Patricia D. Morrell, Ph.D.

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Education

Ph.D., Science Education. 1992. Oregon State University, Corvallis, Oregon. Dissertation title: An Examination of Students' Attitudes toward School and Classroom Science.

M.S., Science Education. 1988. Oregon State University, Corvallis, Oregon. Thesis title: The Effects of Computer Assisted Instruction on Student Achievement in High School Biology.

B.S., Forest Biology. 1978. State University of New York College of Environmental Science and Forestry, Syracuse, New York.

State Teaching Certification

Secondary Teacher's Certificate, Grades 5-12, Biology, Basic Math, Oregon State Department of Education.

Academic Appointments

2011 – present. Professor, University of Portland, School of Education, Portland, Oregon.

2015 – present. Director, University of Portland STEM Education and Outreach Center.

2012-2015. Chair, University of Portland STEM Group.

2004 – 2005. Director, Off-Campus Programs, University of Portland, School of Education, Portland, Oregon.

2003 – 2004. Acting Graduate Program Director, University of Portland, School of Education, Portland, Oregon.

2002 - 2011. Associate Professor, University of Portland, School of Education, Portland, Oregon.

1997 - 2002. Assistant Professor, University of Portland, School of Education, Portland, Oregon.

1996 - 1997. Visiting Assistant Professor, University of Portland, School of Education, Portland, Oregon.

Other Teaching Experience

1992 - 1996. Science and Math Teacher, Scio School District, Scio, Oregon. Responsibilities: spent three years as a half-time middle school/half time high school teacher; one year full-time at the high school. Courses taught: biology, advanced biology, life science topics (genetics, basidiomycetes, animal behavior), general math, seventh grade math, eighth grade math,

pre-algebra, natural resource applications, and general science.

1992. Substitute Teacher, Linn-Benton Educational Service District, Oregon.

1989 - 1991. Graduate Teaching Assistant, Department of Science, Mathematics, and Computer Science Education, Oregon State University, Corvallis, Oregon. Responsibilities: teaching and supervision of student teachers, junior block students, and student interns. Courses taught: undergraduate/graduate sections of Secondary Science Methods and Secondary Math Methods, Microteaching, Student Teaching Seminar, Instructional Computing: Logo.

1984 - 1989. Science and Math Teacher, Scio High School, Scio, Oregon. Courses taught: biology, advanced biology, general science, animal behavior, pre-algebra, general math, and Logo. I was a member of an inter-school group working on a grant-funded project for at-risk students; we redesigned high school forestry curricula to incorporate sufficient science content and activities to merit science credit.

1979 - 1980. Science Teacher, Bishop Loughlin Memorial High School, Brooklyn, New York. Responsibilities: taught physical science. Served as the Assistant Track Coach (Boys and Girls Cross-Country, Indoor and Outdoor Track and Field).

Related Professional Responsibilities

1999 - present. Educational Consultant. Oregon Wood Magic. Responsibilities: applied for and received funding for an educational program at the Oregon State University Department of Forest Products for 3rd and 4th graders from across the State, developing unit/lesson plans, and helping to organize and tailor demonstrations. Each elementary class spends three hours going through the program. The purpose is to educate youth about forest products. The event was scheduled over a two-day period in 1999 and extended to a three-day period in 2000. In 2002, we also included a one-day event in the Portland area, which was extended to a two-day event in 2004. In addition, we had a mobile version that travels to schools and presents a one-hour show to reach students in all areas of the State. From 1999-2009, the Program was funded primarily with OFRI funds; beginning in 2009, funding for the on-site Corvallis program comes solely from OSU; private donors fund the PDX offering. (The mobile program ended in 2010.)

2011-2014. Program Evaluator. Researcher-teacher partnerships: Making global climate change relevant in the classroom. The project is designed to engage Oregon $7 - 12^{th}$ grade teachers in professional development to (a) advance their personal knowledge of the fundamentals of global climate change; and (b) partner with scientists to research a particular focus area of global climate change; in order to (c) integrate this knowledge and experience into their classroom teaching. Funded through an NASA Global Climate Change Education Program Grant.

2012-2013. Program Evaluator. Oregon Natural Resources Education Program Stewardship Schools Program. Schools partner with ONREP to receive professional development in order to "build a foundation of conceptual learning about the environment through experiential strategies that promote awareness, understanding, knowledge, and action." Funded through the Kelley Family Foundation.

2007 – 2011. University of Portland core faculty member with the PrISM program. PrISM is a multi-institution effort to strengthen the mathematics and science content and teaching skills of K-8 teachers. Aside from my work as a core member, I also coordinate the University of Portland's participation in the program. Funded through a FIPSE grant.

2007-2010. University Liaison on the MSP/PPS Partnership program. The primary focus of this grant is to develop highly qualified middle school science teachers. I coordinate the University's involvement with the Portland Public Schools on this project, which includes working with faculty from our College of Arts and Sciences, and oversee the classroom observation portion of the evaluation data collection. Funded by an ODE Math/School Partnership Grant.

2009-2010. Program Evaluator. Oregon Natural Resources Education Program Teachers as Researchers Program. This is a series of workshops for high school teachers wherein they work with scientists in the field while learning how they can apply the same inquiry skills with their classroom students. Funded through an Oregon Watershed Enhancement Board Grant.

2005 – 2009. Student Assessment Specialist. Oregon Technology Education Network grant. Assisting teachers involved in a grant-funded program in assessing the effect of the integration of technology into their teaching on student achievement. Funded through a US Department of Education Teacher Quality Enhancement Partnership Grant.

2006, 2008. Writing Coach, Oregon Technology in Education Network Writing Retreat. Led a writing retreat for faculty involved in the Oregon Technology Education Network grant. Funded through a US Department of Education Teacher Quality Enhancement Partnership Grant.

2006, 2008. Planning Committee Member and Workshop Leader. Integrating Environmental Education into Teacher Preparation: The Environment as a Window for Engaging Learners. Involved in the planning and leading of a two-day workshop for college faculty from throughout Oregon who work with pre-service teachers.

2003-2004. Consultant. Vernier Software and Technology, Beaverton, OR. Assisted in the design of technology for use in elementary science classrooms and writing corresponding elementary activities for its use.

2002-2003. Co-coordinator. Workshop series on the Integration of Technology and Science Teaching. This was a four-workshop series for K-5 teachers in the northwest Portland area. This Eisenhower funded project was designed to provide hands-on experiences for elementary teachers to learn a variety of ways to use technology in their science instruction to enhance student learning.

1998 - 1999. Coordinator of I.D.E.A.S. (Inquiry based, Developmentally appropriate, Educational Activities in Science), a science workshop series for K-8 teachers in the northwest Portland area. Responsibilities: applied for and received funding to organize and conduct a series of four 3-1/2 hour workshops to assist in-service teachers in presenting inquiry-type science activities for their students.

- 1997 1998. Coordinator of ISTEP-UP (Integrated Sciences Teacher Enhancement Program at the University of Portland), a science workshop series for K-8 Catholic schoolteachers and pre-service elementary teachers in the northwest Portland area. Responsibilities: applied for and received funding to organize and conduct a series of four 3-1/2 hour workshops to assist pre-service and in-service teachers in presenting inquiry-type science activities for their students.
- 1992 1997. Instructor/Leadership Team Member, Math/Science Teacher Improvement Project M/STIP), Linn-Benton-Lincoln Educational Service District, Albany, Oregon. Responsibilities: planned, developed, and presented a series of graduate credit workshops (through Western Oregon State College) on the integration of math and science activities for K-8 teachers.
- 1994 1995. Instructor. Linn-Benton-Lincoln Educational Service District, Albany, Oregon. Responsibilities: part of a team that developed, coordinated, planned, and taught <u>Apply Math and Science: A CIM Strand Workshop Series</u>. This three graduate credit series (through Western Oregon State College) covered many of the general Certificate of Initial Mastery topics, as well as specifics related primarily to the Apply Math and Science outcome.
- 1993 1995. Director, Oregon Cadre for Assistance to Teachers of Science (OCATS), Region 6 (Benton, Lincoln, and Linn Counties), Oregon Department of Education, Salem, Oregon. Responsibilities: motivate, facilitate, inform, and advise the teachers of science (K-12) in Region 6. Emphasis was placed on the implementation of the State's concept/process curriculum and the reforms required under the Oregon Educational Act for the 21st Century.
- 1992 1994. Secretary of Scio High School 21st Century Site Committee. The group's responsibilities included the development and implementation of plans for improvement of the school's instruction, staff development activities, and coordination of the implementation of the new State curriculum reforms.
- 1988 1989. Mentor Teacher, Scio High School, Scio, Oregon.
- 1987 1989. Coordinator, Onward to Excellence (OTE) Leadership Team, Scio High School, Scio, Oregon. Responsibilities: organized and coordinated the OTE faculty meetings for our school improvement plan.
- 1984 1985. Athletic Coordinator, Scio High School, Scio, Oregon. Responsibilities: scheduled and supervised athletic events, budgeted, ordered equipment, and interacted with community members and groups.
- 1979. Urban Park Ranger, New York City Department of Parks and Recreation, Queens, New York. Responsibilities: included patrolling and aiding visitors in the proper use of the park; assisted in the design of forestry and zoo tours within the park and conducted such tours to groups of park visitors (preschoolers through senior citizens).
- 1978. Instructor (5th grade), Backyard Nature Program, CESF Student Chapter of the National Wildlife Society, Syracuse, New York. Responsibilities: instructed in an award-winning teaching

program designed to introduce inner-city students to the basic concepts of ecology and instill in them an appreciation of and sense of responsibility for their local environments.

