CURRICULUM VITAE

NAME: Odell, Michael Robert Linley
E-MAIL: mrlodell@gmail.com
modell@uttyler.edu
DATE: October 2024
OFFICE: (903) 566-7132
CELL: (208) 301-0542

Linked-In Profile: https://www.linkedin.com/in/michael-odell-ab571a11

CURRENT POSITION: University of Texas at Tyler

RANK: Professor (STEM Education)
APPOINTMENT: College of Education and Psychology (Tenured)/College of Engineering)

EDUCATION BEYOND HIGH SCHOOL:
Degrees:

Ph.D.	Curriculum and Instruction	August 1993	Indiana University
M.A.T.	Science Education	August 1989	University of Texas-Dallas
B.A.	Geosciences	May 1984	University of Texas-Dallas

CURRENT BIOGRAPHY:

Michael R.L. Odell, Ph.D., is a Professor of STEM Education, holding a joint appointment in the College of Education and Psychology and the College of Engineering at UT Tyler. He currently serves as the Co-Coordinator for the Ed.D. in School Improvement program and Co-Director of the UTeach STEM Teacher Preparation Program. Dr. Odell has spearheaded numerous innovative programs, leading to increased enrollments, extramural research grants, and substantial gifts from alumni and industry. Notably, he launched the UTeach Replication, which has doubled the number of STEM teachers produced at UT Tyler. He also co-founded the UT Tyler University Academy charter schools, which function as Laboratory Schools at UT Tyler's main campus and extension campuses in Longview and Palestine. Additionally, Dr. Odell established the Ingenuity Center, one of seven designated STEM Centers in Texas. Throughout his career, Dr. Odell has played a pivotal role in expanding UT Tyler's research initiatives, particularly within the College of Education. Beyond his faculty role, he has held several key administrative positions, including Director of the School of Education and Vice President for Sponsored Research. Dr. Odell has published extensively in academic journals, books, and conference proceedings and has secured over $60 million in grants, contracts, royalties, and development funding.

EDUCATION EXPERIENCE:

University of Texas at Tyler (2006-Present)
Professor STEM Education: Dr. Odell is a senior faculty member and serves as the Co-Coordinator of the EdD Program in School Improvement and the Co-Director of the UT Tyler UTeach Replication program. He is currently developing a Bachelor of Science in Education with a composite 7-12 science focus to address the needs of rural schools.

Accomplishments:

- Over $40 million dollars in external funding since arriving at UT Tyler
- UTeach Replication that has significantly increased the number of STEM Teachers
- Founding of three high performing K-12 University Charter Laboratory Schools (Public Open

Enrollment Schools).

- Founding of the Ingenuity Center, one of the most influential STEM Education Research and Development Centers in Texas.
- Co-developed the Doctoral Program focused on School Improvement (THECB Approved 2020).

Sam and Celia Roosth Chair in Education (Endowed Chair 2006-2023)
School of Education: As the Roosth Chair in Education, I was responsible for advocating for STEM education and identifying new opportunities to expand STEM initiatives in East Texas and across the state. I collaborated with faculty to develop personal research agendas and outreach programs. In this role, I led efforts to make UT Tyler a UTeach replication site, resulting in doubling the number of STEM teachers produced annually and achieving the highest retention rate of UTeach students among all replication sites nationwide. I also co-led the development of the Ed.D. program in School Improvement (approved in 2019) and the new bachelor's degree in education with multiple certification options in science (approved in 2021).

Vice President, Office of Research and Technology Transfer (ORTT) (2013-2017)
The mission of the Office of Research and Technology Transfer was to provide effective leadership through the promotion and support of quality research and sponsored programs both within the university and through collaborative efforts with other universities, industry, and business. It was my role to ensure that the ORTT provided quality services and administrative support to the university community and represent the interests of the UT System, the President of the university, and the university community in relationships with external funding agencies and sponsors.

Accomplishments:

- According to the 2016 Chronicle of Higher Education Almanac, UT Tyler Ranked 3rd nationally for "Greatest in total percentage increases in Research and Development Spending" and 3rd nationally for "percentage increases in federal research dollars spent" (2005-2014). I was personally responsible for a significant portion of the growth as both a faculty member and as Vice President.
- UT Tyler was one of two UT System Institutions to increase research dollars from 2005-2015. As Vice President, I provided strategic investments in faculty, equipment, and facilities to increase competitiveness in securing external funds.
- Provided oversight for university research centers and assisted in the recruitment of faculty by obtaining start-up funding which included $1.2 million in start-up funds for talent acquisition in 2016-17.
- Provided leadership to implement the development of an electronic submission process for IRB, IACUC, and Biosafety Applications.
- Revised the Internal Grant program to align to the research mission of the university and support projects that could lead to additional external funding.
- Initiated new research center development that added over 50,000 sq. ft. of facilities on campus including seed funding for new research centers in Biology, Computer Science, Education Leadership, STEM Education, and Kinesiology.

Director, Federal Relations (2013-2017)
As Director of Federal Relations, I aligned UT Tyler's priorities with those of the UT System Federal Relations Office. I developed and submitted congressional grant proposals and successfully secured funding for UT Tyler initiatives. Additionally, I met regularly with Texas Congressional staff to brief them on UT Tyler's initiatives and discuss the potential impact of federal legislation and policies on the university.

Accomplishments:

- UT Tyler was the first UT Institution to supply faculty researchers to the Army Research Lab in Maryland under the 2014 UT System Cooperative Research and Development Agreement (CRADA).
- In 2015, UT Tyler entered into a Space Act Agreement to collaborate with NASA JSC to support the Orion program and develop partnerships with the UT Tyler Houston Engineering Center.
- Supported visits to campus by the Texas Congressional Delegation to highlight UT Tyler programs.

Other Duties

Advancement: Worked with the Office of University Advancement to raise private dollars to support research and education outreach. This includes matching and sustainability funds for successful projects when sponsored funding ended.

Accomplishments:

- Raised over$200,000 in private dollars to support research, STEM Education Initiatives, UT Tyler Charter Schools, Scholarships, and the Discovery Science Place.
- Manage the Roosth Endowment ($700K) which yields approximately $35,000 annually.

State Government Relations: During the 2017 Texas Legislative Session, I worked with the State Government Relations Office to address three Education Bills that passed concerning the High School Math Sequence, Instructional Minutes in Schools, and Financial Reporting for University Charter Schools.

Accomplishments:

- Financial reporting to TEA for University Charter Schools was revised to no longer disadvantage university charter schools.

Dual Credit: I initiated dual credit at UT Tyler to compete with community colleges, provide rigorous high-quality courses that meet UT Tyler standards for students ultimately seeking STEM degrees, and recruit high quality students. High school students in Texas can earn up to 60 credits towards a bachelor's degree. This has implications for future enrollments and student recruiting.

- UT Tyler enrolled over 750 Dual Credit students in 2017.
- Developed a Virtual Senior High School Charter Application in 2017 that would allow qualified High School Juniors and Seniors to enroll full time into a Dual Credit Academy that would allow students to complete the University Core Curriculum in place of the final two years of High School. Proposal approved by the Texas Education Agency.

Associate Vice President, Office of Sponsored Research and Director, Federal Relations (2010-13)

Accomplishments:

In 2013, the AVP position was reclassified as a VP position, reporting directly to the President. This change was made to support the acquisition of external funds beyond Academic Affairs and to expand the development of technology transfer capabilities and entrepreneurial initiatives.

UT TYLER UNIVERSITY ACADEMY

I co-founded the Innovation Academy in 2012, now known as the University Academy, and serve as the chief architect of the open enrollment school model, which operates as both a laboratory school and a model STEM academy. UT Tyler manages three academies, serving over 1,000 students in grades K-12..

Accomplishments:

- The UT Tyler University Academy district has an A Rating from the Texas Education Agency.
- In 2022, the University Academy was recognized by:
    - Earning all 22 available Texas Education Agency Distinctions
    - Earning PLTW Distinguished district and schools for PLTW Engineering, PLTW Biomedical Science, PLTW Gateway, and PLTW Launch programs.
    - Texas STEM School Recognition from the Texas STEM Coalition,
    - Earned WeTeachCS Distinction from UT Austin for Girls in Computer Science
    - Recognized by Children at Risk School Rankings
- Implemented a teacher residency program with THECB funding to develop new teachers through a mentor-based model of teacher preparation.
- The University Academy Longview is the top achieving school district in Gregg County and the academy is recognized as one of the highest performing schools in Texas.
- The University Academy Tyler is the top achieving school district in Smith County and is recognized as one of the top performing schools in the state.
- The Innovation Academy in Palestine is a Title 1 School and is the top performing school in Anderson County. It was also recognized as one of the highest performing schools in Texas.
- The Academies are host clinical sites for educator preparation programs including the UTeach Replication and Teacher Residency Program.
- In 2023, the schools were recognized by proclamation in the Texas Legislature.

Discovery Science Place (DSP) (2012-18. I provided oversight for the management of the Discovery Science Place (DSP), a local children's science museum, until 2018. In 2011, I negotiated a Memorandum of Understanding (MOU), which was renewed in 2017, to manage the museum and developed three mobile museums that serve Texas and beyond. My oversight responsibilities included both the retail enterprise and the non-profit outreach initiatives. The DSP also offers internship opportunities for UT Tyler students in Education, Business, and Engineering.

Accomplishments (2012-18):

- From 2012-18 DSP served over 80,000 attendees annually and the mobile museums hosted over 100,000 attendees annually.
- The DSP also hosted the Tyler Maker Fair (pre-COVID).
- The DSP is a self-supporting auxiliary that adds value to the community and provides a presence for the university in downtown Tyler.

Executive Director, Ingenuity Center: A Texas STEM Center (2006-2013; 2017-Present)

As Roosth Chair, I established the Ingenuity Center (IC), an R&D Center approved by the UT System. The IC has become the umbrella organization for the UT Tyler Education Core Research Facility that is available to all system institutions for research purposes. The center also provides technical assistance services to schools, non-profits, and universities.

Accomplishments:

- Over $40 million in external funds to UT Tyler through the IC.
- The Ingenuity Center is one of the seven original Texas Education Agency designated STEM Centers.
- Co-Chair the Texas STEM Coalition Annual Conference (2009-2024)
- Director, College Board Annual Advanced Placement Summer Institute
- Director, Project Lead the Way Preservice Partnership for Launch Program
- Co-Director, UT Tyler GLOBE Partnership
- Education Representative, Affiliate Texas Space Grant Consortium

Director, School of Education (Interim), 2008-2009

As the founding Director of the School of Education, I was responsible for consolidating three separate departments—Curriculum and Instruction (C&I), Teacher Educator Certification (TEC), and Early Childhood, Reading, and Special Education (ECRSE)—into a single, cohesive unit .

Accomplishments:

- Initiated a professional advising office, a policy and procedures manual, a consistent and predictable course schedule for students, and reduced costs while increasing efficiency, services, and enrollments.
- Provided oversight for the accreditation process for TEAC and SACS.
- Updated technology for all faculty and students.
- Implemented differentiated assignments for faculty to capitalize on the individual strengths of each faculty member.

Previous Institutions

Illinois State University *(2005-06)*

Assistant Dean (Interim)**,** College of Education (2006)

- Focus on grant development and research initiatives.

Chair, Curriculum and Instruction (2005)

University of Idaho (1993-2005)

Director, Division of Teaching, Learning, and Leadership (TLL) (2004-05)

- Oversight and administration for Undergraduate, Graduate, and Doctoral Programs within the Division, which included Curriculum and Instruction, Educational Leadership and Special Education.
- Oversight of NCATE Accreditation
- Oversight of programs at Boise, Coeur d'Alene, and Idaho Falls outreach campuses.
- Coordinated outreach to public schools.
- Developed collaborative projects with Native American schools at the Nez Perce Reservation and the Coeur d'Alene Reservation.

Interim Director, Division of Teaching, Learning, and Leadership (TLL) (2003-04)

As part of reorganization, combined Curriculum and Instruction, Special Education, and Educational Leadership into one unit.

Associate Professor of Science/Technology Education (1999-2005)

- Elementary Program Coordinator (2001-2003)

Assistant Professor, Science Technology Education (1993-1999)

Adjunct Associate Professor, Environmental Science (2000-05)

Director, Institute for Mathematics, Interactive Technology, and Science Education (1995-2005)

Accomplishments:

- Co-Director, National Center for Online Learning Research (NCOLR), 2001-2005.
- Director, Idaho Virtual Campus (IVC), 1997-2005.
- Co-Director, Idaho GLOBE Partnership, 1996-2005.
- Associate Director, Idaho Space Grant Consortium, 1997-2005.
- Over $20 Million in grant funding.

INDIANA UNIVERSITY

(1990-93)

- **Associate Instructor** (Doctoral Student)
- **Q200:** Introductory Science Skills for Elementary Majors

IRVING Independent School District **(1984-90)** **TEA ID:661048**

- **Earth Science Teacher**, Sam Houston Junior High School (1984-90)
- **Environmental Science/English Teacher**, MacArthur High School (summers)

Certificates and Licenses:

- Texas Teacher Evaluation and Support System (T-TESS)
- Secondary Level (6-12) Earth Science
- Secondary Level (7-12) English, Texas
- GLOBE Master Trainer Certification
- GLOBE Weather Trainer
- Get the Facts Out (GFO) Champion
- CPE Provider #500725

FELLOWSHIPS

The GLOBE Program-University Corporation for Atmospheric Research (UCAR)
GLOBE Fellowship: From 2006 to 2008, I developed an online grant course for GLOBE US Partners, co-developed five grant proposals in collaboration with the GLOBE Program Office and assisted in establishing the GLOBE foundation. Two of these proposals were successfully funded, including an NSF OISE grant and an NSF ITEST grant. Additionally, I contributed to creating a sustainability strategy for the GLOBE Program Office.

National Aeronautics and Space Administration (NASA)
Faculty Fellowship: Kennedy Space Center, NASA KSC, Cape Canaveral, Florida. My primary task during the summer of 2003 was to conduct research and deliver a report to guide the Kennedy Space Center (KSC) Education Office in developing online education products.

National Space Grant Fellowship: NASA Headquarters, Washington, D.C. My responsibilities included assisting the director in managing the GLOBE Program, serving as a liaison to GLOBE Program training sites at Space Grant Universities across the country, supporting NASA EPSCoR programs, and assisting with the NEWEST/NEWMAST Program. I also conducted site visits for Space Grant Affiliate program evaluations from 1995 to 1997.

NON-PROFIT 501c3 EXPERIENCE (NGO)

Texas STEM Coalition 2009-2024

I am a founding member of the Texas Science, Technology, Engineering, and Mathematics (T-STEM) Coalition, a professional organization created to address the challenges of a technology-driven economy by researching and developing best practices in STEM education for K-12 schools. The coalition supports school districts, charter schools, and private schools in enhancing their STEM programs or establishing STEM specialty schools. Additionally, the coalition hosts an annual STEM conference for school personnel and policymakers and is actively involved in school turnaround efforts through the Texas 1882 initiative. I lead the coalition's school initiatives and co-lead the planning of the annual conference.

Lyceum Education Foundation 2020-22

I am a founding member of the Lyceum Education Foundation (LEF). The vision of the foundation is to develop a grand unified theory of P-20 education. The mission is to create school designs that are effective for charter schools and traditional public schools.

TEACHING ACCOMPLISHMENTS:

Context: I have taught at both the K-12 and university levels. As a middle school teacher, I taught Earth Science, and at the high school level, I taught Environmental Science and English. At the university level, I have taught a wide range of courses, including Geoscience for undergraduates, teacher preparation courses, and graduate-level courses in statistics and research design. I am dedicated to developing innovative strategies and integrating new technologies to enhance student learning and increase access for a broader population of students. My teaching philosophy and a list of courses can be found in the appendices.

***Co-Director, University of Texas a Tyler Doctor of Education (Ed.D.) in School Improvement*:** I co-developed the Ed.D. program in School Improvement. As Co-Director, I work with faculty to develop courses, mentor faculty to chair dissertations, and advise students in research to complete their Dissertation of Practice. The Ed.D. in School Improvement is grounded in improvement science and is one of a handful of school improvement focused doctoral programs in the country and the only one in Texas. I also led the efforts to become a member of the Carnegie Project on the Education Doctorate (CPED).

Co-Director, University of Texas at Tyler UTeach Program: I serve as the Co-Director for the UTeach replication at UT Tyler, an innovative university-based teacher preparation program designed to increase the number of qualified STEM teachers in middle and secondary schools. The program was implemented at UT Tyler without extending time to degree completion or adding costs for students. UT Tyler is part of Cohort 2 Replication sites for the UTeach initiative."

Co-Director, University of Texas at Tyler GLOBE Partnership: I have been involved with the GLOBE Program since 1995, initially serving as a NASA liaison to Space Grant Institutions that hosted GLOBE National Trainings during my time as a National Space Grant Fellow at NASA Headquarters (1995-1997). I became a GLOBE trainer in 1996 and conducted teacher trainings across North America, Europe, and South America. After my fellowship, I returned to the University of Idaho to establish the Idaho GLOBE Partnership and later co-established the University of Texas at Tyler Partnership. I work with preservice and inservice teachers to integrate GLOBE in classrooms and was one of the first to implement GLOBE into preservice teacher preparation. I have collaborated with U.S. Partners and GLOBE Program management to create curriculum activities and co-chaired the 11th Annual GLOBE Conference in San Antonio, Texas. Over the years, I have written

numerous funded state proposals to support GLOBE activities and co-authored five proposals as a GLOBE Fellow at UCAR. I was elected the first GLOBE International Advisory Committee (GIAC) Representative for North America. In 2022, UT Tyler was selected to host the Southwest GLOBE Student Research Symposium, funded by NASA. At UT Tyler, all EC-6 and UTeach students earn GLOBE certification at no cost as part of their training.

***Affiliate Director, Texas Project Lead the Way* (PLTW):** I served as the Affiliate Director for the Texas Project Lead the Way (PLTW) Program from 2007 to 2018. PLTW provides transformative learning experiences for K-12 students and teachers across Texas, including Advanced Placement and Career/Technical Education STEM Pathways. These programs create engaging, hands-on classroom environments and empower students to develop in-demand knowledge and skills. Under my leadership, Texas PLTW grew from 112 programs in 2007 to over 900 in 2018, reaching over 170,000 students in more than 200 of Texas's 1,247 school districts. Expanding by 100+ programs annually, Texas PLTW also trained over 1,000 teachers each year at UT Tyler campuses in Tyler and Houston.

Director, UT Tyler Advanced Placement Summer Institutes (APSI): I oversee the delivery of the College Board APSI program serving over 100 teachers annually. 2006-2010; 2016-Present.

Texas Space Grant Consortium Representative

I serve as the UT Tyler Education Representative to the Texas Space Grant Consortium (TSGC). The TSGC is a group of 65 institutions which include universities, industrial organizations, non-profit organizations, and government agencies within Texas that are joined to ensure that the benefits of space research and technology are available to all Texans. In a broader context, the National Space Grant Program, consisting of 52 Space Grant Consortia nationwide, cooperate to achieve this goal for all Americans.

Scholarship: (ORCID 0000-0001-7693-9207)

Context: My research centers on two primary areas: STEM education and school improvement. In STEM education, I focus on preparing and supporting preservice and inservice STEM teachers. In school improvement, my work highlights innovative school design and turnaround strategies, with a particular emphasis on improvement science and STEM laboratory schools. These schools not only serve as exemplary models for teacher preparation but also function as laboratories for advancing school improvement and implementing effective turnaround initiatives.

Recent Research Activity (Accepted Scholarly Works):

Book Chapters:

Odell, M.R.L. (2025). Evaluation Standards in STEM Education. In B. Akpan & G. Cakmakci, Assessment and Evaluation as Tools for Science Education. Switzerland. Springer Nature.

Odell, M.R.L. & Kennedy, T.J. (2025) Professional Development in the Digital Age. In B. Akpan & T.J. Kennedy (Eds.), *Science Education in Theory and Practice: An Introductory Guide to Learning Theory.* (Chapter 9, pp. XXX). Switzerland: Springer Nature.

Kennedy, T.J. & Odell, M.R.L. (2025) Global Classrooms, Digital Tools: Advancing STEM Education through Innovation, Data, and Equity. In B. Akpan & T.J. Kennedy (Eds.), *Science Education in Theory and Practice: An Introductory Guide to Learning Theory.* (Chapter 9, pp. XXX). Switzerland: Springer Nature.

Published

Edited Volume

Odell, M.R.L., Kennedy, T.J., Meyer, B. & Sarada, J. (Eds.) (2025) The How and Why of Laboratory Schools. Myers Education Press, USA.
https://myersedpress.presswarehouse.com/browse/book/9781975506292/The-How-and-Why-of-Laboratory-Schools

Book Chapters:

Odell, M.R.L., Kennedy, T.J., Morris, D., & Simmons, J.A. (2025). The University of Texas at Tyler University Academies: A P-16 research-based laboratory model to develop a sustainable STEM pipeline. In M.R.L. Odell, T.J. Kennedy, B. Meyer, & J. Sarada (Eds.), *The how and why of laboratory schools* (pp. x-x). Meters Education Press, USA.

Odell, M.R.L., Worch, E., & Duran, E. (2025). The future of laboratory schools. In M.R.L. Odell, T.J. Kennedy, B. Meyer, & J. Sarada (Eds.), *The how and why of laboratory schools* (pp. x-x). Meyers Education Press, USA.

Odell, M.R.L., & Pedersen, J.L. (2025). Project and problem-based teaching and learning. In B. Akpan & T.J. Kennedy (Eds.), *Science education in theory and practice: An introductory guide to learning theory (2nd ed.)* (Chapter 20). Springer Nature. https://link.springer.com/book/9783031813504

Lane, J. M., Rios, A., Hickey, W. D., & Odell, M. (2024). Developing educational leaders within an EdD redesign that focuses on school improvement. In J. Watters, G. Miller, & R. Rhone (Eds.), *Reimagining the P-20 landscape for school leadership learning*. IGI Global.

Kennedy, T.J., & Odell, M.R.L. (2024). Integrating STEM: An interdisciplinary approach to PreK-12 education. *IntechOpen*. doi: 10.5772/intechopen.114009

Odell, M.R.L., Dyer, K., & Klett, M. (2023). Collaboration and communication in science and technology education. In B. Akpan & T.J. Kennedy (Eds.), *Contemporary issues in science and technology education* (Chapter 20). Switzerland: Springer Nature. https://link.springer.com/book/10.1007/978-3-031-24259-5

Kennedy, T.J., & Odell, M.R.L. (2023). STEM education as a meta-discipline. In B. Akpan & T.J. Kennedy (Eds.), *Contemporary issues in science and technology education* (Chapter 4). Switzerland: Springer Nature. https://link.springer.com/book/10.1007/978-3-031-24259-5

Worch, R., Odell, M.R.L., & Magdich, M. (2022). Engaging children in science learning through outdoor play. In S.D. Tunnicliffe & T.J. Kennedy (Eds.), *Play and STEM education in the early years worldwide* (Chapter 5, pp. 105-122). Switzerland: Springer International Publishing. https://link.springer.com/book/10.1007/978-3-030-99830-1

Carrillo-Rowley, J., Odell, M.R.L., & Kennedy, T.J. (2022). A case study in equity-focused school improvement in an urban middle school. In D.S. Peterson & S. Carlile (Eds.), *Improvement science as a tool for school enhancement* (Chapter 3). Myers Education Press. https://myersedpress.presswarehouse.com/browse/book/9781975504793/Improvement-Science-as-a-Tool-for-School-Enhancement

Pedersen, J., Odell, M.R.L., Kennedy, T.J., Dyer, K., Simmons, J., & Oliveras-Ortiz. (2021). Improvement science models used for achievement in mathematics. In D.S. Peterson & S. Carlile (Eds.), *Improvement science: Promoting equity in schools* (Chapter 9, pp. 132-146). Stylus Publishing, LLC. https://styluspub.presswarehouse.com/browse/book/9781975504670/Improvement-Science

Rasberry, J., Odell, M.R.L., Kennedy, T.J., Dyer, K., Simmons, J., & Pedersen, J. (2021). University Academy lab schools: Closing the gaps in literacy. In D.S. Peterson & S. Carlile (Eds.), *Improvement science: Promoting equity in schools* (Chapter 3, pp. 42-56). Stylus Publishing, LLC. https://styluspub.presswarehouse.com/browse/book/9781975504670/Improvement-Science

Ferrara, J., Pedersen, J., & Odell, M.R.L. (2021). Creating digital content using stop motion animation: Delving into expressions and equations. In J.S. Lee & E. Galindo (Eds.), *Making mathematics come alive in the elementary classroom with project-based learning: Rigor, relevance and relationships* (Chapter 7). National Council for Teachers of Mathematics (NCTM): Reston, VA. https://www.nctm.org/Store/Products/Project-Based-Learning-in-Elementary-Classrooms--Making-Mathematics-Come-Alive/

Odell, M.R.L., Kennedy, T.J., Simmons, J.A., & Pedersen, J.L. (2020). Laboratory schools to support the preparation of UTeach preservice teachers. In J. Goodell & S. Koc (Eds.), *Preparing STEM teachers: The UTeach replication model*. Information Age Publishing. https://www.infoagepub.com/products/Preparing-STEM-Teachers

Odell, M.R.L., & Pedersen, J.L. (2020). Project and problem-based teaching and learning. In B. Akpan & T.J. Kennedy (Eds.), *Science education in theory and practice: An introductory guide to learning theory* (Chapter 23, pp. 343-357). Switzerland: Springer Nature. ISBN 978-3-030-43619-3; ISBN 978-3-030-43620-9 (eBook). http://doi.org/10.1007/978-3-030-43620-9

Odell, M.R.L., & Kennedy, T.J. (2019). Human resources and STEM teacher education. In B. Akpan (Ed.), *Science education: Visions of the future* (Chapter 11, pp. 151-164). Next Generation Education, LTD, Abuja.

