., Walter, L. & Waterman, J. (2010). Undergraduate research experiences at different level of inquiry. *Journal of STEM Education: Innovation and Outreach*, 11(1&2), 27-44.
- Nadelson, L. S. & Southerland, S. A. (2010). Examining the interaction of acceptance and understanding: How does the relationship change with a focus on macroevolution? *Evolution: Education and Outreach*, 3(1), 82-88.
- Nadelson, L. S., & Southerland, S. A. (2010). Development and evaluation for a measuring understanding of macroevolutionary concepts: Introducing the MUM. *Journal of Experimental Education*, 78(2), 151-190.
- Nadelson, L. S. & Nadelson, S. G. (2010). K-8 educators perceptions and preparedness for teaching evolution topics. *Journal of Science Teacher Education*. 21(7), 843–858.
- Nadelson, L. S. & Sinatra, G. M. (2009). Educational professionals understanding and acceptance of evolution. *Journal of Evolutionary Psychology* 7(4), 490-516.
- Hoffman, B. & Nadelson, L. S. (2009). Motivational engagement and video gaming: A mixed methods study. *Educational Technology Research and Development*. 58(3), 245-270.
- Nadelson, S. G., Nadelson, L. S. & Osguthorpe, R. (2009). Perceptions of education, engineering, and nursing faculty members regarding their role in helping students develop professional behavior. *Journal of College and Character*, 10(7), 1-13.

- Nadelson L. S., Culp, R., Bunn, S., Burkhart, R., Shetlar, R., Nixon, K., & Waldron, J. (2009). Teaching evolution concepts to elementary school students. *Evolution, Education and Outreach*, 2(3), 458-473.
- Gray, J., Nadelson, L. S., & Busser, J. (2009). Undergraduate student perceptions of completion practices of end of course evaluations. *Scholarship*, 24, 1-20.
- Nadelson, L. S. (2009). How true inquiry can happen in k-16 science education. *The Science Educator*, 18(1), 48-57.
- Nadelson, L. S. (2009). Preservice teacher understanding and vision of how to teach biological evolution. *Evolution: Education and Outreach*. 2(3), 490-504.

Refereed Conference Proceedings

- Lanci, S., Nadelson, L. S., Villanueva, I., Youmans, K., & Bouwma-Gearhart, J. (2018). Developing a measure of engineering students' makerspace learning, perceptions and interactions. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Salt Lake City, UT
- Villanueva, I., Youmans, K., Lanci, S., Bouwma-Gearhart, J. & Nadelson, L. S. (2018). Work in Progress: Exploring the role of non-technical courses on students' engineering professional identities . *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Salt Lake City, UT
- Nadelson, L. S., *Sias, C. M. & Seifert, A. L. (2016). Challenges for integrating engineering into the K-12 curriculum: Indicators of K-12 teachers' propensity to adopt educational innovations. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, New Orleans, LA.
- Salzman, N., Ubig, R., & Nadelson, L. S. (2016). Implementing and assessing a joint REU/RET program in material science. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, New Orleans, LA.
- Yang, D., Nadelson, L. S., & Hardy, K. K., (2015). Are they simply interested? An exploration of engineering students' most favorite class. *Proceedings of 2015 Frontier in Education (FIE) Conference*, 2090-2093.
- Nadelson, L. S., Seifert, A. L. & *Hendricks, K. (2015). Are we preparing the next generation? K-12 teacher knowledge and engagement in teaching core STEM practices. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Seattle, WA.
- Nadelson, L. S., Hardy, K. K., & Yang, D. (2015). I like therefore I learn! Engineering student motivation to learn in their least and most favorite courses. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Seattle, WA.
- Nadelson, L. S. & Callahan, J. (2014). Where do we go from here? Conversations with K-6 principals following three years of engineering education professional development for their faculty. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Indianapolis, IN.
- Nadelson, L. S., Seifert, A. L., & *McKinney, M. (2014). Place based STEM: Leveraging local resources to engage K-12 teachers in teaching integrated STEM and for addressing the local STEM pipeline. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Indianapolis, IN.

- Nadelson, L. S. Mooney, D. & Rush-Byers, J. (2014). Why I am an engineering major: A cross-sectional study of undergraduate students. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Indianapolis, IN.
- Nadelson, L. S. Seifert, A. L., & *Hettinger, J. K. (2012). If they come they will build it! Focusing on engineering design as part of K-12 teacher STEM professional development. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, San Antonio, TX.
- Nadelson, L. S., Shadle, S., & Callahan, J. (2012) Promoting STEM faculty members' reflection on their learning perceptions and teaching practices. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, San Antonio, TX.
- Nadelson, L. S., Pfiester, J., Callahan, J., Pyke, P., Hay, A. & Emmet, M. (2011). Connecting science with engineering: Using inquiry and design in a teacher professional development course. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Vancouver, BC
- Nadelson, L. S., Moll, A. J., & Seifert, A. (2011). Living in a materials world: Materials science and engineering professional development for K-12 educators. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Vancouver, BC.
- Nadelson, L.S., Callahan, J, Pyke, P. Hay, A. & Schrader, C. (2010). Teaching inquiry-based STEM in the elementary grades using manipulatives: A SySTEMic solution report. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Louisville, KY.
- Nadelson, L. S., Callahan, J, Pyke, P. Hay, A. & Schrader, C. (2009). A systemic solution: elementary-teacher preparation in stem expertise and engineering awareness. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition*, Austin, TX.