Research Support/Grants

- 2013-2018. NSF Noyce Scholars and Interns Program at the University of Portland. Co-PI. Submitted with Stephanie Salomone, Sharon Jones, Timothy Doughty, Jacque Van Hoomissen. \$1,197,866.
- 2016. Provost Diversity and Inclusion Initiative Grant to support travel to South Korea. \$1,000.
- 2016. Provosot Diversity and Inclusion Initiative Grant to support a Workshop on Culturally Relevant Pedagogy for STEM Faculty, \$1,000.
- 2015. Butine Award to support research project, "Learning at Pollentia." \$2,000.
- 2015. CISGO Seed Grant to support research project at Pollentia, Mallorca. \$500.
- 2015. Oregon Department of Education. Educator Preparation Professional Development Series Grant. Co-team leader. Submitted with Sally Hood (Team Leader). \$11,000.
- 2014. Oregon Department of Education. Quality teaching and learning summer institute: Pedagogical practices and educator preparation, transformational teams. Team leader. Submitted with Stephanie Salomone, Tamar More, Jennifer Kelley and Mike Moren (PPS). \$6,000.
- 2012-2013. Oregon Natural Resources Education Program Stewardship Schools Program. Evaluator for the project. Kelley Family Foundation. \$6000.
- 2012. University of Portland, Educational Use of i-Pad Material Grant. \$500.
- 2011-2014. Researcher-teacher partnerships: Making global climate change relevant in the classroom. NASA Global Climate Change Education Program. Part of a writing team led by Kari O'Connell, Oregon Natural Education Program. Evaluator for the project. Total NASA grant: \$331,936.
- 2011-2013. School of Education Technology Innovation grant. \$750.
- 2010. Butine Award to sponsor the Neuroscience and Education Conference by the School of Education. Submitted with Ellyn Arwood and Richard Christen. \$2,005.
- 2007 2010. Preparation for Instruction of Science and Math (PrISM), Statewide Collaborative, UP Coordinator for the FIPSE Project. Total FIPSE grant: \$685,685.
- 2007-2010. Oregon Mathematics and Science Partnership Program. Submitted with Amy Sutton, Portland Public Schools. Total MSP grant: \$596,090.
- 2009-2010. Oregon Wood Magic On the Road. Oregon Forestry Resources Institute. Submitted with J.J. Morrell and L. McDaniel (Oregon State University). \$110,000.

2008-2009. Butine Award to support presentation of a paper at the annual meeting of the American Educational Research Association. \$794.

2008-2009. Oregon Wood Magic On the Road. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University). \$112,000.

2008-2009. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University) and Richard Zenn (World Forestry Center). \$39,000.

2007-2008. Oregon Wood Magic On the Road. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University). \$101,714.

2007-2008. Projects Materials Grant for Pres-ervice Teachers. Oregon Natural Resource Education Program. \$2,000.

2006-2007. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University) and Richard Zenn (World Forestry Center). \$43,643.

2006-2007. Oregon Wood Magic On the Road. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University). \$95,439.

2006-2007. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University) and Richard Zenn (World Forestry Center). \$46,662.

2006-2007. Oregon Technology in Education Mini-Grant for professional development with technology. \$300.

2005-2008. Student Assessment Specialist, Oregon Technology Education Network. Funded through a US DOE grant, \$60,000.

2005-2006. Oregon Wood Magic On the Road. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University). \$93,691.

2005-2006. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University) and Richard Zenn (World Forestry Center). \$39,219.

2002-2006. Outcomes Research Study-Phase Two. Subcontracted under the Oregon Collaborative for Excellence in the Preparation of Teachers Extension, a National Science Foundation grant. \$6,000.

2005. Write On! 2005. Sub-contracted under Oregon Collaborative for Excellence in the Preparation of Teachers, a National Science Foundation grant. \$800.

2004-2005. Oregon Wood Magic Road Show. Oregon Forestry Resources Institute. Submitted with J.J. Morrell (Oregon State University). \$13,645.

2004-2005. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell and T. McLain (Oregon State University). \$39,219.

2003-2004. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell and T. McLain (Oregon State University). \$41,079.

2003. Write On! 2003. Sub-contracted under Oregon Collaborative for Excellence in the Preparation of Teachers, a National Science Foundation grant. \$1,000.

2002-2003. Workshop series on the Integration of Technology and Science Teaching. Eisenhower Higher Education Professional Development Program Grant. Submitted with J. Carroll, S. Kolmes, M. Snow. \$9,600.

2002-2003. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell and T. McLain (Oregon State University). \$36,669.

2002. Write On! 2002. Sub-contracted under Oregon Collaborative for Excellence in the Preparation of Teachers, a National Science Foundation grant. \$1,000.

2002.PDX Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell and T. McLain (Oregon State University). \$12,543.

2001-2002. Butine Supplemental Award to support presentation of papers at the annual meeting of several national associations. \$1,143.

2001-2002. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell and T. McLain (Oregon State University). \$24,000.

2002. Oregon State University GK-12 Fellows (an NSF grant-funded program). External Evaluator. \$700.

2000-2002. OCEPT Outcomes Research Study. Sub-contracted under Oregon Collaborative for Excellence in the Preparation of Teachers, a National Science Foundation grant. Submitted with C. Wainwright (Pacific University) and L. Flick (Oregon State University). \$100,000.

1997-2002. OCEPT Student Survey Evaluator. Sub-contracted under Oregon Collaborative for Excellence in the Preparation of Teachers, a National Science Foundation grant. \$18,500.

1999. Evaluator for NSF Digital Imaging and Investigations in Biology Grant awarded to three University of Portland Biology Faculty (Drs. Favero, Snow, and Tobalske). \$1,000.

2000-2001. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J. Morrell and T. McLain (Oregon State University). \$30,064.

1999-2000. Oregon Wood Magic. Oregon Forestry Resources Institute. Submitted with J.J.

Morrell and T. McLain (Oregon State University). \$32,000.

1998-1999. IDEAS, Science workshop series for K-8 teachers. Oregon Community Foundation. \$8,800.

1998-1999. Butine Supplemental Award to support presentation of a paper at an annual meeting of a national association. \$670.

1997-1998. Science Workshop Series, professional development workshop series for K-8 Catholic schoolteachers. Sub-contracted under CC-ISTEP of Colorado College NSF grant. Submitted with R.Young (University of Portland) and M. Scott (Portland Public Schools). \$6,000.

1997-1998. OCEPT Fellow. Support for research on preservice teachers' self-efficacy in science; travel support. \$7,500.

1997-1998. Butine Supplemental Award to support presentation of papers at annual meetings of national associations. \$905.

Related Professional Activities

Member, Oregon Science Advisory Panel, Oregon Department of Education, 2016- present.

Member, Oregon Science Leaders, 2016 – present.

Editor, Science Teacher Education Division, Editorial Board Member, *Heliyon*, 2015 – present.

Member of the Editorial Board and Reviewer of manuscripts, *Innovations in Science Teacher Education*, 2016 – 2018.

Reviewer of manuscripts, Journal of Science Teacher Education, 2010 – present.

Reviewer of manuscripts, *Teacher and Teacher Education*, 2006 – present.

Reviewer of manuscripts, International Journal of Science Education, 2011 – present. .

Member on the International Advisory Board and Reviewer of manuscripts, *Studying Teacher Education*, 2004 – 2015.

Reviewer of manuscripts, School Science and Mathematics. 1992-present.

Grant Reviewer, National Science Foundation, February, 2017.

Grant Reviewer, US National Academy of Sciences, Pakistan-U.S. Science & Technology Cooperation Program, April, 2015.