Hickey, W.D., & Odell, M.R.L. (2015). Instructional activities that create engaging experiences in online courses. In V. Vaughn, G. Miller, & Y. Oliveras-Ortiz (Eds.), *Preparing future ready education leaders through globalized online learning* (pp. 110-119). Ypsilanti, MI: NCPEA Publications.

Crow, J.E., Kennedy, T.J., Odell, M.R.L., Ophus, J.D., & Abbitt, J.T. (2013). Using just-in-time PD to technologically prepare high school STEM teachers. In M.M. Capraro, R.M. Capraro, & C.W. Lewis (Eds.), *Improving urban schools: Equity and access in K-16 STEM education* (Chapter 9, pp. 143-157). Information Age Publishing. http://www.infoagepub.com/products/Improving-Urban-Schools

Kennedy, T.J., Abbitt, J.T., & Odell, M.R.L. (2010). Pre-service ELL science teacher preparation in the Southeast United States. In D.W. Sunal, C.V. Sunal, & E.L. Wright (Eds.), *Research in science education: Teaching science with Hispanic ELLs in K-16 classrooms* (Chapter 8, pp. 183-199). Information Age Publishing.

Roblyer, M., Dickey, E., & Odell, M.R.L. (2005). Technology in mathematics and science instruction. In M.D. Roblyer (Ed.), *Integrating educational technology into teaching* (4th ed., Chapter 11). Prentice Hall.

Sundberg, C., Sunal, D., Mays, A., & Odell, M.R.L. (2005). Problem solving and coping strategies used in an online learning environment. In V.H. Wright, C.S. Sunal, & E.K. Wilson (Eds.), *Research on enhancing the interactivity of online learning: Perspectives in instructional technology and distance education* (Chapter 10). Information Age Publishing.

Odell, M.R.L., Badger, W., Kennedy, T.J., Ewers, T., & Klett, M.D. (2004). Lessons from research: Integrating information technology into undergraduate science education. In D. Sunal & E. Wright (Eds.), *Reform in undergraduate science teaching for the 21st century* (Chapter 11). Information Age Publishing.

Graves, S., Odell, M.R.L., Ewers, T., & Ophus, J. (2004). Models of reform in teaching the general and earth sciences: Promoting scientific literacy among undergraduate non-science majors. In D. Sunal & E.

Wright (Eds.), *Reform in undergraduate science teaching for the 21st century* (Chapter 32). Information Age Publishing.

Special Issue Journal (Editor)

Odell, M.R.L., Kennedy, T.J., &Worch, E. (Eds.) (2024) STEM Education: Challenges and Development, Education Sciences, MDPI, Switzerland. [Special Journal Issue]
https://www.mdpi.com/journal/education/special_issues/C8PBLKLJEN

Journals

Odell, M. R. L., Kennedy, T. J., & Simmons, J.A. (2025). The University Academies: An Improvement Science Research Platform for P-20 Education. *Frontiers in Education.*

Culclasure, B., Stocks, E. & Odell, M.R.L. (2023). The Impact of the NTN Design on Academic Outcomes. *Interdisciplinary Journal of Problem-based Learning.* 17 (1). https://doi.org/10.14434/ijpbl.v17i1.32477

Dyer, K., Childers, G. & Odell, M.R.L. (2022). Predictors of Academic Achievement in Dual Credit Students. Journal of Advanced Academics. Vol.2. pp.217-236.

Stocks, E., Culclasure, B. & Odell, M.R.L. (2021). *The Effect of New Tech Network Design on Students' Achievement and Workforce Skills*. ERIC, https://eric.ed.gov/?q=culclasure&id=ED611915

Odell, M.R.L., Kennedy, T.J., & Stocks, E. (2019). "The Impact of PBL as a STEM School Reform Model." *Interdisciplinary Journal of Problem-Based Learning, 13*(2). www.ijpbl.org (ISSN 1541-5015)

Veal, W., Malone, K, Hines, M. Wenner, J. & Odell, M.R.L. (2019) Increasing Science Teacher Candidates Ability to become Lifelong Learners through a Professional Online Learning Community. *Innovations in Science Teacher Education,* Association of Science Teacher Educators 4 (1).

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Sundberg, C., Kennedy, T.J., & Odell, M.R.L. (2013, winter). "Weather, Climate, and Web 2.0: 21st Century Students Speak Climate Science Well." *Journal of Interactive Online Learning, 12*(3), 122-155. http://www.ncolr.org/issues/jiol/v12/n3/3

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Professional Meetings:

Pending:

Klett, M.D., Odell, M.R.L. & Kennedy, T.J. (2025). From Local Observations to Global Understanding: Using the GLOBE Program to Engage Learners in Outdoor and Environmental Education. Michigan Alliance for Environmental and Outdoor Education Conference. Marquette, Michigan.

Completed:

Alejandro, A., Ashley, A., Barreras, J., Brown, L., Cline, J., Riquelme, E., Smith-Weerts, L., Farias, N., Pellegrotti, J. V., Sanchez, V., Serrudo, N. M., Kennedy, T. J., Odell, M., Prieto, A., & Ramos, S. (2025). *Trees and their impact on carbon storage and surface temperature: A comparative study*. NASA GLOBE Program.https://www.globe.gov/do-globe/research-resources/student-research-reports/-/projectdetail/globe/trees-and-their-impact-on-carbon-storage-and-surface-temperature-a-comparative-study

Odell, M.R.L. & Kennedy T.J. (2025). Harnessing AI for Global Innovation in Higher Education: Enhancing Research, Teaching, and Student Success. COBEC Winter Conference, Placencia, Belize.

Odell, M.R.L (2025). Mastering the Art of Grant Writing: Strategies for Success. COBEC Winter Conference, Placencia, Belize.

Odell, M.R.L. & Kennedy, T.K. (2025). The Design and Implementation of the EdD Program and Dissertation of Practice at UT Tyler. Hawaii International Conference on Education, Honolulu, Hawaii.

Odell, M.R.L., Fischer, K., Ferrara, J., Young, T. Kennedy, T.K. & Sognier, M. (2025). The Impact of the Texas STEM Coalition: Evolution of STEM Education in Texas. 23rd Annual Hawaii International Conference on Education, Honolulu, Hawaii.

Odell, M.R.L. & Kennedy, T.J. (2025). Improvement Science as a Tool for Professional Learning in Doctoral Programs. International Congress on School Effectiveness and Improvement, ICSEI Congress 2025. Melbourne Australia.

Odell, M.R.L. (2024). Developing p-16 STEM Pipelines through University-based Lab Schools: A Strategic Approach to cultivating STEM Majors. International Conference on Education (INCOED 2024), Virtual.

Odell, M.R.L., Kennedy, T.J., & Fischer, K. (2024). Developing GLOBE Project-based Learning (PBL) Projects Aligned to State Standards, GLOBE North American Regional Meeting, Virtual.

Odell, M.R.L., Kennedy, T.J., & Fischer, K. (2024). Developing a sustainable STEM pipeline: The University of Texas at Tyler University Academy laboratory schools. *Southwest Association of Science Teacher Educators (SWASTE)*, Denton, Texas.

Yurkofsky, M., Title, D., Odell, M.R.L., & Mitani, H. (2024). Incorporating improvement science into EdD programs: Benefits, challenges, and lessons learned. *CPED Annual Convening*, University of Hawaii, Honolulu.

Odell, M.R.L., Alejandro, A., Pepe, M., & Kennedy, T.J. (2024, August 16). STEM innovations for climate solutions. *The Collaborative to Develop Climate Education Capacity, Partners of the Americas/100,000 Strong in the Americas Workshop*, Neuquén, Argentina.

Prieto, A., Kennedy, T.J., & Odell, M.R.L. (2024). Strengthening climate education through North-South collaboration: The University of Texas at Tyler and the National University of Comahue partnership. *GLOBE International Conference*, Fredonia, New York.

Odell, M.R.L., Kennedy, T.J., & Simmons, J.A. (2024). Laboratory schools as research platforms. *International Association of Lab Schools Conference*, Muncie, Indiana.

Alejandro, A., Brown, L., Cline, J., Smith, L., Odell, M.R.L., & Kennedy, T.J. (2024, August 16). Climate action planning with U.S. preservice teachers. *The Collaborative to Develop Climate Education Capacity, Partners of the Americas/100,000 Strong in the Americas Workshop*, Neuquén, Argentina.

Odell, M.R.L. (2024). STEM grants for teachers. *Texas Virtual STEM Conference*.

Odell, M.R.L. (2024). AI to support STEM teaching and learning. *Texas Virtual STEM Conference*.

Odell, M.R.L., & Fischer, K. (2024). Grant writing for STEM teacher leaders. *University of Alabama Noyce List Webinar*.

Odell, M.R.L. (2024). Unleashing the potential of STEM education: A guide to funding, resources, and programs. *STEM for Innovation Conference*, Texas A&M University, Virtual.

Odell, M.R.L., & Kennedy, T.J. (2024). Leveraging global climate education networks to improve climate literacy outcomes. *International Congress for School Effectiveness and Improvement Annual Conference*, Dublin, Ireland.

Mendoza, N., Mitchell, A., Heilingoetter, J., & Odell, M.R.L. (2023). Strengthening the STEM teacher pipeline: Public-private initiatives in STEM education. *Children at Risk Virtual STEM Summit*.

Goldberg, E., Kirkland, P., Urquhart, M., & Odell, M.R.L. (2023). The USEA induction and professional development working group. *UTeach Annual Conference*, Austin, Texas.

Odell, M.R.L., & Kennedy, T.J. (2023). Texas and Argentina: GLOBE climate exchange program. *GLOBE North American Regional Meeting (Virtual)*.

Odell, M.R.L. (2023). Integrating AI into STEM teaching and learning. *University of Alabama NSF Noyce List Webinar*.

Odell, M.R.L. (2023). Utilizing improvement science to improve student outcomes in K-12 education and higher education. *East Texas Research Conference*, Tyler, Texas.

Odell, M.R.L., Simmons, J.A., & Kennedy, T.J. (2023). Designing and maintaining high-fidelity laboratory school models. *International Association of Laboratory Schools*, Toronto, Canada.

Odell, M.R.L., Feng, L., Thomas, C., Stocks, E., & Massey, P. (2023, June). Board 152: An analysis of school district adoption of K-12 engineering curriculum (Evaluation) (DEI). Paper presented at the *2023 ASEE Annual Conference & Exposition*, Baltimore, Maryland. https://peer.asee.org/42490

Feng, L., Massey, P., & Odell, M.R.L. (2023, June). Board 158: Creating a pipeline of future engineers in Texas (Evaluation) (DEI). Paper presented at the *2023 ASEE Annual Conference & Exposition*, Baltimore, Maryland. https://peer.asee.org/42502

Odell, M.R.L., & Kennedy, T.J. (2023). School improvement laboratories to inform policy and practice: The case for project- and problem-based learning. *International Congress for School Effectiveness and Improvement*, Viña del Mar, Chile.

Odell, M.R.L., & Kennedy, T.J. (2023). The GLOBE student research symposium (SRS). *Texas STEM Conference (Virtual)*.

Odell, M.R.L., & Kennedy, T.J. (2023). The elementary GLOBE program. *Texas STEM Conference (Virtual)*.

Odell, M.R.L., & Kennedy, T.J. (2022). The role of laboratory schools in the preparation of STEM preservice teachers in the time of COVID. *Critical Questions in Education Conference*, Denver, CO.

Odell, M.R.L. (2022). Get the facts out: STEM teaching. *UTeach Orientation*, Tyler, Texas.

Odell, M.R.L., & Hickey, W. (2022). Post-pandemic STEM teaching: A guide to self-care to sustain your STEM teaching and leadership career. *LIST Conference*, Tuscaloosa, Alabama.

Odell, M.R.L., & Kennedy, T.J. (2022). The University Academy: A case study in school improvement. *Lab Schools Europe Conference*, Bielefeld, Germany.

Odell, M.R.L., & Kennedy, T.J. (2022). The University Academy Lab Schools. Poster presented at the *Lab Schools Europe Conference*, Bielefeld, Germany.

Odell, M.R.L. (2022). Funding to support GLOBE partnerships: Creating a portfolio of funding. *GLOBE North American Regional Meeting (Virtual)*.

Odell, M.R.L. (2022). School improvement in K-12 mathematics. *Professional Development Conference*, Toledo District, Belize.

Odell, M.R.L. (2022). Making sense of student artifacts to inform and improve student learning. *NSF LIST Webinar Series*, Tuscaloosa, Alabama.

Odell, M.R.L. (2022). What matters in research for tertiary-level educators. *COBEC Conference*, Benque Viejo del Carmen, Belize.

Odell, M.R.L., & Kennedy, T.J. (2022). The GLOBE program: A free ESS NASA-supported program. *Texas STEM Conference*, San Antonio, Texas.

Odell, M.R.L., & Kennedy, T.J. (2022). The impact of project-based learning and problem-based learning models on STEM achievement and social-emotional learning. *INTED 2022 Virtual Conference*, Spain.

Odell, M.R.L., & Kennedy, T.J. (2022). Using GLOBE to prepare preservice teachers to facilitate scientific communication. *GLOBE Virtual International Conference*.

Odell, M.R.L., Stocks, E., Culclasure, B., Gant, K., & Bergeron, L. (2022). Effectiveness of New Tech Network school whole school implementation model in Texas. *Southwest Educational Research Association*, New Orleans, Louisiana.

Culclasure, B.T., Stocks, E., & Odell, M.R.L. (2022). The impact of the New Tech Network (NTN) design on academic outcomes. *American Educational Research Association (AERA) Conference*, San Diego, California.

Odell, M.R.L., Kennedy, T.J., & Fischer, K. (2021). STEM clinical practice in a pandemic. *Southwest Association of Science Teacher Educators Conference*, The Woodlands, Texas.

Odell, M.R.L., & Kennedy, T.J. (2021). The UT Tyler and T STEM Coalition GLOBE partnerships: Preparing preservice teachers during the pandemic. *International GLOBE Conference (Virtual)*.

Odell, M.R.L. (2021). STEM teaching: The forgotten discipline. *STEM World Conference*, Education for All Foundation (Virtual).

Worch, E., Odell, M., & Magdich, M. (2021). Outdoor play and science learning. *The Association for the Study of Play (Virtual Conference)*.

Odell, M.R.L. (2021). Seeking grant funding. *Consortium for Belize Educational Cooperation (COBEC) Virtual Conference*.

Simmons, J.A., & Odell, M.R.L. (2021). The University of Texas at Tyler University Academy. *International Association of Laboratory Schools Conference*.

Kennedy, T.J., & Odell, M.R.L. (2021). The GLOBE weather curriculum. *Texas A&M College of Medicine Mentors Project 20th Annual Summer Institute for K-12 Educators (Virtual)*.

Odell, M.R.L., & Minix-Wilcox, R. (2021). Lesson study for STEM teachers. *University of Alabama NSF LIST Grant Professional Development Series*.

Odell, M.R.L. (2021). Free online interactive STEM simulations for STEM. *Texas STEM Coalition Virtual Conference*.

Odell, M.R.L. (2021). The NSTA learning center. *Texas STEM Coalition Virtual Conference*.

Odell, M.R.L., & Kennedy, T.J. (2021). The GLOBE elementary STEM program. *Texas STEM Coalition Virtual Conference*.

Odell, M.R.L., & Kennedy, T.J. (2021). The GLOBE program (Grades 5-12). *Texas STEM Coalition Virtual Conference*.

Odell, M.R.L., Simmons, J.A., & Kennedy, T.J. (2021). University Academies: Case studies in teacher preparation and school improvement. *International Association of Laboratory Schools Conference (Virtual)*.

Odell, M.R.L., & Kennedy, T.J. (2020). Specialty high schools to support STEM teaching and learning. *International Conference New Perspectives in Science Education*, Florence, Italy, pp.396-399.

Odell, M.R.L., & Kennedy, T.J. (2020). Inquiry-based pedagogy to support STEM learning and 21st-century skills: Preparing new teachers to implement project- and problem-based learning. *14th Annual International Technology, Education and Development Conference*, Valencia, Spain.

Veal, W., Jones, R., & Odell, M.R.L. (2020). Developing science teachers as lifelong learners. *National Science Teaching Association Conference*, Boston, Massachusetts.

Odell, M.R.L., & Kennedy, T.J. (2020). Using GLOBE to support STEM, PBL, and student research in the classroom. *13th Annual STEM Conference*, Austin, Texas.

Simmons, J.A., & Odell, M.R.L. (2020). Evaluating teachers through a portfolio approach. *13th Annual STEM Conference*, Austin, Texas.

Simmons, J.A., & Odell, M.R.L. (2020). School improvement: Keep it simple. *13th Annual STEM Conference*, Austin, Texas.

Odell, M.R.L., & Kessler, G. (2020). STEM recognition through the Texas STEM Coalition. *13th Annual STEM Conference*, Austin, Texas.

Odell, M.R.L., Kennedy, T.J., & Simmons, J.A. (2020). Lab schools to support the preparation of preservice science teachers. *Association of Science Teacher Educators Conference*, San Antonio, Texas.

Mendez, F., Scalovino, R., Burrows, A., Odell, M.R.L., & Bogdon, O. (2020). How can the National Science Teaching Association support teacher candidates and professors? *Association of Science Teacher Educators Conference*, San Antonio, Texas.

Jones, R., Odell, M.R.L., & Roehrig, G. (2019). 2020 National Science Teaching Association/Association for Science Teacher Education standards for science teacher preparation. *National Science Teachers Area Conference*, Seattle, Washington.

Odell, M.R.L., Kennedy, T.J., & Simmons, J.A. (2019). The impact of lab schools on the STEM pipeline. *Southwest Association of Science Teacher Educators Conference*, Fayetteville, Arkansas.

Odell, M.R.L., & Kessler, G. (2019). Understanding and using data to improve instruction and learning. *University of Alabama Noyce Symposium*, Tuscaloosa, Alabama.

Odell, M.R.L., & Kennedy, T.J. (2019). UT Tyler Globe partnership: Fostering international STEM collaborations in Texas schools. *International GLOBE Conference*, Detroit, Michigan.

Hammett, W., Johnson, D., Breedlove, B., Higginbotham, J., & Odell, M.R.L. (2019). Providing UTeach students with high-quality clinical placements. *UTeach Annual Conference*, Austin, Texas.

Odell, M.R.L., & Mendez, F. (2019). Supporting UTeach science teachers using the NSTA learning center. *UTeach Annual Conference*, Austin, Texas.

Kennedy, T.J., Odell, M.R.L., Dyer, K., & Prieto, S. (2019). Supporting international collaboration using the GLOBE program. *National Science Teachers Convention*, Saint Louis, Missouri.

Odell, M.R.L., Kennedy, T.J., Dyer, K., & Prieto, A. (2019). UT Tyler Globe partnership: Fostering international collaboration for East Texas. *East Texas Research Conference*, Tyler, Texas.

Odell, M.R.L., & Kennedy, T.J. (2019). The TSTEM blueprint as a model for school turnaround. *Southwest Association of Science Teacher Educators Conference*, Norman, Oklahoma.

Odell, M.R.L., Kennedy, T.J., Stocks, E., & Culclasure, B. (2019). The efficacy of the STEM New Tech design promoting 21st-century learning in four Southeastern high schools in the United States. *EduLearn Conference*, Majorca, Spain.

Culclasure, B., Stocks, E., & Odell, M.R.L. (2019). The effect of the New Tech Network design on students' academic achievement and workforce skills. *American Education Research Association Conference*, Toronto, Canada.

Odell, M.R.L., Simmons, J.A., & Simmons, D. (2019). The TSTEM blueprint as a model for school turnaround. *Texas STEM Coalition Conference*, San Antonio, Texas.

Pickhart, I., & Odell, M.R.L. (2018). Using outdoor learning environments to build science skills. *Conference for the Advancement of Science Teaching*, Fort Worth, Texas.

Odell, M.R.L., & Kennedy, T.J. (2018). Texas teacher residency programs: University of Texas at Tyler model. *Hawaii International Conference on Education: 16th Annual Conference*, Honolulu, Hawaii.

Odell, M.R.L., Kennedy, T.J., Stocks, E., & Culclasure, B. (2018, July). *The Efficacy of the STEM New Tech Design.* EDULEARN18, Palma de Mallorca, Spain.

Odell, M.R.L., & Kennedy, T.J. (2018). School turnaround: The University of Texas at Tyler instructional coach model. *Hawaii International Conference on Education: 16th Annual Conference*, Honolulu, Hawaii.

Simmons, J.A., Rutledge, B., & Odell, M.R.L. (2018). University charter schools: The University of Texas Innovation Academy model. *Hawaii International Conference on Education: 16th Annual Conference*, Honolulu, Hawaii.

Case, S.B., Dass, P., & Odell, M.R.L. (2018). A center's role in STEM literacy. *National STEM Education Center Conference (APLU)*, Columbus, Ohio.

Odell, M.R.L., & Pedersen, J. (2017). University of Texas at Tyler Innovation Academy: A teacher preparation laboratory and model T-STEM academy. *Texas Prospect Initiative Summit*, Rockwall, Texas.

Simmons, J.A., & Odell, M.R.L. (2017). Outside the box: The first dual credit senior high school in Texas. *Texas Charter School Association Conference*, Grapevine, Texas.

Culpepper, C., Odell, M., & Manuel, M. (2017). UTeach STEM Educators Association (USEA): Excellence in STEM education. *UTeach Annual Conference*, Austin, Texas.

Nantz, C., Odell, M., & Cable, J. (2017). Empowering students while strengthening communities. *New Tech Annual Conference*, St. Louis, Missouri.

Odell, M.R.L., & Kennedy, T.J. (2016). University of Texas at Tyler Texas teacher residency program (T-RES). *Southwest Association of Science Teacher Educators Conference*, Tyler, TX.

Odell, M.R.L., & Kennedy, T.J. (2016). Preparing teachers in a laboratory school setting. *Southwest Association of Science Teacher Educators Conference*, Tyler, TX.

Ladine, A., Stocks, E., & Odell, M.R.L. (2016). Evaluation of an I3 New Tech implementation project in South Carolina. *Southwest Association of Science Teacher Educators Conference*, Tyler, TX.

Dyer, K., Pedersen, J., & Odell, M.R.L. (2016). Instructional coaching model at UT Tyler Innovation Academy. *Southwest Association of Science Teacher Educators Conference*, Tyler, TX.

Kennedy, T.J., & Odell, M.R.L. (2016). Developing STEM academies to develop the next generation of scientists and engineers through ESD. *The First Swedish International Global Action Programme on ESD Conference*, Uppsala University, Sweden.

Odell, M.R.L., Stocks, E., Culclasure, B., & Nantz, C. (2016). Planning ahead: Approaches for dealing with challenges that arise in PreK-12 evaluations. *American Evaluation Association (AEA) Conference*, Atlanta, Georgia.

Odell, M.R.L., Kennedy, T.J., & Rasure, C. (2016). Discovery Science Place developing a core research platform to study the STEM education ecosystem. *Association of Science and Technology Centers (ASTC) Annual Conference*, Tampa, Florida.

Odell, M.R.L., Gray, N., Kennedy, T.J., Pedersen, J., Wise, D., & Simmons, J. (2016). UTeach Tyler and the Innovation Academy: Innovation in clinical study. *UTeach Annual Conference*, Austin, Texas.

