Judith A. Morrison

Department of Teaching and Learning Washington State University Tri-Cities 2710 Crimson Way Richland, Washington 99354 (509) 372-7176 jamorrison@wsu.edu

EDUCATION

Ph.D.	1999	Oregon State University, Corvallis, Oregon Science Education/Integrated Science Dissertation title: Investigating Teachers' Understanding and Diagnosis of Students' Preconceptions in the Secondary Science Classroom
M.S.	1991	Oregon State University, Corvallis, Oregon Science Education
Teacher Certification	1983	Eastern Washington University, Cheney, Washington Biology, Chemistry
B.A.	1979	University of Montana, Missoula, Montana Zoology

PROFESSIONAL WORK EXPERIENCE

August, 2015- present	Academic Director, College of Education, WSU Tri-Cities campus. Responsibilities include oversight over all education programs and faculty, scheduling, budgeting, and personnel issues
August, 2021-present	Professor, Science Education, Washington State University Tri-Cities. Responsibilities include teaching elementary science methods courses (T&L 371, MIT 534) and practicum and seminars for the Alternative Route program
August, 2009-2021	Associate Professor, Science Education, Washington State University Tri-Cities. Responsibilities include teaching elementary science methods courses (T&L 371, MIT 534) and practicum and seminars for the Alternative Route program. Faculty lead for department, January 2014- August 2015.

Morrison Vita	
August, 2003- 2009	Assistant Professor, Washington State University Tri-Cities, tenure track faculty, science education and secondary education coordinator. Responsibilities included teaching elementary and secondary science methods courses (Teaching & Learning (T&L) 371, T&L 572, Bio 430), research courses (T&L 588, EdPsy 504), graduate level science education courses (T&L 571, T&L 574), and designing and coordinating the secondary education program on the Tri-Cities campus.
August, 2001- May, 2003	Instructor, Washington State University Tri-Cities, temporary faculty, science education. Responsibilities included teaching K-8 science methods, learning theory, and research courses.
October, 2000- July, 2001	Math/Science Specialist, Educational Service District (ESD)123, Pasco, WA. Responsibilities included providing support for inservice math and science teachers and establishing preservice/inservice teacher mentorships through a collaboration with WSU-TC faculty. Specific foci: performance assessments, state standards, and teacher enhancement
2000, Fall Term	Adjunct Faculty, Science Education, Washington State University Tri-Cities. Course taught: T&L 371: Teaching Elementary Science.
1999, Fall Term	Adjunct Faculty, Biology , Columbia Basin College (CBC). Course taught: Science 110: Natural History of the Columbia Basin.
1999, 2000, 2001 Summer	Adjunct Faculty, Science Education, Washington State University Tri-Cities. Course taught: T&L 574: Science for All.
1993- 1996	Graduate Teaching Assistant, Science Education , Oregon State University. Responsibilities included teaching courses in pedagogy and microteaching (methods). Additional responsibilities included supervision of graduate level teaching interns.
1993- 1996	Summer Term Instructor, Science Education, Oregon State University. Responsibilities included teaching courses to preservice and inservice teachers in integrating science and math, pedagogy, and assessment and evaluation.
1994, 1995-1996	Curriculum Evaluator , Lawrence Livermore National Laboratory. Responsibilities included review and evaluation of the elementary, middle, and high school curriculum "Global Climate Change" (1994), evaluation of the Biotechnology Education

Morrison Vita	
	Project (1995-96), and travel to LLNL to work with curriculum writers.
1991-1993	Graduate Research Assistant, Science Education , Oregon State University. Responsibilities included researching, writing, and editing the integrated science and math curriculum "Earth, Air, Fire and Water."
1983-1990	Science Teacher, Shadle Park HS, Spokane, WA, Prince George College, Prince George, BC., Queen Margaret's School, Duncan, BC., and D. P. Todd HS, Prince George, BC. Responsibilities included teaching grade 11 and 12 Chemistry, Organic Chemistry, Grade 12 Biology, General Science grades 7- 10, Physical Science, and grade 8 Math.

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OVERVIEW OF RESEARCH AND SCHOLARLY ACTIVITY

My research focus is the professional development of science teachers. My research interests have been centered on **best practices for preparing science teachers** with a focus on the nature of science and collaborations with scientists. The research I carry out also includes study of **best practices for the preparation of science teachers** who teach in STEM schools, teach STEM curricula, teach computing, and work with English Language Learner students (ELLs). Additionally, through my work as academic director, I have developed programs in and conduct research on an alternative route for teaching and a certificate for computer science education.

PUBLICATIONS IN REFEREED JOURNALS

PUBLISHED-PEER REVIEWED

- Morrison, J. A. (2021). NGSS science practices in an elementary science methods course: Preservice teachers doing science. *Innovations in Science Teacher Education, 6 (3)*.
- Ernst-Slavit, G., Newcomer, S.N., Morrison, S.J., Lightner, L.K., Morrison, J.A., Ardasheva, Y., Carbonneau, K.J. (2021). Latina Paraeducators' Stories of Resistance, Resilience and Adaptation in an Alternative Routes to Teaching Program. In special issue "An Overlooked Educator Workforce in Schools: Investigating the Career Development of Paraeducators", *Journal of Career Development*, guest edited by C. Gist, Y.T. Amos and A. Garcia. DOI: 10.1177/08948453211005000
- Morrison, J., Frost, J., Gotch, C., Roth McDuffie, A., Austin, B., & French, B. (2021). Teachers' role in students' learning at a project-based STEM high school: Implications for teacher education. *International Journal of Science and Mathematics Education*, 19, 1103-1123. DOI: 10.1007/s10763-020-10108-3
- Morrison, J., Ardasheva, Y., Newcomer, S., Lightner, L., Ernst-Slavit, G., & Carbonneau, K. (2020). Supporting science learning for English learners (ELs). *Journal of Educational Research and Practice*, 10 (1), 254-274.

- Newcomer, S. N., Ardasheva, Y., Morrison, J. A., Ernst-Slavit, G., Morrison, S. J., Carbonneau, K. J., & Lightner, L. K. (2020). "Whoa... Welcome to America!" Working with refugee students and families. *Journal of Research in Childhood Education*. DOI: 10.1080/02568543.2020.1734697
- Ardasheva, Y., Newcomer, S. N., Ernst-Slavit, G., Morrison, S. J., Morrison, J. A., Carbonneau, K. J., & Lightner, L. K. (2019). Decision-making practices of experienced upper elementary teachers during small group instruction to support English learners. *The Elementary School Journal*, 120(1), 88-108.
- Collins, L., Cavagnetto, A., Ferry, N., Adesope, O., Baldwin, K., Morrison, J., & Premo, J. (2019). May I have your attention: An analysis of teacher responses during a multi-year professional learning program. *Journal of Science Teacher Education*, 30(6), 549-566.
- Tretter, T., Ardasheva, Y., Morrison, J., & Roo, A. K. (2019). Strengthening science attitudes for newcomer middle school English learners: Visually enriched integrated science and language instruction. *International Journal of Science Education*, 41(8),1015-1037.
- Lesseig, K., Firestone, J., Morrison, J., Slavit, D., & Holmlund, T. (2018). An analysis of cultural influences on STEM schools: Similarities and differences across K-12 contexts. *International Journal of Science and Mathematics Education*, 17(3), 449-466.
- Ardasheva, Y., Wang, Z., Roo, A. K., Adesope, O. O., & Morrison, J. A. (2018). The effects of representational visuals on science interest and reading comprehension of adolescent English learners. *Journal of Educational Research*, 111(5), 631–643. DOI: 10.1007/s10763-017-9875-6
- Selwitz, J. L., Ahring, B., Garcia-Perez, M., & Morrison, J. (2017). Engineering an associate degree level STEM workforce education curriculum. *Community College Journal of Research and Practice*, 1-17. Published online 19 June 2017.
- Morrison, J., Roth McDuffie, A. & French, B. (2015). Identifying key components of teaching and learning in a STEM school. *School Science and Mathematics*, 115(5), 244-255.
- Ardasheva, Y., Bowden, J. O., Morrison, J. A., & Tretter, T. R. (2015) Comic relief: Using comic and illustrated trade books to support science learning in first year English language learners. *Science Scope*, 38(6), 39-47.
- **Morrison, J. A.** (2014). The impact of experiences with scientists on 4-8th grade teachers' understanding and implementation of inquiry science. *International Journal of Science and Mathematics Education*, 12(4), 793-816.
- Weiland, I. & Morrison, J. (2013). The integration of environmental education into two elementary preservice science methods courses: A content-based and a method-based approach. *Journal of Science Teacher Education*, 24(6), 1023-1047.
- **Morrison, J. A.** (2013). Exploring exemplary elementary teachers' conceptions and implementation of inquiry science. *Journal of Science Teacher Education*, 24(3), 573588.

- Morrison, J. A., Raab, F. J., & Ingram, D. (2009). Factors influencing elementary and secondary teachers' views of the nature of science. *Journal of Research in Science Teaching*, 46(4), 384-403.
- Morrison, J. A., & Roth McDuffie, A. (2009). Connecting science and mathematics: Using inquiry investigations to learn about data collection, analysis, and display. *School Science and Mathematics*, 109(1), 31-44.
- Morrison, J. A. & Young, T. A. (2008). Using science trade books to support inquiry in the classroom. *Childhood Education*, *84*(4), 204-208.
- Morrison, J. A. (2008). Elementary preservice teachers' use of science notebooks. *Journal* of Elementary Science Education, 20(2), 13-21.
- Morrison, J. A. (2008). Individual inquiry investigations in an elementary science methods course. *Journal of Science Teacher Education*, 19(2), 117-134.
- Roth McDuffie, A. & Morrison, J.A. (2008). Teachers learning about data display: Connecting mathematics and science inquiry. *Teaching Children Mathematics*, 14(6), 375-382.
- Morrison, J. A., & Estes, J. (2007). Using scientists and real-world scenarios in professional development for middle school science teachers. *Journal of Science Teacher Education*, 18(2), 165-184.
- Akerson, V. L., Morrison, J. A., & Roth McDuffie, A. (2006). One course is not enough: Preservice elementary teachers' retention of improved views of nature of science. *Journal* of Research in Science Teaching, 43(2), 194-213.
- Morrison, J. A., Roth McDuffie, A., & Akerson, V. (2005). Preservice teachers' development and implementation of science performance assessment tasks. *International Journal of Science and Mathematics Education*, (3), 379-406.
- Morrison, J. A. (2005). Using science notebooks to promote preservice teachers' understanding of formative assessment. *Issues in Teacher Education*, 14(1), 5-21.
- Morrison, J.A., & Lederman, N. G. (2003). Science teachers' diagnosis and understanding of students' preconceptions. *Science Education*, 87(6), 849-867.
- Roth McDuffie, A., Akerson, V., & **Morrison, J.** (2003). Designing and implementing meaningful field-based experiences for mathematics methods courses: A theoretical framework and a program description. *The Mathematics Educator*, 13(1), 22-32.