Member of the Editorial Board and Reviewer of manuscripts, Journal of Elementary Science

Education, 2001-2004, 2008-2014.

Member, Urban Stewardship Schools Steering Committee, Oregon Natural Resource Education Program, Corvallis, OR, 2012 – 2014.

Chair, Advisory Board, Oregon Natural Resource Education Program, 2011 - 2014.

Member, Professional Development Guidelines Committee for Implementing the Oregon Environmental Literacy Plan, Corvallis, OR, 2011-2012.

Member, North Portland Collaborative, 2010 - 2012.

Grant Reviewer, National Science Foundation, Climate Change Education Program, Arlington, VA, July, 2010.

Reviewer, State Validation and Standard Setting Conference for the NES Biology Test, Portland, OR, August, 2010.

University of Portland Liaison, Oregon Department of Education K-12 Learn and Serve Project Legacy Project with Tillamook School District, 2010-2011.

Steering Committee Member, Oregon Department of Education K-12 Learn and Serve Grant to Oregon Forest Resources Institute and Tillamook School District, 2010 – 2012.

Advisory Board Member, Oregon Natural Resource Education Program, 2007 – 2011, 2014-present.

UP School of Education Representative to Middle Level Consortium, 2010 – 2012.

Member, Corvallis School District New Diploma Implementation Group, 2008-2009.

Reviewer of presentation proposals for the Association of Science Teacher Education, 2005, 2007-present; thread coordinator, 2011.

Reviewer of presentation proposals for National Association for Research in Science Teaching, 2000, 2005-2009.

Reviewer of presentation proposals for American Educational Research Association 2000, 2001, 2008.

Member, Oregon Department of Education Standards and Assessment Task Force, 2007 – 2008.

Member, Oregon Science Education Council, 2005 – 2007.

Member, Oregon Collaborative Research Initiative Team, 2005-2007.

Advisory Board Member, Oregon Forestry Education Program, 2004-2007.

Reviewer of assessment texts for McGraw Hill Company, 2003, 2005.

Co-Chair, Science Education Division, Oregon Academy of Science, 2000-2002, 1991-1992.

Reviewer of proposals for Eisenhower Grants submitted to the Oregon System of Higher Education, 2001.

Reviewed evaluation documents of NSF Core Evaluation Team for use by CETP projects, 2001.

Reviewed first draft of five chapters of *Science and Science Teaching*, a manuscript in progress designed for use in a Science Methods Course for Elementary Teachers, Houghton Mifflin, 1998.

Contracted test-item developer, The American College Testing Program, 1992.

Current Professional and Academic Association Memberships

Association for Science Teacher Educators (ASTE, formerly AETS)

President-Elect, 2017 (elected position)

Chair, Ad-Hoc Committee for the Development of Preservice Teacher Preparation Standards (2016-2017)

Board Member, 2013 – 2016 (elected position)

Chair, Professional Development Committee (2013-2016)

Co-Chair, 2013 ASTE National Conference (2013-2015)

Member, ASTE Conference Committee (2013-2016)

Member, ASTE Long Range Conference Committee (2013-2016)

Conference Thread Coordinator, Innovations in Science Teaching (2011-2012)

Co-Chair, Elections Committee, 2010- 2011(elected position)

Member, Elections Committee, 2009-2010 (elected position)

Board Member, 2003-2006 (elected position)

Co-Chair, 2006 ASTE National Conference (2004-2006)

Director, AETS/ASTE Northwest Region, 2001-2004, 2004-2007 (elected position)

Member, Committee of Regional Units, 2001-2007, Chair 2003-2006

Member, ASTE Professional Development Committee, 2008 – 2011

Member, ASTE Conference Committee, 2004-2007

Member, AETS Awards Committee, 1997-2000

Member, AETS Finance Committee, 1993-1996

American Educational Research Association (AERA)

National Association for Research in Science Teaching (NARST)

Strand Co-Coordinator, Annual Conferences, 2006-2008

Member, NARST Outstanding Paper Award Committee, 1997-2000

Member, NARST Elections Committee, 1997-1998

Member (Ad-Hoc), NARST Outstanding Paper Award Committee, 1992-1993

National Council of Teachers of Mathematics (NCTM)

National Science Teachers Association (NSTA)

Member, Preservice Teacher Committee, 2017-2020 Program Coordinator, 2002 NSTA Northwest Regional Convention, 2001-2002 Oregon Science Teachers Association (OSTA) School Science and Mathematics Association (SSMA)

Books, Chapters, Published Curricula

Morrell, P.D., & Popejoy, K. (Eds.) (2014). *A few of our favorite things: Teaching ideas for science methods instructors.* Rotterdam: Sense Publishers.

Morrell, P.D. (2014). Review of constructivism. In P.D. Morrell & K. Popejoy (Eds.). *A few of our favorite things: Teaching ideas for science methods instructors*. Rotterdam: Sense Publishers.

Kalnin, J., & Morrell, P.D. (2014). Integrating writing to support scientific thinking. In P.D. Morrell & K. Popejoy (Eds.). *A few of our favorite things: Teaching ideas for science methods instructors.* Rotterdam: Sense Publishers.

Morrell, P.D., & Schepige, A. (2012). Helping preservice science teachers reflect on their own practice. In S. Bullock & T. Russell (Eds.). *Self-Study of science teaching and science teacher education*. NY: Springer.

Morrell, P.D., & Carroll, J.B. (2010). *Conducting educational research: A primer for teachers and administrators*. Rotterdam: Sense Publishers.

Schepige, A., Morrell, P., Smith-Walters, C., Sadler, K.C., Munck, M., & Rainboth, D. ((2010). Using environmental educational project curricula with elementary preservice teachers. In A. Bodzin, B. Shiner-Klein, & S. Weaver (Eds.) *The inclusion of environmental education in science teacher education.* (pp. 281-296). NY: Springer.

Morrell, P.D. (2008). *Oregon Wood Magic unit plans: Biology and geometry*. 3rd Ed. Corvallis, OR: Oregon State University. (Available in Spanish and English.)

Morrell, P.D., & Mitchell T. (2004). *Let's go! Investigating temperature*. Beaverton, OR: Vernier Software & Technology.

Morrell, P.D. (2003). *Oregon Wood Magic unit plans: Biology and geometry*. 2nd Ed. Corvallis, OR: Oregon State University. 126 pp.

Morrell, P.D. (2002). Observing solubilities. In *Modern Biology* (p. 1034). NY: Holt, Rinehart, and Winston.

Morrell, P.D. (2002). Graphing tobacco use. In *Modern Biology* (p. 1071). NY: Holt, Rinehart, and Winston.

Morrell, P.D. (2002). Predicting the spread of disease. In *Modern Biology* (p. 472). NY: Holt, Rinehart, and Winston.

Morrell, P.D. (2002). Calculating CO₂ production. In *Modern Biology* (p. 444). NY: Holt, Rinehart, and Winston.

Morrell, P.D. (2001). Enzymes in action. In *Holt Science and Technology, Life Science* (pp. 770-771 in the Annotated Teachers' Edition and pp.151-153 in the Datasheets for LabBook). NY: Holt, Rinehart, and Winston.

Morrell, P.D. (1999). *Oregon Wood Magic 1999 unit plan: Botany*. Corvallis, OR: Oregon State University.

Morrell, P.D. & Steinbock, S. (2002). *Dental health curriculum for Headstart/Preschool*. Portland, OR: University of Portland, School of Education.

Publications in Peer Reviewed Proceedings and Journals

Morrell, P.D., & Salomone, S. (2017, January). Impact of Robert Noyce Scholarship on teacher recruitment. 2017 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.

Morrell, P.D., & Morrell, I. (2016, November). Using Pokemon Go to meet NGSS science and engineering practices! *The Oregon Science Teacher*. Retrieved from http://www.oregonscience.org/resources/Documents/TOST/2016/Articles%202016/PokemonGo!%20Activity.pdf

Morrell, P.D., & Turner, K. (2016). Service learning: A view from the inside. *The Oregon Science Teacher*, May, 2016. Retrieved from http://www.oregonscience.org/resources/Documents/TOST/2016/Service%20Learning%20Article.May%20TOST.pdf

Kalnin, J.S., Morrell, P.D., & O'Connell, K., & Nelson, P. (2016). Intersecting communities in a teacher as researcher model. 2016 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.

Morrell, P.D., O'Connell, K., & Nelson, P. (2015). Using a scientist teacher partnership model to provide professional development in climate change. 2015 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.

O'Connell, K., & Morrell, P.D. (2014). Making global climate change relevant in the classroom: An experiential approach to professional development. *The Oregon Science Teacher*, 55(3), 21-25.