Book Chapters

- Nadelson, L. S., & Seifert, A. L. (In press). Looking deeper through the STEM lens: Exploring the intersection between content and context to optimize STEM learning. In P. M. Jenlink & K. E. Jenlink (Eds.), *STEM teaching: An interdisciplinary approach*. Lanham, MD: Rowman & Littlefield Publishers.
- Nadelson, L.S. (2016). From idea to publication: Course embedded authentic research experiences. In M.C. Smith & N. DeFrates-Densch (Eds.), *Challenges and innovations in educational psychology teaching and learning* (pp. 397-410). Charlotte, NC: Information Age Publishing.
- Southerland, S. A. & Nadelson, L. S. (2012). An intentional approach to teaching evolution: making students aware of the factors influencing learning of microevolution and macroevolution. In K. R. Rosengren, S. Brem, E. M. Evans, & G. Sinatra (Eds.), *Evolution challenges: Integrating research and practice in teaching and learning about evolution* (pp 348-374). New York, NY: Oxford University Press.
- Sinatra, G. M. & Nadelson, L. S. (2011). Science and religion: Opposite ends of core epistemological continua? In R. Taylor & M. Ferrari (Eds.), *Epistemology and science education: Understanding the evolution vs. intelligent design controversy* (pp. 173-194). New York, NY: Routledge.

Non-Refereed

- Nadelson, L. S. (2016). *Communicating STEM: The science of science communication*. Evaluation report prepared for NSF award #1545867.

- Farmer, C., Klien-Gardner, S. & Nadelson, L.S. (2014). *Standards for preparation and professional development for teachers of engineering*. American Society of Engineering Education,
- Nadelson, L. S. & Seifert, A. L. (2013). Business, education partnerships—bridging the paradigm divide. *NSTA Reports*, 24(5), 5.
- Nadelson, L. S. Williams, S., & Turner, H. (2012). *Protocol: Influence of inquiry-based science interventions on middle school students' cognitive, behavioral, and affective outcomes*. Campbell Collaboration. <http://www.campbellcollaboration.org/lib/download/1489/>.
- Nadelson, L. S. & Farmer, C. (2012). Developing standards for teaching engineering. *NSTA Reports*, 24(1), 3.
- Nadelson, L. S., Luft, J., & Scantlebury, K. (2010). Bridging research and practice: Research summaries for science educators. *NSTA Reports*, 22(4), 14-15.
- Nadelson, L. S., Barney, K., & Morgan, B. (2009). *Secondary school needs for math and science teachers*. Idaho Association of School Administrators. http://www.idschadm.org/cms/lib6/ID07000902/Centricity/ModuleInstance/108/Idaho_Math_and_Science_Teacher_Needs_01_20_11_%282%29.pdf
- Nadelson, L. (2000). Problem solving and project based learning in high school mathematics. *Northwest Teacher, NWREL* 1(1), 20.
- Nadelson, L (1999). Students publishing mathematics and science research on the world wide web. In *Chevron Corporation Best classroom practices mathematics, science and technology academic lesson plans*. Chevron, U.S.A.
- Nadelson, L. (1997). Online assignments, *The Science Teacher*, 64, (3), 22-5.
- Nadelson, L. (1995). Heating it up with thermocouples. *The Science Teacher*, 62 (3), 30-33.
- Nadelson, L (1993). Calibration for teaching lines in mathematics. *The Computing Teacher*, 21 (6), 46-47

Manuscripts in Submission

- *Matyi, J. & Nadelson, L. S. (Under Review). Nowhere to turn? Student academic entitlement, perceptions and engagement. *Journal of College Student Development*.
- *Rae, D. & Nadelson, L. S. (Under review). What are you going to do with that digital camera? A snapshot of educators' perspectives and practices with instructional technology. *Teacher Education and Practice*.
- Bartholomew, S., Nadelson, L. S., & Bullock, E. (Under Review). A route less traveled: Principals' perceptions of alternative licensed CTE teachers. *Career and Technical Education Research*.
- Nadelson, L. S., Heddy, B. Jones, S. Taasobsharazi, G., & Johnson, M. L. (Under Review). The dynamic model of conceptual change. *Science Education*.

Manuscripts in Progress

- Nadelson, L.S., Seifert, A. L. & Johnson, C. (In Progress). Teacher knowledge and perceptions of computational thinking.

PRESENTATIONS

National & International

- Villanueva, I., Bouwma-Gearhart, J. & Nadelson, L. S. (2018). *The “soft” argument for engineering professional identity course: A case study*. Poster presented at the annual meeting of the American Education Research Association, New York, NY.
- Samford, L., Nadelson, L., Fromm, M. & Mahoney, R. (2018). *Delphi study focus group 1*. Annual Meeting of the American Association for Advancement of Science, Austin, TX.
- Samford, L., Nadelson, L., Fromm, M. & Mahoney, R. (2018). *Delphi study focus group 2*. Annual Meeting of the American Association for Advancement of Science, Austin, TX.
- Nadelson, L. S., Cochran, C., Edmondson, S., Gionco, D., Jensen, H., Martinez-Sandoval, D., & Yang, P. (2018). *Are they what they eat? College students’ knowledge and perception of nutrition and diet trends*. Poster presentation at the Sixteenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Nadelson, L. S., Broderick, A., Brouse, B., Hathaway, J., Hays, M., McGovern, L., & Morton, T. (2018). *Earth, wind and sun: Student knowledge of electrical energy production*. Poster presentation at the Sixteenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Nadelson, S. G. & Nadelson, L. S. (2018). *Perceptions of caring by international pre-nursing students*. . Poster presentation at the Sixteenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Nadelson, S. G. & Nadelson, L. S. (2018). *Pre-nursing advising through a massive open online course*. Paper presentation at the Sixteenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Krasnow, K., Houseal, A., Szydowski, M., Gunshenan, C., & Nadelson, L. (2017). *What difference does doing field research make? Comparing outcomes from inquiry research, citizen science, and adventure hike experiences for middle/high school students*. Place Based Education Conference, Ypsilanti, MI.
- Nadelson, L. S., Berg, W., Fox, B., Grandbouche, P., Harris, M., Kroschel, T., & Sandoal, S. (2017) *Snap, tweet and post: College student social media perceptions and heutagogic practices and uses*. Annual Meeting of the National Consortium for Instruction and Cognition, San Antonio, TX.
- Nadelson, L. S., Heddy, B., Jones, S. Taasooobsharazi, G., & Johnson, M. (2017) *The refined dynamic model of conceptual change*. Annual Meeting of the National Consortium for Instruction and Cognition, San Antonio, TX.
- Nadelson, L. S., *Sias, C. M., & Seifert, A. L (2016). *Challenges for integrating engineering into the K-12 curriculum: Indicators of K-12 teachers’ propensity to adopt educational innovations*. Annual Conference and Exposition of the American Society of Engineering Education, New Orleans, LA.
- Salzman, N., Ubic, R., & Nadelson, L. S. (2016). *Implementing and assessing a joint REU/RET program in material science*. Annual Conference and Exposition of the American Society of Engineering Education, New Orleans, LA.