PUBLISHED- EDITOR-REVIEWED

Morrison, J., & Lightner, L. (2017). Putting paraeducators on the path to teacher certification. *Phi Delta Kappan*, 98(8), 43-47. <u>https://doi.org/10.1177/0031721717708294</u>

UNDER REVIEW

Carbonneau, K. J., Ardasheva, Y. Lightner, L. K., Newcomer, S. N., Ernst-Slavit, G., Morrison, J. A., & Morrison, S. J. (under review). Moving beyond the classroom: Pre- and practicing teachers' self-efficacy for working with culturally and linguistically diverse students. *Educational Psychology*.

UNDER REVISION

- Firestone, J. B. Newcomer, S. N., & **Morrison**, J. (under revision). Flying lessons: Challenges and successes in integrating literacy into a STEM-based curriculum.
- Newcomer, S. N., Ernst-Slavit, G., Morrison, S. J., Ardasheva, Y., Carbonneau, K. J., Morrison, J. A., & Lightner, L. K. (under revision). Experienced teachers' use of scaffolding during small instruction across content areas to support English learners.

UNDER DEVELOPMENT

Morrison, J., Malone, D., & Firestone, J. Teachers' understanding and implementation of computational thinking in the K-8 classroom.

BOOK CHAPTERS

- Morrison, J. (2014). What's in the can? Modeling scientific practices. In T. Morrell & K. Popejoy (Eds.). *A few of our favorite things: Teaching ideas for K-8 science methods instructors*. Sense Publishers.
- Morrison, J. A. (2007). Teachers' use of science notebooks to assess understanding of science concepts. In V. Akerson (Ed.). *Interdisciplinary language arts and science instruction in elementary classrooms: Applying research to practice* (pp. 49-59). Mahwah, NJ: Lawrence Erlbaum.
- Morrison, J. A. (2007). Using science notebook writing to promote preservice teachers' understanding of formative assessment. In V. Akerson (Ed.). *Interdisciplinary language arts and science instruction in elementary classrooms: Applying research to practice (pp. 197-216)* Mahwah, NJ: Lawrence Erlbaum.
- Akerson, V., Roth McDuffie, A., & Morrison, J. (2006). Performance assessment tasks as a stimulus for collaboration among preservice and inservice teachers. In M. McMahon, P. Simmons, R. Sommers, D. DeBaets, & F. Crawley (Eds.) Assessment in Science: Practical Experiences and Education Research. (pp. 159-171). Arlington, VA: NSTA Press.

OTHER PUBLICATIONS

- Nollmeyer, G. E., **Morrison, J.,** & Baldwin, K. A. (2019). Barriers to Authentic Science Inquiry in the Elementary Classroom. Educational Research: Theory and Practice, 30(1) 1-6. NRMERA Conference Proceedings.
- Ardasheva, Y., Newcomer, S. N., Ernst-Slavit, G., Morrison, S. J., Morrison, J. A., Carbonneau, K. J., & Lightner, L. K. (2017). *Experienced Teachers' Use of Small Group Strategies* across Content Areas: 2016-2017 [Executive Summary Report prepared for participating schools in three school districts: Pasco, Kennewick, and Evergreen]. Washington State University Tri-Cities, Richland, WA.
- Morrison, J. A. (2011). Exemplary teachers' views of and recommendations for the teaching of inquiry science. *Washington Science Teachers' Journal*, 52(1), 39-42.
- Morrison, J. A., & Roth McDuffie, A. (2006). Authentic inquiry investigations: Using real data across science and math methods courses. *Washington Science Teachers' Journal*, 45(4), 4-6.
- Morrison, J. A. (2004). Using science notebooks to promote preservice teachers' understanding of formative assessment. In Proceedings of the Annual Meeting of the National Association for Research in Science Teaching, Vancouver, BC: National Association for Research in Science Teaching.
- Morrison, J.A., & Aram, R. J. (2004). Using science notebooks as an assessment tool in science *methods courses*. In Proceedings of the 2004 International Annual Meeting of the Association for the Education of Teachers in Science. Nashville, TN: Association for the Educators of Teachers in Science.
- Morrison, J. A. (2003). Using science notebooks with preservice and inservice teachers. In Proceedings of the International Annual Meeting of the Association for the Education of Teachers in Science, St. Louis, MO: Association for the Educators of Teachers in Science.
- **Morrison, J. A.** (2003) *The moon's phases and lunar eclipses: An inquiry lesson.* In Proceedings of the 15th Annual Education Seminar, Washington State University College of Education and Nishinomiya Education Board.
- **Morrison, J. A.** (2002). *Preparing preservice and inservice teachers to teach inquiry science*. In Proceedings of the 14th Annual Education Seminar, Washington State University College of Education and Nishinomiya Education Board. 39-41.
- Morrison, J. A., Roth McDuffie, A., & Akerson, V. (2002) A focus for collaboration: Developing and implementing science and mathematics performance assessment tasks. In Proceedings of the 2002 International Annual Meeting of the Association for the Education of Teachers in Science, Charlotte, NC: Association for the Educators of Teachers in Science.

- Roth McDuffie, A., Akerson, V., & Morrison, J. (2002). Designing and implementing meaningful field-based experiences for mathematics methods courses: A program description. In Proceedings of the 2001 Association of Mathematics Teacher Educators Annual Conference, Costa Mesa, CA: Association of Mathematics Teacher Educators.
- Akerson, V., Roth McDuffie, A., & Morrison, J. (2001). The bridges research project: Pairing preservice and inservice teachers for professional development in science, math, and literacy using performance assessment tasks as contexts. In Proceedings of the 2001 International Annual Meeting of the Association for the Education of Teachers in Science, Costa Mesa, CA: Association for the Educators of Teachers in Science.

GRANTS

<u>FUNDED</u>

- Firestone, J.B., McMahon, D., Hardin, C., & Morrison, J. (2021-2022) Coding with Alice Virtual Environment Peer Mentoring Project (CAVE Project). Office of the Superintendent of Public Instruction (OSPI). \$50,000
- **Morrison, J.** (2022). PESB Block Grant for Alternative Route Program 2022-2024 through the Washington State Professional Educators Standards Board. \$363,000.
- Morrison, J., Firestone, J. & Newcomer, S. (2020-24). Collaborative Research: Socio-Environmental Science Investigations: Exploring Alternative New Directions: SESI-ExpAND. Funded through NSF ITEST Program (with Lehigh and Texas Christian Universities), \$642,545, total award across three sites: \$2,851,245.
- **Morrison, J.** (2020-22). PESB Block Grant for Alternative Route Program 2020-2022 through the Washington State Professional Educators Standards Board. \$363,000.
- Firestone, J., & Morrison, J. (2019-20). CSTEP III- Computer Science Teacher Education Project. Funded through the Washington State Office of the Superintendent of Public Instruction (OSPI); \$50,000 with matching funds of \$50,000 from Pacific Northwest National Laboratory (PNNL).
- Firestone, J., & Morrison, J. (2018-2019). CSTEP II- Computer Science Teacher Education Project. Funded through the Washington State Office of the Superintendent of Public Instruction (OSPI); \$49,000 with matching funds of \$49,000 from PNNL.
- Petersen, S., Moscatelli, M., Morrison, J., & Hsiao, Y. (2018-2020). Advancing System Equity Using Inclusive and Diverse Instructional Practices. Funded through the Washington State Professional Educators Standards Board, \$20,000.
- **Morrison, J.** (2018-2020). PESB Block Grant for Alternative Route Program funded through the Washington State Professional Educators Standards Board. \$240,000.

- Firestone, J., & Morrison, J. (2017-18). CSTEP I- Computer Science Teacher Education Project. Funded through the Washington State Office of the Superintendent of Public Instruction (OSPI); \$49,000 with matching funds of \$49,000 from PNNL.
- Nelson, T., Kruse, S., Rollwagen-Bollens, G., & Morrison, J. (2016-2021). Collaborative Research: The Next Generation of STEM Teacher Preparation in Washington State. Funded through NSF \$296,235.
- Ernst-Slavit, G., Morrison, J., Carbonneau, K., Ardasheva, Y., & Newcomer, S. (2016-2021). Equity for Language Learners: Improving Practice and Acquisition of Culturally Responsive Teaching (ELL-IMPACT). Funded through the US Department of Education, \$2,274,430.
- **Morrison, J.** (2015-2018). PESB Block Grant for Alternative Route Program funded through the Washington State Professional Educators Standards Board. \$336,000.
- Firestone, J. & Morrison, J. (2014). STEM Elementary Teachers: Exploring their Views, Practices, and Growth, Faculty Research Award funded through WSU College of Education. \$9,000.
- French, B., Gotch, C., Frost, J., **Morrison, J.**, & Roth McDuffie, A. (2013-2016). Riverpoint Academy and the Components of Success. Funded through private funders, \$490,000.
- Cavagnetto, A., Morrison, J., Baldwin, K., & Adesope, O. (2013-2015). Enhancing Understanding of Scientific Concepts and Practices with the Science Writing Heuristic Approach, Concept Mapping, and Instructional Design. Math Science Partnership (MSP) funded through WA State OSPI, \$518,189.
- Nagel, E., Roth-McDuffie, A., **Morrison, J.**, Trevisan, M., & French, B. (2010). Delta High School Research and Evaluation. Funded through the Paul Allen Family Foundation, \$195,000
- Morrison, J. A. (2010). Science Alliance Partnership. Funded through ESD123. \$12,000.
- **Morrison, J. A.** (2010). Exploring teachers' implementation of inquiry science. Faculty Research Award funded through WSU College of Education. \$4,000.
- Morrison, J. A. (2009). Science Alliance Partnership. Funded through ESD123. \$12,000.
- **Morrison, J. A.** (2009). Teachers' implementation of inquiry science. Faculty Research Award funded through WSU College of Education. \$2,400.
- **Morrison, J. A.** (2009). Support for Teaching Science. Funded through the Ken and Marleen Alhadeff Teachers of Teachers Faculty Awards. \$310.