Lee, K., Morrell, P.D., Schepige, A., & Park, Y. (2014). An international comparison of the undergraduate preparation programs of secondary science teachers: The case of South Korea and Oregon. 2014 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.

- Morrell, P.D. (2013). "I have, who has" for pre-service teachers. *The Oregon Science Teacher*, 54(3), 21-24.
- Morrell, P.D. & O'Connell, K. (2013). Results of using a teacher as researcher PD model for climate change. 2013 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.
- Kalnin, J.S., Morrell, P.D., & Sahnow, S. (2013). Reexaming the role of short-term workshops for professional development in science. 2013 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.
- Morrell, P.D. (2012). Purposeful microteaching on standards in an ECE/Elementary science/math methods class. 2012 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.
- Morrell, P.D., & O'Connell, K. (2012). Helping teachers with climate change. 2012 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.
- Morrell, P.D., & Carroll, J. B. (2011). A kid in a candy store: When given a "blank check" what kind of technology do preservice science teachers buy? *The Oregon Science Teacher*, 52(5), 6-11.
- Morrell, P.D., Sahnow, S., & O'Connell, K. (2011). Research-teacher partnerships: Developing teachers' understanding of scientific inquiry. 2011 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.
- Morrell, P.D. (2010, September). Rats! A dice game to practice addition/subtraction/multiplication. *The Oregon Mathematics Teacher*, p. 12.
- Morrell, P.D., Sutton, A., & Vinal, H. (2010). An MSP partnership model: Successes and obstacles. 2010 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.
- Schepige, A., & Morrell, P.D. (2010). Helping preservice teachers recognize and develop reformed based teaching practices. 2010 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.
- Morrell, P.D.. (2009). Initiating intellectual dialog in a diverse faculty. In A. Johnston & J. Settlage (Eds.), *Proceedings of the Science Education at the Crossroads Conference*. Portland, OR: National Science Foundation.
- Flick, L. B., Sadri, P., Morrell, P.D., Wainwright, C., & Schepige, A. (2009). A cross discipline study of reformed teaching by university science and mathematics faculty. *School Science and Mathematics*, 109(4), 197-211.

Morrell, P.D., Rigelman, N.M., & Ault, C. (2009). Science engagement for your students and you! *The Oregon Science Teacher*, 50(5), 3-5.

Morrell, P.D. (2009). Muscle contraction. The Oregon Science Teacher, 50(4), 20-21.

Morrell, P.D., & Schepige, A. (2009). Exploring preservice elementary teachers' conceptualizations of the water cycle. 2009 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.

Morrell, P.D., & Carroll, J.B. (2009). Technology choices of preservice science teachers: Content specific or ubiquitous. 2009 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.

Morrell, P.D. (2008). Linking literacy with the Project guides. 2008 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.

Szymanski, M. & Morrell, P. (2008). The impact of a technology grant project on mentor teacher professional development. 2008 Conference Proceedings of the Society for Information Technology and Teacher Education.

Carroll, J.B., Morrell, P.D., & Eifler, K.E. (2007). An alternative model to implementing technology integration in teacher education. *AILACTE Journal*, *4*(1), 33-49.

Morrell, P.D., & Charles, M. (2007). Evolving uses of a technology lending library in preservice teacher education 2007 Conference Proceedings of the Annual Meeting of the Association for Science Teacher Education.

Carroll, J.B., & Morrell, P.D. (2006). A comparison of teacher education faculty and preservice teacher technology competence. *Journal of Computing in Teacher Education*, 23(1), 5-10.

Morrell, P.D., & Morrell, J.J. (2006). Taking a field experience on the road. 2006 Conference Proceedings of the Annual Meeting of the National Association of Research in Science Teaching.

Wainwright, C., Flick, L., & Morrell, P. (2005). Developing an instrument for assessment. In D. Smith, & E. Swanson (Eds.). *Preparing Future Science and Mathematics Teachers*. STEP Project, Bozeman Montana.

Wainwright, C., Morrell, P.D., Flick, L., & Schepige, A. (2004). Observation of reform teaching in undergraduate level mathematics and science courses. *School, Science, and Mathematics*, 104(7), 322-335.

Morrell, P.D., Wainwright, C., & Flick, L. (2004). Reform teaching strategies used by student teachers. *School, Science, and Mathematics*, 104(5), 199-213.

Park, Y., Flick, L, Morrell, P.D., & Wainwright, C. (2004). Student teachers and beginning

- teachers' understandings of scientific inquiry. *Journal of Korean Earth Science Society*, 25(3), 160-175.
- Morrell, P.D. & Carroll, J.B. (Fall, 2003). The occurrence of reform teaching practices in undergraduate mathematics and science classes: The students' perspective. *The Journal of Mathematics and Science: Collaborative Explorations*, 6, 153-164.
- Wainwright, C., Flick, L., & Morrell, P. (Fall, 2003). The development of instruments for assessment of instructional practices in standards based teaching. *The Journal of Mathematics and Science: Collaborative Explorations*, 6, 21-46.
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Workshops and Presentations

Morrell, P.D., & Morrell, I. (2017, March). Using Pokemon Go to meet NGSS science and engineering practices. A paper presented at the 2017 Annual National Science Teachers Association Conference, Los Angeles, CA.

Morrell, P.D. (2017, March). Securing funding for you and your classroom. Invited presentation to Kappa Delta Pi-Professional Development Session, Portland, OR.

Kalnin, J., & Morrell, P.D., (2017, March). Examining mandated performance assessments influence on teacher candidate use of formative assessment. Paper presented at the 2017 Annual Meeting of the American Association of Colleges for Teacher Education, Tampa, Florida.

Morrell, P.D., Mellgren, E., & Hood, S. (2017, February). A first-year science teacher's experiences in a middle school dual language immersion program. Paper presented at the 2017 Korean Association for Science Education International Conference, Seoul, South Korea.

Morrell, P.D. (2017, February). Teacher preparation in Oregon with a comparison to Korean teacher preparation programs. Invited symposium presented at both Kangwon national University, Chuncheon, South Korea, and Ewha Woman's University, Seoul, South Korea.

Morrell, P.D., & Filbert, L. (2017, February). Family STEM Night: Connecting the university and the community. Invited presentation at the 2017 International STEAM Symposium hosted by Chosun University, Gwangju, South Korea.

Morrell, P.D., & Salomone, S. (2017, January). Impact of Robert Noyce Scholarship on teacher recruitment. Poster presented at the 2017 Association for Science Teacher Education Conference in Des Moines, Iowa.

Pyle, E., Kier, M., & Morrell, P. (2017, January). Lessons Learned from Robert Noyce Scholarship Programs. A Panel Discussion presented at the 2017 Association for Science Teacher Education Conference in Des Moines, Iowa.

Pyle, E.J., Morrell, P., Veal, W., Roehrig, G., Clogh, M., Clough, J., Park Rogers, M. (2017, January). Teacher preparation standards to meet the NRC Framework for K-12 Education. A Town Hall Meeting conducted at the 2017 Association for Science Teacher Education Conference in Des Moines, Iowa.

Morrell, P.D., & Kalnin, J. (2016, November). Coupling engineering design practices with CCSS ELA Writing. Workshop presented at the ASEE section of the National Science Teachers Association Regional Conference in Portland, OR.

Morrell, P.D., & Turner, K. (2016, November) Expanding the boundaries of STEM. Poster presented at the ASTE section of the NSTA Regional Conference in Portland, OR.