- Nadelson, L. S. (2016). *An education research professional learning community for STEM faculty*. Presentation at the SMTI NSEC 2016 National Conference, San Antonio, TX
- Nadelson, L. S. & Goetz, T. (2016). *Building A statewide network of STEM centers to improve undergraduate STEM education*. Roundtable Presentation at the SMTI NSEC 2016 National Conference, San Antonio, TX
- Villanueva, I., & Nadelson, L. S. (2016). *Do they have the "Knack"? Professional identity development of engineering students*. Paper presented at the annual meeting of the American Education Research Association, Washington, DC.
- Heller, M. F., Verdi, M., Nadelson, L. S., Vernon-Dotson, L. J., & Reutzel, R. (2016). *Journal of education research editors' roundtable*. Roundtable presentation at the annual meeting of the American Education Research Association, Washington, DC.
- Nadelson, L. S. & Jones, S. H. (2016). *The emotions towards and support of education reform by K-12 and higher education faculty members*. Poster presentation at the annual meeting of the American Education Research Association, Washington, DC.
- Rae, D. & Nadelson, L. S. (2016). *The impact of STEM professional development: K-12 teacher progression identified in technology, pedagogy, and content knowledge assessment*. A roundtable presentation at the annual meeting of the American Education Research Association, Washington, DC.
- Nadelson, L. S. (2016). *Embracing innovation in education: Practices and processes that engage teachers and students in learning*. **Keynote Speaker** at the PLATEAU annual conference, Monticello, Utah
- Nadelson, L. S. & Seifert, A. L. (2016). *Fostering teacher adoption of educational innovations*. Workshop presentation at the annual meeting of the USOE MSP Program, Baltimore Maryland.
- Nadelson, S. & Nadelson, L. (2016). *Internet access and student outcomes*. Poster presentation at the Fourteenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Nadelson, L., Seifert, A., & Nadelson, S. (2016). *Innovating the future: best practices in k-12 stem education*. Workshop presentation at the Fourteenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Nadelson, L. S., Heddy, B., & Jones, S. (2015). *Stirring the pot and adding ingredients: A recipe for changing conceptual change*. Paper presentation at the Southwest Consortium for Innovative Psychology in Education, Albuquerque, NM.
- Nadelson, L. S. & Seifert, A. L. (2015). *Much more than content: Teaching core STEM practices*. Workshop presentation at the STEMTech Conference, Phoenix, AZ
- Nadelson, L. S. & Seifert, A. L. (2015). *Practices make perfect: Preparing teachers to teach core STEM Practices*. Workshop presentation at the School Science Mathematics Association Annual Convention, Intersecting the Past and the Future of Science and Mathematics Integration, Oklahoma City, OK.
- Nadelson, L. S., & Seifert, A. L. (2015). *Practice-practice-practices! Aligning teaching to the core STEM practices*. Workshop presentation at the regional meeting of the National Science Teacher Association, Reno, NV
- Bouwma-Gearhart, J. & Nadelson, L. S. (2015). *Building understanding and collaboration on the study of organization change associated with undergraduate STEM education improvement initiatives*.