- Morrison, J. A. (2008). Support for Teaching Inquiry Science. Funded through the Ken and Marleen Alhadeff Teachers of Teachers Faculty Awards. \$1,000.
- Morrison, J. A. (2007). Support for Teaching Inquiry Science. Funded through the Ken and Marleen Alhadeff Teachers of Teachers Faculty Awards. \$900.
- Muxen, M., Morrison, J., Raab, F, Meadows, D., Ingram, I., McLean, J., Van Beek, V., Lindsay, S., Wheaton, C., & Landvoy, R. (2007). Southeast Washington-Science Learning Community MSP through Washington State OSPI. \$891,563.
- Morrison, J. A., & Roth McDuffie, A. (2006). Faculty Research Award funded through WSU College of Education. \$4,800.
- **Morrison, J. A.** (2006). Travel award. Funded through the WSU College of Education Faculty Funding Awards to present at ASTE annual meeting, Clearwater Beach, FL, \$1000.
- Roth McDuffie, A. & Morrison, J. A. (2005). Support for Mathematics and Science Methods Courses. Funded through the Ken and Marleen Alhadeff Teachers of Teachers Faculty Awards. \$2,166.
- McLean, J., Fossa, S., Hailey, J., Lindsay, S., Morrison, J., Reault, J., Redinger, S., Sauer, N., & Willcuts, P. (2004). Expansion of the Southeast Washington LASER Alliance Services. Funded through Battelle Corporate Contributions Grants, \$519,000.
- Morrison, J. A. (2004). Professional Development for Science Teachers: Exploring the Nature of Science. Funded through the WSU Foundation New Faculty Seed Grant Program, \$5,250.
- Morrison, J. A. (2004). Science notebook project. Funded through the WSU College of Education Faculty Research Awards, \$2,400.
- Morrison, J. A. (2003). Support for Science Methods Courses. Funded through the Ken and Marleen Alhadeff Teachers of Teachers Faculty Awards. \$965.
- Morrison, J. A. (2003). Science notebook project. Funded through the WSU College of Education Faculty Research Awards, \$4,400.
- **Morrison, J. A.** (2003). Travel award. Funded through the WSU College of Education Faculty Funding Awards to present at 2003 AERA conference in Chicago, \$634.

UNDER REVIEW

Ardasheva, A., Morrison, J., Fick, S. & Austin, B. (2021). Collaborative Research: Science Inquiry Centered Argumentation Model (ScICAM): Enhancing science learning and reasoning for young children, including English Learners (ELs). Revised from 2020 and resubmitted to NSF DRK-12 Program, \$1,031,351

NOT FUNDED

- Johnson, E., Ardasheva, Y., Vaughn, M., Hsiao, Y.-J. Dai, S., Morrison, J., & Lightner, L. (2021). Supporting Dual Language Learners' Biliteracy in School and at Home (Support-DLL). Department of Education, NPD. \$2,327,936.00.
- Morrison, J., Ardasheva, A., & Austin, B. (2020). Collaborative Research: Science Inquiry Centered Argumentation Model (ScICAM): Enhancing science learning and reasoning for young children, including English Learners (ELs). Revised from 2019 and resubmitted to NSF DRK-12 Program, \$963,091.
- Morrison, J., Ardasheva, A., & Austin, B. (2019). Collaborative Research: Science Inquiry Centered Argumentation Model (ScICAM): Enhancing science learning and reasoning for young children, including English Learners (ELs). Revised from 2018 and resubmitted to NSF DRK-12 Program (with University of Louisville), \$1,255,712.
- Morrison, J., Carbonneau, K., Firestone, J., Roth McDuffie, A., Learn. R., Wright-Mockler, A., & Rougee, A. (2018). Developing Practices in Interdisciplinary Computational Thinking and Inclusive Culturally-responsive Teaching (DePICT²). Submitted to NSF STEM+C Program, \$1,462,005.
- Morrison, J., Ardasheva, A., & Austin, B. (2018). Collaborative Research: Science Inquiry Centered Argumentation Model (ScICAM): Enhancing science learning and reasoning for young children, including English Learners (ELs). Submitted to NSF DRK-12 Program (with University of Louisville), \$1,255,712.
- Morrison, J., Roth McDuffie, A., Firestone, J., Carbonneau, K., Wright-Mockler, A., & Rougee, A. (2018). Developing Practices in Interdisciplinary Computational Thinking and Inclusive Culturally-responsive Teaching (DePICT²). Submitted to NSF STEM+C Program, \$955,827.
- Ianelli, J., Allena, S., Ameli, A., Hudson, S., & Morrison, J. (2017). A Project-Driven Global Education Program to Empower Engineering and Computer Science Students to Transform the World. Submitted to NSF IUSE Program, \$2,843,354.
- Meiers, C., McAteer, K. & Morrison, J. (2017). Recruitment and Support to Impact Student Success. Submitted to the Department of Education, Post-Secondary Education for \$5,044,42.
- Mo, C., Demissie, Y., Hossain, A., Moo-Young, K. Morrison, J., Osman, M., Tan, L., Thomsen, K., & Jordan, S. (2015). DOE-EM Robotics Traineeship: Robotics Graduate Education Program for Sustainable Workforce in Environmental Cleanup, Restoration and Monitoring. \$3,959,999.

- Nelson, T., Slavit, D., McDuffie, A., Morrison, J., Frost, J., Baldwin, K., and French, B. (2012). Student Understanding, Confidence, Career Awareness, and Efficacy in STEM Schools (SUCCESS) Transforming Student Learning (TSL) proposal submitted to NSF, \$1,897,202.
- Morrison, J., Felsot, A., McDuffie, A., & Cooper, J. (2012). Mid-Columbia Small District STEM Alliance. Math Science Partnership (MSP) proposal submitted to NSF, \$3,790,934.
- Felsot, A., McAteer, K., & Morrison, J. (2011). Building Science & Technology Employment Opportunities through Scholarships for Students Enrolling in Science Programs at Washington State University Tri-Cities, S-STEM proposal submitted to NSF, \$574,960.
- Morrison, J., Johnson, E., Trevisan, M., & Ahring, B. (2011). Bio-energy: A Catalyst for Scientific Literacy. DR K-12 proposal submitted to NSF, \$3,324,680.
- Ahring, B., Felsot, A., Hallsted, L., Licea, McAteer, K., Morrison, J., Yang, B., & Lei. (2010). Sustainable futures: Bio-energy and bio-products education for a 21st century bioeconomy. Submitted to USDA, \$4,995,834.
- Morrison, J. A., & Trevisan, M. S. (2010). Pathways to technology (P2T). ITEST proposal submitted to NSF, \$1,150,624.
- **Morrison, J. A.** (2005). Influencing Science Teachers' Views on the Nature of Science. Proposal submitted to the Spencer Foundation's Small Research Grants Program. Amount requested \$37,752.
- Paznokas, J. L., Gutting, J., Morrison, J. A., Nelson, T. D., & Paznokas, L. S. (2003). Southern Washington Partnership, a five year National Science Foundation Math/Science Partnership grant. Amount requested \$12,243,493.
- Roth McDuffie, A., & Morrison, J. (2002). Comprehensive Math and Science Partnership in Washington State. A National Science Foundation Proposal submitted in partnership with the Washington State Office for the Superintendent of Public Instruction, regional Educational Service Districts, School Districts state-wide, and other State Universities. WSU Tri-Cities funding requested: \$125,000; Comprehensive program funding requested: \$3,500,000.
- Storm, S., Morrison, J.A., & McDuffie, A. (2001). Teachers Leading Teachers: Establishing Mentorships for Science and Mathematics Teachers at All Levels. \$632, 801. National Science Foundation. Preproposal accepted, full proposal not funded.

REFEREED PRESENTATIONS

INTERNATIONAL/NATIONAL (* denotes graduate students)

- Ernst-Slavit, G., Newcomer, S. N., Morrison, S. J., Ardasheva, Y., Morrison, J. A., Carbonneau, K. J., & Lightner, L. K. (2022, March). Preparing Future Teachers for Parent and Family Engagement. Paper to be presented at the annual virtual TESOL conference on March 22-25, Pittsburgh, PA.
- Morrison, J., Lightner, L.*, Malone, D.*, Firestone, J., & Newcomer, S. (2022, January). Designing Virtual Professional Development to Motivate Teachers' Implementation of ArcGIS. Paper presented at the 2022 International Conference of the Association of Science Teacher Education (ASTE), Greenville, SC.
- Malone, D.*, Morrison, J., Firestone, J., Newcomer, S., Lightner, L.*, & Feltes, S.* (2022, January). Teaching with Technology: Building Confidence. Paper presented at the 2022 International Conference of the Association of Science Teacher Education (ASTE), Greenville, SC.
- **Morrison, J.** (2021, July). *Preparing teachers for roles in STEM project-based learning*. Poster presentation at the 2021 International STEM Education virtual conference, Vancouver, BC, Canada.
- Ernst-Slavit, G., Hellman, A., Newcomer, S. N., Morrison, J. A., Morrison, S. J.*, Lightner, L. K.*, Carbonneau, K. J., Uribe-Zarain, X., & Ardasheva, Y. (2021, April). *Effective bilingual and ELL teacher preparation: Lessons learned from two federally funded programs*. Roundtable at the 2021virtual annual meeting of the American Educational Research Association (AERA).
- Ernst-Slavit, G., Newcomer, S. N., Morrison, S. J.*, Lightner, L.K.*, Morrison, J.A., Ardasheva, Y., & Carbonneau, K. J. (2021, April). *Reconsidering community cultural wealth in teacher education: Lessons learned from Latina paraeducators*. Paper presented at the 2021 virtual annual meeting of the American Educational Research Association.
- Carbonneau, K. J., Ardasheva, Y., Lightner, L. K.*, Newcomer, S. N., Ernst-Slavit, G., Morrison, J. A., & Morrison, S. J.* (2021, April). Moving beyond the classroom: Pre and in-service teachers' self-efficacy for working with culturally and linguistically diverse students. Paper presented at the 2021 virtual annual meeting of American Educational Research Association.
- Lightner, L. K.*, Ardasheva, Y., **Morrison, J. A**, Carbonneau, K. J., Ernst-Slavit, G., Newcomer, S. N., & Morrison, S. J.* (2021, April). *Investigating prior learning assessments in an alternative route teacher certification program*. Roundtable paper

presented at the 2021 virtual annual meeting of the American Educational Research Association.