- Hood, S., Morrell, P.D., & Mellgren, E. (2016, October). Experiences of a first-year teacher in a middle school dual language immersion program. Paper presented at the Sixth International Conference on Immersion and Dual Language Education Conference, Minneapolis, MN.
- Morrell, P.D., Salomone, S., VanHoomissen, J., More, T., & Hoffert, P. (2016, August). Future Goals: Integrated STEM curriculum for middle school teachers. Four day workshop presented to Oregon teachers (face-to-face and synchronous on-line format).
- Kalnin, J.S., & Morrell, P.D. (2016, March). Integrating Engineering Design and CCSS-ELA. Workshop presented to elementary school principals and teachers of the Archdiocese of Portland, Oregon.
- Kalnin, J.S., Morrell, P.D., & O'Connell, K., & Nelson, P. (2016, January). Intersecting communities in a teacher as researcher model. Paper presented at the 2016 Annual Meeting of the Association for Science Teacher Education, Reno, NV.
- Morrell, P.D. (2015, December). Literacy: Utilizing academic vocabulary in multiple disciplines. Panel presentation along with Drs. Richard Christen and Peter Thacker for the University of Portland Teacher Leader Network, Portland, OR.
- Kalnin, J.S., & Morrell, P.D. (2015, October). Integrating CCSS and NGSS using children's literature. Workshop presented at the 2015 Annual Conference of the Oregon Science Teachers Association, Bend, OR.
- Turner, K., & Morrell, P. (2015, October). A self-study in service learning: Lessons from the field to the classroom. A poster presented at the 2015 Area Conference of the National Science Teachers Association, Reno, NV.
- Kalnin, J., Morrell, P.D., & O'Connell, K. (2015, April). Teachers as scientists: Examining the influence of a long-term professional development model. Paper presented at the 2015 Annual Meeting of the American Educational Research Association, Chicago, IL.
- Kalnin, J., & Morrell, P.D. (2015, February). Fostering educational imagination: Reexamining the role of reflection. Paper presented at the 2015 Annual Conference of the Association of Independent Liberal Arts Colleges for Teacher Education, Atlanta, GA.
- Morrell, P.D. (2015, February). Getting funding for you and your classroom. Presentation to Kappa Delta Pi, University of Portland, Portland, OR.
- Morrell, P.D., O'Connell, K., & Nelson, P. (2015, January). Using a scientist teacher partnership model to provide professional development in climate change. Paper presented at the 2015 Annual Meeting of the Association for Science Teacher Education, Portland, OR.
- Morrell, P.D., & Salomone, S. (2014, December). Encouraging STEM majors to consider a career in teaching. Poster presented at the 2014 Annual National Science Teachers Association Conference, Long Beach, CA.

- Morrell, P.D., O'Connell, K., & Nelson, P. (1014, April). Preparing teachers to explore global climate change with their middle and high school students. Paper presented at the 2014 Annual Meeting of the National Science Teacher Association, Boston, MA.
- Kalnin, J.S., & Morrell, P.D. (2014, April). Aligning the CCSS and NGSS. Presentation at the National Middle Level Science Teachers Association, Boston, MA.
- Morrell, P.D. (2014, March). The engineering design process: A way to help students meet the 3 E's. Presentation at the University of Portland School of Education 25th Anniversary Workshops, Edmonton, Alberta, Canada.
- Morrell, P.D. (2014, January). Engineering Design. Presentation to Kappa Delta Pi, University of Portland, Portland, OR.
- Lee, K., Morrell, P.D., Schepige, A., & Park, Y. (2014, January). An international comparison of the undergraduate preparation programs of secondary science teachers: The case of South Korea and Oregon. Paper presented at the 2014 Annual Meeting of the Association for Science Teacher Education, San Antonio, Texas.
- Morrell, P.D. (2013, April). What's on Your Plate? Presentation to Kappa Delta Pi, University of Portland, Portland, OR.
- Lee, K., Morrell, P.D., Schepige, A., & Carr, K. (2013, February). An international comparison of the preparation and certification of secondary science teachers. Paper presented at the 2013 Annual Meeting of the Oregon Association of Teacher Educators, Portland, OR.
- Morrell, P.D. & O'Connell, K. (2013, January). Results of using a teacher as researcher PD model for climate change. Paper presented at the 2013 Annual Meeting of the Association for Science Teacher Education, Charlotte, SC.
- Kalnin, J.S., Morrell, P.D., & Sahnow, S. (2013, January). Reexaming the role of short-term workshops for professional development in science. Paper presented at the 2013 Annual Meeting of the Association for Science Teacher Education, Charlotte, SC.
- Nelson, P., Kennedy, R., O'Connell, K., Hunter, N., Rumage, J., Swafford, J., Hemel, J., Yang, Z., Cohen, W., & Morrell, P. (2012, September). Making remote-sensing relevant in the classroom: A model for researcher-teacher partnerships through authentic research experiences. Poster presented at the 2012 International ForestSAT Conference. Corvallis, OR.
- Morrell, P.D. (2012, July). Using a Teacher/Researcher Model of Professional Development to Help Teachers Learn and Teach about Climate Change. Invited presentation to the faculty of the University of the Sunshine Coast, Queensland, Australia.
- Hoban, G.F., Nielsen, W.S., Morrell, P.D., & Schepige, A. (2012, April). Self-study as professional learning for science teacher educators. Paper presented at the 2012 Annual Meeting

of the American Educational Research Association. Vancouver, BC.

Morrell, P.D., O'Connell, K., & Hunter, N. (2012, March). An experiential approach to climate change professional development. Paper presented at the 2012 Annual Meeting of the National Association for Research in Science Teaching. Indianapolis, Indiana.

Morrell, P.D., & O'Connell K. (2012, January). *Helping teachers with climate change*. Paper presented at the 2012 Annual Meeting of the Association for Science Teacher Education, Clearwater Beach, Florida.

Morrell, P.D. (2012, January). *Purposeful microteaching on Standards in an ECE/Elementary Science/Math Methods Class*. Paper presented at the 2012 Annual Meeting of the Association for Science Teacher Education, Clearwater Beach, Florida.

Morrell, P.D. (2011, October). *Halloween Fun*. Professional Development Workshop offered to KDP members and other interested UP students, Portland, OR.

Morrell, P.D. (2011, April). *Fun with Fractions*. Professional Development Workshop offered to our students and alumni on Guam.

Morrell, P.D., & Schepige, A. (2011, April). *Using an observation protocol to improve preservice science teacher practice*. Paper presented at the 2011 Annual meeting of the American Educational Research Association, New Orleans, LA.

Vinal, H., Morrell, P.D., & Lapotin, N. (2011, March). *Inquiry about inquiry*. Paper presented at the 2011 Annual Meeting of the National Science Teachers Association, San Diego, CA.

O'Connell, K., Morrell, P.D., & Sahnow, S. (2011, March). *Teachers as watershed researchers: A professional development model*. Paper presented at the 2011 Annual Meeting of the National Science Teachers Association, San Diego, CA.

Morrell, P.D., Sahnow, S., & O'Connell, K. (2011, January). *Research-teacher partnerships: Developing teachers' understanding of scientific inquiry*. Paper presented at the 2011 Annual Meeting of the Association for Science Teacher Education, Minneapolis, Minnesota.

Morrell, P.D., Eick, C., Bell, R., Popejoy, K., Ziedler, D., & Feldman, A. (2011, January). *How to get more involved with ASTE*. Paper presented at the 2011 Annual Meeting of the Association for Science Teacher Education, Minneapolis, Minnesota.

Vinal, H., Morrell, P., & Lapotin, N. (2010, October). *Designing inquiry using a learning cycle approach*. Paper presented at the 2010 Annual Meeting of the Oregon Science Teachers Association, Colton, Oregon.

Eifler, K., Carroll, J., Mitchell, G., Morrell, P., & Guest, A. (2010, May). *Taming of the screw:* A quick overview of some ubiquitous classroom technology tools. Presentation at University of Portland Faculty Development Day, Portland, OR.

- Morrell, P.D., Schoenheit, B., Beuving, S., Breton, E., Greisen, K., & Chelton, C. (2010, March). *Infusing technology into elementary learning centers*. A poster presented at the 2010 Annual Conference of the Oregon Association of Teacher Educators, Monmouth, OR.
- Morrell, P.D., Sutton, A., & Vinal, H. (2010, January). *An MSP partnership model: Successes and obstacles*. Paper presented at the 2010 Annual Meeting of the Association for Science Teacher Education, Sacramento, CA.
- Schepige, A., & Morrell, P.D. (2010, January). *Helping preservice teachers recognize and develop reformed based teaching practices*. Paper accepted for presentation at the 2010 Annual Meeting of the Association for Science Teacher Education, Sacramento, CA.
- Vinal, H., Sutton, A., & Morrell, P.D. (2009, November). *Portland Public School Title IIB MSP: Partnerships with the University of Portland and the Assessment Training Institution*. Paper presented at the 2009 Oregon Department of Education Semi-Annual Math/Science Partnership Meeting, Salem, OR.
- Morrell, P.D. & Schepige, A. (2009, October). *How simple IS the water cycle?*_Paper presented at the 2009 Annual Meeting of the Oregon Science Teachers Association, Salem, OR.
- Morrell, P.D. & Schepige, A. (2009, October). *PrISM: A new kind of professional development*. Paper presented at the 2009 Annual Meeting of the Oregon Science Teachers Association, Salem, OR.
- Morrell, P.D. (2009, September). *Initiating intellectual dialog in a diverse faculty*. Paper presented at the 2009 Annual Meeting of Science Education at the Crossroads, Portland, OR.
- Szymanski, M., & Morrell, P.D. (2009, April). *Professional development for technology-enhanced instruction*. Paper presented at the 2009 annual Meeting of the American Educational Research Association, San Diego, CA.
- Morrell, P.D., & Schepige, A. (2009, January). *Exploring preservice elementary teachers' conceptualizations of the water cycle*. Paper presented at the 2009 Annual Meeting of the Association for Science Teacher Education, Hartford, CT.
- Morrell, P.D., & Carroll, J.B. (2009, January). *Technology choices of preservice science teachers: Content specific or ubiquitous*. Paper presented at the 2009 Annual Meeting of the Association for Science Teacher Education, Hartford, CT.
- Morrell, P.D., Sutton, A., Hoffman, A., McDowell, L., & Thomas, J. (2008, November). *How a University/District partnership supports middle level science teachers*. Paper presented at the 2008 National Science Teachers Association Portland Area Conference, Portland, OR.
- Morrell, P.D. and ED 445 Students. (2008, November). *Technology learning centers for elementary science students*. Paper presented at the 2008 National Science Teachers Association Portland Area Conference, Portland, OR.