- Concurrent presentation at the annual meeting of the APLU Science Math Teacher Imperative, New Orleans, LA.
- Nadelson, L. S. & Goetz, T. (2015). *On being an epicenter for a culture of change; Challenges of a state level STEM center*. Roundtable presentation at the annual meeting of the APLU Science Math Teacher Imperative, New Orleans, LA.
- Smith, J. & Nadelson, L. S. (2015). *Learning for you and learning for me: Mentoring as professional development for mentor teachers*. Research presented at the Annual UTeach Conference. Austin, TX.
- Nadelson, L. S. & Seifert, A. L. (2015). *Place-based integrated STEM: STEM in my backyard and beyond!* Workshop presentation of the NSTA STEM Expo, Minneapolis, MN.
- Nadelson, L. S. & Seifert A. L. (2015). *Putting the pieces together: A model for K-12 teachers' innovation implementation behaviors*. Paper presentation at the annual meeting of the National Consortium of Instruction and Cognition, Chicago, IL
- Heller, M., Verdi, M., Vernon-Dotson, L. J., Nadelson, L. S. & Reutzler, D. R. (2015). *Meet the journal editors: Journal talks I*. Roundtable presentation at the annual meeting of the American Education Research Association, Chicago, IL
- Nadelson, L. S. & Seifert A. L. (2014). *Integrated place-based STEM: Local context for stem content*. Workshop presentation at the NSTA Long Beach Area Conference on Science Education in collaboration with CSTA, Long Beach, CA
- Nadelson, L. S. & Seifert A. L. (2014). *Place-based integrated STEM PD and the i-STEM Summer Institute model*. Workshop presentation at the STEMxchange, Columbus, OH
- Nadelson, L. S. & Seifert A. L. (2014). *Integrated stem, 21st century skills, and place - based learning: a state wide plan for the i-STEM professional development and research initiative*. Workshop presentation at the USDOE MSP Conference, Washington, DC
- Seifert, A. & Nadelson, L. S. (2014). *Integrated place-based STEM: Local context for STEM career awareness and skill development*. Paper presentation at the STEM Innovations Conference, Boise, ID
- Nadelson, L. S. et al. (2014). *Assessing professional identity of STEM majors*. Paper presentation at the STEM Innovations Conference, Boise, ID
- Nadelson, L. S., Mooney, D. & Rush-Byers, J. (2014). *Why am I an engineer: A comparison of data from undergraduate engineering majors and professional engineers*. Paper presentation at the STEM Innovations Conference, Boise, ID
- Nadelson, L. S. et al., (2014). *Expanding UTeach to community colleges and satellite campuses*. Panel presentation at the Eighth Annual UTeach Conference, Austin TX
- Nadelson, L. S. et al., (2014). *UTeach and community college partnerships roundtable*. Roundtable presentation at the Eighth Annual UTeach Conference, Austin, TX.
- Nadelson, L. S. & Smith, J., (2014). *Integrated STEM: Preparing teachers using the NGSS and CCSS-M practices*. Workshop presentation at the Eighth Annual UTeach Conference, Austin TX
- Nadelson, L. S. Smith, J., Wigglesworth, M., & Clink, A. (2014). *IDoTeach summer internships*. Poster presentation at the Eighth Annual UTeach Conference, Austin TX

- Nadelson, L. S. et. al. (2014). *Am I a STEM professional? Self-authorship and student professional identity development*. Poster presentation at the Improving the Undergraduate STEM Experience, an invited National Science Foundation conference. Washington DC
- Nadelson, L. S. & Nadelson, S. (2014). *The iSTEM project: Integrated STEM professional development for teachers*. Workshop presentation at the Tenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Nadelson, S. & Nadelson, L. S. (2014). *Using crime scene investigation to promote STEM Education with K-12 teachers and students*. Tenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Nadelson, S., Nadelson, L.S., & Seifert, A. (2014). *Facilitating Rural Teachers' Abilities to Guide their Students towards Healthcare Careers: A Funded STEM Initiative*. Poster presentation at the International Rural Health and Rural Nursing Research Conference, Boseman, MT.
- Nadelson, L. S. & Turner, J. (2013). *Teacher Preparation Programs: What do we know about what works*. Poster presentation at the Biennial Meeting of the Southwest Consortium for Innovative Psychology in Education, Tucson, AZ.
- Nadelson, L. S. & Seifert, A. L. (2013). *STEM in your backyard: Integrated STEM professional development*. Workshop presentation at the STEMtech 2013 Conference, Atlanta, GA.
- Nadelson, L. S. & Seifert, A. L. (2013). *Integrated STEM: Teaching mathematics in a STEM context*. Workshop presentation at the National Council of Teachers of Mathematics, Regional Conference, Las Vegas, NV.
- Nadelson, L. S. & Seifert, A. L. (2013) *Integrated STEM 21st Century and place-based Learning: A Statewide Plan for the i-STEM Professional Development Initiative*. Workshop presentation at the Annual Meeting of the U.S. Department of Education, Math Science Partnership, Washington, DC.
- Nadelson, S.G., Nadelson, L.S. & Seifert, A.L. (2013). *Building tomorrow's nursing workforce in today's elementary classrooms*. Paper presented at the 24th International Nursing Research Congress, Sigma Theta Tau, Prague, Czech Republic.
- Farmer, C. Kazmer, D. Nadelson, L. S. & Wigal, C. (2013). *U Teach engineering*. Workshop presentation at the UTeach Conference, Austin, TX.
- Farmer, C. & Nadelson, L. (2013). *Standards for preparation and professional development for k-12 teachers of engineering*. Workshop presentation at the UTeach Conference, Austin, TX.
- Nadelson, L. S. (2013). *Integrated STEM: Building a STEM toolbox for solving complex problems*. Workshop presentation at the NSF Noyce National Conference, Washington, DC.
- Nadelson, L. S. & Seifert, A. (2013). *Integrated STEM professional development for K-12 teachers*. Workshop presentation at the NSTA STEM Expo, St. Louis, MO.
- Heddy, B. & Nadelson, L.S. (2013). *The variables related to public acceptance of evolution in the United States*. Paper presentation at the annual meeting of the American Educational Research Association. San Francisco, CA.
- Nadelson, L. S. & Seifert, A. (2013). *i-STEM leads the way: Integrating STEM to develop the 21st century workforce*. Workshop presentation at the North Carolina New Schools, Scaling STEM: Strategies that Engage Minds, Durham NC.