- Morrison, J., Lightner, L.*, Malone, D.*, Firestone, J., & Newcomer, S. (2021, March). Planning and connecting with partner teachers in virtual environments: A research and practices partnership in times of COVID19. Roundtable session presented virtually at the March 2021 International Consortium for Research in Science & Mathematics Education.
- **Morrison, J.** (2021, January). *Authentic science investigations in a virtual science methods course.* Paper presented at the virtual 2021 International Conference of the Association of Science Teacher Education (ASTE).
- Lightner, L. K.*, Malone, D. J.*, **Morrison, J. A.**, Firestone, J. B., & Newcomer, S. N. (2020, December). *Socio-environmental science investigations: Developing geospatial thinking and research-practice partnerships in the age of COVID-19.* Presentation given at the Northwest ASTE 2020 unConference.
- Ernst-Slavit, G. Newcomer, S.N., Carbonneau, K.J., Morrison, J.A. Ardasheva, Y., Morrison, S.J.*, & Lightner, L.K.* (2020, October). *Challenges and solutions in expanding pathways for paraeducator workforce*. Poster presented virtually at the annual meeting of the Office of English Language Acquisition, US Department of Education.
- Calderone, S. M., Ardasheva, Y., Newcomer, S., Ernst-Slavit, G., Morrison, J., Carbonneau, K. J., Lightner, L. K.* & Morrison, S.* (2020, April) "Are we having rich, deep conversations, or are we just checking boxes?" Teacher sense-making and curricular reasoning to support English learners [Paper Session]. AERA Annual Meeting San Francisco, CA. http://tinyurl.com/soofsuy (Conference Canceled)
- Ernst-Slavit, G., Hellman, A., Newcomer, S., Morrison, J. A., Morrison, S.*, Lightner, L. K.*, Carbonneau, K. J., Uribe-Zarain, X. & Ardasheva, Y. (2020, April) *Preparing bilingual* and English learner teachers in two innovative federally funded programs: Lessons learned [Paper Session]. AERA Annual Meeting San Francisco, CA. <u>http://tinyurl.com/w7chysl</u> (Conference Canceled)
- Carbonneau, K. J., Ardasheva, Y., Lightner, L. K.*, Newcomer, S., Ernst-Slavit, G., Morrison, J. & Morrison, S.* (2020, April) *Moving beyond the classroom: Pre- and in-service Teachers' self-efficacy for working with culturally and linguistically diverse students* [Paper Session]. AERA Annual Meeting San Francisco, CA. <u>http://tinyurl.com/wvsjcvl</u> (Conference Canceled)
- Malone, D.*, **Morrison, J.,** & Firestone, J. (2020, January). *K* -12 Teachers' implementation of computing and computational thinking. Poster presented at the international conference of the Association of Science Teacher Education (ASTE), San Antonio, TX.
- Morrison, J., Ardasheva, Y., Newcomer, S. Lightner, L.*, Ernst-Slavit, G., Carbonneau, K., & Morrison, S.* (2020, January). *Supporting Science Learning for English Language*

Students (ELs). Paper presented at the international conference of the Association of Science Teacher Education, San Antonio, TX.

- Lightner, L.* & **Morrison, J**. (2019, April). *The Transition from Paraprofessional to Teacher: The Paraprofessional's Voice*. Paper presented at the annual meeting of the American Education Research Association (AERA), Toronto, Canada.
- Newcomer, S. N., Ernst-Slavit, G., Morrison, S. J.*, Ardasheva, Y., Morrison, J. A., Lightner, L.*, & Carbonneau, K. (2019, April). "This was the first time anybody had ever invited me": The power of school/family engagement. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Toronto, Canada.
- Holmlund, T., Berger, M., Morrison, J., Rollwagen-Bollens, G., Watson, F., Baldwin, K., Nollmeyer, G., Egger, A., & Nolet, V. (2019, April). A Statewide Collaboration for Integrating Education for Sustainability into Teacher Preparation. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Toronto, Canada.
- Lightner, L.* & Morrison, J. (2019, January). The Relationship of Teaching Beliefs to Paraprofessional Preservice Teachers' Self-Efficacy for Teaching Elementary Science.
 Paper presented at the international conference of the Association of Science Teacher Education (ASTE), Savannah, GA.
- **Morrison, J.,** Firestone, J., & Malone, D.* (2019, January). *K-12 teachers' implementation of computing and computational thinking*. Paper presented at the international conference of the Association of Science Teacher Education (ASTE), Savannah, GA.
- Baldwin, K., Berger, M., Egger, A., Greary, E., Holmlund, T., Morrison, J., Nolet, V.,
 Rollwagen-Bollens, G., Nollmeyer, G., & Watson, F. (2019, January). NextGen STEM teacher preparation and Education for Sustainability (EfS): From framework development to landscape analysis. Poster at the Hawaii International Conference on Education (HICE) in HI.
- Newcomer, S. N., Ernst-Slavit, G., Morrison, S. J.*, Ardasheva, Y., Morrison, J. A., Lightner, L. K.*, & Carbonneau, K. J. (2018, November). *Exploring our educational imagination: Stories of journeying toward teaching.* Session paper presented at the annual meeting of the American Anthropological Association, San Jose, CA.
- Ardasheva, Y., Newcomer, S. N., Ernst-Slavit, G., Morrison, S. J.*, Morrison, J. A., Carbonneau, K. J. & Lightner, L. K.* (2018, November). *Experienced teachers' small* group instruction decision-making practices. Session paper presented at the annual meeting of the American Anthropological Association, San Jose, CA.
- Baldwin, K., Berger, M., Egger, A., Holmlund, T., **Morrison, J.**, Nolet, V., Rollwagen-Bollens, G., Nollmeyer, G., & Watson, F. (2018, Ocober). *Education for sustainability in*

Washington's K-12 STEM teacher preparation programs. North American Association of Environmental Education (NAAEE) Conference, Spokane, WA.

- Ardasheva, Y., Newcomer, S. N., Ernst-Slavit, G., Morrison, S. J.*, Carbonneau, K. J., Morrison, J. A., & Lightner, L. K.*. (2018, April). Upper-elementary teachers' use of small group strategies across content areas to support English learners. Roundtable presented at the annual meeting of American Educational Research Association (AERA), New York, NY.
- Lightner, L. K.* & Morrison, J. A. (2018, March). *Striking balances: Influences on paraprofessional preservice elementary teachers' science teaching self-efficacy.* Poster presented at the National Association for Research in Science Teaching (NARST) International Conference, Atlanta, GA.
- Firestone, J.B., Morrison, J., & Newcomer, S., (2018, January) Flying lessons: Challenges & successes in integrating literacy into a STEM-based curriculum. Paper presented at the international conference of the Association of Science Teacher Education (ASTE), Baltimore, MD.
- Lightner, L. K.*, & Morrison, J. A. (2018, January). Exploring the influence of situated work experiences on paraprofessional preservice teachers' science teaching self-efficacy.
 Paper presented at the Association for Science Teacher Education International Conference, Baltimore, MD.
- Ernst-Slavit, G., Carbonneau, K., Ardasheva, Y., Morrison, J., & Newcomer, S. (November, 2017). Equity for language learners: Improving practices and acquisition of culturally responsive pedagogy. Poster presented at the annual U.S. D.O.E OELA Project Director's Meeting on Nov. 7-9 in Arlington VA.
- Morrison, J., Lesseig, K., Firestone, J., Holmlund, T., & Slavit, D. (October, 2017). *Exploring teaching, learning and culture in STEM schools across the elementary, middle, and high school levels*. Paper presented at the STEM Education Research and Practice Summit, Purdue University.
- Firestone, J., Newcomer, S., & Morrison, J. (October, 2017). *Tensions and lessons in integrating literacy into a STEM based curriculum*. Paper presented at the STEM Education Research and Practice Summit, Purdue University.
- Cavagnetto, A., Morrison, J., Adesope, O., Baldwin, K., & Ferry, N.* (April, 2017). Exploring teacher perceptions of the Enhancing Understanding of Concepts and Practices (EUCAPS) project. Paper presented at the annual meeting of the National Association for Research in Science Teaching (NARST), San Antonio, TX
- Morrison, J., Frost, J., Gotch, C., Roth McDuffie, A., & Austin, B. (January, 2017). *Investigating student success at an innovative project-based high school.* Paper presented at the annual meeting of the Association for Science Teacher Education, Des Moines, IA.

- Lightner, L.* & **Morrison, J.** (January, 2017). *What are the science teaching self-efficacy beliefs* of para-professionals enrolled in an alternative route certification program? Paper presented at the annual meeting of the Association for Science Teacher Education, Des Moines, IA.
- Firestone, J. B., **Morrison, J.,** & Grant, L.* (January, 2016). *Transplanted Stems: Teachers' changing beliefs about STEM at a new elementary STEM school*. Paper presented at the annual meeting of the Association for Science Teacher Education, Reno, NV.
- **Morrison, J.** Firestone, J. B., & Grant, L.* (January, 2016). *The first year of an innovative STEM elementary school*. Paper presented at the annual meeting of the Association for Science Teacher Education, Reno, NV.
- **Morrison, J.,** & Firestone, J. B. (May, 2015). *Integrated STEM curricula at a STEM elementary school*. Paper presented at the National Science Teachers Association STEM Conference, Minneapolis, MN.
- Cavagnetto, A., Adesope, O., Morrison, J., Baldwin, K., & Gotch, C. (2015, April). Negotiating transition to the NGSS: Findings from a K-8 professional learning project. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.
- **Morrison, J.,** Firestone, J., Nelson, T., Lesseig, K., & Slavit, D. (2015, January). *STEM schools and curricula: Research at the elementary, middle and high school levels.* Themed paper presented at the annual meeting of the Association for Science Teacher Education, Portland, OR.
- Baldwin, K., Morrison, J., Cavagnetto, A., Adesope, O., Gotch, C., Boatman, G. & Marr, J.* (2015, January). Supporting teachers' implementation of the Next Generation Science Standards: Exploring the EUCAPS partnership. Paper presented at the annual meeting of the Association for Science Teacher Education, Portland, OR.
- Tretter, T., Ardasheva, Y., & **Morrison, J.** (2015, January). *Visually rich integrated science and language instruction to strengthen science attitudes for newcomer middle school English learners*. Paper presented at the annual meeting of the Association for Science Teacher Education, Portland, OR.
- **Morrison, J.,** Roth McDuffie, A., & French, B. (2014, January). *Identifying key components of a STEM high school.* Paper presented at the annual meeting of the Association for Science Teacher Education, San Antonio, TX.
- Baldwin, K., Cooper, C., Cavagnetto, A., **Morrison, J.**, & Adesope, O. (2014, December). *Big* outcrops and big ideas in Earth Science K-8 professional development. Paper presented at the American Geophysical Union's annual meeting, San Francisco, CA.