Mendez, F., Byers, A., Baird, K., Sparrow, K., Veal, W., McDonough, & Vaughn, M., Odell, M.R.L. (2016). Using the NSTA learning center as an online textbook for teaching science preservice teachers. *Association of Science Teacher Education (ASTE)*, Reno, Nevada.

Odell, M.R.L., Kennedy, T.J., & Ladine, A. (2016). Building and sustaining an education ecosystem. *Hawaii International Conference on Education*, Honolulu, Hawaii.

Odell, M.R.L., & Kennedy, T.J. (2015). Developing a core research facility for K-12 and teacher education. *Southwest Association of Science Teacher Educators (SWASTE)*, Denton, Texas.

Odell, M.R.L. (2015). Using the NSTA learning center as an e-text, portfolio, and induction tool. *Southwest Association of Science Teacher Educators (SWASTE)*, Denton, Texas.

Odell, M.R.L., & Nelson, J.K. (2015). Engineering your future at the University of Texas at Tyler. *12th Annual Texas Project Lead the Way Conference*, Corpus Christi, Texas.

Odell, M.R.L. (2015). Innovation education: A research platform to study the STEM ecosystem. *National Science Teachers Associations Global Conversations*, Chicago, Illinois.

Odell, M.R.L., & Kennedy, T.J. (2014). The NSTA learning center: Diagnosing and remediating preservice teacher content knowledge. *Preservice Teacher Self-Efficacy Strand, National Association of Research in Science Teaching (NARST)*, Pittsburgh, Pennsylvania.

Kennedy, T.J., & Odell, M.R.L. (2014). Texas STEM Coalition transforms teaching and learning methods. *Hawaii International Education Conference*, Honolulu, Hawaii.

Kennedy, T.J., Odell, M.R.L., Sundberg, C., & Robinson, D. (2013). Weather, climate, and Web 2.0: 21st-century students speak climate science well. *International Council of Associations of Science Education (ICASE) WorldSTE2013*, Penang, Malaysia.

Malmberg, J., Odell, M.R.L., Hoadley, C., Sumner, T., Maull, K., Dibie, O., Sundberg, C., Andersen, T., Mackaro, J., Randolph, G., Tessendorf, S., & Wegner, K. (2013). From learning to research: Working with middle and high school students and teachers to create climate projects using 21st-century technologies. *American Meteorological Society Annual Meeting*, Austin, TX.

Kennedy, T.J., & Odell, M.R.L. (2013). Content-based applications of science, technology, engineering, and mathematics (STEM) materials in Spanish and Portuguese promote 21st-century language acquisition. *American Association of Teachers of Spanish and Portuguese (AATSP) National Conference*, San Antonio, Texas.

Kennedy, T.J., Odell, M.R.L., & Chen, D. (2013). University of Texas at Tyler international opportunities. *NASFA Higher Education Fair: NASFA-Association of International Education, 65th Annual Conference & Expo*, St. Louis, Missouri.

Kennedy, T.J., & Odell, M.R.L. (2013). Texas STEM Center Coalition transforms teaching and learning methods. *International Council of Associations of Science Education (ICASE) WorldSTE2013*, Penang, Malaysia.

Odell, M.R.L., Kennedy, T.J., & Klett, M. (2013, April). Online Earth system science PBL projects. *NESTA National Share-a-thon, National Science Teachers Association (NSTA) National Conference*, San Antonio, Texas.

Kennedy, T.J., & Odell, M.R.L. (2013, April). GLOBE in East Texas. *GLOBE Reception by Texas Partners Associated with the GLOBE North America Partner Meeting at the National Science Teachers Association (NSTA) National Conference*, San Antonio, Texas.

Vaughn, V., Crow, J.E., Hickey, W., & Odell, M. (2012). Designing, developing, and implementing a university charter school in a time of a statewide financial crunch and increasing academic standards. *National Education Finance Conference*, San Antonio, Texas.

Kennedy, T.J., Odell, M.R.L., & McClurg, N. (2012, March). The GLOBE program. *CESI Share-a-thon: Elementary Extravaganza, National Science Teachers Association (NSTA) National Conference*, Indianapolis, Indiana.

Trampus, K., Odell, M.R.L., & Kennedy, T.J. (2012, January). Building P-16 collaborations from the higher education perspective. *Hawaii International Conference on Education: 10th Annual Conference*, Honolulu, Hawaii.

Trampus, K., Odell, M.R.L., & Kennedy, T.J. (2012, January). Leveraging diverse STEM programs to foster a robust statewide collaborative. *Hawaii International Conference on Education: 10th Annual Conference*, Honolulu, Hawaii.

Malmberg, J., Charlevoix, D., Odell, M.R.L. et al. (2012). From learning to research: Developing future earth scientists and professionals. *ITEST Annual Meeting, National Science Foundation*, Washington, D.C.

Ellins, K.K., Olson, H.C., Snow, E., Willis, M., Odell, M., Stocks, E., & Manganella, K. (2011). Characteristics of the Texas Earth and Space Science (TXESS) revolution model of in-service teacher professional development. *Geological Society of America Abstracts with Programs, V. 43, No. 5, Paper No. 216-8*.

Charlevoix, D.J., Odell, M.R.L., & Kennedy, T.J. (2011). Teachers learning to research climate: Development of hybrid teacher professional development to support climate inquiry and research in the classroom. *ED12: Climate Literacy: Integrating Research and Education, Science & Solutions, American Geophysical Union (AGU)*, San Francisco, California.

Odell, M.R.L., Ellins, K.K., Polito, E., Comer, C., Stocks, E., Manganella, K., & Ledley, T. (2010). TXESS revolution: Utilizing TERC's Earth Labs cryosphere module to support professional development of Texas teachers. *American Geophysical Union Conference*, San Francisco, California.

Ellins, K.K., Olson, H.C., Snow, E., Odell, M., Stocks, E., & Willis, M. (2010). The impact of the Texas Earth and Space Science revolution. *GSA Annual Meeting*.

Ellins, K.K., Olson, H.C., Snow, E., Odell, M., Stocks, E., & Willis, M. (2010). The impact of the Texas Earth and Space Science (TXESS) revolution. *Geological Society of America Abstracts with Programs, V. 42, No. 5, Paper No. T43-133-1*.

Olson, H., Ellins, K., Snow, E., Bryant, S., Olson, J., Comer, C., Willis, M., Odell, M.R.L., & Stocks, E. (2010). Climate literacy initiatives as part of the TXESS program. *American Geophysical Union Conference*, San Francisco, California.

Odell, M.R.L., & Kennedy, T.J. (2010, November). The GLOBE Science Network. *National Consortium for Specialized Secondary Schools of Mathematics, Science, and Technology (NCSSSMST)*, Atlanta, Georgia.

Kennedy, T.J., & Odell, M.R.L. (2010, March). NASA's GLOBE program across the curriculum. *National Science Teachers Association (NSTA) National Conference*, Philadelphia, Pennsylvania.

Kennedy, T.J., Abbitt, J.T., & Odell, M.R.L. (2010, February). Preservice science teacher ELL preparation in the Southeast United States. *University of Alabama Research Seminar Series*, Tuscaloosa, Alabama.

Odell, M.R.L., & Kennedy, T.J. (2010, January). Vertical alignment of STEM curriculum. *Department of Education—NSF Mathematics and Science Partnership Program: Regional Conference*, Washington, D.C.

Kennedy, T.J., & Odell, M.R.L. (2009, December). NASA's GLOBE program: STEM partnerships developing global citizens and connecting the next generation of international scientists. *UT-Tyler Annual Faculty Research Symposium*, Tyler, Texas.

Kennedy, T.J., Odell, M.R.L., Ruscher, P., & McClurg, N. (2009, March). The GLOBE program. *NESTA Earth and Space Science Share-a-thon, National Science Teachers Association (NSTA) National Conference*, New Orleans, Louisiana.

Kennedy, T.J., Odell, M.R.L., Ruscher, P., & McClurg, N. (2009, March). The GLOBE program. *NESTA Ocean and Atmosphere Share-a-thon, National Science Teachers Association (NSTA) National Conference*, New Orleans, Louisiana.

Kennedy, T.J., Batycky, B., Odell, M.R.L., & Besong, M. (2009, March). The GLOBE program: Monitoring climate change. *National Science Teachers Association (NSTA) International Day*, New Orleans, Louisiana.

Trampus, K., Brown, F., & Odell, M.R.L. (2009). Assessing peer attitudes among STEM students and the potential effects on the retention of minorities in STEM programs. *ASEE Conference*, Austin, TX.

Trampus, K., Brown, F., & Odell, M.R.L. (2009). Assessing peer attitudes among STEM students and the potential effects on the retention of females in STEM programs. *ASEE Conference*, Austin, TX.

Ellins, K., Snow, E., Olson, H., Odell, M., & Stocks, E. (2009). A progress report on the Texas Earth and Space Science Revolution. *American Geophysical Union Conference*, San Francisco, CA.

Odell, M.R.L., Kennedy, T.J., Abbitt, J.T., Ophus, J., & Klett, M. (2009). Pre-service ELL science teacher preparation in the Southeast United States. *UNITED Conference*, Marquette, MI.

Odell, M.R.L., Kennedy, T.J., & Abbitt, J.T. (2009). Pre-service ELL science teacher preparation in the Southeast United States. *UT-Tyler Annual Faculty Research Symposium*, Tyler, Texas.

Kennedy, T.J., & Odell, M.R.L. (2009, December). NASA's GLOBE program: STEM partnerships developing global citizens and connecting the next generation of international scientists. *UT-Tyler Annual Faculty Research Symposium*, Tyler, Texas.

Ellins, K., Snow, E., Olson, H., Odell, M., & Stocks, E. (2009). A progress report on the Texas Earth and Space Science (TXESS) revolution. *EOS Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract ED 12A-01.

Wright, E.L., Kennedy, T.J., & Odell, M.R.L. (2008). Integrating and researching the GLOBE program in K-12 science, language, and social studies methods courses and graduate programs. *International Conference on Education*, Honolulu, Hawaii.

Abbitt, J., Ophus, J., & Odell, M.R.L. (2008). Developing an online collaboration platform to support professional development in rural schools. *E-Learn Conference Proceedings* (AACE), Las Vegas, NV, pp. 1165-1166.

Odell, M.R.L., Kennedy, T.J., & Abbitt, J.T. (2008, September). Science teacher education for Hispanic language learners in the Southeast (SHELLS). *UNITED 2008 Conference*, Marquette, MI.

Odell, M.R.L., Klett, M.D., & Kennedy, T.J. (2008, June). Electronic applications of the GLOBE Earth System Science poster activity. *12th Annual GLOBE Conference*, Cape Town, South Africa. (Also co-chaired the event with African hosts from Cameroon and South Africa).

Olson, H.C., Ellins, K.K., Snow, E., Willis, M., Odell, M., & Stocks, E. (2008). The TXESS revolution: A teacher professional development program to advance Earth and Space Science in Texas. *GSA Annual Meeting*.

Odell, M.R.L. (2008). Using GLOBE data visualizations in the online learning environment. *Charleston, South Carolina*.

Nelson, J.T., Trampus, K., & Odell, M.R.L. (2008). A vision of P-16 education and the relationship between STEM retention. *ASEE Conference*, Pittsburgh, PA.

Lauman, J., & Odell, M.R.L. (2008). The Barnett Shale ESSEA module. *ESSEA Conference*, Charleston, SC.

Odell, M.R.L., & Trampus, K. (2008). Surveys of enacted curriculum. *Texas Regional Collaborative Annual Conference*, Austin, TX.

Odell, M.R.L., & Trampus, K. (2008). An analysis of the Texas Essential Knowledge and Skills (TEKS) test versus the Texas Assessment of Knowledge and Skills (TAKS). *Southwest Association of Science Teacher Educators Conference*, Irving, TX.

Kennedy, T.J., Odell, M.R.L., & Batycky, W. (2008). GLOBE inquiry. *GLOBE Learning Expedition*, Cape Town, South Africa.

Ophus, J., Abbitt, J., & Odell, M. (2008). Developing an online collaborative platform to support professional development in rural schools. Poster presented at the *2008 E-Learn Conference*, Las Vegas, NV.

Abbitt, J., & Odell, M. (2007). Using social bookmarking to enhance an undergraduate educational technology course. Paper presented at the *Society for Information Technology in Teacher Education Conference*, San Antonio, TX.

Odell, M.R.L., Kennedy, T.J., Klett, M., Graves, S., & Ophus, J. (2007). Lifelong learning online. *12th Annual GLOBE Conference*, San Antonio, Texas.

List, H., Odell, M.R.L., & Kennedy, T.J. (2007). The S2 task project. *Annual GLOBE Conference*, San Antonio, TX.

Odell, M.R.L., Abbitt, J., Sunal, D., Whitaker, K., MacKinnon, C., & Robinson, D. (2007). NASA opportunities for visionary academics. Poster presentation at the *Association of Science Teacher Educators Conference*, Clearwater, Florida.

Kennedy, T.J., & Odell, M.R.L. (2006). The future of the GLOBE program in Texas. *Conference for the Advancement of Science Teaching*, Wichita Falls, Texas.

Odell, M.R.L., Christiansen, J., Goc-Karp, G., & Graham, J. (2006). The University of Idaho online standards and dispositions assessment system. Sub-presentation of the data system imperative: Eight institutional scenarios of successful information systems implementation. *American Association of Colleges of Teacher Education Conference*, San Diego, CA.

Teasdale, J.T., Atkinson, D., & Odell, M.R.L. (2005). NASA Opportunities for Visionary Academics (NOVA). *NASA/UA*, $11,000.

Odell, M.R.L., Christiansen, J., Goc-Karp, G., & Graham, J. (2006). The University of Idaho online standards and dispositions assessment system. Sub-presentation of *The Data System Imperative: Eight Institutional Scenarios of Successful Information Systems Implementation*. *American Association of Colleges of Teacher Education Conference*, San Diego, California.

Odell, M.R.L., Lorsbach, A., Park, D., & Morey, M. (2006). Integrating information technologies into science education. *6th Annual ISU Symposium on Teaching and Learning*, Bloomington, Illinois.

Kennedy, T.J., & Odell, M.R.L. (2006). The future of the GLOBE program in Texas. *Conference for the Advancement of Science Teaching*, Wichita Falls, Texas.

Odell, M.R.L., Stocks, E., Culclasure, B., & Nantz, C. (2006). Planning ahead: Approaches for dealing with challenges that arise in PreK-12 evaluations. *American Evaluation Association (AEA) Conference*, Atlanta, Georgia.

Odell, M.R.L., Kennedy, T.J., & Ladine, A. (2006). Building and sustaining an education ecosystem. *Hawaii International Conference on Education*, Honolulu, Hawaii.

Odell, M.R.L., Kennedy, T.J., & Fischer, K. (2005). Developing a core research facility for K-12 and teacher education. *Southwest Association of Science Teacher Educators (SW-ASTE)*, Denton, Texas.

Odell, M.R.L. (2005). Using the NSTA Learning Center as an e-text, portfolio, and induction tool. *Southwest Association of Science Teacher Educators (SW-ASTE)*, Denton, Texas.

Odell, M.R.L., Nelson, J.K. (2005). Engineering your future at the University of Texas at Tyler. *12th Annual Texas Project Lead the Way Conference*, Corpus Christi, Texas.

Odell, M.R.L. (2005). Innovation education: A research platform to study the STEM ecosystem. *National Science Teachers Associations Global Conversations*, Chicago, Illinois.

Sunal, D.W., Odell, M.R.L., Raubenheimer, C., Sunal, C., MacKinnon, C., & Gardner, F. (2004). The development and implementation of standards-based reform in university undergraduate science courses: Do they work? *Association of Educators of Teacher of Science (AETS) Conference*, Nashville, Tennessee.

Odell, M.R.L., (2004). KSC educational technology and development plan. *Proceedings of the International Conference on Computers in Education*, ISBN 1-86335-573-1, pp. 1361-1368.

Sunal, D., Wright, E., Sunal, C., Harwood, W., Mason, C., & Odell, M.R.L. (2005). Reform in undergraduate science teaching for the 21st century: Research trends. *Association for the Education of Teachers in Science Conference*, Colorado Springs, Colorado.

Sunal, D., Odell, M.R.L., Raubenheimer, C., & Sunal, C. (2004). The effect of standards-based reform in university science courses. *American Association of Educators in Science Teaching Conference*, Nashville, Tennessee.

Odell, M.R.L., Alexander, G.C., & Kennedy, T.J. (2002). Creating a virtual campus. *NCOLR Conference Proceedings*, Tuscaloosa, Alabama.

Odell, M.R.L., Popiel, E.L. (2002). Using web-based modules to teach science process skills to preservice teachers. *National Science Teachers Association Conference*, Portland, Oregon.

Teasdale, J.T., Odell, M.R.L., Klett, M.D., Badger, S., & Kennedy, T.J. (2002). Lifelong learning online. *National Science Teachers Association Conference*, Portland, Oregon.

Kennedy, T.J., & Odell, M.R.L. (2001). Internet en las escuelas de Estados Unidos: Una perspectiva desde el programa GLOBE. *Congreso de Educa Red*, Madrid, Spain.

Odell, M.R.L., & Boone, W.J. (2001). Eighth grade students' attitudes toward geology: A survey. *NSTA Convention*, Anaheim, California.

Odell, M.R.L. (2001). The Idaho GLOBE program. *NSTA Regional Conference*, Boise, Idaho.

Odell, M.R.L. & Kearney, R.J. (1999). The NOVA program. *NASA Earth Systems Conference*, Austin, Texas.

Odell, M.R.L., & Popiel, E.L. (1999). The Idaho Science Technology Project: A model for training teachers. *NSTA National Convention*, Las Vegas, Nevada.

Klett, M.D., Odell, M.R.L., & Graves, S. (1998). Raising self-confidence of preservice teachers in alternative clinical settings. *NSTA National Convention*, Boston, Massachusetts.

Sunal, D.W., Sunal, C.S., Freeman, L., & Odell, M.R.L. (1998). College SMET courses for the next millennium. *NSTA National Convention*, Boston, Massachusetts.

Odell, M.R.L., & Dasch, E.J. (1997). The National Space Grant College and Fellowship Program: National Mathematics, Science, and Technology Education Standards. *AETS Conference Proceedings*, ERIC Document ED398-060, pp. 386-392.

Odell, M.R.L., & Popiel, E.L. (1996). The Idaho Science and Technology Education Project: An innovative model for teaching multimedia and educational technology. *The Thirteenth International Conference on Technology in Education Proceedings*, Vol. 2, pp. 419-421.

Blurton, C., Ostendorf, L., & Odell, M.R.L. (1996). Mission to Planet Earth: Online Earth Systems Science Course. *IGARSS Conference*, Lincoln, Nebraska.

Odell, M.R.L., & Popiel, E.L. (1996). The Idaho Science Technology Project (ISTEP): A model for training teachers. *ICTE Convention*, New Orleans, Louisiana.

Odell, M.R.L., & Popiel, E.L. (1995). The relationships among three-dimensional laboratory models, gender, spatial visualization ability, and junior high Earth science achievement: Examining models. *NRMERA Convention*, Jackson Hole, Wyoming.

Mowrer-Popiel, E.L., Odell, M.R.L., Mayer, M., & Graham, J. (1995). Teachers, technology, and Donkey Kong: Implications for mathematics and science education in the nineties. *NWATE Convention*, Coeur d'Alene, Idaho.

Odell, M.R.L. (1994). The relationships among three-dimensional laboratory models, gender, spatial visualization ability, and junior high Earth science achievement. *MWERA Convention*, Chicago, Illinois.

Odell, M.R.L., Worch, E.A., & Hewitt, P. (1994). Three-dimensional modeling for spatial learning. *NSTA Convention*, Anaheim, California.

Odell, M.R.L., & Boone, W.J. (1994). Eighth grade students' attitudes towards geology: A survey. *NSTA Convention*, Anaheim, California.

Mowrer-Popiel, E., & Odell, M.R.L. (1994). Gender stereotyping and the preservice educator. *NWATE Convention*, Coeur d'Alene, Idaho.

Odell, M.R.L., Hewitt, P., Bowman, J., & Boone, W. (1993). Stereotypical images of scientists: A cross-age study. *NSTA Convention*, Kansas City, Missouri.

Worch, E.A., Odell, M.R.L., Gabel, D., & Boone, W. (1993). Saturday Science QUEST: Enhancing pre-service science teaching and children's science. *AETS Convention*, Kansas City, Missouri.

Odell, M.R.L., Lane, N.G., & Gabel, D. (1992). Indiana University's integrated science for preservice teachers: The geology component. *GSA Convention*, Cincinnati, Ohio.

Odell, M.R.L., Worch, E.A., Svec, M.T., & Gabel, D. (1992). Saturday Science QUEST: Enhancing pre-service science teaching. Poster presented at the *WISE Conference*, Bloomington, Indiana.

Technical Reports:

In Preparation:

Stocks, E., Odell, M.R.L., & Culclasure, V. (2025). Evaluation of the New Tech Network (NTN) Improvement Science Model in California.

Completed:

Odell, M.R.L., & Stocks, E. (2025). External evaluation report for UT Arlington ITEST Quantum Physics Education (unpublished evaluation report submitted to NSF). Arlington, Texas. (Annual Report).

Odell, M.R.L., & Stocks, E. (2024). External evaluation report for University of West Georgia Noyce Grant (unpublished evaluation report submitted to NSF). Carrollton, Georgia.

Odell, M.R.L., & Stocks, E. (2024). External evaluation report for UT Arlington IRES Grant (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2024). External evaluation report for UT Arlington ITEST Quantum Physics Education (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2024). External evaluation report for Wayland Baptist University Noyce Scholars Program (unpublished evaluation report submitted to NSF). Plains, Texas.

Odell, M.R.L., & Stocks, E. (2024). Fiscal year: External evaluation report for Mercy Manor ESTEEM Program (unpublished evaluation report submitted to Mercy Manor). Longview, Texas.

Odell, M.R.L., & Stocks, E. (2023). Evaluation report for UT Tyler CARSI Grant (unpublished evaluation report). Tyler, Texas, and Belize City, Belize.

Odell, M.R.L., & Stocks, E. (2023). External evaluation report for Wayland Baptist University Noyce Scholars Program (unpublished evaluation report submitted to NSF). Plains, Texas.

Odell, M.R.L., & Stocks, E. (2023). Fiscal year: External evaluation report for Mercy Manor ESTEEM Program (unpublished evaluation report submitted to Mercy Manor). Longview, Texas.

Odell, M.R.L., & Stocks, E. (2023). External evaluation report for UT Arlington ITEST Quantum Physics Education (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2022). External evaluation report for UT Arlington ITEST Quantum Physics Education (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2022). Noyce 3: External evaluation report for UT Arlington Noyce Scholars Program (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2022). Fiscal year: External evaluation report for Mercy Manor ESTEEM Program (unpublished evaluation report submitted to Mercy Manor). Longview, Texas.

Odell, M.R.L., & Stocks, E. (2022). Evaluation report for UT Tyler CARSI Grant (unpublished evaluation report). Tyler, Texas, and Belize City, Belize.

Odell, M.R.L., & Stocks, E. (2022). External evaluation report for Mercy Manor ESTEEM Project (unpublished evaluation report). Longview, Texas.

Odell, M.R.L., & Stocks, E. (2022). Noyce 4: External evaluation report for UT Arlington Noyce Scholars Program (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2021). Noyce 3: External evaluation report for UT Arlington Noyce Scholars Program (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2021). External evaluation report for University of West Georgia Noyce Scholars Program (unpublished evaluation report submitted to NSF). Carrollton, Georgia.

Odell, M.R.L., & Stocks, E. (2020). Noyce 4: External evaluation report for UT Arlington Noyce Scholars Program (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2020). Noyce 3: External evaluation report for UT Arlington Noyce Scholars Program (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2020). External evaluation report for University of West Georgia Noyce Scholars Program (unpublished evaluation report submitted to NSF). Carrollton, Georgia.

Odell, M.R.L. (2020). Evaluation of AISD Middle School Turnaround Initiative (unpublished evaluation report submitted to Austin ISD). Austin, Texas.

Odell, M.R.L., & Stocks, E. (2019). External evaluation report for University of West Georgia Noyce Scholars Program (unpublished evaluation report submitted to NSF). Carrollton, Georgia.

Odell, M.R.L., & Stocks, E. (2019). Noyce 4: External evaluation report for UT Arlington Noyce Scholars Program (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., & Stocks, E. (2019). Noyce 3: External evaluation report for UT Arlington Noyce Scholars Program (unpublished evaluation report submitted to NSF). Arlington, Texas.