- Nadelson, L. S. & Seifert, A. (2013). *STEM education for all*. Poster Presentation, National Science Foundation, Math Science Partnership Learning Network Conference, Washington, DC.
- Farmer, C. & Nadelson, L. S. (2013). *Defining standards for professional development for K-12 teachers of engineering*. A Featured Topic Session, National Science Foundation, Math Science Partnership Learning Network Conference, Washington, DC.
- Nadelson, L. S. Seifert, A. L. & Nadelson S. G. (2012). *Integrated STEM teacher professional development*. STEM 2012: Workshop presentation at the 2nd International STEM in Education Conference, Beijing, China.
- Nadelson, L. S., Seifert, A. L. & Nadelson S. G. (2012). *STEM on a plate: Using nutrition for learning STEM*. Workshop presentation at the League for Innovation 2012 STEMTech Conference, Kansas City, MO.
- Nadelson, L. S., & Seifert, A. L. (2012). *i-STEM: A comprehensive teacher STEM professional development program*. Workshop presentation at the League for Innovation 2012 STEMTech Conference, Kansas City, MO.
- Nadelson L.S., Seifert, A. L., Hamilton, M. & Nadelson, S. G. (2012). *Teaching by design: Preparing K-12 teachers to use engineering design across the curriculum*. Paper presentation at the International Conference on Engineering Education, Turku, Finland.
- Nadelson, L. S. (2012). *Integrated STEM for 21st century learning*. Research presentation to the Special Research Group of the National Academy of Engineering and National Academies of Science, Washington, DC.
- Nadelson, L. S. & Maida, C. (2012). *Expert and novice learning in STEM: Exploring assumptions and indicators of success*. Paper presentation at the Annual meeting of the American Association for the Advancement of Science, Boise, ID.
- Nadelson, L. S. (2012). *Building STEM networks with STEM tools*. Panel presentation at the First annual meeting of the U.S. News STEM Solutions: A Leadership Summit. Dallas, TX.
- Nadelson, L. S. (2012). *Integrated STEM: Engineering as the glue of STEM*. Workshop presentation at the APLU SMTI Annual Meeting. Alexandria, VA.
- Nadelson, L. S. & Seifert, A. L. (2012). *Teaching by design: Preparing K-12 teachers to use design across the curriculum*. Workshop presentation at the NSTA STEM Forum & Expo, Atlantic City, NJ.
- Nadelson, L. S. & Williams, S. (2012). *Inquiry-based science interventions for middle school students: A meta-analysis of cognitive, behavioral, and affective outcomes*. Poster presentation at the Annual meeting of the American Education Research Association, Vancouver, BC.
- Broughton, S. & Nadelson, L. S. (2012) *Food for thought: Preservice teachers' knowledge, emotions, and attitudes toward genetically modified foods*. Paper presentation at the Annual meeting of the American Education Research Association, Vancouver, BC.
- Nadelson, L. S. et al. (2012). *Constraints and criteria in the classroom: Classifying elementary teacher implementation of engineering design*. Poster presentation at the Annual meeting of the American Education Research Association, Vancouver, BC.
- Nadelson, S. & Nadelson, L. (2012). *Common reads in higher education. Which books to choose?* Poster presentation at the Tenth Annual Hawaii International Conference on Education, Waikiki, HI.

- Nadelson, S., Palma, S. & Nadelson, L. (2012). *Using Facebook to enhance college student advising: A case study*. Poster presentation at the Tenth Annual Hawaii International Conference on Education, Waikiki, HI.
- Nadelson, L. S. & Seifert, A. L. (2011). *iSTEM summer institute*. Workshop presentation at the Regional Conference of the National Science Teacher Association, Seattle, WA.
- Nadelson, L. S. & Seifert, A. L. (2011). *Introducing A-TEST: Toward the validation and application of the Assessment of Teacher Engagement STEM Teaching*. Poster presentation at the Biannual conference of the Southwest Consortium for Innovative Psychology in Education, Norman, OK.
- Nadelson, L.S. & Callahan, J. (2011). *Shared lessons from the SySTEMic Solution*. Workshop presentation at the Fourth Annual E4 Conference, Excellence in Elementary Engineering Education, St. Paul, MN.
- Nadelson, S., & Nadelson, L. (2011). *Assessing and supporting students entering a nursing program*. Poster presentation at the Eighth National Conference on Students in Transition, St. Louis, MO.
- Nadelson, S., & Nadelson, L. (2011). *Promoting transfer student success through a foundations course*. Workshop presentation at the Eighth National Conference on Students in Transition, St. Louis, MO.
- Nadelson, L. S., Pyke, P., Schimpf, M., & McGuire, S. (2011). *STEM education beyond content knowledge: fostering, assessing, and monitoring STEM student transition through critical junctures and development of self-authorship*. Paper presentation at the APLU Science Math Teacher Imperative, Portland, OR.
- Nadelson, L. S. (2011). *Scientific inquiry and engineering design: Creating meaningful contexts for STEM teaching and learning*. Workshop presentation at the Annual Meeting of the National Science Foundation Noyce Scholarship Program, Washington, DC.
- Olafson, L., Nadelson, L., Schraw, G., Nadelson, S. & Kehrwald, N. (2011). *Exploring the judgment-action gap: college students and academic dishonesty*. Paper presentation at the American Education Research Association, New Orleans, LA.
- Olafson, L., Nadelson, L., Schraw, G., Nadelson, S. & Kehrwald, N. (2011). *"I had the right to be dishonest": College students who get caught cheating*. Paper presentation at the American Education Research Association, New Orleans, LA.
- Nadelson, L.S. Coats, B. & Seifert, A. L. (2011). *Where they go for help: Teachers' Preference for sources of STEM content and pedagogical support*. Paper presentation at the annual meeting of the National Consortium for Instruction and Cognition, New Orleans, LA.
- Nadelson, L.S. (2011). *Scientific inquiry and engineering design: Engaging students in authentic STEM learning*. Workshop presentation at the Western Regional Noyce Conference, Long Beach, CA.
- Nadelson, L.S., Seifert, A. L. & Moll, A. J. (2011). *Enhancing teacher pedagogical content knowledge of inquiry-based STEM curriculum and instruction: An i-STEM initiative*. Poster presented at that the US DOE MSP meeting, San Francisco, CA.
- Nadelson, L. S., Charlier, H. & Johnstone, C. (2011). *The Boise State University MSP Start Partnership "STEM Education for All"*. Poster presented at the annual NSF MSP program meeting, Washington DC