- Morrison, J., Cavagnetto, A., Baldwin, K., & Adesope, O. (2013, September). *Enhancing understanding of scientific concepts and practices with the science writing heuristic approach, concept mapping, & instructional design (EUCAPS).* Poster presented at the Mathematics and Science Partnerships Program Regional Conference, Washington, DC.
- **Morrison, J.** (2013, February). *The nature of scientific inquiry: A course immersing teachers into the world of science.* Presentation at the International Teacher-Scientist Partnership Conference at the American Association for the Advancement of Science (AAAS) Annual meeting, Boston, MA.
- **Morrison, J.A**. (2013, January). *The nature of scientific inquiry: A course immersing teachers into the world of science*. Paper presented at the annual meeting of the Association for Science Teacher Education, Charleston, SC.
- Owens, R., Roth-McDuffie, A., **Morrison, J.,** French, B, & Trevisan, M. (2012, October). *Using student-generated concepts maps in an evaluation of a STEM high school*. Poster presented at American Evaluation Association, Chicago, IL.
- Morrison, J. A. (2012, January). Scientists in teacher professional development: Scientists' views about teaching and partnerships with teachers. Paper presented at the annual meeting of the Association for Science Teacher Education, Clearwater Beach, FL.
- Weiland, I. & Morrison, J. (2011, January). A cross-case study analysis of the integration of environmental education in two elementary preservice science methods courses. Paper presented at the annual meeting of the Association for Science Teacher Education, Minneapolis, MN.
- **Morrison, J. A.** (2011, January). *Exploring exemplary teachers' views, understandings, and implementation of inquiry science.* Paper presented at the annual meeting of the Association for Science Teacher Education, Minneapolis, MN.
- **Morrison, J.,** Brown, F., Donovan, D., & Rios, J. (2010, January). *Preparing teachers to teach environmental and sustainability education in their K-12 classrooms*. Themed paper set presented at the annual meeting of the Association for Science Teacher Education, Sacramento, CA.
- **Morrison, J. A.** (2010, January). *Developing mentor teachers in inquiry science*. Paper presented at the annual meeting of the Association for Science Teacher Education, Sacramento, CA.
- **Morrison, J. A.**, Bushman, D., & Allred, M. (2009, March). *Developing mentor teachers to support inquiry science implementation*. Paper presented at the annual meeting of the National Science Teachers Association, New Orleans, LA.

- **Morrison, J. A.** (2009, January). Overcoming the odds: Supporting 4th-8th grade teachers in their implementation of inquiry science. Paper presented at the annual meeting of the Association for Science Teacher Education, Hartford, CT.
- Morrison, J. A. (2008, January). *Teachers' conversations with scientists about teaching science*. Paper presented at the annual meeting of the Association for Science Teacher Education, St. Louis, MO.
- **Morrison, J. A.** (2008, January). *Developing the Project Learning Tree activity "Planet Diversity."* Paper presented at the annual meeting of the Association for Science Teacher Education, St. Louis, MO.
- Morrison, J. A., & Roth McDuffie, A. (2007, April). *Connecting science and mathematics: Using inquiry investigations to learn about data collection, analysis, and display.* Poster presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Alonzo, A. C., Morrison, J. A., & Nesbit, C. R., (2007, January). Using science notebooks well: Challenges for teacher educators. Paper presented at the annual meeting of the Association for Science Teacher Education, Clearwater Beach, FL.
- **Morrison, J. A**. (2007, January). *Surrounded by scientists and research: Influencing teachers views of NOS at LIGO Hanford.* Paper presented at the annual meeting of the Association for Science Teacher Education, Clearwater Beach, FL.
- **Morrison, J. A.** (2007, January). *Preservice teachers' use of science notebooks*. Embedded workshop presentation at the annual meeting of the Association for Science Teacher Education, Clearwater Beach, FL.
- Morrison, J. A., Raab, F., & Ingram, D. (2006, April). Surrounded by scientists and scientific research: Influencing teachers' views of science and inquiry at LIGO Hanford. Poster presented at the annual meeting of the National Association for Research in Science Teaching, San Francisco, CA.
- Roth McDuffie, A. & Morrison, J. A. (2006, January). *Preservice teachers' understandings of data representation: Connecting mathematics and science methods courses to enhance learning*. Paper presented at the annual meeting of the Association of Mathematics Teacher Education, Tampa, FL.
- Morrison, J. A., Nesbit, C., Villanueva-Hay, M. G., Alonzo, A, Butler, M., & Rogers, C. (2006, January). *Science notebooks: Investigating strategies for classroom use*. Roundtable presentation at the annual meeting of the Association for Science Teacher Education, Portland, OR.

- **Morrison, J. A.** & Roth McDuffie, A. (2006, January). *Preservice teachers' inquiry science projects: Learning about data.* Paper presented at the annual meeting of the Association for Science Teacher Education, Portland, OR.
- **Morrison, J. A.** (2006, January). *Teachers' use of students' science notebooks*. Embedded workshop presentation at the annual meeting of the Association for Science Teacher Education, Portland, OR.
- **Morrison, J. A.** (2005, April). *Teachers' use of science notebooks in assessing students' understanding of science*. Poster presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, TX.
- Morrison, J. A. (2005, January). Using scientists and real-world scenarios in professional development for science teachers. Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Colorado Springs, CO.
- **Morrison, J. A.** (2005, January). *Students' science notebook writing*. Embedded workshop presentation at the annual meeting of the Association for the Education of Teachers in Science, Colorado Springs, CO.
- **Morrison, J. A.,** & Estes, J. (2004, April). Using scientists and real-world scenarios in professional development for middle school science teachers. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- **Morrison, J. A.** (2004, April). Using science notebooks to promote preservice teachers' understanding of formative assessment. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, Vancouver, BC.
- Morrison, J., Akerson, V., Hand, B., Black, K., Yore, L., Butler, M. (2004, January). *Students'* writing in science. Panel presented at the annual meeting of the Association for the Education of Teachers in Science. Nashville, TN.
- **Morrison, J.A.**, & Aram, R. J. (2004, January). Using science notebooks as an assessment tool in science methods courses. Paper presented at the annual meeting of the Association for the Education of Teachers in Science. Nashville, TN.
- Akerson, V., Morrison, J., & Roth McDuffie, A. (2004, January). Preservice elementary teachers' retention of improved views of nature of science after participating in an explicit-reflective science methods course. Paper presented at the annual meeting of the Association for the Education of Teachers in Science. Nashville, TN.
- Morrison, J. A. (2003, November). *Inquiry lesson on the moon's phases and lunar eclipse*. Presented at the 15th WSU College of Education-Nishinomiya Education Board Seminar, Nishinomiya, Japan.

- Akerson, V., **Morrison, J.,** & Roth McDuffie, A. (2003, April). *Preservice elementary teachers' retention of appropriate nature of science conceptions*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- **Morrison, J.A.** (2003, April). *Preservice teachers' development and implementation of science performance assessment tasks*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- **Morrison, J.A.** (2003, January). Using science notebooks with preservice and inservice teachers. Paper presented at the International Annual Meeting of the Association for the Education of Teachers in Science, St. Louis, MO.
- Akerson, V., Reiff, R., Morrison, J., Hanuscin, D., Shymansky, J., & Yore, L. (2003, January). Issues associated with using student science journals with K-6 students. Paper presented at the annual meeting of the Association for the Education of Teachers in Science, St. Louis, MO.
- Roth McDuffie, A., Akerson, V., & **Morrison, J.** (2002, April). *Preservice teachers designing and using performance assessment in schools as part of their math methods course*. Paper presented at an Association of Mathematics Teacher Educators sponsored session at the annual meeting of the National Council of Teachers of Mathematics (National), Las Vegas, NV.
- **Morrison, J. A.** (2002, January). *A focus for collaboration: Developing and implementing science and mathematics performance assessment tasks.* Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Charlotte, NC.
- Akerson, V, **Morrison, J.A.,** & McDuffie, A. (2002, January). *Performance assessment in science methods*. Poster presentation at the annual meeting of the Association for the Education of Teachers in Science, Charlotte, NC.
- Roth McDuffie, A., Akerson, V., & Morrison, J. (2001, January). Designing and implementing meaningful field-based experiences for mathematics methods courses: A program description. Paper presented at the Association of Mathematics Teacher Educators Annual Conference, Costa Mesa, CA.
- Akerson, V., Roth McDuffie, A., & Morrison, J. (2001, January). The bridges research project: Pairing preservice and inservice teachers for professional development in science, math, and literacy using performance assessment tasks as contexts. Paper presented at the International Annual Meeting of the Association for the Education of Teachers in Science, Costa Mesa, CA.
- **Morrison, J. A.,** & Lederman, N. G. (2001, January) *Science teachers' understanding and diagnosis of students' preconceptions*. A paper presented at the annual meeting of the Association for Education of Teachers in Science, Costa Mesa, CA.

- **Morrison, J. A.,** & Lederman, N. G. (2000, April) *Science teachers' diagnosis of students' preconceptions*. A paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- **Morrison, J. A.** (1996, January) *Development of preservice teachers' ability to assess students' understanding*. A paper presented at the annual meeting of the Association for Education of Teachers in Science, Seattle, WA.

REGIONAL/STATE (* denotes graduate students)

- *Malone, D., Morrison, J., & Firestone, J. (2019, October). K -12 teachers' implementation of computing and computational thinking. Poster presented at the WSU/STCU Education Summit, WSU Tri-Cities, Richland, WA.
- Nollmeyer, G. E., **Morrison, J.**, & Baldwin, K. A. (2018, October). *Barriers to authentic science inquiry in the elementary classroom*. Poster presented at the Annual Meeting of the Northern Rocky Mountain Educational Research Association, Salt Lake City, UT.
- *Lightner, L. K., & **Morrison, J. A.** (2017, March). *Predictors of paraprofessional elementary preservice teachers' science teaching self-efficacy.* Poster presented at the Washington State University GPSA Research Exposition, Pullman, WA.
- **Morrison, J.**, Firestone, J., & Newcomer, S. (2016, November). *The struggles and successes of integrating literacy into an elementary STEM-based curriculum*. Poster presentation at the regional conference of the National Science Teachers Association, Portland, OR.
- Morrison, J., Frost, J., Gotch, C., Roth McDuffie, A., & Austin, B. (2016, March). *Investigating* student success at an innovative project-based high school. Poster presented at the WSU Academic Showcase, Pullman, WA.
- Morrison, J., Firestone, J., Nelson, T., Lesseig, K., & Slavit, D. (2015, March). *STEM schools: Research across the elementary, middle, and secondary levels.* Poster presented at the WSU Academic Showcase, Pullman, WA.
- **Morrison, J.** (2014, December). *STEM high school teachers' implementation of NGSS science and engineering practices.* Poster presentation at the regional conference of the National Science Teachers Association, Long Beach, CA.
- Ardasheva, Y., & Morrison, J. (2014, June). Integrating trade and comic books to support English learners' science learning. NWATE conference in Pullman, WA.
- Morrison, J., Burke, D., & Tilson, M. (2013, October). *Key aspects of a STEM school.* Presentation at the Regional Conference of the National Science Teachers Association, Portland, OR.