Odell, M.R.L., Sullivan, J., et al. (2019). Integrating professional growth into the school day. *100Kin10*. https://grandchallenges.100kin10.org/progress/100kin10-project-team-integrating-professional-growth-into-the-school-day

Odell, M.R.L., & Stocks, E. (2019). External evaluation report for University of Alabama Noyce Scholars Program (unpublished evaluation report submitted to NSF). Tuscaloosa, Alabama.

Odell, M.R.L., & Stocks, E. (2018). External evaluation report for University of Alabama Noyce Scholars Program (unpublished evaluation report submitted to NSF). Tuscaloosa, Alabama.

Odell, M.R.L., & Stocks, E. (2018). External evaluation report for University of West Georgia Noyce Scholars Program (unpublished evaluation report submitted to NSF). Carrollton, Georgia.

Culclasure, B., Odell, M.R.L., & Stocks, E. (2017). New Tech Network evaluation report: 9th, 10th, and 11th grade data (2015-16). Expanded evaluation sample (unpublished evaluation report submitted to US ED). Greenville, SC: Furman University.

Odell, M.R.L., & Stocks, E. (2017). External evaluation report for University of Alabama Noyce Scholars Program (unpublished evaluation report submitted to NSF). Tuscaloosa, Alabama.

Odell, M.R.L., & Stocks, E. (2017). External evaluation report for University of West Georgia Noyce Scholars Program (unpublished evaluation report submitted to NSF). Carrollton, Georgia.

Odell, M.R.L. (2017). The University of Texas at Tyler Teacher Residency Program. *100Kin10 Working Papers*.

Odell, M.R.L., & Stocks, E. (2016). External evaluation report for University of Alabama Noyce Scholars Program (unpublished evaluation report submitted to NSF). Tuscaloosa, Alabama.

Odell, M.R.L., & Stocks, E. (2016). External evaluation report for University of West Georgia Noyce Scholars Program (unpublished evaluation report submitted to NSF). Carrollton, Georgia.

Odell, M.R.L., & Stocks, E. (2015). External evaluation report for University of Alabama Noyce Scholars Program (unpublished evaluation report submitted to NSF). Tuscaloosa, Alabama.

Odell, M.R.L., & Stocks, E. (2015). External evaluation report for University of West Georgia Noyce Scholars Program (unpublished evaluation report submitted to NSF). Carrollton, Georgia.

Nelson, J.K., Odell, M.R.L., & Kennedy, T.J. (2013). Verhoef Aluminum Scheepsbouw Industries. *College of Engineering and Computer Science Research Report: CECS-2013-05*.

Odell, M.R.L., Nelson, J., & Trampus, K. (2008). The East Texas STEM Center strategic plan. Submitted to the Texas Education Agency and the Community Foundations of Texas.

Odell, M.R.L., Whitaker, K., Sunal, D., & Abbitt, J. (2006). Final report: NASA Opportunities for Visionary Academics (submitted to NASA Headquarters), September 30.

Odell, M.R.L. (2003). KSC Education Technology Research and Development Plan. *NASA CR-2003-211527*.

Sunal, D., Odell, M.R.L., Mays, A., & Vernon, F. (2001). Evaluation of an online ESS-NOVA Middle School Earth Science course. Report to NASA Headquarters.

Ewers, T., Odell, M.R.L., Klett, M.D., Graves, S.M., Davis, J.C., Davis, A., Ophus, J., & Thornhill, A. (2001). The status of K-12 mathematics and science in Idaho: Student course-taking patterns and teacher certification. Report to the Idaho State Department of Education.

Davis, A., & Odell, M.R.L. (2001). Revision of teacher preparation standards for teachers. Report to the Idaho State Board of Education.

Davis, A., & Odell, M.R.L. (2001). Summary report: Statewide public assessment inquiry. Report to the Idaho State Board of Education.

NASA Opportunities for Visionary Academics: The First Five Years. (1995-2000). National Aeronautics and Space Administration, Washington, DC (Editor).

Odell, M.R.L., & Freeman, M. (1997). Project NOVA: Creating change in higher education. *NASA MTPE*.

Odell, M.R.L., and Kearney, R. (1997). *Idaho GLOBE: An ESS Model for Preservice Science Education*. NASA MTPE Education Reports, April.

Kay, R., Carlson, S., Craig, J., Humphries, R., McCurdy, M., Odell, M., Ollie, M., Reich, C., Singletary, T., Toole, C., Volkening, L., Weaver, D., Wright, S., and Zoller, S. (1994). *Idaho K-12 Science Content Guide and Framework*. Idaho State Department of Education, Boise, Idaho.

Odell, M.R.L. (Editor) (1996). *Proceedings, Fourth National Space Grant/NASA EPSCoR Conference Report*. National Aeronautics and Space Administration, Washington, DC.

Invited Professional Meeting Papers and Presentations:

Odell, M.R.L. (2024). *Integrating PhET Simulations into your STEM Teaching*. University Academy Professional Development Conference, Virtual.

Staton, M., DiBacco, M., Goldberg, E. and Odell, M.R.L. (2024). *Submit Your Best: Conference and Proposal Workshop*, UTEach STEM Educators Association Connect Webinar (USEA) Webinar, Virtual.

Odell, M.R.L. and Fischer, K. (2024) Developing Small STEM Grants for Science Teachers. LIST Webinar, University of Alabama, Tuscaloosa, Virtual.

Odell, M.R.L. (2023). Incorporating AI into your UTeach Program. LIST Webinar, University of Alabama, Tuscaloosa, Virtual.

Odell, M.R.L. (2023). Incorporating AI into your Science Teaching. UTEach STEM Educators Association Connect Webinar (USEA) Webinar, Virtual.

Odell, M.R.L. and Kennedy, T. J. (2022). *Funding your GLOBE Program*. North American Regional GLOBE Meeting, Virtual.

Odell, M.R.L. (2022). *Panelist: UT Tyler Graduate School Doctoral Program Panel*. Tyler, Texas.

Odell, M.R.L. (2022). *Keynote: UT Tyler University Academy Graduation and 10th Year Anniversary*. Tyler, Texas.

Odell, M.R.L. (2021). *Keynote: STEM Education Post COVID*. ESC 1 STEM Summit, Edinburg, Texas.

Bourgeault, J., Odell, M.R.L. (2019). *(Panelist). US Student Research Symposia: Four Years of Development, Growth, and Building Sustainability*. International Globe Conference, Detroit, Michigan.

Odell, M.R.L. (2019). *Keynote: The STEM Education Landscape*. LBJ Institute, Texas State University.

Odell, M. (2016). *Careers in STEM Education*. Tyler Junior College.

Snook, D. and Odell, M.R.L. (2014). *Innovative Models Panelist: Early College High School*, 4th Annual Education Productivity Forum, George Bush Library, Dallas, Texas.

Odell, M.R.L. (2014). *The NSTA Learning Center*. Association of Science Teacher Educators (ASTE), San Antonio, Texas.

Odell, M.R.L. (2013). *The NSTA Learning Center*. National Science Teachers Association (NSTA), San Antonio, Texas.

Odell, M.R.L. (2012). *The NSTA Learning Center*. National Science Teachers Association (NSTA), Indianapolis, Indiana.

Odell, M.R.L. (2012). *Evaluation of the UT Tyler MSTTPA Program: Promising Practices*, MSTTPA/THECB Conference, El Paso, Texas.

Odell, M.R.L. (2011). *The NSTA Learning Center*. National Science Teachers Association (NSTA), San Francisco, California.

Odell, M.R.L. (2010). *The NSTA Learning Center TCEA*. Austin, Texas.

Odell, M.R.L., Fontenot, D., Tribett, K., and Trampus (2009). *Vertical Alignment and College Readiness*. Association of School Administrators Mid-Winter Conference, Austin, Texas.

Capraro, R., Odell, M.R.L., and Trampus (2009). *What T-STEM Centers do for your School District*. Texas Association of School Administrators Mid-Winter Conference, Austin, Texas.

Odell, M.R.L. (2008). *College Readiness Standards for Science*. The Charles A. Dana Center's Annual Mathematics and Science Higher Education Conference, Austin, Texas.

Odell, M.R.L. (2008). *Education in a Flat World*. UT-Tyler Fundraising Luncheon, Tyler, Texas.

Odell, M.R.L. (2008). *Education in a Flat World*. Palestine Chamber of Commerce, Palestine, Texas.

Odell, M.R.L. (2008). *East Texas STEM Center*. East Texas Workforce Commission, Longview, Texas.

Odell, M.R.L. (2007). *Panel Discussion, Education Opportunities*. American Meteorological Society Student Conference, San Antonio, TX.

Odell, M.R.L. (2006). *GLOBE: Ten Years of Student Inquiry*, Keynote Presentation: SW-ASTE Conference, Wichita, Kansas.

Odell, M.R.L. (2006). *Education Reform*. Phi Delta Kappa, University of Texas at Tyler.

Michie, G., Odell, M.R.L., Moore, M., Johnson, B., and Witucke, C. (2006). *The Start of Something Big: Little Village-A Community-Based Urban PDS*. The 10th Annual Holmes Partnership Conference. Chicago, Illinois.

Odell, M.R.L. (2005). *NASA Resources to Support Science Teaching*, Conference on Teaching Elementary Science: Developing Models of Collaboration among Schools, Colleges and Scientists. Wheelock College, Boston, Massachusetts.

Odell, M.R.L. (2005). *State Standards Alignment with GLOBE Protocols and Learning Activities*. GLOBE Learning Communities Conference, Corpus Christi, Texas.

Odell, M.R.L. (2005). *State Partnerships with Higher Education Preservice Programs and PDS Schools*. GLOBE Learning Communities Conference, Corpus Christi, Texas.

Odell, M.R.L. (2005). *Connecting GLOBE Student Data to the Community*. GLOBE Learning Communities Conference, Corpus Christi, Texas.

Odell, M.R.L. (2005). *The Idaho Virtual Campus*. Educating the NET Generation Symposium, Moscow, Idaho.

Odell, M.R.L. and Kennedy, T.J. (2004). *The GLOBE Program*. Partnerships in Education Instruction and Professional Development Conference (PIE), Lewiston, Idaho.

Odell, M.R.L. (2004). *Idaho GLOBE*, 8th Annual GLOBE Conference (Proceedings).

Odell, M.R.L. (2004). *Idaho Space Grant Consortium*. Senator Mike Crapo's Math, Science and Technology Education Symposium: Charting the Course of Idaho's Children, Boise, Idaho.

Odell, M.R.L. (2002). *NOVA: Coordinating a national NASA project on the Internet*. Making Connections II Conference, Columbus, Georgia.

Odell, M.R.L. (2001). *Unlearning What You Think You Know: Science Education at the University of Idaho*. College of Education Advisory Board Conference, Moscow, Idaho.

Odell, M.R.L. and Kennedy, T.J. (2001). *Learning to Diagnose and Remediate science Misconceptions*. Alaska State Mathematics and Science Teachers Conference, Anchorage, Alaska.

Odell, M.R.L. (2001). *Science Education Update*. College of Education Advisory Committee, University of Idaho, Moscow, Idaho.

Freeman, L.M., Odell, M.R.L., Romeo, J.T., and Walton, E. (2000). *The NOVA Program*. Title II Project Directors Meeting, US Department of Education, Crystal City, Virginia.

Odell, M.R.L. (2000). *The Palouse Discovery Science Center*. Lions Club Luncheon, Moscow, Idaho.

Odell, M.R.L. (1999). *The Institute for Mathematics, Interactive Technologies, and Science* (exhibit). Idaho Science Teachers Conference, Coeur d'Alene, Idaho.

Odell, M.R.L. (1999). *The Institute for Mathematics, Interactive Technologies, and Science*. Research Seminar; Resource, Recreation, and Tourism.

Odell, M.R.L. (1999). *The Idaho Virtual Campus*. Region I & II Superintendent Meetings.

Odell, M.R.L., Kennedy, T.J., Graves, S.M., and Abbitt, J.T. (1998). *Global Learning and Observations to Benefit the Environment*. Idaho Science Teachers Association Conference, Boise, Idaho.

Odell, M.R.L., Kennedy, T.J., Graves, S.M., and Abbitt, J.T. (1998). *The Idaho Virtual

Campus*. Idaho Science Teachers Association Conference, Boise, Idaho.

Kennedy, T.J., Odell, M.R.L., Graves, S.M., and Abbitt, J.T. (1998). *Technology and the One Room School House*. Phi Delta Kappa International Conference, Calgary, Canada.

Odell, M.R.L., and Kennedy, T.J. (1998). *The Idaho GLOBE Franchise Model*. GLOBE Train the Trainers Conference, Missoula, Montana.

Odell, M.R.L., and Kearney, R. (1998). *The Idaho Virtual Campus: A Model for Interactive Learning*. Inland Northwest Media Conference, Moscow, Idaho.

Odell, M.R.L. (1998). *The Idaho Virtual Campus*. Idaho Engineering Colloquium, Moscow, Idaho.

Kennedy, T.J., Odell, M.R.L., and Graves, S. (1997). *The Idaho GLOBE Program*. Second International GLOBE Conference, Airlie, Virginia.

Singletary, T., Jordan, R., and Odell, M.R.L. (1997). *Bringing GLOBE to Your State*. National Science Teachers Association National Conference, New Orleans, Louisiana.

Odell, M.R.L. (1997). *The National Space Grant College and Fellowship Program*. The Aerospace Education Specialists Conference, Johnson Space Center, Houston, Texas.

Odell, M.R.L., and Albright, J. (1997). *The National Science Standards*. Kentucky Space Grant Conference/Kentucky Education Technology Conference, Louisville, Kentucky.

Odell, M.R.L. (1997). *The National Space Grant College and Fellowship Program*. Invited presentation at the First U.S.-Argentina Conference on Space, Science, and Technology for Society, Buenos Aires, Argentina.

Odell, M.R.L. (1997). *The National Science Education Standards*. Consortia to Establish Local Science Standards Conference, Nampa, Idaho.

Odell, M.R.L., Klett, M., and Graves, S. (1997). *The Idaho Virtual Classroom*. The High-Performance Computing and Communications Conference (IITA), Dryden Space Flight Center, Lancaster, California.

Odell, M.R.L. (1996). *Educational Reform: Issues in Preparing Students for the 21st Century*. Collegium V, University of Texas-Dallas, Richardson, Texas.

Odell, M.R.L. (1996). *Panel member, The GLOBE Program*, NSTA Global Summit, San Francisco, California.

Odell, M.R.L. (1996). *The University of Idaho NOVA Project*. Regional NOVA Conference, Jet Propulsion Laboratory, Pasadena, California.

Odell, M.R.L., Morgan, B. (Teacher in Space), Dugger, W. (Director, Technology for All Americans), Keener-Chavis, P. (SSI Hubs, South Carolina), and Owens, F. (NASA Education Division Director, Moderator). (1996). *National Standards (panel)*. NASA Space Grant/EPSCoR Conference, Williamsburg, Virginia.

Odell, M.R.L. (1996). *NASA Opportunities and Idaho*. Idaho Space Grant Consortium Conference, Moscow, Idaho.

Odell, M.R.L. (1996). *Remote Sensing in the Classroom*. Mississippi Space Grant Consortium Conference, Oxford, Mississippi.

Odell, M.R.L. (1996). *The National Science Education Standards: An Overview*. Presented to the Idaho Academy of Science, Moscow, Idaho.

Odell, M.R.L. (1996). *The National Space Grant College and Fellowship Program*. Presented at the NASA TRC Annual Conference, Huntsville, Alabama.

Fodor-Davis, J., and Odell, M.R.L. (1995). *Idaho Science Education Program and Projects*. Presentation at the ISTA Convention, Boise, Idaho.

Odell, M.R.L. (1995). *Educational Reform*. University of Idaho (ED 201), Moscow, Idaho.

Odell, M.R.L. (1994). *Integrated Science, Technology, and Social Studies Methods*. Presentation to the Division of Teacher Education, Moscow, Idaho.

Odell, M.R.L. (1994). *IdaHOES: Hands-On Elementary Science*. Presentation at the ISTA Convention, Boise, Idaho.

Odell, M.R.L. (1994). *Professional Development in Science Education*. Presentation at the SOARS Conference, McCall, Idaho.

Odell, M.R.L. (1994). *Science and Technology Initiatives*. Presentation to the College of Education, Moscow, Idaho.

Odell, M.R.L., and Munsch, T. (1993). *Science Education at the University of Idaho*. Presentation at the ISTA Convention, Jerome, Idaho.

Odell, M.R.L. (1993). *Indiana University Saturday Science QUEST*. Presentation at the Indiana University Annual Education Conference, Bloomington, Indiana.

Odell, M.R.L. (1992). *Scope, Sequence, and Coordination*. Presentation, Irving Independent School District, Irving, Texas.

Patents/Copyrights:
Graham, J., Abbit, J.T., and Odell, M.R.L. Idaho Virtual Campus Software. Transferred to the University of Idaho Research Foundation. License Issued 2001. Rights granted to developers, 2006.

Other Scholarly and Creative Activities:

Non-Credited Publication
Lead-Author, NSTA Position Statement on Aerospace Education, 2008, http://www.nsta.org/about/positions/aerospace.aspx

Curriculum Development

Odell, M.R. L. (2010). Carbon Sequestration and the Copenhagen Accord. ESSEA Course Module. Archived https://wayback.archive-it.org/15181/20201019195852/https://esseacourses.strategies.org/module.php?module_id=160

Klett, M., Odell, M.R.L., Kennedy, T.J., Ophus, J., Willis, M. & Larsen, J. (2007, July). Comparing Surface And Subterranean Environments. GLOBE Earth System Science Learning Activity.

Software Development
Co-Developers: Jason Graham, Jason Abbitt, and Michael Odell

- IVC Online Course System 1.0 (1999)
- IVC Online Course System 2.0 SQL Based ASP Script (2000)

- IVC Candidate Assessment and Accountability Performance System 1.0 (2003)

Dissertation:
Odell, M.R.L. (1993). The Relationships among Three-Dimensional Laboratory Models, Gender, Spatial Visualization Ability, and Junior High Earth Science Achievement. *Dissertation Abstracts International*.

Grants and Contracts Under Development:

Odell, M.R.L., Morris, D., Gunpinar, Y., Bretl, B, Thomas, C., Kennedy, T.J., Fischer, K., Smith, N. (Delayed due to DOGE). NSF Noyce Track 1. $1.5 million.

Grants and Contracts Awarded:

2024
Odell, M.R.L., Fischer, K, and Pedersen, J. (2024). PhET In-kind Software Grant. Provided Free Licenses for all University Academy Students. Renewal.

Odell, M.R.L. (2024). Discovery Education In-Kind Software Grant. Provided Fee Licenses for all UT Tyler Preservice Teachers and Faculty.

2023
Kennedy, T.J., Odell, M.R.L., and Prieto, A. (2023). Co-PI 100KStrong Grant. Collaborative to build Climate Education Capacity. $50,000.

Odell, M.R.L., Dennis, A., & Pedersen, J. (2023). PhET In-kind Software Grant. Provided Free Licenses for all University Academy Students.

2022
Dykes, F., and Odell, M.R.L. (2022). Co-Author. THECB Teacher Preparation Pathways Grant. $50,000.

2020
Odell, M.R.L. (2020-Present). In-Kind Access to Accelerated Learning STEMScopes to support School of Education Students in 5E Lessons.

Pedersen, J. L., Simmons, J.A., and Odell, M.R.L. (2019-20). Co-Author. Blended Learning Grant. Texas Education Agency. Continuation $100,000.

Pedersen, J. L., Simmons, J.A., and Odell, M.R.L. (2019). Co-Author. Math Innovation Zone. Texas Education Agency. Continuation, $135,000.

2019
Pedersen, J. L., Simmons, J.A., and Odell, M.R.L. (2019-20). Co-Author. Blended Learning Grant. Texas Education Agency. Initial $150,000.

Pedersen, J. L., Simmons, J.A., and Odell, M.R.L. (2019). Math Innovation Zone. Texas Education Agency. Initial $150,000.

2018
Odell, M.R.L., and Pedersen, J. L. (2018). Scaling and Dissemination of Promising T-STEM Education Practices. Communities Foundation of Texas. $15,000

2017

Marzilli, S., and Odell, M. (2017-21). UT Tyler Greater Texas Foundation Scholars Program. Greater Texas Foundation. $1.4 Million.

Odell, M.R.L. (2017-19). Noyce Program Evaluation, University of Texas at Arlington, Subcontract, National Science Foundation, $5000.

2016

Delello, J., Odell, M.R.L., Kennedy, T.J., Biswas, M., and Kennedy, T. (2016-18). Orion Journey to Mars: Bringing NASA Programming to Rural Diverse Settings, Texas Space Grant Consortium. $10,000.

Naizer, G., Odell, M.R.L., Swain, C., and Stocks, E. (2016-17). Teacher Residency Grant (TRES), Texas Higher Education Coordinating Board, $1.29 Million (UTT Share $350,000) (Subcontract).

Brown, F., and Odell, M.R.L. (2016-17). Teacher Externship Program: Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($20,000).

Brown, F., Dyer, K., Odell, M.R.L., and Wise, D. (2016-17). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($140,000).

Bextine, B., Powell, C., and Odell, M.R.L. (2016-18). Wood Borer Research. $21,000. Texas A&M University.

2015

Nelson, J.K., and Odell, M.R.L. (2015-17). Lifeboat Study. $9,149. Hatecke Corporation.

Odell, M.R.L., and Kennedy, T.J. (2015-17). GLOBE Science Fair Support, UCAR/UNH/NSF, $11,000.

Odell, M.R.L. (2015). Russell Foundation Gift to Support the Innovation Academy, $20,000.

Nelson, J.K., and Odell, M.R.L. (2015-17). Lifeboat Durability Testing. $70,187. Verhoef Corporation.

Bextine, B., Powell, C., and Odell, M.R.L. (2015-16). Texas CAPS Program, Texas Department of Agriculture. $40,152.

Odell, M.R.L., and Parkerson, J. M. (2015-16). Recruitment and Mentoring Program, Texas Higher Education Coordinating Board, ($100,000).

Brown, F., Dyer, K., Odell, M.R.L., and Wise, D. (2015-16). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($140,000).

2014

Odell, M.R.L. (PI) & Parkerson, M. (2014-15). Texas Gear-Up, State of Texas Gear-Up Initiative, University of Texas Austin, ($90,000).

Brown, F., Dyer, K., Odell, M.R.L., & Wise, D. (2014-15). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($140,000).

Odell, M.R.L. (PI), Parkerson, M. (2014-15). Ingenuity Center East Texas STEM Center, Texas STEM Initiative, Texas Education Agency, ($650,000).

Odell, M.R.L. Chevron Gift to Support Texas PLTW ($160,000), 2014-16.

Odell, M.R.L. (PI); Brown, F., and Wise, D. (2014-15). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($140,000).

2013
Odell, M.R.L. (PI); Brown, F., and Wise, D. (2013-14). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($150,000).

Blount, K., Odell, M.R.L., Naizer, G., and Stocks, E. (2013-14). Teacher Residency Grant (TRES), Texas Higher Education Coordinating Board, $1.29 Million (UTT Share $500,000).

Odell, M.R.L. (PI), Parkerson, M. (2013-14). Ingenuity Center East Texas STEM Center, Texas STEM Initiative, Texas Education Agency, ($652,000).

Odell, M.R.L. (PI), and Bondurant, D. (2013-14). Scholarship Funds for UTeach Students, $20,000, AT&T Foundation.

Odell, M.R.L. (PI), and Wickham, L. (2013-14). Scholarship Funds for UTeach Students, $25,000, Roosth Foundation.

Odell, M.R.L. (PI), Parkerson, M. (2013-14). Ingenuity Center East Texas STEM Center, Texas STEM Initiative, Texas Education Agency, ($652,000).

Odell, M.R.L. (PI), Crow, J.E., Dubose, J., Parkerson, M. (2013-2018). UT Tyler After-School Initiative Cycle 8. Texas Education Agency, ($11,200,000).

Odell, M.R.L. (PI), Crow, J.E., Dubose, J., Parkerson, M. (2013-18). UT Tyler After-School Initiative Cycle 8. Texas Education Agency, ($11.2 Million).

Odell, M.R.L. (PI); Brown, F., and Wise, D. (2013-14). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($200,000).

2012
Odell, M.R.L., Dubose, J., and Baldwin, K. (2012-13). Texas P-16 GENTX Grant. Texas Higher Education Coordinating Board, ($50,000).

Odell, M.R.L. (PI); Brown, F., and Wise, D. (2012-13). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($200,000).

Odell, M.R.L. (PI); Brown, F., and Wise, D. (2012-13). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($200,000).

Odell, M.R.L., Dubose, J., and Baldwin, K. (2012-13). Texas P-16 GENTX Grant. Texas Higher Education Coordinating Board, ($50,000).