- Morrell, P.D. (2008, September). *The impact of technology-enhanced lessons on student achievement.* Paper presented at the 2008 OTEN Inspiration in technology integration conference, Portland, OR.
- Szymanski, M. & Morrell, P. (2008, March). *The impact of a technology grant project on mentor teacher professional development*. Paper presented at the 2008 Annual Meeting of the Society for Information Technology and Teacher Education, Reno, NV.
- Morrell, P.D. (2008, January). *Helping preservice elementary teachers link literacy with environmental education using the Projects.* Paper presented at the 2008 Annual Meeting of the Association for Science Teacher Education, St. Louis, MO.
- Morrell, P.D., & Carroll J.B. (2007, November). "Developing" Science Learning with a Digital Camera. Paper presented at the 2007 Annual Meeting of the Oregon Science Teachers Association, Milwaukie, OR.
- Morrell, P.D. (2007, May). A Look at the Reform-Based Mathematics and Science Teaching Practices of Student Teachers and their Undergraduate College Faculty. Invited seminar presented at Monash University, Education Faculty, Melbourne, Australia.
- Carroll, J.B., & Morrell, P.D. (2007, April). *Assessments of learning in technology-enhanced curriculum.* Paper presented at the 2007 Annual Meeting of the American Education Research Association, Chicago, IL.
- Morrell, P.D., & Charles, M. (2007, January). *Evolving uses of a technology lending library in preservice teacher education* Paper presented at the 2007 Annual Meeting of the Association for Science Teacher Education, Clearwater Beach, FL.
- Morrell, P.D. (2006, November). Workshop Leader. *Integrating environmental education into teacher preparation: The environment as a window for engaging learners.* Corbett, OR.
- Carroll, J.B., & Morrell, P.D. (2006, May). *Technology in teaching and learning: Do our students really know more than we do.* Paper presented at the 2006 University of Portland Faculty Development Day, Portland, OR.
- Morrell, P.D., & Morrell, J.J. (2006, April). *Taking a field experience on the road*. Paper presented at the Annual Meeting of the National Association of Research in Science Teaching, SanFrancisco, CA.
- Flick, L., Sadri, P., Morrell, P., Wainwright, C., Schepige, A., & van Zee, E. (2006, April). *Analysis of university teaching in science and mathematics undergraduate courses.*_Paper presented at the Annual Meeting of the American Education Research Association, SanFrancisco, CA.
- Morrell, P.D., Schepige, A., Wainwright, C., & Flick, L. (2006, April). *A longitudinal examination of reform-based science teaching in preservice to beginning teachers*. Paper

- presented at the Annual Meeting of the American Education Research Association, SanFrancisco, CA.
- Morrell, P.D., Schepige, A., Wainwright, C., & Flick, L. (2006, January). *Reform-based teaching practices employed by student teachers*. Paper presented at the Annual Meeting of the Association for Science Teacher Education, Portland, OR.
- Flick, L., Sadri, P., Morrell, P., Wainwright, C., Schepige, A., & van Zee, E. (2006, January). *Reforming college teaching in science and mathematics*. Paper presented at the Annual Meeting of the Association for Science Teacher Education, Portland, OR.
- Schepige, A., Morrell, P., Wainwright, C., & Flick, L. (2006, January). *The use of reform-based strategies by three beginning teachers*. Paper presented at the Annual Meeting of the Association for Science Teacher Education, Portland, OR.
- Carroll, J.B., Eifler, K.E., & Morrell, P.D. (2005, April). *An alternative model to implementing technology integration in teacher education*. A paper presented at the Annual Meeting of the American Education Research Association, Montreal, Canada.
- Flick, L.B., Wainwright, C., Morrell, P.D., & Park, Y.S. (2005, January). *Teaching practices of science and mathematics faculty reflecting standards-based reform*. A paper presented at the Annual Meeting of the Association for the Education of Teachers of Science, Colorado Springs, CO.
- Morrell, P.D., Wainwright, C., Schepige, A., & Flick, L. (2005, January). *Do standards-based teaching practices of preservice teachers change as they move from student teaching into their first two years of teaching?* A paper presented at the Annual Meeting of the Association for the Education of Teachers of Science, Colorado Springs, CO.
- Carroll, J.B. & Morrell, P.D. (2005, January). *A comparison of technological competence of teacher education faculty and students*. A paper presented at the Annual Meeting of the Association for the Education of Teachers of Science, Colorado Springs, CO.
- Morrell, P.D., Carroll, J., & Eifler. K. (2004, November). *Handing student teachers technology*. A paper presented at the Northwest Area Convention of the National Science Teachers Association, Seattle, WA.
- Carroll, J. & Morrell, P. (2004, January). *A comparison of the technological competence of teacher education faculty and students*. A paper presented at the Annual Meeting of The Oregon Academy of Science, Portland, Oregon.
- Morrell, P., Schepige, A., & Wainwright, C. (2004, January). *Do reform-based teaching practices of pre-service teachers change as they move into their first year of teaching?* A paper presented at the Annual Meeting of The Oregon Academy of Science, Portland, OR.
- Carroll, J. & Morrell, P. (2003, April). Reform teaching practices in undergraduate mathematics

- and science classes. A paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Carroll, J. & Morrell, P. (2003, March). A longitudinal examination of reform teaching practices in undergraduate math and science classes. A paper presented at the Annual Meeting of the National Association of Research in Science Teaching, Philadelphia, PA.
- Morrell, P., Flick, L., Park, Y., Perkins, C., Wainwright, C. (2003, March). *Reform teaching strategies used by student teachers: A study of 20 preservice teachers.* A paper presented at the Annual Meeting of the National Association of Research in Science Teaching, Philadelphia, PA.
- Morrell, P. & Carroll, J. (2003, January). *The occurrence of reform teaching practices in undergraduate mathematics and science classes: The students' perspective.* A paper presented at the Annual Meeting of the Association for the Education of Teachers of Science, St. Louis, MO.
- Morrell, P.D., Flick, L., Park, Y., Perkins, C., Blair, S., Wainwright, C., Schepige, A. (2003, January). *Measuring reform teaching in undergraduate level mathematics and science courses*. A paper presented at the Annual Meeting of the Association for the Education of Teachers of Science, St. Louis, MO.
- Morrell, P., Steinbock, S., Long, J. (2003, January). *Bringing learning centers into the current century*. A paper presented at the Northwest Area Convention of the National Science Teachers Association, Portland, OR.
- Wainwright, C., Morrell, P., & Flick, L. (2003, January). *Assessing mathematics and science reform-based instructional practices*. A paper presented at the Northwest Area Convention of the National Science Teachers Association, Portland, OR.
- Carroll, J.B., & Morrell, P.D. (2002, April). *Preservice elementary teachers' science self-efficacy*. A paper presented at the Annual Meeting of the National Association of Research in Science Teaching, New Orleans, LA.
- Morrell, P.D. & Morrell, J.J. (2002, April). *Cognitive outcomes of a field experience for third and fourth graders*. A paper presented at the Annual Meeting of the National Association of Research in Science Teaching, New Orleans, LA.
- Carroll, J.B. & Morrell, P.D. (2002, April). A study of preservice elementary science teaching self-efficacy. A paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Morrell, P.D., Carroll, J.B., & Steinbock, S. (2002, February). *Infusing technology into a methods course.* A paper presented at the OCEPT Pre-OAS Showcase 2002, Forest Grove, OR.
- Wainwright, C.L., Morrell, P., & Flick. L. (2002, February). *OCEPT's Teacher Observation Protocol: Practice and applications in a classroom setting*. A paper presented at the OCEPT