- Morrison, J., Roth-McDuffie, A., French, B., Owens, R., & Trevisan, M. (2012, March). Evaluation of an innovative STEM school: Description of context and indicators of student success. Poster presented at the WSU Academic Showcase, Pullman, WA.
- Roth-McDuffie, A., **Morrison, J.,** French, B., Trevisan, M., & Owens, R. (2012, March). *Mathematics teaching and learning at a STEM-focused high school.* Poster presented at the WSU Academic Showcase, Pullman, WA.
- Morrison, J. & Boatman, G. (2011, December). *Impacting teachers' understanding and implementation of inquiry science teaching: What works*? Presentation at the regional conference of the National Science Teachers Association, Seattle, WA, Dec. 8-10.
- **Morrison, J. A.**, & Rios, J. (2010, April). *Preparing teachers to teach environmental and sustainability education in their K-12 classrooms*. Northwest Association of Teacher Educators, Ellensburg, WA.
- **Morrison, J. A.** (2009, May). *Building collaborations between science educators based on environmental education*. Presentation at the Sustainability and Environmental Education for Preservice Teachers Conference, Spokane, WA.
- **Morrison, J. A.**, & Roth McDuffie, A. (2007, March). *Connecting science and mathematics: Using inquiry investigations to learn about data collection, analysis, and display.* Poster presented at the WSU Academic Showcase, Pullman, WA.
- Morrison, J. A., & Young T.A. (2006, October). Using science trade books to support inquiry in *the classroom*. Paper presented at the combined conference of WSTA and WORD, Spokane, WA.
- Morrison, J. A., Roth McDuffie, A., & Anderson, M. (2004, November). *Involving preservice teachers in authentic inquiry investigations: Using real data across science, math, and technology methods courses.* Paper presented at the Northwestern Regional Conference of the National Science Teachers Association, Seattle, WA.
- **Morrison, J. A.**, *Olana, S., & *Smith, J. (2004, November). *Action research in the science classroom: Research to improve practice.* Paper presented at the Northwestern Regional Conference of the National Science Teachers Association, Seattle, WA.
- Morrison, J. A., *Doty, M., *Hendrickson, L., *Hood, P., & *Redfield, W. (2003, October). *Action research on science teaching in the K-8 classroom*. Presentation at the Annual Conference of the Washington Science Teachers Association, Pullman, WA.
- **Morrison, J. A.**, & *Hood, P. (2002, November). Using science notebooks in K-5 to increase students' understanding of science. Paper presented at the Annual Regional Meeting of the National Science Teachers Association, Portland, OR.

- **Morrison, J. A.** (2002, October). *Preparing preservice and inservice teachers to teach inquiry science*. Paper presented at the WSU College of Education-Nishinomiya Board of Education Seminar, WSU Tri-Cities, WA.
- **Morrison, J. A.**, & Akerson, V. (2001, November). *A variety of performance assessment tasks to help prepare your K-8 students for the science WASL*. Paper presented at the Annual Meeting of the Washington Science Teachers Association. Yakima, WA.
- **Morrison, J. A.** (1995) Development of preservice teachers' ability to assess students' understanding. A paper presented at the annual meeting of the Oregon Educational Research Association, Corvallis, OR.
- Morrison, J. A. (1994) *Students' conceptions on the nature of matter*. Oregon State University, Department of Science and Mathematics Education, Corvallis, OR.

INVITED PRESENTATIONS/WORKSHOPS

REGIONAL/STATE

- Morrison, J., Boatman, G., Ingram, D. (2014, March). Science workshop for MESA middle school teachers focusing on the NGSS. Pasco, WA
- Morrison, J. A. (2013, March). Understanding scientific practices and the nature of science. Workshop for local teachers at STEM CON, CBC, Pasco, WA.
- Morrison, J.A. (2012, March). Environmental and Sustainability Education Workshop for local teachers, ESD123, Pasco, WA.
- **Morrison, J. A.** (2011, September). *Teaching the nature of science to middle school students*. Workshop for middle school MESA teachers, WSU Tri-Cities, Richland, WA.
- **Morrison, J. A.** (2008, August). *Teachers' implementation of inquiry science: Research on practice.* Presentation at the Board meeting of the Educational Service District 123.
- Morrison, J. A. (2007, December). *Influencing teachers' views of science at LIGO Hanford*. Presentation at the Annual Meeting of the NW American Association of Physics Teachers (NWAAPT). Richland, WA.
- **Morrison, J. A.**, & Roth McDuffie, A. (2007, March). *Connecting science and mathematics: Using inquiry investigations to learn about data collection, analysis, and display.* Paper presented at WSU College of Education Faculty Research Seminar, Pullman, WA.
- **Morrison, J. A.** (2005, April). *Teachers' use of science notebooks*. Poster presented at the WSU College of Education Celebration of Excellence, Pullman, WA.

LOCAL

- Morrison, J., & Firestone, J. (February, 2015). STEM activities for families, Rosalind Franklin Elementary School, Pasco, WA
- Morrison, J. A. (June, 2012). Science lesson. Cottonwood Elementary School, Kennewick, WA
- Morrison, J.A. (2011, March). Science lesson on sound, third grade, Cottonwood Elementary School, Kennewick, WA.
- Morrison, J. A. (2011, May). Workshop for Delta High School students at the STEM Con, Washington State University Tri-Cities.
- Morrison, J. A. (2010, May). Workshop for Delta High School students at the STEM Con, Washington State University Tri-Cities.
- Morrison, J.A. (2010, March). Science lesson on sound, third grade, Sunset View Elementary School, Kennewick, WA.
- Morrison, J. A. (2008, April). Teacher Inservice: Teaching inquiry science K-5, Ruth Livingston Elementary School, Pasco, WA.
- Morrison, J.A. (2008, March). Science lesson on sound, third grade, Sunset View Elementary School, Kennewick, WA.
- **Morrison, J. A.** (2008, January). Science Education Reform: Where we have been, where we are, and where we are going. Presentation at the monthly meeting of Delta Kappa Gamma, Pasco, WA.
- Morrison, J. A. (2007, March). Science lesson on sound, third grade, Sunset View Elementary School, Kennewick, WA.
- Morrison, J. A. (2006, September). Teacher Workshop on the nature of science, "Science Demystified", Rowena Chess Elementary School, Pasco, WA.
- Morrison, J. A. (2006, March). Science lesson on experimental design, second grade, Sunset View Elementary School, Kennewick, WA.
- Morrison, J. A. (2006, January). Science lesson, physics of sound, third grade, Sunset View Elementary School, Kennewick, WA.
- Morrison, J. A. (2005, April). Science lessons on experimental design, second grade, Sunset View Elementary School, Kennewick, WA.
- **Morrison, J. A.** (2004, December). Innovative science education programs: WSU/LIGO collaborations in science teacher education. Presentation to the Professional Education Advisory Board to Washington State University, Richland, WA.

- **Morrison, J. A.** (2004, October). Two sessions on inquiry science to high school students attending the Careers in Education Conference, WSU Tri-Cities, Richland, WA.
- Morrison, J. A. (2004, February). School-wide science assemblies (K-3 and 4-5 grades) on the physics of sound at Sunset View Elementary School, Kennewick, WA.
- Morrison, J. A. (2003, January,) Using science notebooks with preservice and inservice teachers. Presentation at the LASER Alliance Lead Teacher Training Meeting, Pasco, WA.
- Roth McDuffie, A. & **Morrison, J.** (2002, March). Designing and using meaningful field-based experiences in mathematics and science methods courses. Presentation to the Professional Education Advisory Board to Washington State University, Richland, WA.
- Morrison, J. A. (2001, April). Nature of Science/Inquiry Science workshop, North Franklin School District, Connell, WA.
- Morrison, J. A. (2001, February). GEMS (Great Explorations in Math and Science) workshop for grade K-5 teachers, Educational Service District 123, Pasco, WA.
- Morrison, J. A. (2001, February). Mathematics/Problem Solving workshops, Clarkston School District, January and February, Clarkston, WA.
- Morrison, J. A. (2001, January). Workshop on Washington mathematics EALRS, Amistad Elementary School, Kennewick School District, Kennewick, WA.

SERVICE AND PARTNERSHIPS

SERVICE TO WASHINGTON STATE UNIVERSITY

<u>UNIVERSITY/CAMPUS</u> Member, Graduate Mentor Academy, January 2020-23

Member, STEM HUB Initiative between PNNL and WSU, August- December, 2019

Member, Academic Directors Leadership Team, WSU TC, September, 2016- present

Member, Campus Posting Committee, WSU TC, September, 2018-May, 2019

Member, Search Committee, Clinical Mathematics Assistant Professor, WSU TC, October, 2017- February, 2018

Member, Search Committee, Vice Chancellor for Academic Affairs, Tri-Cities campus, October, 2016- March, 2017

- Chair, Search Committee, Clinical Mathematics/Mathematics Education Assistant Professor, WSU TC, January, 2015- March, 2016
- Member Search Committee, Graduate Student Recruiter, WSU TC, October, 2015- March, 2016

Member, Chancellor's Leadership Team, August, 2014-2017

- Member, WSU TC MakerSpace Planning Committee, May, 2015- May, 2016
- Member, Wine Science Center Indicator Garden Planning/Implementation Committee, October, 2014-May, 2017
- Member, Campus Assessment Plan Committee, May-August, 2015
- Member, Advising and Mentoring Team, WSU Tri-Cities, December, 2014-May, 2015
- Member, Academic Strategic Planning Committee, WSU Tri-Cities, January, 2014-May, 2015
- Member, Provost's Leadership Academy, January- December, 2014
- Member, Search Committee, Director of CEREO, WSU Pullman, September 2012-March 2013
- Scholarship Reviewer, WSU Tri-Cities Scholarship Committee, January-March, 2012
- Member, STEM Education Partnership, Executive Committee, September, 2011-2013
- Member, Search Committee, Assistant/Associate Professor of Physiology, WSU Tri-Cities, December, 2010-March 2011
- Member, Executive Committee, Center for Environmental Research, Education, and Outreach (CEREO), August, 2008- present
- Chair, Education Committee, Center for Environmental Research, Education, and Outreach, August, 2008- November, 2009
- Faculty Research Presentation, Board of Regent Spouses, LIGO Observatory, March, 2008.
- Search Committee, Director of Science, WSU Tri-Cities, September, 2007- February, 2008.
- Mission to DC, OGRD sponsored trip November 16, 17, 2005.
- WSU-TC Health, Safety, and Environment Committee, January, 2002-present.