- Kehrwald, N., Olafson, L., Schraw, G., Nadelson, L., & Nadelson, S. (2011). *An analysis of academic misconduct cases: Informing a better institutional response*. Paper presentation at the annual meeting of the Association for Student Conduct Administration, St. Petersburg, FL.
- Nadelson, L. S. (2010). *Inquiry and problem based learning in STEM*. A workshop presentation at the annual meeting of the NSF Noyce Scholarship Program, Washington, DC.
- Nadelson, L. S. (2010). *Applying the Cognitive Reconstruction of Knowledge Model to promote conceptual change of preservice teachers' misconceptions of probabilistic reasoning*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Bean, T., Sinatra, G. M. & Nadelson, L. S. (2010). *Effects of playing SPORE on beliefs and understandings about evolution*. Poster presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Nadelson, L. S. & Callahan, J. (2010). *A comparison of two engineering outreach programs for adolescents*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition, Denver, CO.
- Nadelson, S., Stephens, B., Nadelson, L., & Veltman, M. (2010). *Electronic resumes in nursing career searches: a process and project*. Poster presentation at the Fifty Eighth Annual Student Nurse Association Conference, Orlando, FL.
- Southerland, S. A. & Nadelson, L. S. (2010). *A more fine-grained measure of students acceptance of evolution: development of the inventory of student evolution acceptance - I-SEA*. Paper presentation at the Eighty Third Annual National Association of Research in Science Teaching, Philadelphia, PA.
- Nadelson, L. S., Moll, A. & Morgan, B. (2010). *The Boise State University MSP Start Partnership "STEM Education for All"*. Poster presented at the annual MSP program meeting, Washington DC
- Nadelson, L. S. & Barney, K. (2010). *Examining student exposure to biology concepts on their acceptance and understanding of macroevolution*. Paper presentation at the Eight Annual Hawaii International Conference on Education, Honolulu, HI
- Nadelson, S. & Nadelson, L. (2010). *Common reads in higher education. Which books to choose?* Poster presentation at the Eight Annual Hawaii International Conference on Education, Honolulu, HI.
- Nadelson, S., Nadelson, L., & Shaw, K. (2009). *Perceptions of first year read program student benefits*. Concurrent session presentation at the Sixth National Conference on Students in Transition, Salt Lake City, UT.
- Nadelson, S. & Nadelson, L. (2009). *Moving upwards: Trends and influences of financial aid on student graduation rates at Hispanic serving institutions and other public, four-year institutions*. Paper presented at the American Educational Research Associations Annual Meeting, San Diego, CA.
- Nadelson, L. S. (2009). *Student attitudes and retention of an environmental education fieldtrip*. Poster presented at the Southwest Consortium for Innovations in Psychology in Education, UNLV, Las Vegas, NV.
- Hoffman, B. & Nadelson, L. S. (2009). *Motivational engagement: Calibrating the commitment of video game players*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

- Nadelson, L. S., Walters, L., & Waterman, J. (2009). *Undergraduate research experiences at different levels of inquiry*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Nadelson, L.S. & Southerland, S. A. (2009). *The acceptance and understanding of macroevolution*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Nadelson, S., Nadelson, L., & Osguthorpe, R. (2009). *Caring in higher education*. Paper presented at the annual meeting of the American Educational Research Associations Annual Meeting, San Diego, CA.
- Nadelson, S., Nadelson, L., & Osguthorpe, R. D. (2009). *Promoting professional behavior in higher education*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Nadelson, L. S. (2009). *The Boise State University Noyce Scholarship Program*. Poster presented at the Annual NSF Robert Noyce Award Meeting, Washington DC.
- Nadelson, L. (2008). *Teaching standards based evolution concepts to elementary school students*. Paper presented at the meeting of the Northern Rocky Mountain Education Research Association, Lake Tahoe, NV.
- Nadelson, L. & Sinatra, G. (2008). *Educational professionals understanding and acceptance of evolution*. Poster presentation at the American Psychological Association, Boston, MA.
- Nadelson, L. (2007). *Perservice teacher understanding of evolution, the nature of science and situation of chance*. Poster session presentation at Southwest Consortium for Innovations in Psychology in Education. Phoenix, AZ.
- Nadelson, L. (2006). *Letting go staying connected*. Concurrent session presentation at NASPA. Phoenix, AZ.
- Nadelson, L. (2006). *Teacher Response to the Reform Effort of Block Scheduling*. A paper presented at the Hawaii International Conference on Education, Honolulu, HI.
- Nadelson, L. (2006). *Letting Go Staying Connected, A parent Orientation Program*. A poster presented at the Hawaii International Conference on Education, Honolulu, HI.
- Nadelson, L. & Broughton, S. (2005). *High School Science student Misconceptions and Epistemic Beliefs*, Paper presented at the Southwest Consortium for Innovations in Psychology In Education, UNLV, Las Vegas, NV.
- Muis, K. & Nadelson, L. (2005). *Epistemic Beliefs and Mathematics problem Solving*. Paper presented at the American Psychological Association, Washington, DC.
- Nadelson, L. (1997). Featured Speaker: *Multimedia based student project*. Paper presented at the National Education Computing Conference, Seattle, WA.
- Nadelson, L. (1995). *Using probeware to teach science*. National Science Teacher Association, Vancouver, BC

State/Regional

- Nadelson, L. S. & Seifert, A. L. (2016). *STEM and educational innovation*. Workshop presentation at the ND Spring Collaborative Conference, University of North Dakota, Grand Forks, ND