2011
Odell, M. and Moore, J. (2011-15). Project Lead the Way Teacher Assistance Project (PLTW), Texas Education Agency, ($600,000).

Odell, M.R.L. (PI), Crow, J.E. (2011-2014). UT Tyler TTIPS, Texas Education Agency/Tyler ISD, ($1,500,000).

Odell, M.R.L. (Co-PI); Nelson, J.K. (Co-PI), Trampus, K. (Co-I), Brown, F. (Co-I), Stocks, E. (Co-I), and Bailey, B. (Co-I) (2011-13). Ingenuity Center, Texas STEM Initiative, Texas Education Agency, ($800,000).

Odell, M.R.L. (PI), Crow, J.E. (2011-2015). UT Tyler After-School Initiative Cycle 7, Texas Education Agency, ($8,700,000).

Odell, M.R.L., Kennedy, T.J., and Kulkarni, A. (2011). Earth System Science Workshop. Texas Space Grant Consortium K-12 Grant, ($14,999).

Odell, M.R.L., Nelson, J.K., Trampus, K., Brown, F., Stocks, E., and Bailey, B. (2011-13). Ingenuity Center, Texas STEM Initiative, Texas Education Agency, ($800,000).

Odell, M.R.L. (PI), Crow, J.E. (2011-2015). UT Tyler After-School Initiative Cycle 7, Texas Education Agency, ($8.7 Million).

Odell, M.R.L. (PI); Brown, F., and Trampus, E. (2011-12). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($200,000).

Odell, M.R.L. (PI), Crow, J.E. (2011-2014). UT Tyler TTIPS, Texas Education Agency/Tyler ISD, ($500,000).

Odell, M. and Moore, J. (2011-12). Project Lead the Way Teacher Assistance Project (PLTW), Texas Education Agency, ($150,000).

Odell, M.R.L., Kennedy, T.J., and Kulkarni, A. (2011). Earth System Science Workshop. Texas Space Grant Consortium K-12 Grant, ($14,999).

Odell, M.R.L. (PI); Brown, F., and Trampus, E. (2011-12). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($200,000).

2010

Odell, M.R.L., Nelson, J.K., Trampus, K., Brown, F., Stocks, E., Geiger, W., and Bailey, B. (2010-11). East Texas STEM Center, Texas STEM Initiative, Texas Education Agency, ($550,000).

Odell, M.R.L. and Baldwin, K. (2010-11). Texas P-16 Initiative Grant, Texas Higher Education Coordinating Board, ($25,000).

Geary, E., Kennedy, T.J., and Odell, M.R.L. (2010). From Learning to Research, NSF ITEST for the GLOBE Program, $1,200,000 (Co-PI and Evaluator).

Bailey, B., Odell, M.R.L., and Brown, F. (2010-2015). Noyce Scholars Program #1035462, $897,000.

Odell, Michael R.L. (PI), Nelson, J., and Trampus, K. (2010). East Texas STEM Center, Congressional Grant, $300,000.

Odell, M.R.L. (Co-PI); Nelson, J.K. (Co-PI), Trampus, K. (Co-I), Brown, F. (Co-I), Stocks, E. (Co-I), Geiger, W. (Co-I), and Bailey, B. (Co-I) (2010-11). East Texas STEM Center, Texas STEM Initiative, Texas Education Agency, ($550,000).

Odell, M.R.L. (PI); Brown, F., and Trampus, E. (2010-11). Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($99,000).

Odell, M.R.L., Sherman, C., Brown, F. (2010). Beginning Teacher and Induction Program (BTIM), Texas Regional Collaborative, Texas Education Agency/UT-Austin, ($133,000).

Odell, M. and Moore, J. (2010-11). Project Lead the Way Teacher Assistance Project (PLTW), Texas Education Agency, ($100,000).

Odell, M.R.L., Trampus, K., Gray, N., and Bailey, B. (2010). CCRI SEC, ($15,000).

2009

Geary, E., Kennedy, T.J., and Odell, M.R.L. (2009). Global Climate Change Research and Education Workshop, $47,000.

Odell, M.R.L. (Co-PI); Brown, F., and Trampus, E. (2009-10). Texas Regional Collaborative, Texas Education Agency/UT-Austin, $97,000 Addendum, ($26,000).

Odell, M.R.L., Lamb, J., Smith, N., Gray, N., Kennedy, T., and Bailey, B. (2009-11). Math Science Teacher Preparation Academy, Texas High Education Coordinating Board, ($750,000).

Odell, M.R.L., Sherman, C., Lamb, J., Smith, N., Gray, N., Kennedy, T., Sherman, R., and Bailey, B. (2009-14). UTEACH Tyler, National Science Mathematics Initiative/Texas Education Agency, ($1.4 Million).

Odell, M. and Moore, J. (2009-10). Project Lead the Way Teacher Assistance Project (PLTW), Texas Education Agency, ($200,000).

Odell, M. and Moore, J. (2009-10). Project Lead the Way Teacher Implementation Project (PLTW), Texas Education Agency, ($1,400,000).

Odell, M.R.L. (PI), GLOBE Fellowship, University Corporation for Atmospheric Research, 2008-09, $93,000.

Odell, M.R.L. (PI); and Stocks, E. (2008-13). Texas Earth Space Science Revolution Evaluation, UT-Austin/NSF, $125,000.

Odell, M.R.L. (PI) and Ippolito, A. (2009). Science Competition Grant, UT-Austin/Shell Foundation, $2000.

Nelson, J., Odell, M.R.L., Scott, J., and Pleasant, K. (2008-09). Engineering Recruitment Program Summer Camps, $20,000 (2008); $8,000 (2009).

2008

Odell, Michael R.L. (PI), Nelson, J., and Trampus, K. (2008). East Texas STEM Center, Congressional Grant, $148,000.

Odell, M.R.L. (Co-PI); Brown, F., and Trampus, E. (2008-09). Texas Regional Collaborative, Texas Education Agency/UT-Austin, $97,000.

White, A., Nelson, J., Geiger, W., Sherman, C., Bailey, B., Gray, N., and Odell, M. (2008). UTEACH Pre-proposal, University of Texas System, $41,000.

2007

Odell, M.R.L. (Co-PI); Nelson, J.K. (Co-PI), Trampus, K. (Co-I), Brown, F. (Co-I), Stocks, E. (Co-I), Geiger, W. (Co-I), and White, A. (Co-I) (2007-10). East Texas STEM Center, Texas STEM Initiative, Texas Education Agency, $3.25 Million.

Odell, M.R.L. (Co-PI); Brown, F., and Trampus, E. (2007-08). Texas Regional Collaborative, Texas Education Agency/UT-Austin, $97,000.

Odell, M.R.L. (PI) and Lauman, J. (Co-PI) (2007). Earth Systems Online, ESSEA/NSF, $40,000.

Odell, M.R.L. (PI) (2007). Texas Science Vertical Team, Texas Education Agency, $15,000.

Brown, F. (PI) and Odell, M.R.L. (Co-PI) (2007-10). Texas Regional Collaborative for Science, University of Texas at Austin/Texas Education Agency, $300,000.

Odell, M.R.L. (PI) (2007-08). GLOBE Fellowship, University Corporation for Atmospheric Research, $68,000.

2006
Odell, M.R.L. (PI) (2006). GLOBE Annual Conference, University Corporation for Atmospheric Research, $34,000.

2005
Teasdale, J. and Odell, M.R.L. (2005). NASA Opportunities for Visionary Academics (NOVA), NASA/UA, $11,000.

Odell, M.R.L. (PI) (2005). Kit-based Science Education, Idaho MSP Project, $71,000.

2004
Odell, M.R.L. (PI) and Doty, M. (2004). Idaho STEM Access, National Science Foundation, $100,000.

Ewers, T. and Odell, M.R.L. (Co-PI) (2004-2005). Classroom Assessment of Mathematical Performance, $239,241.

Odell, M.R.L (Co-PI) and Abbitt, J.T. (2004-2005). NASA Opportunities for Visionary Academics (NOVA), NASA/UA, $110,000.

2003
Odell, M.R.L. (PI) and Kennedy, T.J. (2002-03; 2003-04). NW Inland Science Curriculum Dissemination Hub, EDC/NSF, $15,000 (2002-03); $25,000 (2003-04).

Hollenhorst, S., Fizzell, G., and Odell, M.R.L. (Co-PI) (2003). McCall Outdoor Science School (MOSS), EPA, $70,000.

2002
Dyer, M., Gunter, M., Odell, M.R.L. (Co-PI), and Davis, J. (2002-04). Optical Mineralogy Textbook, NSF/Holyoke College Grant, $417,000.

Odell, M.R.L. (PI) and Kennedy, T.J. (2002). Global Learning and Observations to Benefit the Earth, Eisenhower, $16,500.

Kennedy, T.J., Klett, M.D., and Odell, M.R.L. (Co-PI) (2002). Pathways to Mars, Eisenhower, $16,000.

Odell, M.R.L. (PI) and Thornhill, A. (2002). Science and Mathematics Integrating Technology, Eisenhower, $33,000.

Odell, M.R.L. and Davis, A. (2004). Access Science, Technology, Engineering, and Mathematics (STEM) in Idaho, National Science Foundation, $100,000.

Ewers, T., Kmitta, D., Davis, J., and Odell, M.R.L. (2002). Classroom Assessment of Mathematics Performance, Eisenhower, $43,000.

2001

Teasdale, J., Odell, M.R.L. (Co-PI), Thomson, S., and Meyers, R. (2001). Lifelong Learning Online, Congressional Grant, NASA Headquarters, $2,000,000.

Odell, Michael R.L. (PI), Kennedy, T.J., and Sunal, D. (2001). National Center for Online Learning Research (NCOLR), Congressional Grant, $900,000.

Odell, M.R.L. (PI) and Kennedy, T.J.K. (2001). Global Learning and Observations to Benefit the Earth, Eisenhower, $24,500.

Odell, M.R.L. (PI) and Kennedy, T.J. (2001). Implementing and Aligning Science Curriculum, Eisenhower, $15,190.

Kennedy, T.J., Klett, M.D., and Odell, M.R.L. (2001). Pathways to Mars, Eisenhower, $18,000.

Nelson, R. and Odell, M.R.L. (2001). Exploring Cultural and Historical Outlooks (ECHO), Columbia Education Center, $65,000.

2000

Odell, M.R.L. (2000). Constructing Physics Understanding (CPU), Subcontract from SDSU/NSF, $32,000.

Odell, M.R.L. (PI) and Kennedy, T.J. (2000). Global Learning and Observations to Benefit the Earth, Eisenhower/State Department of Education, $34,000.

Dyer, M., Gunter, M., Odell, M.R.L. (Co-PI), and Davis, J. (2000). Optical Mineralogy Textbook, National Science Foundation Proof of Concept Grant, $65,000.

Teasdale, J., Odell, M.R.L. (Co-PI), Thomson, S., and Meyers, R. (2000). Lifelong Learning Online, Congressional Grant, NASA Headquarters, $2,000,000.

Odell, M.R.L. (Co-PI) (2000). NOVA-MUSPIN, University of Alabama/NASA, $16,000.

Odell, M.R.L. (PI), Kennedy, T.J., and Gentry, D. (2000). Interactive Learning Environments, LAAP/FIPSE US Department of Education, $1.25 Million.

Prior to 2000

Kennedy, T.J. and Odell, M.R.L. (1999-02). Inland Northwest Curriculum Dissemination Center, Subcontract from EDC/NSF, $30,000.

Shreeve, J., Odell, M.R.L., and Ewers, T. (1999-01). Idaho Science Teachers as Researchers, Idaho EPSCoR Program, $30,000.

Gentry, D., Tuchscherer, J., Odell, M.R.L. (Co-PI), Davis, J., Kennedy, T.J., and Kearney, R. (1999-03). Idaho Preparing Tomorrow's Teachers Today (IPT3), US Department of Education, $1.2 Million.

Nelson, R. and Odell, M.R.L. (1999-02). Expanding Cultural Horizons and Outlooks Grant, International

Fulbright, (non-UI).

Gentry, D., Odell, M.R.L. (Co-PI), and Graves, S. (1999-04). LC 2000 Project, US Department of Education/Potlatch, $2.1 Million.

Odell, M.R.L. (PI) and Kearney, R. (1997). Constructing Physics Understanding (CPU) Project, Subcontract Grant NSF/SDSU, $17,000.

Kearney, R.J. and Odell, M.R.L. (Co-PI) (1996). Constructing Physics Understanding (CPU) Project, Subcontract Grant NSF/SDSU, $40,000.

Gentry, D. et al. (1999-02). Teacher Education Redesign, Albertson Foundation Grant, $750,000.

Odell, M.R.L. (PI) (1999-2001). Windows on the Universe, Proposal on behalf of Palouse Science Center, Services funded by the Challenger Center.

Odell, M.R.L. (PI) (1999-03). NOVA Online Earth Systems Science, NASA, $100,000.

Odell, M.R.L. (PI) (1999-03). Earth Observing System Project, Subcontract from UM/NASA, $75,000.

Kennedy, T.J. and Odell, M.R.L. (1998). Model for the 21st Century: Pine Project, PDK Service Project, $1,000.

Odell, M.R.L. (PI) and Kearney, R. (1998). Idaho Virtual Campus-Extension, SBOE, $148,000.

Kennedy, T.J. and Odell, M.R.L. (1998). FLES, State Board of Education Innovative Grants, Moscow School District, $10,000.

Odell, M.R.L. (PI) (1998). Idaho GLOBE/MTPE, Idaho Space Grant Consortium, $5,000.

Odell, M.R.L. (PI) and Kearney, R. (1998). Idaho Construction Physics Understanding (ICPU), IKE, $27,500.

Odell, M.R.L. (1997). NASA COTF/ISGC Agreement to Pilot Online Professional Development Course, $9,200.

Odell, M.R.L. (Co-PI) (1997-2000). NOVA: Creating Change in Higher Education, Subcontract NASA/UA, $107,000 Annually to UI ($4,516,224 total project).

Odell, M.R.L. (PI) (1997). NASA NEWEST/NEWMAST Summer Aerospace Education Course, NASA Headquarters, $33,750.

Teasdale, J.T., Atkinson, D., and Odell, M.R.L. (Co-PI) (1996-2005). Idaho Space Grant Consortium, NASA, $250,000 Annually.

Odell, M.R.L. (PI) (1995-97). NASA Space Grant College and Fellowship Program Training Grant, $150,000.

Odell, M.R.L. (PI) (1997). Idaho GLOBE/MTPE, Idaho Space Grant Consortium, $5,000.

Odell, M.R.L. (PI) (1997). IdaHOES-IV, Hands-On Elementary Science, Eisenhower Grant, $27,250.

Yamamoto, L. and Odell, M.R.L. (1997). CELLSS, Consortium to Establish Local Level Science Standards, Eisenhower Grant, $34,000.

Yamamoto, L. and Odell, M.R.L. (1997). CELLSS, Consortium to Establish Local Level Science Standards, SMCNWS Grant, $5,000.

Odell, M.R.L. (PI) and Kearney, R. (1997-2000). Idaho Virtual Campus, UI/ISU/ISGC SBOE Technology Proposal for Faculty Enhancement and Online Course Development, $650,000.

Odell, M.R.L. (PI) (1997). CPU Constructing Physics Understanding, Eisenhower Grant, $33,000.

Odell, M.R.L. (1996). GLOBE Franchise Agreement for Teacher Enhancement, Joint project with BSU and CSI.

Odell, M.R.L. (PI) (1996). NASA Project NOVA: Integrated Science, Technology, and Mathematics, NASA/UA Subcontract Proposal, $29,000.

Kearney, R.J. and Odell, M.R.L. (Co-PI) (1996). Idaho Virtual Classroom, UI/ISU/ISGC SBOE Technology Grant for Faculty Enhancement and Online Course Development, $153,000.

Odell, M.R.L. (PI) and Kennedy, T.J. (1995). Idaho Hands-On Elementary Science (IDAHOES III), State Eisenhower Proposal, $34,207.

Odell, M.R.L. (PI) and Kearney, R.J. (1995). Teacher Enhancement in Physics Education (TEPE), State Eisenhower Grant, $26,640.

Odell, M.R.L. (PI) (1995). Idaho Hands-On Elementary Science (IDAHOES North), State Eisenhower Grant, $28,556.

Popiel, E. and Odell, M.R.L. (1995). Learning Styles Inventory as an Aid to Student Success in a Peer Mentoring Program, Phi Delta Kappa Grant, $200.

Odell, M.R.L. (PI) (1994). Idaho Hands-On Elementary Science (IDAHOES), State Eisenhower Grant, $21,530.

Odell, M.R.L. (1994). Integrated Science/Technology/Social Studies Methods for Elementary Teachers, Teaching Learning Grants, University of Idaho, $1,500.

Gentry, D., Davis, J., and Odell, M.R.L. (1994). Educational Technology Grant, Idaho State Board of Education, Enhancement of technology and technology education at the University of Idaho (Line Item), $150,000.

Davis, J. and Odell, M.R.L. (1994). Instructional Enhancement Mini-Grant to upgrade classroom equipment, University of Idaho, $1,060.

Odell, M.R.L. and Mulholland, J. (1987). Fossil Hunt, integrating video cameras, video disc technology, Macintosh, Apple, IBM computers, and other technology to take field trip to Western US without leaving the classroom, GTE Growth Initiatives for Teachers (GIFT), $15,000.

Technical Assistance

Research and Development for Third Parties (Funded or Approved).

Context: As part of my professional service obligations (pro bono) or as a consulting project, I often provide technical assistance to school districts, charter schools, professional organizations, universities and non-profits assistance in developing grant proposals. I also provide non-UT Tyler students with research design and analysis support (pro bono).

2025

- Texas STEM Coalition & All Saints Episcopal School, Ft. Woth Texas, GLOBE Grant, ($5,000).
- Student Research Symposium Support UT Tyler University Academies (Empower Fridays)
- GLOBE program Support Northwest ISD San Antonio and UT Tyler University Academies
- Arp ISD School Improvement Strategies Workshop.

2023

- Texas STEM Coalition, GLOBE Grant, ($5,000).

2022

- Phi Delta Kappa, Teaching Fundamentals for Substitute Teachers Expert Panel.
- Wayland Baptist University, Noyce Grant.

2021

- Austin ISD, Austin Education Foundation Grant #1 ($3,500)
- Austin ISD, Austin Education Foundation Grant #2 ($5,000)

2020

- Austin ISD, School Improvement Grant ($119,000)

2019

- Principal Preparation Grant for UT Tyler School of Education. ($300,000)
- Research Design Assistance for Publication for Dr. Kennedy and Shuang Mei Gao (Faculty Exchange Scholar). Paper Accepted.
- Everyone:1 Grant for Austin ISD. (Chromebook 1:1 Initiative) ($120,000 in Equipment)
- Austin ISD. Dove Springs Foundation Grant. ($5000)

2018

- Lawson Academy Charter School, (Houston) TEA Transformation Fund Planning Grant. ($250,000)
- Texas STEM Coalition, TEA S.B. 1882 School Turnaround Contract. ($25,000,000)
- Texas STEM Coalition, University of Alabama NSF LIST Proposal. ($700,000)
- Austin ISD, TEA Transformation Implementation Fund Grant, 2018. ($1,000,000)
- New Somerfield ISD, TEA 21st Century Cycle 10, 2018. ($400,000)
- Chapel Hill ISD, TEA Grow Your Own Initiative, 2018. ($150,000)

2015

- University of West Georgia, UTeach Replication, Georgia Board of Regents.
- University of West Georgia, STEM Grant, Georgia Board of Regents.

2014

- Ysleta ISD, 21stc Century Grant Cycle 8/9, 2014.

2011

- Tyler Independent School District, TEA TTIPS, 2011. ($500,000)

Charter Applications

- University of Texas at Tyler, Virtual Senior High School Expansion Charter, 2017 (Approved by TEA)
- Texas A&M Commerce, TEA Charter School Application, 2016 (Approved by Texas SBOE and TEA).
- University of Texas at the Permian Basin, TEA Charter School Application, 2012 (Approved by SBOE and TEA).
- University of Texas at Tyler Innovation Academy (now University Academy), 2011 (Approved SBOE and TEA).

Negotiated Contracts/Fee for Services (2010-Present)

Birdville ISD, $8,000; Fort Worth ISD ($79,000); Eustace ISD ($100,000); Mission ISD ($45,000); Tyler ISD, ($100,000); Greenville ISD ($100,000); SW Charter Schools ($21,000); UT Permian Basin STEM Academy ($140,000); Texas Commission on Environmental Quality ($500,000).

Development Gifts for STEM Programs

- Russell Foundation Gift to Support the Innovation Academy, ($20,000), 2016.
- Chevron Gift to support Texas PLTW ($160,000), 2014-16
- Scholarship funds for UTeach Students, ($20,000), AT&T Foundation. 2013-14.
- Scholarship funds for UTeach Students, ($25,000), Roosth Foundation. 2013-14

Endowment Management

Sam and Celia Roosth Endowment, $750,000 and growing. Annual interest generated is approximately $35,000 annually invested into UT Tyler STEM initiatives 2006-2023.

Proposal/Journal Review

- **Applied Sciences** (ISSN 2076-3417) – Reviewer (2022-Present)
- **Education Sciences** (ISSN 2227-7102) – Reviewer; Editor, Special Issue (2022-Present; 2023-24)
- **Current Social Sciences** – Reviewer (2023)
- **European Journal of Education Research** (ISSN 2165-8714) – Reviewer (2020)
- **Electronic Journal for Research in Science and Mathematics Education (EJRSME)** (ISSN 2692-241X) – Editorial Board (2024-Present)
- **Humanities and Social Science Communication** (ISSN 2662-9992) – Reviewer (2022-Present)
- **International Association of Lab Schools Journal** – Reviewer (2024)
- **International Journal of Environmental Research and Public Health** (ISSN 1660-4601) – Reviewer (2021-Present)
- **International Journal of STEM Education** (ISSN 2196-7822) – Reviewer (2017-Present)
- **Improving Schools** – Reviewer (2024)
- **Journal of Education in Science, Environment and Public Health** (ISSN 2149-214X) – Reviewer (2019-Present)

- **Journal of the Idaho Academy of Sciences** – Reviewer (2002)
- **Journal of Geoscience Education** – Reviewer (2002)
- **Literature Reviews in Education and Human Services** – Editorial Board (2021-Present)
- **Journal of Educational Change** – Reviewer (2024)
- **Journal of Experimental Education** – Reviewer (2020)
- **Journal of Interactive Online Learning** (ISSN 1541-4914) – Co-Editor (2002-19)
- **Journal of Professional Capital and Community** – Reviewer (2024)
- **Journal of Research in STEM Education** – Reviewer (2023-Present)
- **Sustainability Journal** (ISSN 2071-1050) – Reviewer (2021-Present)
- **Science Education International** (ISSN 2077-2327) – Reviewer (2020-Present)
- **Sage Open** (ISSN 2158-2440) – Reviewer (2018-Present)
- **Sensors** (ISSN 1424-8220) – Reviewer (2022)
- **Social Sciences** – Reviewer (2024)
- **Springer Nature Social Sciences Journal** (ISSN 2662-9283) – Reviewer (2021-Present)
- **Studies in Educational Evaluation** – Reviewer (2020)
- **Texas Journal of School Improvement** – Editor (In-Process) (2022-Present)
- **Theory and Practice in Rural Education** (ISSN 2641-7170) – Reviewer (2022)
- **Trends in Higher Education** – Reviewer (2022)
- **World** - Reviewer (2025)

Book/Chapter Reviews

- **Info Age, Preparing STEM Teachers Volume** (2019)

Conference Proceedings

- **NCOLR Conference Proceedings** – Co-Editor (2002)

Conference Proposals

- **American Evaluation Association Conference Proposals** – Reviewer, Multiple SIGs (2020-Present)
- **Science Mathematics Consortium for Northwest Schools (SMCNWS)** – Reviewer, Idaho State Professional Development Proposals (1997-98)
- **Reviewer Association of Science Teacher Education Conference** (2019, 2020)

- **Southwest Educational Research Association Conference Session Proposals** – Reviewer (2021)
- **ICSEI Conference Proposals** – Reviewer (2023-Present)
- **UCEA Conference Proposals** – Reviewer (2022)
- **Texas STEM Conference** – Reviewer (2009-Present)

Grant Applications (Ethics Require Program Non-Identification)

- **National Oceanic and Atmospheric Administration (NOAA)** – Reviewer (2015-Present)
- **North American Association for Environment Education (NAAEE)** – Reviewer (2020)
- **National Aeronautics and Space Administration** – Panelist (1996-Present)
- **National Science Foundation** – Panelist (2008-20)
- **Texas Education Agency** – Reviewer (2008-15)
- **Texas Higher Education Coordinating Board** – Reviewer (2009-11)
- **UT Tyler Internal Grant Submissions** – Reviewer (2009-17, 2021-Present)
- **Idaho Space Grant Research Proposal Review** – Reviewer (2000-05)
- **Phi Delta Kappa (PDK) Research Grant Proposals** – Reviewer (1994-2004)
- **National Space Grant Proposals** – Reviewer (1997-2005)
- **Texas Space Grant Education Proposals** – Reviewer (2017)
- **Reviewer, Texas Space Grant Fellowship and Scholarship Applications** – Reviewer (2021)

APPENDIX 1: Teaching Philosophy and Courses Taught

As an educator, my teaching philosophy is centered on fostering active, inquiry-driven learning environments where students engage with real-world challenges through a combination of experiential and reflective practices. I believe that education should not only transmit knowledge but also cultivate critical thinkers and problem solvers who can adapt to an ever-changing world, particularly within STEM disciplines and broader educational systems.