Judge, WSU-TC Student Research Symposium, May, 2001.

COLLEGE OF EDUCATION

Chair, WSU Tri-Cities Education Summit, October 2018, 2019, 2021

Academic Director, College of Education Tri-Cities, August 2015- present

College of Education Leadership Team, January 2014- present

Chair, College of Education WSU Tri-Cities Advisory Board, 2016- present

Program Lead, College of Education Tri-Cities, January 2014- August 2015

College of Education Faculty Advisory Committee (CEFAC) September 2013-May 2017

Professional Education Standards Board (PESB) Program Review Committee, September 2013March, 2015

Research Advisory Committee, December 2010-2012

Dean's Faculty Advisory Committee (DFAC), September 2009- 2011

Graduate Studies Committee, September 2009-2011

College of Education IRB Review Committee, March, 2008

Search Committee, Director of Education, Tri-Cities, September, 2007- January, 2008

Graduate Studies Committee, September, 2005-2007

Search Committee, Director of Education, Tri-Cities, November, 2005- April, 2006

Dean's Faculty Advisory Committee (DFAC), September 2003-September, 2005

DEPARTMENT OF TEACHING AND LEARNING Co-Lead, EdM C&I 702 Exam revisions Committee

Co-Lead, MIT 702 Exam revisions Committee

- Lead, Professional Education Standards Board (PESB) Alternative Route 27-month Program Review team, June, 2019-May, 2020
- Member, Search Committee, Assistant Professor Science Education, Department of Teaching and Learning WSU Pullman, September 2019- February, 2020

Co-Chair, WSU Tri-Cities AVID Teacher Preparation Initiative, Site Team, 2016-2020

Member, Search Committee, Assistant/Associate Professor Mathematics Education, Department of Teaching and Learning WSU Pullman, September 2015- March, 2016

Member, Professional Educators Advisory Board (PEAB), January, 2013- present

- Member, Search Committee, Assistant Professor Methods/Assessment, Department of Teaching and Learning, September 2013-February, 2014
- Chair, Search Committee, Assistant Professor ESL/Bilingual Education, Department of Teaching and Learning, September 2012-March 2013
- Member, Search Committee, Assistant Professor Science Education, Department of Teaching and Learning, September 2012-January 2013
- Member, Math and Science PhD Committee, August 2011-present
- Member, Search Committee, Associate/Full Science Education Faculty, Department of Teaching and Learning, October, 2011- February, 2012.
- Middle Level Science Endorsement Committee, Department of Teaching and Learning, Spring, 2010
- STEM Partnership Planning Committee, Department of Teaching and Learning, August 2010-2011

Statewide EdD Committee, August 2007-2009

Graduate Studies Committee, September, 2006-2007

EdM/MIT Merger Committee, Fall, 2006

Chair, Secondary Education Committee, WSU TC, 2004- present

- Search Committee, Academic Coordinator, Department of Teaching and Learning, WSU Tri-Cities, September, 2006
- Search Committee, Academic Coordinator, Department of Teaching and Learning, WSU Tri-Cities, June, 2004
- Organized First Annual Cross Campus Secondary Education Faculty meeting held at the Tri-Cities campus, January, 2004

CO-TEACH meetings with Columbia Basin College. Organized and facilitated two meetings, May and June 2003. Meetings involved examining and coordinating teacher preparation programs served by both institutions

Academic Student Affairs Council of the Dept. of Teaching and Learning at WSU TC

Student Admissions Committee of the Dept. of Teaching and Learning at WSU TC

SERVICE TO PROFESSIONAL ORGANIZATIONS AND AGENGIES NATIONAL ORGANIZATIONS

Editorial Reviewer:

Journal for Research in Science Teaching, June 2008-present Journal of Science Teacher Education, January 2007-2017 Journal of Elementary Science Education. January 2004-2013 International Journal of Mathematics and Science Education, September 2013-present Science Education, October 2013- present

Member, Executive Committee, Association for Science Teacher Education, 2022-2023

Member, Board of Directors, Association for Science Teacher Education, 2020-2023

Chair, Communications Committee, Association for Science Teacher Education, 2020-2023

Reviewer, Association for Science Teacher Education, 2021 Annual Meeting, Salt Lake City, UT

Reviewer, Association for Science Teacher Education, 2020 Annual Meeting, San Antonio, TX

Presider, Association for Science Teacher Education, 2019 Annual Meeting, Savanah, GA

Reviewer, Association for Science Teacher Education, 2019 Annual Meeting, Savanah, GA

Presider, Association for Science Teacher Education, 2016 Annual Meeting, Reno, NV

Reviewer, Association for Science Teacher Education, 2016 Annual Meeting, Reno, NV

Co-chair, Association for Science Teacher Education Conference Portland, OR, January 2015

Member, Annual Meeting Program Committee, Association for Science Teacher Education, January 2014-January 2015

Member, Executive Board, Association for Science Teacher Education, January, 2013-2014

Member, Board of Directors, Association for Science Teacher Education, January, 2011-2014

Reviewer, Association for Science Teacher Education, 2014 Annual Meeting, San Antonio, TX

Director, Northwest Region of the Association for Science Teacher Education, June, 2007-June, 2013

Co-chair, Awards Committee, Association for Science Teacher Education, January, 2011-2014

Coordinator, Northwest Region of the Association for Science Teacher Education, 3-hour session on Engineering Design for Preservice Teachers at the Regional NSTA meeting, December, 2011

Reviewer, Association for Science Teacher Education, 2013 Annual Meeting, Charleston, SC

Presider, Association for Science Teacher Education, 2013 Annual Meeting, Charleston, SC

- Reviewer, Association for Science Teacher Education, 2012 Annual Meeting, Clearwater Beach, FL
- Reviewer, Association for Science Teacher Education, 2011 Annual Meeting, Minneapolis, MN

Presider, Association for Science Teacher Education, 2011 Annual Meeting, Minneapolis, MN

Reviewer, Association for Science Teacher Education, 2010 Annual Meeting, Sacramento, CA

Presider, Association for Science Teacher Education, 2009 Annual Meeting, Hartford, CT

Reviewer, National Association for Research in Science Teaching 2008 Annual Meeting

- Reviewer, American Educational Research Association 2008 Annual Meeting, Division K
- Presider, National Association for Research in Science Teaching 2007 Annual Meeting, New Orleans, LA
- Member, Outstanding Doctoral Research Award Selection Committee, National Association for Research in Science Teaching, 2005-2008
- Presider, Association for Science Teacher Education, 2007 Annual Meeting, Clearwater Beach, FL

Reviewer, Association for Science Teacher Education, 2007 Annual Meeting, Thread 2

- Reviewer, National Association for Research in Science Teaching, 2007 Annual Meeting
- Presider, Association for Science Teacher Education, 2006 Annual Meeting, Portland, OR
- Coordinator, Teacher Education (Inservice) Thread, Association for Science Teacher Education. 2006 Annual Meeting, Portland, OR

Reviewer, Association for Science Teacher Education 2006 Annual Meeting

- Reviewer, National Association for Research in Science Teaching 2006 Annual Meeting, Strands 1 and 8 (4 proposals each).
- Presider, National Association for Research in Science Teaching 2005 Annual Meeting, Dallas, TX
- Reviewer, National Association for Research in Science Teaching 2005 Annual Meeting, Strands 1 and 8 (4 proposals each).
- Reviewer, American Educational Research Association 2005Annual Meeting, Division K
- Presider, National Association for Research in Science Teaching 2004 Annual Meeting, Vancouver, BC
- Coordinator, Johns Hopkins University Center for Talented Youth Conference on Nanoscale Science and Engineering at Pacific Northwest National Laboratory, November, 2004.
- Reviewer, American Educational Research Association 2004 Annual Meeting, Division K
- Reviewer, National Association for Research in Science Teaching 2004 Annual Meeting, Strands 1, 2, and 8 (5, 6, and 4 proposals respectively).
- Member, Membership and Participation Committee, Association for Education of Teachers of Science, January 2003-2006.
- Reviewer, National Association for Research in Science Teaching 2003 Annual Meeting, Strands 1, 2, and 8.
- Reviewer, National Association for Research in Science Teaching 2002 Annual Meeting
- Member, Financial Advisory Committee, Association for Education of Teachers of Science, 1997-2001.
- Presider, Association for Education of Teachers in Science, 1996 Annual Meeting, Seattle, WA

Reviewer, National Science Teachers Association 1996 Annual Meeting

Reviewer, National Science Teachers Association 1995 Regional Meeting

STATE AND LOCAL AGENCIES/ORGANIZATIONS

Member, Planning Team, NWPB six-part series on Education to be aired Fall 2019

- Member, STEM Collaboratory, January, 2016- present
- Member, Washington State Environmental and Sustainability Education Leadership Team, March, 2011- 2015
- Member, Science Partnership Academy, a statewide partnership for science education leaders, December 2009-2013
- Member, Core Planning Team for Science, for the Battelle, WSU, Pasco, Richland, and Kennewick STEM High School, May 2008- 2010
- Member, Mid-Columbia Council for Science Education, April, 2008-2014
- Member, Middle Level Science Endorsement Implementation Committee, Eastern Washington University, sponsored by OSPI, March 2008
- Member, Educational Framework/Program Design Team for the Battelle, WSU, Pasco, Richland, and Kennewick STEM High School, November, 2007- 2009
- Member, Washington Science Advisory Panel, State Board of Education committee for review of state standards, December, 2007-2009
- Member, Math Science Partnership Core Planning Team, ESD123, May, 2007-2012
- Member, Middle School Mathematics and Science Endorsement Review Committee, Office of the Superintendent of Public Instruction, May-September, 2007
- Member, State Science Notebooking Summit, sponsored by the North Cascades and Olympic Science Partnership, 2005- 2006
- Member, Fitzner Eberhardt Award for Outstanding Contributions to Science and Engineering Education (Pacific Northwest National Laboratory) Selection Committee, April, 2003; April, 2004; March, 2005; April, 2007; April, 2008; April, 2010.
- Member, LIGO (Laser Interferometer Gravitational-wave Observatory) Local Educators Network Advisory Board, December, 2002- present