- Nadelson, S. & Nadelson, L. (2016). *Evaluating a nursing advising massive open online course*. Poster presented at the Nursing Research Conference 2016, University of Arkansas for Medical Science, Little Rock, AR.
- Nadelson, L. S. (2015). *The rift of two realities: Bridging the in-school and out-of-school chasm*. Workshop presentation at the 57th IAS Annual Meeting and Symposium, Boise ID
- Nadelson, S., Nadelson, L., & Seifert, A. (2014). *Keeping the pipeline open: Preparing Teachers to Ready Students for Health Professions Careers*. Poster presentation at the Idaho State University Research Day, Meridian, ID.
- Nadelson, L. S. & Seifert, A. (2013). *STEM literacy*. Workshop presentation at the annual meeting of the Idaho Science Teacher Association and the Idaho Council of Teachers of Mathematics, Pocatello, ID
- Nadelson, L.S. (2013). *Why computer science and engineering in the high school curriculum*. Invited research presentation to the Idaho State Board of Education, Pocatello, ID
- Nadelson, L.S. (2013). *The STEM toolbox: Integrating STEM for the future*. Keynote speaker iSTEM Conference, Boise, Twin Falls, Pocatello, Idaho Falls, Coeur d'Alene ID
- Nadelson, L.S. (2013) *Integrated STEM and workforce development in K-12*. Invited research presentation to the Economic Development Council, Boise, ID
- Nadelson, L. S. (2012). *Developing and publishing standards for professional development for K-12 teachers of engineering*. Workshop presentation at the ISTA/ICTM Joint Conference, Boise, ID.
- Nadelson, L. S. (2012). *Integrating STEM: Opening the K-12 pipeline toward workforce development*. Workshop presentation at the ISTA/ICTM Joint Conference, Boise, ID.
- Nadelson, L. S. (2012). *Integrating STEM*. Keynote address at the annual meeting of i-STEM, Coeur d' Alene & Twin Falls, ID.
- Nadelson, L. S. (2011). *i-STEM: Preparing K-12 educators to develop STEM literacy by teaching 21st century skills*. Workshop presentation at the IAESP/IASEA Annual Conference, Meridian, ID.
- Nadelson, L. S. & Seifert, A. L. (2011). *i-STEM*. Workshop presentation at the annual meeting ISTA/ICTM Annual Conference, Idaho Falls, ID.
- Nadelson, L. S. (2010). *Developing STEM literacy in Idaho*. Workshop presentation at the Idaho School Boards Association Annual Convention. Boise ID
- Nadelson, L. S. (2010). *An integrated approach to teacher professional development in STEM: An i-STEM initiative*. Workshop presentation at the ISMTC STEM Education Resource Conference 2010. Boise, ID.
- Nadelson, L. S. & Seifert, A. (2010). *I-STEM summer institute: Teacher professional development in STEM*. Workshop presentation at the ISTA annual Conference, Lewiston, ID.
- Nadelson, L. S. (2010). *Inquiry based learning*. iSTEM conference 2010. Coeur d'Alene, ID.
- Jordan, R. & Nadelson L. S. (2010). *Make everyday an "Outside Day."* Workshop presentation at the Idaho Environmental Education Conference 2010. Boise, ID

- Nadelson, L. (2009). Invited Panelist at the Joint meeting of the Idaho Science Teachers Association and Idaho Council of Teachers of Mathematics, Boise, ID.
- Nadelson, L. (2009). *Using research to inform policy: Current STEM projects at Boise State University*. Research presentation at the Idaho National Laboratory iSTEM Fall Meeting, Boise, ID.
- Nadelson, L., Walters, L. & Waterman, J. (2008). *What works best? Classroom undergraduate research experiences with different levels of inquiry*. Poster presentation at the University of Central Florida Research Week, Orlando, FL.
- Nadelson, L. (2002). *Math and the brain*. Position paper presentation at The Evergreen State College, Olympia, WA.
- Nadelson, L. (2001). *A snapshot of Spokane*. Workshop presentation at the annual meeting at the Northwest Council for Computer in Education, Spokane, WA.
- Nadelson, L. (2000). *Presenting people and places in Portland*. Workshop presentation at the annual meeting at the Northwest Council for Computer in Education, Portland, OR.
- Nadelson, L. (1999). *The technology integrated curriculum, and National technology standards*. Keynote address at the Smart Tools Academy, Bellingham, WA.
- Nadelson, L. (1999). *Claiming a lane of the information super highway*. Research presentation at the USWest Technology Conference, Seattle WA.

Local

- Nadelson, L., & Nadelson, S. (2007). *Hand-on mathematics and science – improving student learning*. Workshop presentation at the CCSD New Teacher Conference. Las Vegas, NV
- Nadelson, L. (2006). *An inquiry into teaching science inquiry*. Workshop presentation at the CCSD New Teacher Conference. Las Vegas, NV
- Nadelson, L. (2006). *Where did you learn that? Working with student misconceptions*. Workshop presentation at the CCSD New Teacher Conference. Las Vegas, NV.
- Nadelson, L. (2006). *Teacher response to the reform effort of block scheduling*. A poster presented at the UNLV Graduate and Professional Student Association annual research forum. Las Vegas, NV.
- Nadelson, L. (1998). *Assessment of technology-based learning*. Workshop presentation at the University of Washington Computer Fair, Seattle, WA.