A core element of my approach is experiential learning, where students are encouraged to actively engage in hands-on, project-based activities. In my STEM courses, I emphasize problem- and project-based learning that connects classroom theory with practical application. This method allows students to develop deep content knowledge while building essential skills like collaboration, communication, and critical thinking. Programs like UTeach and GLOBE, which I co-direct, are designed to prepare future STEM educators by immersing them in real-world teaching experiences that bridge the gap between pedagogy and practice.

In addition to my work in STEM education, I am deeply invested in school improvement, particularly through the Carnegie model of Improvement Science. In my graduate courses, I focus on the principles of continuous improvement, encouraging students to identify and address the root causes of systemic issues in education. Improvement Science provides a structured approach for analyzing and refining educational practices, ensuring that change is evidence-based and sustainable. By teaching students to apply this model, I aim to empower future educational leaders to implement data-driven reforms that lead to meaningful, long-term improvement in schools.

My educational philosophy aligns strongly with the ideas of John Dewey, who believed that education should be a dynamic, active process grounded in real-world experiences. Like Dewey, I view learning as an interactive process where students engage in critical thinking and problem-solving. Similarly, Jean Piaget's constructivist theory influences my belief that learners actively build their knowledge through exploration and inquiry, which is central to my focus on project- and problem-based learning.

In the context of school improvement, I draw heavily on the work of Donald Schön and W. Edwards Deming. Schön’s notion of the “reflective practitioner” mirrors my emphasis on the need for continuous reflection in professional practice, particularly in the iterative processes of Improvement Science. Likewise, Deming’s principles of continuous improvement, systems thinking, and the importance of data in driving decisions directly inform my approach to educational reform, both in graduate-level coursework and in real-world applications in schools.

Ultimately, my teaching philosophy reflects a commitment to both equity and access. I believe that all students, regardless of background, should have opportunities to engage with high-quality education that prepares them for future success. This philosophy extends beyond STEM education into school improvement, where I strive to develop leaders who can create inclusive, effective educational environments that benefit all learners.

In conclusion, my approach to teaching integrates active learning, continuous improvement, and the application of real-world problem-solving strategies. By cultivating critical thinkers and adaptable problem solvers, I aim to prepare both students and educators to meet the complex challenges of the 21st century with confidence and creativity.

Courses Taught:

Institution	*Level*	*Number*	*Course Title*
UT Tyler	***GRAD***	EDUC 5308	Current Issues in Education
		EDUC 5386	History of STEM Education
		EDUC 5370	Historical and Philosophical Foundations
		EDUC 5389	Interdisciplinary Teaching Methods
		EDUC 5115	Practicum in Teaching
		EDUC 5302	Research in Curriculum and Instruction
		EDUC 5100	Workshop/Seminar
		EDRM 6351	Design-based Implementation Research 1
		EDSI 6370	School Improvement Policy Residence
		EDSI 6312	Improvement Science in the Educational Setting
		EDSI 6X60	Dissertation (Variable Credit)
	UGRAD	EDUT 4170	Apprentice Teaching Seminar
		EDUT 1170	STEP 1: UTeach
		EDUT 2170	STEP 2: UTeach
		ELED 4314	Teaching Science in the Elementary School
		EDUC 4314	Teaching Science in the Middle and Secondary School
		GEOL 3310	Physical Geology and Astronomy
		GEOL 3314	Meteorology and Oceanography
		EDUT 4370	Project–Based Instruction
		EDUT 3371	Classroom Interactions
		EDUC 4199	Independent Study in STEM Education
		EDUC 4399	Independent Study STEM Education (Multiple)
		EDUC 4360	Special Topics (Multiple)
Illinois State University	**GRAD**	C&I 411	Curriculum Foundations
University of Idaho	**GRAD**	EDTE 518	Capstone: Application of Educational Theory
		EDTE 508	Standards-based Curriculum in Science (hybrid)
		EDTE 513	History of Educational Thought (online)
		EDTE 524	Models of Teaching
		EDTE 511	Planning and Administering the Curriculum
		EDTE 516	College Teaching (online)
		EDTE 501	Seminar: Multiple Topics
		EDTE 503	Workshop: Multiple Topics
		EDTE 502	Directed Study: Multiple Topics
		ENVS 500	Master's Thesis Research
		EDTE 599	Research: Multiple Topics
		EDTE 500	Master's Thesis Research
		EDTE 600	Doctoral Dissertation Research
		EDTE 505	Professional Development: Multiple Topics
	UGRAD	EDTE 328	Educational Technology
		INTER 103	Integrated Science for Elementary Ed. Majors
		EDTE 329	Elementary/Middle School Science Education (K-8)
		EDTE 429	Implementing Elementary/Middle School Science (K-8)
		ENVS 497	Senior Research Project Environmental Science
		EDTE 101	Introduction to the Education Profession
		EDTE 477	Secondary School Science Methods
		EDTE 444	Elementary Science Methods
		EDTE 421	Elementary Social Studies Methods
		EDTE 444/421	Integrated Science/Technology/Social Studies
		EDTE 314	Strategies for Teaching
		EDTE 403	Workshop: Multiple Topics

APPENDIX 2: Student Advising and Supervision

Institution	*Level*	*Degree*	*Committee Role*	*Number*
University of Texas at Tyler	GRAD	Master of Education	Chair	42
	GRAD	Master of Education	Member	24
	GRAD	Doctor of Education	Chair/Co-Chair	23
University of Idaho	GRAD	Doctor of Philosophy	Major Professor	7
	GRAD	Doctor of Philosophy	Member	14
	GRAD	Master of Education	Chair	68
	GRAD	Master of Science in Education	Chair	2
	GRAD	Master of Science in Education	Member	5
	GRAD	Master of Science In ENVS	Chair	1
	GRAD	Master of Science (Multiple)	Member	5
	GRAD	Master of Arts in Teaching	Member	11
George Mason University	GRAD	Master of Business Administration	Outside Member	1
Texas Tech University	GRAD	Ph.D. Curriculum and Instruction	Outside Member	1

Appendix 3: National and International Programs of Significance

NASA Opportunities for Visionary Academics (NOVA) was created to develop and disseminate a national framework for enhancing science, mathematics and technology literacy for preservice teachers in the 21st century. The lead institutions of the NOVA consortium, consisting of the: University of Alabama, University of Texas – Tyler, Fayetteville State University, California State Polytechnic University, and Miami University (OH) and a network of 101 member institutions collaborated to produce enhanced scientific literacy for preservice teachers. This decade long effort (1995-2006) was accomplished through the demonstration of an undergraduate science and mathematics course framework, examples of successful course models, and a mentoring support system for faculty wishing to implement new courses or modify existing courses at their universities. The framework uses interactive learning and integrates science, mathematics and technology as a means of developing a new paradigm for educating preservice teachers. NASA's financial support of NOVA ended on September 30, 2006. http://www.novaprogram.org/

NASA Opportunities for Visionary Academics Phase III Workshops. 2000-2005. (Kennedy Space Center, Florida, 2003; Ames Research Center, California, 2002; Langley Research Center Virginia, 2002; Jet Propulsion Laboratory, California, 2001; 2005; Johnson Space Center, Texas 2001; Marshall Space Flight Center, Alabama, 2000, Goddard Space Flight Center, Maryland, 1999, 2005).

NASA's Opportunities for Visionary Academics Phase I Workshops (NOVA), 1996-2002 (Pasadena, California, 1996; Langley, Virginia, 1997; Moscow, Idaho, 1997; Cleveland, Ohio, 1997; Las Vegas, New Mexico, 1997; Orlando, Florida, 1998; Houston, Texas, 1998; Durham, New Hampshire, 1998, Bellingham, Washington, 1999; Bowling Green, Kentucky, 1999, San Jose, California, 1999; Huntsville, Alabama, 2000; Dryden, California, 2001; Stennis, Mississippi, 2001; Kennedy Space Center; Ames Research Center, 2002).

The Global Learning and Observations to Benefit the Environment (GLOBE) Program is an international science education program that provides students and the public worldwide with the opportunity to participate in data collection and the scientific process and contribute meaningfully to our understanding of the Earth system and global environment. Announced by the U.S. Government on Earth Day in 1994, GLOBE launched its worldwide implementation in 1995. GLOBE provides grade level-appropriate, interdisciplinary activities and investigations about the atmosphere, biosphere, hydrosphere, and soil/pedosphere, developed by the scientific community and validated by teachers. GLOBE connects students, teachers, scientists, and citizens from different parts of the world to conduct real, hands-on science about their local environment and put in a global perspective. GLOBE is jointly sponsored by U.S. National Aeronautics and Space Administration (NASA) and the National Science Foundation (NSF), with support from the National Oceanic and Atmospheric Administration (NOAA) and Department of State. Internationally, GLOBE is implemented through Government-to-Government agreements with each Country Partner responsible for in-country activities.

Global Learning and Observations to Benefit the Environment (GLOBE) Workshops 1996-Present. Dallas, Texas, 1996; Ogden, Utah, 1996; Madrid, Spain, 1998-99; Bloomington, IN, 1998; Nova Scotia, Canada, 1999; Moscow, Idaho 1999, Mexico City, Mexico 1999; Moscow, Idaho, 2000-04; St. Charles, Missouri, 2000; Boise, Idaho, 2000; Grangeville, Idaho, 2000; Santa Barbara, California, 2000; Orlando, Florida, 2000; Coppell, Texas, 2015; San Antonio, Texas, 2014. Georgetown, Texas 2019; Austin Texas, 2019; Tyler, Texas, 2006-Present (2 annually), GLOBE Weather Workshop, Texas A&M, College Station, 2021.

UT Tyler Ingenuity Center GLOBE Workshops

Title / Location	Start Date	Workshop Investigation Area(s)
Preservice GLOBE Workshop	03/20/2024	Atmosphere: Aerosols, Air Temperature, Clouds, Precipitation, Relative Humidity, Surface Temperature
EC-6 Preservice GLOBE Workshop	02/12/2024	Atmosphere: Aerosols, Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity, Surface Temperature, Wind Biosphere: Biometry (including Tree Height), Carbon Cycle, Land Cover Classification Pedosphere (Soil): Soil Temperature
GLOBE Elementary	02/22/2023	Atmosphere: Aerosols, Air Temperature, Clouds, Precipitation, Surface Temperature, Water Vapor
GLOBE Research Methods	02/01/2023	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity, Water Vapor, Wind Biosphere: Biometry (including Tree Height), Green-Up / Green-Down, Land Cover Classification Hydrosphere: Freshwater Macroinvertebrates, Water Temperature, Water Transparency
UT Tyler/Texas STEM Coalition GLOBE Atmosphere Workshop	10/25/2020	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity, Wind
Preservice Atmosphere Workshop	10/23/2019	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity, Surface Temperature
EC-6 Preservice Workshop	04/17/2019	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity, Wind
Preservice Workshop	11/07/2018	Atmosphere: Clouds, Precipitation, Relative Humidity, Wind
Preservice Workshop	03/27/2018	Atmosphere: Air Temperature, Clouds, Precipitation, Relative Humidity, Surface Temperature, Wind
UT Tyler-BGSU-Ohio	06/27/2016	Atmosphere: Aerosols, Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity, Surface Temperature Biosphere: Biometry (including Tree Height) Hydrosphere: Dissolved Oxygen, Freshwater Macroinvertebrates, Nitrates, pH, Water Temperature, Water Transparency Pedosphere (Soil): Bulk Density, Soil Characterization, Soil Moisture - Gravimetric, Soil Moisture - SMAP Block Pattern, Soil Particle Size Distribution, Soil pH, Soil Temperature
UT Tyler Ingenuity Center	03/04/2016	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity, Surface Temperature, Water Vapor, Wind Biosphere: Biometry (including Tree Height), Green-Up / Green-Down, Land Cover Classification Hydrosphere: Alkalinity, Conductivity, Dissolved Oxygen, Freshwater Macroinvertebrates, Mosquitoes, Nitrates, pH, Water Temperature, Water Transparency Pedosphere (Soil): Bulk Density, Soil Characterization, Soil Fertility, Soil Infiltration, Soil Moisture - Gravimetric, Soil Particle Density, Soil Particle Size Distribution, Soil pH, Soil Temperature
Coppell ISD	06/16/2014	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity Biosphere: Biometry (including Tree Height), Green-Up / Green-Down, Land Cover Classification Hydrosphere: Conductivity, Dissolved Oxygen, Freshwater Macroinvertebrates, pH, Water Temperature, Water Transparency

		Pedosphere (Soil): Soil Characterization, Soil Infiltration, Soil pH, Soil Temperature
Northside ISD, San Antonio, TX	11/15/2013	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity Biosphere: Green-Up / Green-Down Hydrosphere: Conductivity, Dissolved Oxygen, pH, Water Temperature, Water Transparency Pedosphere (Soil): Soil Temperature
Northside ISD San Antonio Master Trainer Event	11/14/2013	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity Biosphere: Green-Up / Green-Down, Land Cover Classification Hydrosphere: Conductivity, Dissolved Oxygen, pH, Water Temperature, Water Transparency Pedosphere (Soil): Soil Temperature
Hawkins ISD Refresher Training	10/28/2013	Atmosphere: Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity Biosphere: Green-Up / Green-Down Pedosphere (Soil): Soil Temperature
Discovery Science Place	10/08/2013	Atmosphere: Air Temperature, Clouds, Precipitation Pedosphere (Soil): Soil Temperature
UT Tyler - Ingenuity Center-OIP	09/24/2013	Atmosphere: Air Temperature, Clouds, Precipitation, Relative Humidity
UT Tyler - Ingenuity Center-OIP	03/14/2013	Atmosphere: Aerosols, Air Temperature, Barometric Pressure, Clouds, Precipitation, Relative Humidity, Surface Temperature Pedosphere (Soil): Soil Temperature
UT Tyler - Ingenuity Center-OIP	09/12/2012	Atmosphere: Clouds, Precipitation, Relative Humidity, Water Vapor Biosphere: Land Cover Classification Pedosphere (Soil): Bulk Density, Soil Particle Density, Soil Particle Size Distribution
UT Tyler - Ingenuity Center-OIP	12/01/2011	Atmosphere: Air Temperature, Clouds, Precipitation, Relative Humidity Pedosphere (Soil): Soil Temperature

Appendix 4: International Endeavors

I have engaged in several International Endeavors over the course of my career. In 2016, the UT System established a collaboration with Mexico. The initiative named ConTex was designed to create collaborations with UT System Institutions and Higher Education Institutions in Mexico supported by Mexico's National Council of Science and Technology (CONACYT). I coordinated UT Tyler activities for this initiative. Working in collaboration with the UT Tyler Office of International Programs UT Tyler established two agreements with Mexican Institutions.

As described earlier in the document, I have been engaged in several research and training activities internationally. I am still an active participant in the NASA, NOAA, NSF, and US Department of State sponsored GLOBE Program. I have also represented the university and NASA at international events.

International Travel

- Argentina
- Aruba
- Australia*
- Bahamas
- Belgium
- Belize*
- Brazil*
- British Virgin Islands
- Canada*
- Canary Islands
- Czech Republic
- China
- Costa Rica
- Croatia
- Denmark
- Dominican Republic
- Estonia
- France
- Germany
- Grand Cayman
- Greece
- Greenland
- Hungary
- Iceland
- India
- Ireland
- Italy
- Jamaica
- Japan
- Latvia
- Lichtenstein
- Luxembourg
- Macedonia
- Malaysia
- Malta
- México*
- Monaco
- Morocco
- New Zealand
- Norway
- Portugal
- Russia
- Scotland
- Singapore
- South Africa
- Spain*
- St. Kitts/Nevis
- Sweden
- Switzerland*
- Thailand
- Trinidad & Tobago
- United Kingdom
- Uruguay
- Vatican City
- Wales

***Note: Indicates International Education Project**

U.S. and U.S. Territories: (2)

I have traveled to all 50 U.S. states and the District of Columbia.
Puerto Rico and the U.S. Virgin Islands.

Appendix 5: Project Evaluation

I have served as a consultant or project evaluator to school districts, industry, professional organizations and universities. Consulting projects are typically in the areas of online learning, STEM education, curriculum alignment, or program/project evaluation. I have consulted on projects in Idaho, Alabama, Washington, D.C., Indiana, Virginia, Georgia, South Carolina, and Texas. I develop mixed methods designs. I am a member of the American Evaluation Association. I have the following skill set:

- Quantitative Research: Research Design, SPSS, HLM, Rasch
- Qualitative Research: Narrative, Ethnographic, Case Study, Coding, V-Note Video Analysis
- Mixed Methods: Program Outcomes, Management, Research Design, Artificial Intelligence

Current Evaluation Projects:

- **2024-2025:** New Tech Network Improvement Science Evaluation (Carnegie Funded).
- **2024-2027:** NSF IRES Evaluation. UT Arlington and Georgia Teach
- **2023-2028:** NSF Noyce Track 1 Evaluation, Wayland Baptist University-NSF
- **2020-2023:** New Tech Network Impact in Texas, Furman University
- **2020-2024:** NSF ITEST Quantum for All Evaluation, UT Arlington-NSF
- **2020-2024:** Pregnancy Prevention Evaluation, Mercy Manor-Texas HHS
- **2020-2024:** NSF Noyce Track 4 Evaluation, University of West Georgia-NSF
- **2018-2020:** New Tech Teams Evaluation, Furman University-Carnegie Foundation
- **2016-2017:** New Tech Teams and Practices Evaluation, Furman University-Carnegie Foundation
- **2016-Present:** NSF Noyce Track 1 Evaluation, UT Arlington-NSF
- **2014-2022:** NSF Noyce Track 1 Evaluation, UT Arlington-NSF
- **2016-2021:** NSF Noyce Track 4 Evaluation, University of Alabama-NSF
- **2014-2020:** NSF Noyce Track 1 Evaluation, University of Alabama-NSF
- **2013-2016:** NSF Noyce Track 1 Evaluation, University of West Georgia-NSF
- **2013-2016:** NSF ADVANCE Evaluation, University of West Georgia-NSF
- **2012-2016:** NTN Investing in Innovation-South Carolina, Knowledge Works-US Dept. of Education
- **2008-2011:** Earth Systems Science Revolutions, UT-Austin-NSF

Past Evaluation Projects (Prior to 2008):

- University of Alabama, Alabama
- University of Idaho, Idaho
- National Aeronautics and Space Administration (NASA), Washington, DC
- Hampton University, Virginia
- Texas A&M Commerce, Texas
- Austin Peay University, Tennessee
- Communities Foundation, Texas
- National Science Teachers Association, Virginia
- Grangeville School District, Idaho
- Texas High School Project, Texas

Appendix 6: Conferences

Conferences Chaired/Co-Chaired/Hosted

Texas Association of Student Council Summer Conference, Tyler, TX, 2025	Attendees TBD
Texas School Improvement Conference 2024	Attendees TBD
Texas Association of Student Council Summer Conference, Tyler, TX, 2024	Attendees 250
Texas STEM Virtual Summit, 2024	Attendees 100
Texas School Improvement Conference 2024	Attendees 82
Southwest GLOBE Student Research Symposium, 2023	Attendees 63
Texas School Improvement Conference, Tyler, TX, 2022	Attendees 58
Texas STEM Conference, Virtual, 2023.	Attendees 247
Texas School Improvement Conference, Tyler, TX, 2022	Attendees 105
Texas STEM Conference, Hybrid, San Antonio, TX. 2022	Attendees 306
Texas STEM Conference, Virtual. 2021	Attendees 400
Texas STEM Coalition Conference, Austin, TX, 2020	Attendees 700
Texas STEM Coalition Conference, San Antonio, TX 2019	Attendees 966
UTeach National Conference, Austin, TX 2018	Attendees 900
Texas STEM Coalition Conference, Galveston, TX 2018	Attendees 967
Texas PLTW Conference, Dallas, TX 2018	Attendees 811
Texas PLTW Conference, Austin, TX, 2017	Attendees 790
Texas STEM Coalition Conference, Addison, TX 2017	Attendees 1100
SWASTE Conference, Tyler, TX 2016	Attendees 32
Texas PLTW Conference, Houston, TX, 2016	Attendees 707
Texas STEM Coalition Conference, San Antonio, TX 2016	Attendees 658
GLOBE Student Research Symposium Southwest Regional, Houston TX, 2016	Attendees 40
Texas PLTW Conference, Corpus Christi, TX 2015	Attendees 600
Texas PLTW Conference, Rockwall, TX 2014	Attendees 600
Texas STEM Conference, Dallas, TX 2014	Attendees 780
Texas PLTW Conference, Houston, TX	Attendees 580
National Alliance of State Science and Mathematics Coalitions 2012, Washington, D.C.	Attendees 80
Texas Project Lead the Way 2012, Austin, TX	Attendees 504
National Alliance of State Science and Mathematics Coalitions 2011, Washington, D.C.	Attendees 75
STEM 2011 Conference, Austin TX	Attendees 354
Texas Project Lead the Way 2011, Dallas, TX	Attendees 427
Texas Project Lead the Way 2010, Houston, TX	Attendees 350
11th Annual GLOBE Conference, San Antonio, TX	Attendees 300
Idaho Science Teachers Conference 2003, Lewiston, ID	Attendees 600
National Space Grant Annual Conference 1996, Hampton, Virginia	Attendees 400

Appendix 7: Service

Major Committee Assignments:

Board Service

- **University Academy School Board** (Public University Charter School Board)
    - Board Secretary: 2012–Present
- **Lyceum Education Foundation** (Professional Organization, 501c3)
    - Treasurer: 2021–2023
- **Southshore Condominium HOA** (501c3)
    - Board Member: 2020–Present
- **Discovery Science Place** (Museum, 501c3)
    - Ex-Officio UT Tyler Representative, 4x4 Leadership Council Member: 2012–2018
- **UTeach STEM Educators Association** (Professional Organization)
    - Past President: 2018–19
    - Board President: 2017–18
    - Vice President: 2016–17
    - Chair, Leadership Development Committee: 2016–17
    - Induction Working Group: 2020–Present
- **Texas STEM Center Coalition** (Professional Organization, 501c3)
    - Advisor/Conference Co-Chair: 2007–Present
    - President: 2022–Present, 2013–14
    - Treasurer: 2017–19
- **National Alliance of State Science and Mathematics Coalitions** (501c3)
    - Board President: 2013–15
    - Board Member: 2010–12
- **Hemingway Learning Institute – Sun Valley, Idaho** (501c3)
    - Board Member: 1999–2004
- **Palouse Discovery Science Center** (Museum, 501c3)
    - Founding Board Member: 1997–98
- **International Association of Lab Schools** (Professional Organization)

- Leadership Working Group: 2020–Present
- Research Working Group: 2020–Present

- **Carnegie Project for the Education Doctorate** (Professional Organization)
  - UT Tyler Delegate: 2022–Present

International Committees

- **International Conference on School Effectiveness and Improvement (ICSEI) - Climate Education Committee**
  - Member: 2021–Present
- **International Association of Laboratory Schools (IALS)**
  - Membership Committee: 2023–Present
  - Lab School Advisory Group Chair: 2023–Present
- **The International GLOBE Program**
  - GLOBE Evaluation Working Group. 2025-Present
  - GLOBE Evaluation Community of Practice. 2023-Present
  - GLOBE Partner Forum SW Rep: 2023–Present
  - GLOBE Regional Revitalization Working Group Member: 2019–21
  - GLOBE International Advisory Committee, North American Representative: 2006–08
  - GLOBE Preservice Working Group Member: 2019–Present
  - GLOBE Student Research Symposium Member: 2019–Present
  - GLOBE Undergraduate Working Group Member: 2019–Present