Reviewer, NASA Space Grant, Mini-grant proposals, January, 2003; December, 2003

Member, Southeast Washington LASER Alliance Advisory Board, January, 2002- present

Member, Washington State LASER Partners Achieving Leadership in Science (PALS) 2001-2003

- Team Leader, Teaching Excellence Advancing Math and Science (TEAMS) Workshop, Oregon State University, Corvallis, Oregon, 1995
- Member, Program Committee, Oregon Educational Research Association, Annual Meeting, Corvallis, Oregon, 1995

Presider, Science Education Section, Oregon Academy of Science, Portland, Oregon, 1995

Co-chair, Science Education Division, Oregon Academy of Science, 1995, 1996

SERVICE TO SCHOOL DISTRICTS

Organized and implemented on-line resource, *Teaching Tips*, for family support during COVID19 school closures

Reviewer/judge, Senior Science Projects, Delta High School, November 2018, 2019

- Judge, Middle School Science Fair, Stevens Middle School, Pasco, February, 2010, 2013
- Judge, Middle School Science Fair, Desert Hills Middle School, February, 2003, 2005-2008
- Judge, Elementary Science Fair, Sacajawea Elementary School, March, 2006, 2007, 2008, 2010, 2012
- Judge, Elementary Science Fair, Sunset View Elementary School, March, 2001-2003, 20052007.
- Judge, Middle School Science Fair, Chief Joseph Middle School, March, 2005.
- Reviewed curriculum designed by local high school teachers, BPA Fuel Cell Project, January, 2005.
- Presented training on FOSS science kits to teachers from Bethlehem Lutheran School, August, 2003.
- Presented workshop on using science notebooks to middle school science teachers from Kennewick, Pasco, Richland, and Walla Walla School Districts, January, 2003.
- Presented trainings on FOSS science kits to Pasco School District teachers, April, November, December, 2002.

Presented training on FOSS science kits, Mesa School District teachers, August, 2002.

WORKSHOPS/TRAININGS ATTENDED

AACU STEM Virtual Conference, November, 2020

- Integration of Engineering into Science Courses, August 14-15, 2019, Central Washington University
- Since Time Immemorial (STI) Implementation workshops WSU TC, March 22, June 14, June 28, 2019
- AVID for Higher Education Teacher Preparation Initiative (TPI), Liaison Meeting, San Diego, CA, February 7-9, 2018
- AVID for Higher Education Teacher Preparation Initiative (TPI), Summer Institute, San Antonio, TX, July 12-15, 2017
- AVID Teacher Preparation Initiative (TPI). Denver, CO. July 5-8, 2016
- AACU STEM Conference and Pre-workshop, Seattle, WA, November, 2015

Faculty Development Series, OGRD sponsored workshops, 2005-2006.

Puget Sound Science Supervisors, yearly workshops 2001, 2002.

Grant writing workshop presented by Dr. Robert Lowman, WSU TC, October, 2002.

LASER Strategic Planning Institute, presented by National Science Resource Center, June, 2001.

TEXTBOOKS REVIEWED

Complete text of Teaching Science in Diverse Classrooms, Allyn & Bacon, Fall, 2005.

- Selected chapters: A Learning System Targeted at Introductory Elementary Science Curriculum Courses, John Wiley & Sons, Inc., June, 2004.
- Complete text of *Secondary and Middle School Teaching Methods*, Allyn & Bacon, August, 2003.
- Prospectus, Table of Contents, Chapter One of *A Pragmatic Approach to Educational Research*, Allyn & Bacon, October, 2003.

AWARDS

Women of Distinction Award, May 2018, WSU Tri-Cities

Chancellor's Award of Excellence, May 2016, WSU Tri-Cities

Berry Family Faculty Fellowship Award, July 2013-June, 2015

Higher Education Science Teacher of the Year Award-2011 Washington Science Teachers

Morrison Vita Association

Excellence in Collaboration and Networking-2011 College of Education

Networking and Collaboration Award- 2007 College of Education Tri-Cities

PROFESSIONAL ORGANIZATIONS

Association for Science Teacher Education American Educational Research Association National Association for Research in Science Teaching National Science Teachers Association Washington Science Teachers Association

Graduate Students

Ed.M.

Committee Chair:

Graduated 2002: Dan Longmire, Gina Taylor, Maria Casteñeda, Sarah Cruzen, Brad Johnson,

Julia Wocik, Carol Brucker

Graduated 2004: Cindy Shaw

Graduated 2006: Marie Forsythe

Graduated 2007: Dawn Callow

Graduated 2008: John Hale, Dee Williams, Jenny Rodriquez

Graduated 2009: Tony Milewski

Graduated 2011: Stephanie Post, Debra Hanson, Deborah Thompson, Amy Tolrud

Graduated 2012: Craig Dickinson, Benjamin Sonnichsen; Kelly Griffiths, Analy Pruneda

Graduated 2013: Audra Richter, Heraclio Torres

Graduated 2014: Lesley Coker

Graduated 2018: Trevor Dunstan, Emily Lyman

Graduated 2019: Lorena Hernandez

Graduated 2020: Brittney Fogus, Sarah Rogers, Ana Munguia

Graduated 2021: Sumiyyah Jalalyar, Jose Garcia, Lauren Romney

<u>In Progress:</u> Jennifer Blaine, Susana Valencia, Viviana Magallon, Mckenzie Booth, Gabriela Varela

Committee Member:

<u>Graduated 2002:</u> Antonia Muñoz, Krista Lee, Kelly Newman, Norma Robledo, Deanna Moore, Ryan Mattson, Connie Morelock, Heather Axel, Jaclyn Moore, Dan Campbell, Michelle Good, Julie McKeown

<u>Graduated 2003:</u> Mark Arreola, Sara Flynn, Rocky Lyons, Dan Bennett, April Sorenson, Audrey Howard, Cristina Cortez.

<u>Graduated 2004</u>: Erin Story, Jennifer Klos, Moses Marquez, Susanna Marquez, Randy Hamon, Lisa Connolley, Pam McWhorter

Graduated 2005: Beth Austin, Pamela Bowman

<u>Graduated 2006:</u> Lacee Kadinger, Linda Henderson, Karen Bryan, Wysteria Edwards, Vicky Parker; John Cochran

<u>Graduated 2008:</u> Tiffany Banning, Alisha Boggess, Alita Rainbolt, Rebecca Johnson <u>Graduated 2009</u>: Krisin Naef, Ronanda Liberty, Dan Bell, Karrie Marden <u>Graduated 2010</u>: Jessica Schmick, William Schmick, Natalie Fithian-Lahti <u>Graduated 2011</u>: Kristin Baker, Teona Golding, Matthew Steel, Melissa Tunnell <u>Graduated 2012</u>: Brenda Wilson, Sheila Diaz, Kimberly Lamb, Michelle Smith, Randall Spaur, Michelle Briggs, Corrie Peterman, Laura Southern, Irina Babiy, David Wilson <u>Graduated 2013</u>: Lesley Guereca, Patrick Yecha, Renae Yecha, Kristina Tucker, Carrie Plewman, Ray Nielson <u>Graduated 2014</u>: Sandra Miller, Madison Wheeler, Sarah Krowiak, Brian Torrence, Ruth Fournier <u>Graduated 2015</u>: Yvonne Moore <u>Graduated 2020</u>: Larissa Hines, Diane Hollis <u>Graduated 2021</u>: Raynel Begay <u>In Progress</u>: Susana Valencia

MIT

Committee Chair:

Graduated 2002: Melissa Leopoldt, Nadia Islam, Bill Ailes, Justin Carey, Rick Wandler,

Graduated 2003: Michelle Doty, Laura Hendrickson, Pam Hood, Wendy Redfield

Graduated 2004: Jodee Smith, Sarah Olona

Graduated 2005: Julie Lowrey, Monica Wheeler

Graduated 2007: Leanna Mastalar; Natasha Sullivan

Graduated 2009: Karma Halliday

Graduated 2010: Vanessa Arslanian

Graduated 2019: Sarah Woods

Graduated 2020: Samantha Raigosa

Graduated 2021: Jennifer Nichols, Piper Newby, Carina Ocampo

<u>In Progress:</u> Jose Mejia, Okongo Sakamoto, Jennifer Woods, John Hubbe, Jillian Haras, Licia Duncan

Committee Member:

<u>Graduated 2002:</u> Jim Wutzke, Kelly Koci, June Hirose, Cherie Mace, Amy Cadd, Neil Asmund, Loria Kirsch, Jane Graf, Melissa Stevens

Graduated 2003: Tiffany Lee, Sarah Hagensen, Theresa Howard, Jim McLarnin, Sharon

Clavette, Jay Smith, Brenda Thomas, Laura Staley, Debbie Savino, Kim Moore

<u>Graduated 2004</u>: Teresa Engelke, Linda Smucker, Kathryn Kester, Leslie Gaffey, Becky Mayer, Maritsa Collantes

Graduated 2005: Kathy Smith, Ron Harris, Randy Scott

Graduated 2007: Stephanie Burgess

Graduated 2008: Tim Lee

Graduated 2009: Joanna Reynolds, Christy Warburton, Maria Weakley, Juli VanderSchoor,

Carrie LaRoy

Graduated 2017: Rose Rapp, Holly Milewski

Graduated 2018: Ashley Pentecost

Graduated 2019: Michael Rutt, David Schultz

Morrison Vita <u>Graduated 2020:</u> Tammy Castrellon, Maren Boucher, Laura Hester, Alejandra Ochoa-Riveras, Mayra Mendoza <u>Graduated 2021</u>: Lexi Stricker <u>In Progress:</u> Michael Groth, Heidi Hussey, Rachele Webb, Nathan Casper

M.S.

Committee Member

Galina York (Environmental Science, graduated 2014) Maria Lopez (Environmental Science, graduated 2017)

Ph.D Committee Chair

Laura Grant (2022) Dimple Patel (Educational Leadership, graduated 2020) Danielle Malone (2023) Stasia Feltes (2023)

Committee Member

Andrew Boyd (Educational Leadership, graduated 2011) Rani Muthukrishnan (Language, Literacy & Technology, graduated 2017) Jason Selwitz (Bioenergy, graduated 2017) Kaylan Petrie (2021) Lindsay Lightner (2021) Sarah Pooler (Math/Science Education, graduated 2018) LoAnn Ayers (Educational Leadership, graduated, 2017) Christine McManus (2022) Jessica Wheeler (2022) Douglas Hughes (Educational Leadership, 2021) Charlotte Waters (2021)