- Pre-OAS Showcase 2002, Forest Grove, OR.
- Wainwright, C.L., Flick, L., & Morrell, P. (2002, January). Assessing the impact of undergraduate mathematics and science instruction on beginning teachers' instructional practices. A paper presented at the Annual Meeting of the Association for the Education of Teachers of Science, Charlotte, NC.
- Morrell, P.D. & Carroll, J.B. (2002, January). *An extended examination of preservice elementary teachers' science teaching self-efficacy*. A paper presented at the Annual Meeting of the Association for the Education of Teachers of Science, Charlotte, NC.
- Morrell, P.D., & Morrell, J.J. (2001, June). *Setting learning objectives and measuring outcomes for Wood Magic Programs*. An invited paper presented at the Annual Meeting of The Society of Wood Science & Technology, Baltimore, MD.
- Flick, L., Wainwright, C., & Morrell, P. (2001, June). Assessing the effects of college math and science classes. A paper presented at the 2001 OCEPT Showcase., Salem, OR.
- Morrell, P.D., & Carroll, J.B. (2001, January). *Technology:Preservice Teachers' Preparation:* Oil: Water? A paper presented at the Annual International Meeting of the Association for the Education of Teachers in Science, Costa Mesa, CA.
- Carroll, J.B., & Morrell, P.D. (2001, February). *Technology use in science and mathematics methods courses*. A paper presented at the Annual Meeting of the Oregon Academy of Science, Portland, OR.
- Morrell, P.D. (2000, January). What we know about our future math and science teachers. A paper presented at the Annual International Meeting of the Association for the Education of Teachers in Science, Akron, OH.
- Morrell, P.D., & Morrell, J.J. (2000, February). *Oregon Wood Magic: Connecting higher education with grade school*. A paper presented at the Annual Meeting of the Oregon Association of Teacher Educators, Eugene, OR.
- Morrell, P.D. (2000, April). A look at the undergraduate math and science preparation of our preservice elementary teachers. A paper presented at the Annual Meeting of the National Association of Research in Science Teaching, New Orleans, LA.
- Morrell, P.D. (2000, April). *The science and math backgrounds of our preservice elementary teachers*. A paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Morrell, P.D., Steinbock, S., & Casareno, A. (1999, January). *Reflective journaling: A way to enhance preservice teachers' field experiences*. A paper presented at the Annual International Meeting of the Association for the Education of Teachers in Science, Austin, TX.

- Morrell, P.D. (1999, January). *ISTEP-UP: A professional development program*. A paper presented as part of a symposium presentation at the Annual Meeting of the Association for the Education of Teachers in Science, Austin, TX.
- Morrell, P.D. (1999, April). *Preservice teachers' perceptions of the "good" and "bad" in their college math and science courses.* A paper presented at the Annual Meeting of the National Association for Research in Science Teaching, Montreal, Canada.
- Morrell, P.D., & Ackley, B. (1999, April). *Practicing what we teach: Assessing preservice teachers' performance using scoring-guides*. A paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada.
- Morrell, P.D., & Andrews, G.G. (1998, April). *Factors affecting undergraduate women's consideration of graduate study in science*. A paper presented at the Annual Meeting of the National Association for Research in Science Teaching, San Diego, CA.
- Morrell, P.D., & Andrews, G. G. (1998, April). A profile of undergraduate women considering graduate study in science. A paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Morrell, P. D., & Curry, D. (1997, April). *Inservicing science and mathematics teachers: A model that works!* A paper presented at the Annual Meeting of the National Association for Research in Science Teaching, Chicago, IL.
- Morrell, P. D. (1996). What students say about school science. A paper presented at the Annual Meeting of the Oregon Educational Research Association, Portland, OR.
- Morrell, P. D., & Buglione, J. (1995). *Integrating math and science applications*. Invited workshop, Oregon Council of Teachers of Mathematics "1995 Math Conference at the Coast," Lincoln City, OR.
- Cape, G., Price-Stone, D., Morrell, P. D., & Nicholson, R. (1994-1995). *Apply Math and Science "A CIM Strand Workshop Series."* A 3-unit graduate credit workshop for K-10 teachers involved in math and science instruction. Linn-Benton-Lincoln Educational Service District, Albany, Oregon and Newport, OR.
- Morrell, P. D., & Webb, C. (1994). *Using the apply math and science scoring guide*. Scio School District Staff. Inservice, Scio, Oregon.
- Morrell, P. D., & Lederman, N. G. (1993). What students say about classroom science. A paper presented at the Annual Meeting of the National Association for Research in Science Teaching, Atlanta, GA.
- Morrell, P. D., Latz, M., & Lwo, L. (1992). *The sources of stress among student teachers in science and mathematics*. A paper presented at the Annual Meeting of the Oregon Academy of Science, Salem, OR.

- Morrell, P. D., & Latz, M. (1992). *The development of preservice teachers' perceptions of positive and negative teacher characteristics*. A paper presented at the Annual Meeting of the National Science Teachers Association, Boston, MA.
- Morrell, P. D. (1992). *Students' attitudes toward school and classroom science: Are they related?* A paper presented at the Annual Meeting of the National Association for Research in Science Teaching, Boston, MA.
- Morrell, P. D., & Morrell, J. J. (1991). *Labs with wood, or why the roof caves in!* A paper presented at the Annual Meeting of the Oregon Academy of Science, Monmouth, OR.
- Morrell, P. D., & Latz, M. (1991). *Preservice teachers' perceptions of positive and negative teacher characteristics*. A paper presented at the Annual Meeting of the Oregon Academy of Science, Monmouth, OR.
- Morrell, P. D. (1990). Effects of computer assisted instruction on student achievement in high school biology. A paper presented at the Annual Meeting of the Oregon Academy of Science, Forest Grove, Oregon.
- Morrell, P. D. (1988). *Hold fast to dreams*. Invited graduation address at the Scio High School commencement, Scio, OR.

Awards

- 2016 Award for Outstanding Service as a Board Member, Association for Science Teacher Education
- 2015 Award for Outstanding Leadership as Conference Co-Chair, Association for Science Teacher Education
- 2013 The Mary Rellegert Forestry Education Award, Oregon Department of Forestry and Oregon State University, co-awardee with Jeffrey Morrell
- 2007 Distinguished Informal Science Education Award, National Science Teachers Association
- 2006 Award for Outstanding Service as a Board Member, Association for Science Teacher Education
- 2006 Award for Outstanding Leadership as Conference Chairperson, Association for Science Teacher Education
- 2003 Award for Service, National Science Teachers' Association
- 2000 Oregon State University, College of Forestry, 2000 Dean's Award for
 Outstanding Achievement, Team Award Extended Education. (Awarded for the
 Oregon Wood Magic Program.)
- 1996 Distinguished Teacher Award, Linn-Benton Business Education Compact
- 1987 Action Alliance for Excellence in Education Distinguished Teaching Award

Service

School of Education

- 2016 2017 Member, Curriculum and Instruction Committee
- 2016 2017 Member, Program Impact and Assessment

2012	Member, Ad-Hoc Scheduling Committee
2012 - 2013	Member, Ed.D. Committee
2008 - 2011	Chair, SOE Curriculum Committee
1998 - 2006,	Chair, SOE Scholarship Committee
2007 - 2012	Chair, SOL Scholarship Committee
2010 - 2015	Member, SOE Students Awards Committee
2010 - 2013 $2010 - 2011$	Chair, Faculty Search Committee
,	Chair, Faculty Search Committee
2005-2006	LID COE Demonstration to Contact to Middle Level Communication
2010 - 2012	UP SOE Representative to Statewide Middle Level Consortium
2009 - 2010	Lead, SOE Good Teaching Committee
2009 - 2010	Member, Faculty Search Committee
2002 - 2006,	Member, SOE Curriculum Committee
2007 - 2008,	
2011 -	
2003 - 2006	Member, UTEC Committee
2002 - 2003	Member, Assessment Committee
2001 - 2002	Coordinator, Oregon Quality Assurance in Teaching Program (O-QAT)
	Initiative 2.1: Enhanced Content Preparation and Coordination Activities
	(Middle School Mathematics)
2000 - 2001	Coordinator, Oregon Quality Assurance in Teaching Program (O-QAT)
	Initiative 2.1: Enhanced Content Preparation in Music.
1998 - 1999	Chair, Faculty Search Committee
1997 - 1998	Chair, Search Committee for Field Coordinator
1997 - 1998	Member, Search Committee for Teaching Education Support Specialist
1997 - 1998	Member, Lytle Scholarship Committee
1997 - 1998	Member, Undergraduate Program Review Committee
1996 - 1998	Member, Consortium for Educational Advisement and Development
1990 - 1998	Member, Consortium for Educational Advisement and Development
University	
2016	Member, Undergraduate Common Core Committee
2016	Member, AdHoc Senate Committee on Faculty Handbook rewrite
2014 - 2015	Chair, Senate Standing Committee on Rank and Tenure
2011 - 2014	Member, Senate Standing Committee on Rank and Tenure
2010 - 2012	Member, Presidential Advisory Committee on Health and Safety
2002 - 2010	Member, University of Portland, Institutional Review Board.
1998 - 2000,	Member, Senate Standing Committee on Teaching and Scholarship
2007 - 2010	Member, Senate Standing Committee on Teaching and Scholarship
2004 – 2005	Member, University of Portland Founder's Day Committee.
2004 - 2003 $2001 - 2004$	Member, Committee on Curriculum and Academic Regulations
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2002 - 2003	Member, University of Portland Founder's Day Design Committee.
1999 - 2000	Member, School of Education Dean's Review Committee
1998 - 2000	Member, Advisory Board to the Math Resource Center
1998	Member, Nominating Committee of 1999 Campus Compact Thomas
	Ehrlich Faculty Award for Service Learning