National Committees

- **UTeach STEM Education Association**
  - UTeach Awards Committee Member: 2017
  - UTeach Pathway Advisory Board Member: 2018
  - USEA Induction and PD Working Group Member: 2021–Present
  - USEA Recruitment Working Group Member: 2021–Present
  - UTeach Leadership Development Committee VP/Chair: 2016
- **National Science Teachers Association**
  - Preservice Teacher Committee Member: 2016–18
  - Ad Hoc Committee Student Chapters Member: 2019–20

- NSTA Aerospace Committee Member: 2004–07
- Earth Space Science Committee Member: 2005

- **100Kin10 Working Group: Embedded Professional Growth to support STEM Teachers**
  - Co-Chair: 2018–2020
- **National Alliance of State Science and Math Coalitions (NASSMC)**
  - Member: 2010–2016
  - President: 2013–15
- **SHELLS Advisory Committee**
  - Member: 2007–08
- **ASTE Technology Committee**
  - Member: 2006–08
- **George Fox University Science Center Advisory Board**
  - Member: 2000–01
- **Tri-State Coalition Initiative Evaluation (Mississippi, Alabama, Tennessee)**
  - Member: 1997–98
- **Western Regional Space Grant Conference Planning Committee**
  - Chair: 1996–97
- **NASA EPSCoR Revision and Review Panel**
  - Member: 1996
- **NSF Get the Facts Out Ambassador**
  - Member: 2021–Present

State Committees

- **TAC Transfer Committee for Education, Texas Higher Education Coordinating Board**
  - Member: 2023
- **Middle School and High School Science TEKS Review and Revision Committee, Texas Education Agency**
  - Member, Workgroup C: 2020–21
- **Texas Regional Collaborative Advisory Committee, University of Texas at Austin**
  - Member: 2014–17

- **High School Science TEKS Review and Revision Committee (ESS/Astro), Texas Education Agency**
    - Member, Workgroup D: 2020–21
- **UT Tyler Liaison with TxDOT for Research, Texas Department of Transportation**
    - Member: 2010–17
- **Generation Texas (GenTX) Advisory Committee, Texas Higher Education Coordinating Board**
    - Member: 2014–20
- **Advisory Board for National Eisenhower Grant: The Electronic Model Congress Project, Columbia Education Center, Portland OR**
    - Member: 1995–99
- **Chevron Design Challenge, HCC Houston**
    - Host: 2016–18
- **NE Texas Online Math Project Advisory, East Texas**
    - Member: 2013–17
- **Earth Space Science TEKS Committee, Austin, TX**
    - Member: 2008
- **Texas College Readiness Standards Science Vertical Team, Austin, TX**
    - Member: 2007
- **Idaho Science Standards-Rubrics Review, Boise, ID**
    - Member: 2004
- **Idaho Science Skills Based Curriculum Guide, Boise, ID**
    - Member: 1996
- **Idaho Exit Standards Science Subcommittee, Boise, ID**
    - Member: 1999–01
- **Idaho MOST Committee on Science Teacher Preparation, Boise, ID**
    - Chair: 1999
- **Third International Mathematics Science Study (TIMSS) Idaho Planning Committee, Boise, ID**
    - Member: 1998
- **Science Mathematics Consortium Northwest Schools, Idaho Action Committee**
    - Member: 1997–00

- **Idaho Association of Teacher Education revision of Idaho Standards Programs, Boise, ID**
    - Member: 1997
- **Idaho Science Framework Committee, Boise, ID**
    - Member: 1994
- **National Standards Review Committee, Idaho Focus Group, Boise, ID**
    - Member: 1994–95
- **Science Education Advisory Committee, Boise, ID**
    - Chair: 1997–98

University Committees

- **University Research Council, University of Texas at Tyler**
    - Member: 2021–23
- **President's Innovation Task Force, University of Texas at Tyler**
    - Chair: 2020
- **Distance Education Committee, University of Texas at Tyler**
    - Ex-Officio: 2017–18
- **Defense Advisory Group, University of Texas System**
    - Member: 2014–17
- **Research Compliance Committee, University of Texas System**
    - Member: 2013–17
- **Discovery Leadership (System VPR's), University of Texas System**
    - Member: 2012–17
- **Horizon Fund Steering Committee, University of Texas System**
    - Member: 2013–14
- **Collaborative for Research on Pharmaceutical Engineering and Sciences (CROPES) Cluster Hire Search Committee, University of Texas at Tyler**
    - Chair: 2016–17
- **PACE Committee (Dual Credit), University of Texas at Tyler**
    - Member: 2014–17
- **University Academy Research Committee and DIP/CIP, University of Texas at Tyler**
    - Chair: 2012–Present

- **Intellectual Property Committee, University of Texas at Tyler**
    - Member: 2010–17
- **Council of Academic Deans (CAD), University of Texas at Tyler**
    - Ex-Officio Member: 2013–15
- **President's Cabinet (VP's), University of Texas at Tyler**
    - Member: 2013–17
- **President's Council (VP's and CAD), University of Texas at Tyler**
    - Member: 2013–17
- **Campus Success Committee, University of Texas at Tyler**
    - Member: 2013
- **Information Technology Committee, University of Texas at Tyler**
    - Chair: 2008–09, 2009–11
    - Member: 2006–08
- **University Research Committee, University of Texas at Tyler**
    - Member: 2011–2017
- **SOE Post Tenure Review Committee, University of Texas at Tyler**
    - Chair: 2022
- **Endowment Compliance Committee, University of Texas at Tyler**
    - Member: 2006–2017
- **Family Care Committee (Ad hoc Senate Committee), University of Texas at Tyler**
    - Member: 2021
- **Provost Search Committee, University of Texas at Tyler**
    - Member: 2007–08
- **Research Librarian Search Committee, University of Texas at Tyler**
    - Member: 2008–09

College Committees

- **Strategic Planning Committee, College of Education and Psychology, UT Tyler**
    - Member: 2023-24
- **Research Award Selection Committee, School of Education, UT Tyler**

- Member: 2020-21

- **College of Education and Psychology Tenure and Promotion Committee, UT Tyler**
  - Member: 2017-19; 2024-25
- **School of Education Pathway Task Force, UT Tyler**
  - Member: 2022
- **College of Education and Psychology Ed.D. Development Committee, UT Tyler**
  - Member: 2017-20
- **Teacher Education Review Board, Illinois State University**
  - Member: 2005-06
- **College Coordinating Committee, University of Idaho**
  - Member: 2003-05

Department Committees

- **SOE T&P Committee, School of Education, UT Tyler**
  - Member: 2006-Present
  - Chair: 2018-19; 2024-25
- **SOE Policy and Procedures Committee**
  - Member 2025
- **University Academy Leadership Committee, UT Tyler**
  - Faculty Advisor: 2011–Present
- **University Academy District Improvement Committee, UT Tyler**
  - Member: 2012–Present
- **Post-Tenure Review, School of Education, UT Tyler**
  - Member: 2019–Present
  - Chair: 2022
- **Search Committee Chair (Math Education, Science Education, EdD/EDLR), School of Education, UT Tyler**
  - Chair: 2020-21, 2021-22, 24-25.
- **Post-Bach Certification Committee, School of Education, UT Tyler**
  - Member: 2009-11

School District Committees

- **Overton ISD STEM Camp Organizer**
    - 2021, 2022
- **Tyler ISD Career and Technology Advisory Committee**
    - Member: 2016
- **John Tyler High School STEM Advisory Board, Tyler, Texas**
    - Member: 2014-17
- **Robert E. Lee High School, Tyler, TX, PLTW Partnership Board**
    - Member: 2015-17

Community Service

- **Innovation Pipeline Committee, City of Tyler**
    - 2015
- **Tyler Area Business Education Council**
    - 2013-17

Outside Committees

- **Get the Facts Out Ambassador, NSF GTFO Initiative**
    - Member: 2022-Present
- **Texas Public Charter Schools Association Advocacy Working Group**
    - Member: 2022-Present
- **Elevate TXEd Ambassador, UT System**
    - Fellow: 2022
- **Co-Directors Working Groups, UTeach STEM Educators Association**
    - Member: 2019-Present

Current Membership

- **American Evaluation Association (AEA)**: 2016–Present
- **American Association of University Professors (AAUP)**: 2023–Present
- **American Educational Research Association**: 1993–Present
- **American Geophysical Union (AGU)**: 2003–Present
- **Carnegie Project for the Educational Doctorate (CPED)**: 2022–Present
- **International Association of Laboratory Schools**: 2019–Present
- **National Science Teachers Association (NSTA)**: 1989–Present
    - Earth-Space Committee/Preservice Committee/Ad hoc Committees
- **Phi Delta Kappa (PDK)**: 1994–Present
    - University of Idaho 1994-2005, Chapter President/Chapter Treasurer
- **Southwest ASTE**: 2015–Present
    - President and Conference Chair (2018)
- **Texas STEM Coalition**: 2009–Present
    - President (2023) /Treasurer
- **University Council for Educational Administration (UCEA)**: 2020-Present
- **UTEACH STEM Educators Association**: 2015–Present
    - President/Vice President
- **Indiana University Alumni Association (Life)**: 1993–Present
- **University of Texas at Dallas Alumni Association**: 1989–Present

Past Membership

- **American Association for the Advancement of Science (AAAS)**: 2020–2024
- **American Association for Teachers of Spanish and Portuguese (AATSP)**: 1998
- **American Institute of Mining, Metallurgical, and Petroleum Engineers (SME)**: 1989–94
- **Association for Supervision and Curriculum Development (ASCD)**: 1994–97
- **Association of Science Teacher Educators (ASTE)**: 1992–Present
    - Technology Committee/Publications Committee
- **Association for Texas Professional Educators**: 1984–90

- **Computer Science Teachers Association (CSTA)**: 2015–2019
- **Dallas Paleontological Association**: 1988–90
- **Gamma Sigma Epsilon (Geology)**: 1990–91
- **Geological Society of America (GSA)**: 1992–94
- **Hoosier Association of Science Teachers (HASTI)**: 1990–93
- **Idaho Science, Mathematics, Technology Coalition (ISMTC)**: 2003–05
- **Idaho Earth Science Teachers Association (IESTA)**: 1993–2005
    - Board Member/Newsletter Editor
- **Idaho Science Teachers Association**: 1993–2005
    - President/Conference Chair
- **International Technology and Engineering Educators Association (ITEEA)**: 2012–2016
- **International Society for Technology in Education**: 2017–18
- **Midwest Educational Research Association (MWERA)**: 1993–94
- **Museum Store Association (MSA)**: 2013–2018
- **National Association for Research in Science Teaching (NARST)**: 1993–2021
- **National Earth Science Teachers Association**: 1988–90, 1995–18
- **Northern Rocky Mountain Educational Research Association (NRMERA)**: 1994–04
- **Northwest Association of Teacher Educators (NWATE)**: 1994–96
- **Parent Teacher Association, SHJH, Irving, Texas**: 1984–90
    - Vice President
- **Pi Lambda Theta (Education)**: 1991–2015
- **School Science and Mathematics (SSM)**: 1993–2006
- **Science Teacher Association of Texas**: 1984–90, 2015–Present
- **Society of College Science Teachers**: 1988–89
- **STEM Teacher Leadership Network**: 2019–2024
- **Texas Earth Science Teachers Association**: 1988–90, 2007–18

Appendix 9: Other Service

Competition Judge

- **NASA GLOBE Student Research Symposium**- Judge High School Student Posters, Fort Worth, Texas, 2024; Tyler, Texas, 2023.
- **NASA Preservice Teacher Conference** – Judge, Preservice Teacher Poster Competition, Washington, DC, 1997, 2008.
- **International Virtual Science Symposium** – Judge, Student Research, Texas A&M (Virtual), 2022.
- **Texas Science and Engineering Fair (TXESF)** – Judge, Student Research, Texas A&M, College Station, TX, 2022–Present.
- **UT Tyler East Texas High School Innovation Competition** – Judge, Tyler, TX, 2020.
- **East Texas Academic Rodeo** – Science Fair Judge, Tyler, TX, 2007-2017.
- **NASA Office of Space Science Student Launch Proposal** – Judge, Washington, DC, 1997.
- **NASA Opportunities for Visionary Academics (NOVA)** – Reviewer, Implementation Proposals, Washington, DC, 1997.
- **NASA Mission to Planet Earth** – Panelist, Preservice Proposals, Washington, DC, 1995-2006.
- **NASA Academy Proposals** – Panelist, Goddard Space Flight Center, MD, 1996.
- **Real World Design Challenge** – Judge, Washington, D.C., 2012-2013.
- **Science Olympiad Event** – Panel Judge, University of Alabama, 2006.
- **Science Fair, Palouse Hills School** – Judge, Moscow, Idaho, 2000.
- **Science Fair Judge, MCCSC Elementary Schools** – Judge, Bloomington, Indiana, 1992-1993.
- **Texas Academy of Science** – Panelist, Science Educator of the Year Selection, Austin, TX, 1996.
- **UT Tyler University Academies Teacher Portfolio Review** – Expert Reviewer, Tyler, TX, 2012-Present.

Tenure Review

- **Bowling Green State University, Ft. Hayes State University, University of Toledo** – Outside Member, Tenure Review, 2015-2021.

Program Review

- **NASA National Space Grant Program**
    - Reviewer for 10-Year Effectiveness, 21 States, 1999.
    - Reviewer for 15-Year Effectiveness, 4 States, 2004.
- **NASA Opportunities for Visionary Academics (NOVA) Program**
    - Reviewer for multiple institutions including:

- Northern Michigan University, Marquette, Michigan, 1998.
- Whitworth College, Spokane, Washington, 1999.
- University of Alabama, Tuscaloosa, Alabama, 1999, 2001.
- Fort Hays State University, Fort Hays, Kansas, 1999.
- Baylor University, Waco, Texas, 2000.
- Indiana University, Bloomington, Indiana, 2001.
- Texarkana College, Texarkana, Texas, 2002, 2005.

- **Rocky Mountain Space Grant Consortium**
  - NASA Reviewer for University of Utah, Brigham Young University, and Utah State University, 1997.
- **Lewis and Clark Rediscovery Project**
  - Consortium Reviewer (US ED) for Kamiah School District, Idaho; Golden Triangle Consortium Schools, Montana; and Kennewick School District, Washington, 2001-2004.

Miscellaneous Service

- **University Academy** – Search Committee, Instructional Technology Coach, 2021.
- **University of Idaho/Lewis Clark State College, Lewiston, Idaho** – Space Day Volunteer, 2001.
- **Odyssey of the Mind Coach** – Moscow Schools, Moscow, ID, 1998.
- **Development of an Outdoor Environmental Classroom** – McDonald School, Moscow, Idaho, 1997-1998.
- **GLOBE Implementation** – Palouse Hills Adventist School, Moscow, Idaho, 1999-2004.
- **National Space Grant/Idaho Space Grant National Academy of Sciences Presidential Teaching Awards Program** – Representative, Washington, DC, 1996.
- **Brownie Science Day, Women in Science** – Committee Member, Indiana University, 1993.
- **Columbus North High School Science Olympiad (Regional)** – Volunteer, Columbus, IN, 1993.
- **National Chemistry Day, Elementary Science Activity Room** – Volunteer, Indiana University, 1992.
- **Science Olympiad** – Volunteer, Bloomington, Indiana, 1990-1992.

Exhibitor

- **Texas STEM Conference** – Ingenuity Center at UT Tyler, Texas, 2008-Present.
- **Association for Supervision and Curriculum Development** – EdD Recruitment, Houston, TX, 2022.
- **Texas Association of Secondary School Principals** – EdD Recruitment, Austin, TX, 2021.

- **NASA Education Program Exhibitor, National Science Teachers Association (NSTA) Convention**
    - Outreach at St. Louis, MO, 1996; New Orleans, LA, 1997; Las Vegas, NV, 1998.
- **NASA Education Program Exhibitor, NCTM Convention**
    - Outreach at San Diego, CA, 1996; Minneapolis, MN, 1997.
- **Family Science Nights** – Outreach at Various Schools, 1995-Present.
- **Science Resource for Local Schools** – Volunteer, Bloomington, Indiana, 1991-1993.

School Service

- **Sam Houston Junior High Wildlife Society** – Sponsor, Irving, TX, 1989-1990.
- **SHJH Campus Advisory Committee** – Representative, Irving, TX, 1988-1989.
- **Sam Houston Junior High Science Club** – Sponsor and Founder, Irving, TX, 1984-1990.
- **Sam Houston Junior High Young Astronaut** – Sponsor and Founder, Irving, TX, 1984-1990.
- **MESH Competition** – Sponsor, Irving, TX, 1985-1990.
- **SHJH Girls Soccer Club** – Coach, Irving, TX, 1986-1988.
- **Academic Pentathlon** – Coach, Irving, TX, 1988.
- **Student Travel** – Sponsor and Coordinator for trips to Yellowstone, WY; Washington, DC; Sea World, FL; Paris, France; and London, England, 1985-1990.

Appendix 10: Personal Professional Development

Workshops and Conferences:

- **Grading for Equity** – Online (2022)
- **International Association of Lab Schools**, Virtual, 2022 (CEU).
- **WeTeachCS Computer Science Conference**, Georgetown, Texas, 2022 (CPE).
- **Wicked Problems in STEM Education Workshop**, University of Western Washington, 2021.
- **EDX Case Studies in Continuous Educational Improvement**, Online, 2021.
- **EDX Designing and Leading Learning Systems**, Online, 2021.
- **UT Tyler Education Law Conference**, Tyler, Texas, 2020.
- **Google Classroom Training**, Valencia, Spain, 2020.
- **EDX Course Improvement Science** – Online (2019-20)
- **Education for Sustainable Development** – Online (2019-20)
- **APSI Coordinator Training**, New York, New York, 2019, Virtual: 2020, 2021, 2022, 2023, 2024.
- **EDX Improvement Science in Education**, Online, 2019-20.
- **Education for Sustainable Development Course**, Online, 2019-20.
- **AASCU Webinar: Competencies for State Colleges and University Presidents** – Online (2016)
- **School Board Training**, Texas Association of Charter Schools, 2014-2022.
- **Texas Open Meetings Act**, Online, State of Texas, 2012.
- **Integrating GLOBE Earth Science Education Projects** and the Digital Library for Earth Systems Education Resources into Professional Development, Boulder, Colorado, 2008.
- **EDC K-12 Science Curriculum Dissemination Hub Leader Meeting**, St. Louis, Missouri, 2001.
- **University Studies Abroad Consortium**, Universidad del Pais Vasco, Spanish I, San Sebastian, Spain, 1999.
- **National Teacher Training Institute**, Idaho Public Television, Moscow, Idaho, 1999.
- **Albertson Sponsored Evaluation/Self-Assessment Workshop**, Boise, Idaho, 1999.
- **Eisenhower National Clearinghouse Networking Resources Workshop**, Seattle, Washington, 1998.
- **Using the Third International Mathematics and Science Study (TIMSS)** to improve science education in Idaho, State Department of Education, Boise, Idaho, 1998.
- **GLOBE Facilitators Workshop**, Santa Barbara, California, 1998.
- **Conceptual Physics Understanding Facilitators Workshop**, San Diego State University, San Diego, California, 1996.

- **GLOBE Franchise Facilitators Training**, Biosphere II, Phoenix, Arizona, 1996; Missoula, Montana, 1998.
- **Using the National Science Education Standards in Evaluation Workshop**, National Research Council, National Academy of Sciences, Washington, DC, 1996.
- **Project 2061 Benchmarks/Standards Workshop**, Wheeling, West Virginia, 1996.
- **Challenger Center Workshop**, Wheeling, West Virginia, 1996.
- **The Kinesthetic Connection for Space Science Educators Workshop**, NASA/NSTA, Arlington, Virginia, 1996.
- **NASA Lunar Sample Certification Workshop**, Moscow, Idaho, 1993.
- **National Science Education Standards Project**, Regional Speaker's Workshops, NRC, Washington, DC, 1995.
- **America's Next Era in Space Seminar**, "Probing the Primordial Constituents of Our Solar System," NASA, Washington, DC, 1995.
- **Science Education Partnership Workshop**, Moscow, Idaho, 1995.
- **HTML Programming Workshop**, Moscow, Idaho, 1995.
- **GLOBE Workshop**, West Chester, Pennsylvania, 1995.
- **Onward to Excellence Workshop**, NWREL, Portland, Oregon, 1994.
- **Educational Reform with Education America**, Department of Education Regional, Moscow, Idaho, 1994.

Scholarship:

- **Texas High School Project Data Workshop**, Tyler, Texas, 2009.
- **Responsive Research Series (CREATE)**, The Woodlands, Texas, 2007.
- **Introduction to NSF Programs and Funding Opportunities**, University of Utah, Salt Lake, Utah, 2002; Illinois State University, 2005.
- **Eisenhower National Clearinghouse**, Connecting to the Future: A Dialogue, Alexandria, Virginia, 1997.
- **NASA KIDSAT/YES Program Review**, Washington, DC, 1996.

Outreach:

- **Office of Space Science Workshop**, Keys to Implementing NASA’s OSS Educational Strategy Workshop, Charleston, South Carolina, 1996.
- **NASA Earth Systems Science Resources Facilitators Workshop**, Goddard Space Flight Center, Greenbelt, Maryland, 1996.

Administration and Management:

- **Risk Mitigation and Management**, 2024.
- **Charter Finance Webinar**, 2021.
- **Educator Preparation Instructional Leadership Academy**, Center for Research, Evaluation, and Advancement of Teacher Preparation, 2006-07.
- **Illinois Commission on School Leader Preparation**, Sponsored Discussion with Dr. Art Levine, Chicago, Illinois, 2005.
- **Chairing the Academic Department**, American Council on Education, San Antonio, Texas, 2004.
- **Small Disadvantaged Businesses and Universities Forum**, NASA Langley, Hampton, Virginia, 2002.
- **EDC/NSF Science Leadership Institute**, Marlboro, Massachusetts, 2002.
- **Windows 95 and Meeting Maker Workshop**, NASA Headquarters, Washington, DC, 1997.
- **Developing Effective Work Plans**, NASA, Washington, DC, 1995.
- **American Academic Leadership Institute (AALI) Executive Leadership Academy**, Washington DC, 2016-17.

Professional Development Certificates:

- **Online Learning Best Practice**, UTEP Training Program.
- **Internal Review Board (Multiple)**.
- **Cyber-security Training**.
- **State of Texas Open Meetings Training**.
- **State of Texas Lobbying Training**.
- **UT Tyler Budget Authority Training**.
- **UT Tyler COVID Training**.
- **Charter School Finance Training**.
- **Texas Teacher Evaluation System (T-TESS) Training**.
- **Charter School Performance Framework Training**.
- **Charter School Communication Practices Training**.
- **Charter School Safety Training**.

- **Charter School TAPR Training**.

School Board Training:

- **Get the Grant: Foundation Prospecting & Proposals**, 2023-08-13.
- **CTE Resources and Regulation for Charter Schools**, 2023-08-13.
- **Creating and Sustaining High-Quality Pre-Kindergarten Programs in Charter Schools**, 2023-08-13.
- **Building Repeatable & Sustainable School Processes**, 2023-08-13.
- **Bringing College Courses to Title I High Schools**, 2023-08-13.
- **A Holistic Approach to ELL Education**, 2023-08-13.
- **21st Century Sex Ed: How School Districts Can Prepare to Implement Updated Sex Education Standards**, 2023-08-13.
- **2023 A–F Refresh Spring Updates**, 2023-08-13.
- **Section 504/Dyslexia Overview for Admin and Boards**, 2023-01-03.
- **Special Education Overview for Admin and Boards**, 2023-01-03.
- **Charter Schools' Impact on Poverty**, 2023-01-03.
- **Legal Requirements in Cyber Security**, 2023-01-03.
- **A-F Accountability Updates for 2023 from TEA**, 2023-01-03.
- **Title IX Update and New Guidelines**, 2021-12-27.
- **STEM Internships for Your Students**, 2021-12-27.
- **Overview of Special Education and Section 504**, 2021-12-27.
- **HB 4545 Overview and Tips**, Accelerated and Supplemental Instruction Updates, 2021-12-27.
- **Federal Grants 101 in 2020**, Impact of COVID-19 on Federal Formula Grants, 2021-12-27.
- **Differences Between Charters and ISDs**, Apples and Oranges or Two Peas in a Pod, 2021-12-27.
- **87th Legislative Session Review**, 2021-12-27.
- **High Performing Board Strategies**, 2021-11-01.
- **Preventable Pitfalls to Avoid Poor Performance**, 19 Practices TEA Recommends for Charter Schools, 2020-03-30.