COURSE TEACHING

Undergraduate Courses

- Engineering for Elementary Educators
- Elementary Science Curriculum and Instruction
- Introduction to Engineering
- Classroom Interactions (IDoTeach Course)
- Knowing and Learning (IDoTeach Course)
- Learning and Instruction
- Foundations of Educational Assessment

Graduate Courses

- Current Issues in STEM Education
- Developing a Technology Integrated Science Curriculum
- Classroom Assessment and Evaluation
- Curriculum, Instruction & Assessment Grades 6-12
- Quantitative Approaches to Research
- Introduction to Research (graduate course)
- Research for Classroom Teachers
- Descriptive and Inferential Statistics
- Research and Program Evaluation

Courses Prepared to Teach

- Current Issues and Trends in STEM Education
- Teaching and Learning Integrated STEM
- Elementary and Secondary Science and Engineering Methods
- Teaching and Learning Engineering
- Nature and Philosophy of Science
- Classroom Assessment and Science Standards
- Misconceptions, Conceptual Change, and Science Education

GRADUATE STUDENTS**Doctoral Committee Chair**

- Kristina Luckey (2011)
- Darcie Bennett (2014)
- Jan Smith (2015) [Chair through 2014]
- David Joy (2017) [Chair through 2016]

Doctoral Committee Member

- Carolyn Prickett (2008)
- Greg Heoker (2010)
- Diana Hooley (2011)
- David Lee (2017) [Member through 2016]
- Emma Bullock (2017) [Member through 2016]
- Kade Hendricks (2017) [Member through 2016]
- Stephanie Juth (2018) [Member through 2016]
- Lauren Burton (2018) [Member through 2016]
- Andrew Glaze (2018) [Member through 2016]
- Melanie Durfee (2018) [Member through 2016]

Master Committee Chair

- Christine Chang (2012)
- Meggan K. Laughrey (2014)
- Stacey Kristine Stanton (2014)

Master Committee Member

- Cameron Haediges (2009)
- Peter Mantius (2010)
- Michelle Devine (2010)
- Clarence Ames (2016)

SERVICE

- Kuwait Foundation for the Advancement of Science grant reviewer – Science Education Development (2016)
- Guest Editor: *Journal of Educational Research* Integrated STEM special issue, 2016
- NSF review panel – MSP Target Partnerships (2009) Directed Research K-12 (2010), STEM+C (2015, 2016), ISUE, (2018)
- Faculty mentor Division C Graduate Student Seminar, 2009, 2016
- NASA and USDOE 21st Century Community Learning Centers Expert Review Panel, 2015, 2016
- Utah State University Graduate Council, 2014 - 2016
- Executive Editor of STEM: *Journal of Educational Research*, 2013 - 2018
- Editorial Board: *International Journal of Higher Education*, 2014 - 2018
- Reviewer for ASEE conference, 2012 - 2018
- Reviewer for the AERA Conference, 2005 - 2017
- Board Member: Endowment Treasurer NCIC (Elected position) 2010 - 2018
- Campus representative for the Science Math Teacher Imperative (APLU) 2009-2016
- Member of the iSTEM Governance Committee (Elected Position) – 2009-2016
- Faculty Position Search Committee Member 2011 - 2015
- STEMx State Representative (Idaho and Utah), 2012 - 2014
- STEMx Round Table Facilitator – STEM Solutions Conference, 2014
- Higher Education Representative for the Building Capacity in State Science Education for Idaho 2012 - 2014
- Member at Large Southwest Consortium for Innovative Psychology in Education (SCIPIE), 2012 - 2014
- AERA Division C New Faculty Seminar Chair, 2013 (Appointed Position)
- AERA Division C New Faculty Seminar Co-Chair, 2012 (Appointed Position)
- Co-lead the development of the *Standards for the Professional Preparation of Teachers of Engineering* 2012, 2013
- Editorial Board: *Journal of The First-Year Experience and Students in Transition*, 2011-2014
- Editorial Board: *Journal of Educational Research*, 2011-2014
- IDoTeach Proposal Preparation, 2011
- Discussant National Consortium for Instruction and Cognition (NCIC), 2009 - 2016
- Program Chair Research Session National Consortium for Instruction and Cognition, 2009, 2010
- Conference reviewer for NARST 2011 – 7 submissions
- Member of the Idaho Science, Mathematics, and Technology Coalition (ISMTC) Board of Directors (Elected Position) 2009 - 2012
- Member planning committee NSF MSP conference - 2010
- Coordinated NASA professional development at BSU 2009
- Participation and preparation in the MS STEM Education 2012
- Member of Department Tenure and Promotion Committee 2009, 2010
- Reviewer for *Science Education*
- Reviewer for *Journal of Engineering Education*
- Reviewer for *Contemporary Educational Psychologist*
- Reviewer for *Journal of Research in Science Teaching*
- Reviewer for *Educational Psychology*
- Reviewer for *Journal of Experimental Educational Psychology*
- Reviewer for *Journal of Teacher Education*
- Reviewer for *Evolution Education and Outreach*

HONORS AND AWARDS

- Founders Award for Best Presentation, SCIPIE, 2015
- Best Division Speaker, ASEE - CIEC, 2015
- Best Session Award, ASEE - CIEC, 2015
- International Association for STEM Leaders STEM Professional Development Leadership Award, 2014
- Interviewed on New Horizons, 2009
- Featured in the Explore Fall/Winter 2009
- Fellows of the Academy, fellowship award Spring 2008

- NSF Synthesis Grant Invited Participant - Evolution Challenges, 2006, 2007
- Action Research Grant, \$1000, 2006
- Equity and Diversity Grant, \$3000, 2006

PROFESSIONAL AFFILIATIONS

National Council of University Research Administrators (NCURA)
Society of Research Administrators (SRA)
National Science Teacher Association (NSTA)
American Society of Engineering Education (ASEE)
School Science and Mathematics Association (SSMA)
American Psychological Association (APA)
American Educational Research Association (AERA)
National Consortium for Instruction and Cognition (NCIC)
Southwest Consortium for Innovations in Psychology in Education (SCIPIE)
Society for Advancement of Chicanos and Native Americans in Science (SACNAS)