Community	
2005 - 2011	Assistant Scoutmaster, BSA Troop 170, Corvallis, Oregon
2010	Classroom volunteer to assist with mathematics instruction, Crescent Valley
	High School, Corvallis, OR
2008 - 2009	Classroom volunteer, Garfield Elementary School. Worked with a 2 nd grade
	bilingual class in mathematics and science
2008 - 2009	New Diploma Implementation Committee. Corvallis School District
2007 - 2008	Classroom volunteer, Cheldelin Middle School and Crescent Valley High
	School, Corvallis, OR.
2007	Classroom volunteer, Indooroopilly State High School, Indooroopilly,
	Queensland, Australia. Worked with a 9 th Grade Maths Class.
2006 - 2007	Classroom volunteer, Crescent Valley High School and Cheldelin Middle
	School, Corvallis, OR. Worked with a high school field biology class and a
	middle school seventh grade physical science class.
2005 - 2006	Classroom volunteer, Crescent Valley High School, Corvallis, OR.
	Worked with a high school mathematics lab doing tutoring to individual
	students in the class (general math – algebra)
2002 - 2005	Committee Chair, BSA Pack 170, Corvallis, Oregon
1996 - 2005	Classroom volunteer, Mountain View Elementary School, Corvallis, OR.
	Responsibilities included working with reading in kindergarten, first, and second
	grades; TAG pull-out group for math/science for first through fifth grades;
	library assistant with second grade; science/math presentations; science fair
	evaluator; assist with field trips
2001 - 2002	Classroom volunteer, Cheldelin Middle School, Corvallis, Oregon.
2003 - 2004	Worked with 7 th grade physical science, 6 th grade Home Economics, 7 th grade tutoring
2001 - 2002	Assistant Cubmaster, BSA Pack 170, Corvallis, Oregon
2001–2002,	Catechist, Saint Mary's Catholic Church, Corvallis, Oregon
1997-1999	
1996 - 2001	Cub Scout Leader, BSA Pack 170, Corvallis, Oregon
2000 - 2001	Member, De La Salle North Catholic High School Advisory Group

Teaching Responsibility

Courses taught (Semester credit hours)

- ED 411 Assessment (sections for both elementary and secondary) (3)
- ED 413/513 Health, Safety, and Nutrition (3)
- ED 445 Elementary Science Methods (3)
- ED 445 ECE/Elementary Math/Science Methods (3)
- ED 450 Models of Teaching (3)
- ED 453 Secondary Math/Science Methods (3)
- ED 453 Middle/High School Math/Science Methods (3)
- ED 457/533 Middle/High School Science Methods (3)
- ED 466 A Look at Teaching Secondary Social Studies Using an Inquiry Approach (Independent Study) (1)
- ED 486 Student Teaching Seminar: Middle/High (3)
- ED 487 Student Teaching Seminar: ECE/Elementary (3)

- ED 490 Examination of the Core Curriculum Goals for Middle Level Mathematics (Independent Study) (1)
- ED 490 Working with Students with ADHD (Independent Study) (4)
- ED 532 Development, Assessment, and Evaluation (3)
- ED 532 Assessment and Evaluation in Inclusive Classrooms (3)
- ED 536 Student Teaching Seminar Middle/High (MAT) (3)
- ED 536B Student Teaching Seminar Elementary (MAT) (3)
- ED 538 Project with Reflection: Master of Arts in Teaching (3)
- ED 550 Personal and Professional Growth and Development (3)
- ED 555 Teacher as Researcher (3)
- ED 558 Educational Research for Improved Student Learning (3)
- ED 560 Project with Reflection (2)
- ED 562 Professional Development Process: Portfolio (3)
- ED 563 Master of Arts Non-Thesis Project with Reflection (3)
- ED 566 Teaching Music through Inquiry (Independent Study) (2)
- ED 570 Curriculum Development and Implementation (3)
- ED 591 Teaching through Inquiry (2)
- ED 591 Integration in the Classroom (2)
- ED 598 M.Ed. Capstone Project (3)
- ED 601 Advanced Qualitative Research (3)
- SCI 109 Ideas in Physics (Team taught) (3)
- SCI 103 Human Biology (3)

Academic Advisees

- 1996 1997 15 undergraduates, 3 graduates
- 1997 1998 24 undergraduates, 2 graduates
- 1998 1999 15 undergraduates
- 1999 2000 8 undergraduates
- 2000 2001 14 undergraduates
- 2001 2002 16 undergraduates
- 2002 2003 23 undergraduates
- 2003 2004 27 undergraduates
- 2004 2005 27 undergraduates
- 2005 2006 21 undergraduates
- 2007 2008 23 undergraduates
- 2008 2009 33 undergraduates
- 2009 2010 30 undergraduates
- 2010 2011 30 undergraduates
- 2011 2012 28 undergraduates
- 2012 2013 29 undergraduates
- 2013 2014 28 undergraduates
- 2014 2015 28 undergraduates
- 2015 2016 28 undergraduates
- 2016 2017 25 undergraduates

Student Teaching Supervision

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1996 - 1997
             25 block teachers, 15 student teachers
1997 - 1998
               4 field placement, 2 student teachers
1998 - 1999
               6 student teachers
1999 - 2000
               3 student teachers (PLA and SLA)
2000 - 2001
               5 student teachers - SLA, 3 student teachers - PLA
2001 - 2002
              2 student teachers - SLA, 2 student teachers - PLA, 1 PACE
               teacher
2002 - 2003
               4 student teachers (PLA and SLA)
2005 - 2006
               1 student teacher (PLA and SLA)
               2 student teachers – PLA, 1 student teacher SLA
2007 - 2008
2008 - 2009
               2 student teachers – PLA, 1 student teacher SLA
2009 - 2010
               3 student teachers (PLA and SLA)
2010 - 2011
               2 student teachers (PLA and SLA)
2011 - 2012
              3 student teachers (PLA and SLA)
2012 - 2013
               2 student teachers (PLA and SLA)
2013 - 2014
               2 student teachers (PLA and SLA)
2014 - 2015
              2 student teachers (PLA anad SLA)
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Advisor for Capstone Research Papers

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2000 22 students (Clark County Cohort) (M.Ed.)
2001 21 students (Roseburg Cohort) (M.Ed.)
2002 27 students (MAT)
2003 26 students (MAT)
2003 16 students (Roseburg Cohort) (M.Ed. and M.A.)
2005 22 students (Edmonton Cohort)
2006 10 students (Roseburg Cohort)
2009 30 students (Edmonton Cohort)
2011 19 students (Guam Cohort)
2012 24 students (Edmonton Cohort)
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Ed.D. Dissertation Committees

Smart, C. (May, 2016). Teacher motivation and learning: Reflective participation in Professional Learning Communities. Chair.

Mayo, J. (May, 2016). From classroom teacher to district-based content specialist: Exploring organizational and individual teacher identity in science teacher leaders. Committee member.

Bucknam, J. (May, 2016). Student language use in a one-way Mandarin immersion classroom: A sociolinguistic perspective. Committee member.

Danskey, J. (May, 2017 expected). AVID Elementary: A case study of program effectiveness. Chair.

Doughty, M. (May, 2017 expected). Use of historical thinking in secondary history classrooms. Committee member.

Shortino-Buck, M. (May, 2017 expected). Mathematical discourse in elementary classrooms: Socioeconomic status and teacher beliefs/ Committee member.

Koffler, J. (May, 2017, expected). Factors influencing leadership efficacy for traditional-aged sophomore male college students. Committee member.