- **How to Have Great Governance Board Meetings**, 2020-03-30.
- **Handling Challenging Employee Situations**, 2020-03-30.
- **86th Legislature Update for Charter Leaders**, 2020-03-30.
- **Working with Special Student Populations**, 2020-03-30.
- **Social Media Use – A School Leader's Legal Guide**, 2020-03-30.
- **Rewards and Challenges of Starting a University Charter**, Information You Need to Know, 2017-10-13.

Appendix 11: CONFERENCES ATTENDED:

International Conferences:

- **American Educational Research Association,** Chicago, IL, 2015; Toronto, Canada, 2019; Denver, 2025.
- **International Congress for School Effectiveness and Improvement**, Vina Del Mar, Chile, 2023; Dublin, Ireland, 2024; Melbourne, Australia, 2025.
- **Lab Schools Europe Conference**, Bielefeld, Germany, 2022.
- **GLOBE North American Regional Meeting (NARM)**, 1995-Present, Virtual.
- **Consortium for Belize Educational Cooperation (COBEC) Conference**, 2021, 2022, 2024.
- **Conference International Technology and Education Conference (InTED)**, Valencia, Spain, 2020, Virtual, 2022.
- **New Perspectives in Science Education**, Florence, Italy, (Virtual Attendee), 2020.
- **International GLOBE Conference**: Denver, Colorado, 2023; Online, 2020, 2021, 2022; Detroit, Michigan, 2019; New Haven, Connecticut, 2018; Boulder, Colorado, 2018; Estes Park, Colorado, 2016; San Antonio, Texas, 2007; Phuket, Thailand, 2006; Boulder, Colorado, 2004; Chicago, Illinois, 2002; Colorado Springs, 2001; Blaine, Washington, 2001; Annapolis, Maryland, 2000; Durham, New Hampshire, 1999; Airlie, Virginia, 1997.
- **EduLearn**, Majorca, Spain, 2019.
- **Learning for Change and Innovation World Congress**, Adelaide, Australia, 2016.
- **Association of Science and Technology Centers (ASTC)**, Charlotte, NC, 2015; Montreal, Canada, 2016.
- **International Association of Amusement Parks and Attractions**, Orlando, Florida, 2012, 2013, 2015.
- **National Science Teachers Association Regional Conference**, Portland, Oregon, 2013.
- **Project Lead the Way Summit**, Austin, TX, 2009; Washington DC, 2010; Indianapolis, 2012, 2015, 2016; Orlando, Florida, 2018.
- **Global Climate Change Research and Education Workshop**, Geneva, Switzerland, 2009.
- **International Council of Association for Science Education**, St. Louis, Missouri, 2007; Boston, Massachusetts, 2008; New Orleans, Louisiana, 2008; Tartu, Estonia, 2010.
- **GLOBE Web Design and Data Summit**, Boulder, Colorado, 2008.
- **Hawaii International Education Conference**, Honolulu, Hawaii, 2008, 2012, 2017, 2025.
- **International Space Olympics**, Korolev, Russia, 1997, 2002.
- **International Technology and Engineering Education Association**, Long Beach, California, 2012; Columbus, Ohio, 2013.
- **Second International Conference on Technology in Teaching and Learning in Higher Education**, Samos Island, Greece, 2001.

- **WebNet World Conference**, Honolulu, Hawaii, 1999.
- **World Association for Case Research Applications**, Caceres, Spain, 1999.
- **First U.S.-Argentina Conference on Space, Science, and Technology for Society**, Buenos Aires, Argentina, 1997.
- **The NSTA Global Summit**, San Francisco, California, 1996.
- **International Conference on Technology Education (ICTE)**, New Orleans, Louisiana, 1996.

National Conferences:

- **Phi Delta Kappa** Educators Rising Conference, Washington, D.C. 2024
- **American Association for Employment in Education (ASEE)**, Chicago, Illinois, 2023.
- **Carnegie School Improvement Summit**, San Diego, California, 2022.
- **National STEM Education Centers Conference**, 2019, 2020.
- **American Council on Education**, Washington, D.C., 2017.
- **American Academic Leadership Institute**, Washington D.C., 2016, 2017.
- **International Society for Technology in Education**, San Antonio, Texas, 2017.
- **NSTA STEM Forum**, Denver, Colorado, 2016.
- **Museum Store Association (MSA)**, Atlanta, Georgia, 2016.
- **100Kin10 Unconference for New Partners**, New York City, New York, 2016; New York, New York, 2017; Phoenix, Arizona, 2018; Virtual, 2021.
- **American Council for Teachers of Foreign Language (ACTFL)**, San Diego, 2015.
- **US News STEM Conference**, Washington, D.C., 2013; Dallas, 2014; San Diego, 2015.
- **AASCU Government Relations Conference**, Miami, Florida, 2012; San Francisco, California, 2013; St. Petersburg, Florida, 2016.
- **UT System Federal Relations Research and Policy Conference**, Washington, DC, 2012, 2013, 2014, 2015, 2016.
- **AAPLU National STEM Center Conference**, St. Louis, MO, 2013.
- **New Tech New School Training**, Grand Rapids, Michigan, 2013; Chicago, 2015.
- **National Alliance of State Science and Mathematics Coalitions (NASSMC)**, Washington D.C., 2011-2013.
- **American Society Engineering Education**, Austin, TX, 2009.
- **UTEACH Conference**, Austin, Texas, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020 (Virtual), 2021 (Virtual), 2022, 2023, 2024.
- **Mathematics and Science Partnerships Program STEM Summit**, Washington DC, 2007; San Francisco, California, 2009; Washington, DC, 2010.

- **Shaping the Future: Launching New Endeavors to Inspire the Next Generation of Explorers**, Washington, D.C., 2008.
- **E-Learn Conference**, Las Vegas, Nevada, 2008.
- **Society for Integrating Technology in Teacher Education (SITTE)**, San Antonio, 2007.
- **Earth Systems Science Education Alliance Conference (ESSEA)**, Omaha, Nebraska, 2007; Charleston, South Carolina, 2008; Biosphere II, Arizona, 2009.
- **NOVA Assessment Summit**, Tuscaloosa, Alabama, 2006.
- **American Association of Colleges of Teacher Education**, Chicago, Illinois, 2004; Washington, DC, 2005; San Diego, 2006.
- **NSTA National Congress**, Charleston, South Carolina, 2002.
- **Consortium for Earth Science Education Conference**, Greenbelt, Maryland, 2002.
- **NOVA Leadership Development Conference**, Goddard Space Flight Center, Maryland, 2002, 2005.
- **National Conference for Online Learning**, Tuscaloosa, Alabama, 2002.
- **NSF/Phi Theta Kappa Conference, Preparing tomorrow's teachers**, New Orleans, Louisiana, 2002.
- **NSTA Online Symposium**, Washington, D.C., 2002.
- **National Space Grant Aerospace Working Group Conference**, White Sands, New Mexico, 2002.
- **NOVA Faculty Research Fellow Orientation Workshop**, Manhattan, Kansas, 2001.
- **NASA/University Cyber Conference**, Washington, DC, 2000.
- **American Association of College of Teacher Education**, Chicago, Illinois, 2000.
- **American Association for Teachers of Spanish and Portuguese**, San Juan, Puerto Rico, 2000.
- **NASA Triumvirate (ESE, ALERT, NOVA)**, Flagstaff, Arizona, 1999.
- **NASA Earth Science Education Forum (invited)**, Austin, Texas, 1999.
- **National Earth Science Teachers Conference**, Las Vegas, Nevada, 1998.
- **National Education Association Conference**, Columbia, South Carolina, 1998.
- **NASA Space Grant Capability Enhancement/EPSCoR Directors Conference**, Washington, D.C., 1998.
- **National Association School Science and Mathematics Coalitions Conference**, Baltimore, Maryland, 1998.
- **NOVA Leadership Forum**, College Park, Maryland, 1997.
- **NASA Educational Resource Center Conference**, Hampton, Virginia, 1997; Pasadena, California, 2000; Cleveland, Ohio, 2001.

- **Aerospace Education Specialist Conference**, Houston, Texas, 1997.
- **National Space Grant Directors Conference**, Washington, DC, 1997.
- **NASA University Affairs Officers Conference**, Washington, DC, 1996.
- **Council of State Science Supervisors Conference**, Wheeling, West Virginia, 1996.
- **EPSCoR National Conference**, Washington, DC, 1996.
- **GLOBE Educators' Conference**, Warrenton, Virginia, 1996.
- **NASA Teacher Resource Center Annual Conference**, Huntsville, Alabama, 1996.
- **National Space Grant/EPSCoR/JOVE Conference**, Williamsburg, Virginia, 1996.
- **NASA Industry Education Initiative Conference**, Ft. Mead, Maryland, 1996.
- **Holmes Partnership National Conference**, Washington, DC, 1996.
- **National Council of Teachers of Mathematics National Convention**, San Diego, California, 1996.
- **NASA JOVE Conference**, Hampton, Virginia, 1996.
- **Albert R. Einstein Fellowship NASA Orientation Conference**, Washington, DC, 1996.
- **Eisenhower National Clearinghouse Future Visions Conference**, Washington, DC, 1996.
- **NASA Aerospace Education Specialist Program Planning Conference**, Stillwater, Oklahoma, 1996.
- **NASA NEW Planning Conference**, Arlington, Virginia, 1996; Kennedy Space Center, 1999; Johnson Space Center, 2000.
- **Association for the Education of Teachers of Science (AETS) National Convention**, Kansas City, Missouri, 1993; Seattle, Washington, 1996; Cincinnati, Ohio, 1997; Reno, Nevada, 2015; Des Moines, Iowa, 2016.
- **Second Annual Conference on Improving America's Schools, US Department of Education**, Washington, DC, 1995.
- **Applied Learning Conference (CORD)**, Waco, Texas, 1995.
- **NSTA National Convention**, Orlando, Florida, 2000; Boston, Massachusetts, 1999, 2008; Las Vegas, Nevada (exhibitor), 1998; New Orleans, Louisiana (exhibitor), 1997; Philadelphia, Pennsylvania, 1995, 2003; Anaheim, California, 1994, 2006; Kansas City, Missouri, 1993; Atlanta, Georgia, 1990, 2004; St. Louis, Missouri, 1996, 2001, 2007; Dallas, 2005; Denver, 2007; Philadelphia, Pennsylvania, 2012; San Antonio, Texas, 2013; Boston, Massachusetts, 2014; Chicago, Illinois, 2015.
- **NSTA Aerospace Committee**, 2004-2007.
- **Women in Science and Engineering Conference**, Indiana University, Bloomington, Indiana, 1992.

Regional Conferences:

- **Southwest Association of Science Teacher Educators**, Denton, Texas, 2015; Tyler, Texas, 2016; Fayetteville, Arkansas, 2019; The Woodlands, Texas, 2021
- **Science Teacher Education for Hispanic English Language Learners in the Southeast (SHELLS) Conference**, University of Alabama, Tuscaloosa, Alabama, 2008, 2009.
- **Southwest Association of Science Teacher Educators**, Wichita, Kansas, 2006; Irving, TX, 2008, 2009.
- **Western States MSP PI Meeting**, Reno, Nevada, 2005.
- **Western Regional Space Grant Consortium Conference**, Big Sky, Montana, 2002.
- **GLOBE Partnership Symposium**, Colorado Springs, Colorado, 2002.
- **GLOBE Curriculum Development Symposium**, Washington, D.C., 2002.
- **GLOBE North American Meeting**, Dallas, TX, 2007; St. Louis, MO, 2008.
- **NSTA/ISTA Regional Conference**, Boise, Idaho, 2000; Phoenix, AZ, 2010.
- **Workforce Development Conference**, Stennis Space Flight Center, Mississippi, 1999.
- **SMCNWS Regional Conference**, Seattle, Washington, 1999.
- **NASA Western Regional Space Grant Conference**, Santa Fe, New Mexico, 1996; Coeur d'Alene, Idaho, 1997 (Conference Chair).
- **NASA Tri-State Initiative Conference**, Arlington, Virginia, 1996.
- **US West Multi-Media Conference**, Seattle, Washington, 1995.
- **NRMERA Regional Conference**, Jackson Hole, Wyoming, 1995.
- **NWATE Convention**, Coeur d'Alene, Idaho, 1995, 1994.
- **Far West Holmes Group Meeting**, Coeur d'Alene, Idaho, 1994.
- **Lewis and Clark University/GTE Telecommunications Conference**, Portland, Oregon, 1993.

State Conferences:

- **University of Texas at Tyler School Improvement Summit**, Tyler, Texas, 2020, 2021, 2022, 2023.
- **University of Texas at Tyler, School Improvement Policy Summit**, Austin, Texas, 2023, 2024.
- **Texas Association of Secondary School Principals**, 2022.
- **Texas Charter School Virtual Summer Summit**, 2020, 2021.
- **University of Alabama Noyce Conference**, Tuscaloosa, Alabama, 2019.
- **College and Career Models Leadership Summit**, Arlington, TX, 2018.
- **Texas Out of School Time Conference**, Grapevine, Texas, 2015.
- **Texas Gear-up Conference**, Austin, Texas, 2014.

- **Texas Charter School Conference**, San Antonio, TX, 2015; Austin, TX, 2016; Grapevine, TX, 2017.
    - University Charter SIG, 2015.
- **Texas Charter School Summit**, Austin, Texas, 2019; Virtual, 2020.
- **Texas Research Summit, Academy of Medicine, Engineering, and Science of Texas**, Bastrop, TX, 2015.
- **Texas SBIR/STTR Conference**, Austin, Texas, 2013.
- **Performance Analysis for Colleges of Education, CREATE**, The Woodlands, Texas, 2013.
- **Texas Association of School Administrators**, Austin, Texas, 2013, 2016.
- **Texas STEM Center Coalition**, 2006-Present.
- **Texas Computer Education Association**, Austin, Texas, 2012.
- **CCRS Conference**, Corpus Christi, Texas, 2009; San Antonio, Texas, 2010.
- **MSTTPA Conference**, San Marcos, Texas, 2010.
- **DANA Center Higher Education Conference**, Austin, Texas, 2008, 2009.
- **PBL Institute (TSTEM)**, San Antonio, TX, 2009.
- **STEM Best Practices Conference**, South Padre Island, TX, 2009; Lubbock, TX, 2010.
- **Texas Association of School Administrators**, Austin, Texas, 2009.
- **Performance Analysis System for Colleges of Education**, Austin, Texas, 2008.
- **SAME-TEC Conference**, Austin, Texas, 2008.
- **Texas Space Grant Conference**, Houston, TX, 2009.
- **Texas Regional Collaborative/T-STEM Summit**, Austin, Texas, 2008.
- **Texas Regional Collaborative Annual Conference**, Austin, TX, 2007-2017.
- **Texas High School Project Conference**, Houston, 2007; Austin, 2008.
- **Project Lead the Way Leadership Conference**, San Antonio, Texas, 2007; Houston, Texas, 2009; Austin, Texas, 2010; Rockwall, Texas, 2014; Corpus Christi, 2015; Austin, 2016; Dallas, 2017.
- **Texas High School Evaluation Conference**, Austin, 2007; Houston, 2008; Dallas, 2009; Austin, 2010.
- **Educator Preparation Instructional Leadership Academy**, Austin, Texas, 2007.
- **Conference for the Advancement of Science Teaching**, Wichita Falls, Texas, 2006; Austin, 2007; Ft. Worth, 2018.
- **Illinois New Teacher Collaborative Working Conference**, Springfield, Illinois, 2006.
- **Illinois Association of Colleges of Teacher Education**, Kankakee, Illinois, 2005.

- **Illinois NBPTS University Alliance Meeting**, Bloomington, Illinois, 2005.
- **Idaho Science, Mathematics, Technology Coalition**, Boise, Idaho, 2004.
- **Linking Leaders Conference**, Boise, Idaho, 2002.
- **Bridges to Learning Conference**, Boise, Idaho, 2002.
- **Best Practices Boot Camp in Standards and Assessment**, Boise, Idaho, 2001.
- **Best Practices E-Boot Camp in Educational Technology**, Boise, Idaho, 2000.
- **Idaho Technology Showcase**, Boise, Idaho, 2000.
- **Idaho Earth Science Teachers Association**, Boise, Idaho, 2000.
- **Science, Mathematics, Consortium of Northwest Schools, State Action Meeting**, Boise, Idaho, 1998-2000.
- **Idaho Academy of Science Executive Committee Meeting, UI Representative**, Boise, Idaho, 1999.
- **Kentucky Education Technology Conference**, Louisville, Kentucky, 1997.
- **Mississippi Space Grant Consortium Annual Conference**, Oxford, Mississippi, 1996.
- **Idaho Academy of Science Conference**, Moscow, Idaho, 1996.
- **Idaho Space Grant Conference**, Moscow, Idaho, 1996; McCall, Idaho, 1997; Moscow, Idaho, 2000; Coeur d'Alene, Idaho, 2005, 2009.
- **Idaho Science Teachers Association Convention**, Idaho Falls, Idaho, 2001; President Elect; Coeur d'Alene, Idaho, 1999; Boise, Idaho, 1994, 1995, 1998; Jerome, Idaho, 1993.
- **Hoosier Association of Science Teachers Convention**, Indianapolis, Indiana, 1992, 1991.
- **Conference for the Advancement of Science Teaching**, Waco, Texas, 1989; Richardson, Texas, 1988; San Marcos, Texas, 1985; Duncanville, Texas, 1996; Fort Worth, 2018.
- **Smith County Education Summit**, Tyler, TX, 2016.
- **Annual Economic Outlook, Tyler Chamber of Commerce**, Tyler, TX, 2014, 2015.
- **STEM Accelerator Regional Thought Leader Convening**, Bay Town, TX, 2015.
- **Longview 2020 Education Convening**, Longview, TX, 2015.
- **Women in STEM Initiative Convening, Stephen F. Austin State University**, Nacogdoches, TX, 2015.
- **East Texas Council Boy Scouts of America, Distinguished Citizen Awards**, 2014.
- **Darwin Day at the University of Texas at Tyler**, 2021, 2022.

Appendix 12: Recognition

Teaching Honors and Awards

- UT Tyler SOE Teaching Award Nomination, 2023.
- UTeach STEM Educators Association Outstanding Faculty Award, 2021.
- University of Idaho Alumni Award for Excellence, 2004-2005.
- Recognized by Former Students, UI Inspirational Teacher Scholarship Fund, 2001.
- Recognized by Former Students, UI Inspirational Teacher Scholarship Fund, 2000.
- GTE GIFT Fellow, 1987-88.
- Letter of Commendation from Texas Governor, William Clements, for Science Teaching, 1987.

Scholarship Honors and Awards:

- Journal Articles selected for Review by the What Works Clearinghouse for possible inclusion. 2024.
- Office of Sponsored Projects, Research Award for Grant Productivity. 2008, 2009.
- GLOBE Fellowship, University Corporation for Atmospheric Research, 2007-09.
- Researcher of the Year, Office of Sponsored Programs, University of Texas at Tyler, 2007.
- NASA Kennedy Space Center Faculty Fellowship, 2003
- Color Simulator Java Applet recognized by MERLOT as a "distinguished, high-quality source of learning material". http://www.merlot.org 2002
- UI College of Education Faculty Research Award, 2001.
- National NASA Space Grant Fellowship, 1996-97.
- National NASA Space Grant Fellowship, 1995-96.

Service Honors and Awards

- PDK/Educators Rising Senior Fellowship, 2024.
- Recognized by NASA for service to the NEWEST/NEWMAST program, 1997.
- Recognized by Vice President Al Gore and GLOBE for service to the program, 1996.
- UI Faculty Excellence Award for Service to the College of Education, 1996.
- Selected as a Distinguished UTD Alumnus to serve on Panel to Discuss Educational Issues, 1989.

Program Awards

- Granted 100Kin10 Partner Status, 2016
- Texas Association of Partners in Education, TAPE Crystal Award with Waxahachie ISD,2014.
- Texas Prime Award for 21st Century After-School Program, 2013, 2014.
- Locals Love Us for the Discovery Science Place, 2012, 2013, 2014, 2015, 2016, 2017, 2018

Appendix 13: Commitment to Diversity

Most of my work has been in the context of rural schools serving economically disadvantaged students. The evidence for this work can be found in several of the grants and contracts that I have had the opportunity to lead.

I am committed to the success of underrepresented and economically disadvantaged indiviulas no matter what the setting. I am also eager to listen and learn from others what I need to know to be effective working with other cultures to meet their educational and cultural needs. For example, while at the University of Idaho, I was co-PI on a grant to celebrate the Lewis and Clark Bi-Centennial. One of the goals of that grant was to portray Lewis and Clark in the context of the past, present, and possible future. This included working with the Nez Perce Indian Nation to provide their perspective of the impact of Lewis and Clark. The deliverable was a website with curriculum to provide historical perspective from Native Americans, the Lewis and Clark Journals, scientific studies of the Lewis and Clark trail and future possibilities of space exploration.

I have also had the opportunity to work on school improvement contracts helping turn around struggling schools in urban and rural areas. These projects have been in schools that serve large populations of Hispanic and African American Students.

Appendix 14: Research Tradition

My research tradition is grounded in applied research, with a focus on education, STEM education, and school improvement. I work extensively with Improvement Science, particularly through the Carnegie model, to systematically apply data-driven strategies for refining and enhancing educational practices. This iterative approach—testing hypotheses, gathering evidence, and implementing reforms—drives my commitment to creating lasting, meaningful improvements in schools.

STEM education is central to my work. Through programs like UTeach and GLOBE, I aim to enhance teacher preparation and advance project- and problem-based learning, preparing future educators to effectively teach STEM subjects. A key objective of my research is increasing the number of qualified STEM teachers, especially in underserved and rural communities, which aligns with my broader commitment to equity and access in education.

Much of my research is applied and collaborative, directly impacting educational practices through partnerships with schools, universities, and organizations. This work includes co-founding laboratory schools and leading STEM teacher initiatives where research informs practice. My focus is on solving real-world problems, ensuring that the research I conduct can be applied in classrooms and schools to make a tangible difference.

I rely on quantitative methods and data analysis to evaluate the effectiveness of educational reforms and interventions. Whether I'm studying the success of the New Tech Network or assessing various STEM initiatives, my research is grounded in the use of metrics like student achievement and retention to draw conclusions about the efficacy of these programs.

Equity and access are at the heart of my research. I focus on ensuring that all students, regardless of their background, have access to high-quality education, particularly in STEM fields. This commitment to inclusivity drives my work in designing interventions that meet the needs of underrepresented students and rural communities.

My work also extends into educational leadership and policy, particularly as it relates to school improvement. I explore how school designs and leadership practices can positively impact student outcomes, and I work closely with doctoral students and educational leaders to apply research in ways that bring meaningful change. This aspect of my work emphasizes the importance of strong leadership and strategic decision-making in creating sustainable improvements in education.

In summary, my research tradition is characterized by a practical, data-driven approach that integrates Improvement Science, STEM education, and a commitment to equity and access. Through applied, collaborative research, I aim to create scalable, evidence-based solutions that directly improve educational outcomes while preparing the next generation of educators and leaders.

Appendix 15: Completed Dissertations (Most Recent)

University of Texas at Tyler
Chair

Bush, M. C. (2024). *Improving seventh grade mathematics achievement using differentiated instructional strategies* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Rodriguez, S. (2023). *Preparing for the future: A collaborative design for high-quality career and technical education programming* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Summers, D. (2023). *Teachers' use of assessment data to improve instruction and student achievement* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Gomez, Y. (2023). *Impact of teacher support systems on Advanced Placement achievement outcomes* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Maccalous, K. S. S. (2023). *Literacy achievement and the effectiveness of Texas' high-quality instructional materials on student outcomes in a rural elementary campus* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Robinson, W. A. (2023). *Reducing recidivism at DAEP with social emotional learning and character education in restorative circles* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Rowley, J. T. C. (2023). *Impact of social emotional learning on exclusionary discipline* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Pedersen, J. L. (2023). *The effect of a personalized learning model on the mathematical achievement of elementary students* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Co-Chair

Ricks, K. (2023). *The role of cultural capital in improving Advanced Placement outcomes* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Thomas, J. (2023). *Evaluation of personalized learning* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Weber, N. M. (2023). *The role and effectiveness of response to intervention to improve elementary students' reading skills and abilities* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Haney II, J. T. (2023). *Impact of restorative practices on exclusionary removals* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Rasberry, J. (2023). *Improving reading outcomes through blended learning* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Young I, S. D. (2023). *How teacher retention is handled at an elementary school* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Anaya, E. T. (2023). *The science of reading: Informing typical literacy practices and improving implementation of research-informed practices* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Dennis, A. L. (2023). *Impact of response to intervention on achievement* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Committee Member

Kennedy, T. W. (2023). *Innovative education: Comparing the success of STEM and traditional school models* [Doctoral dissertation, University of Texas at Tyler]. ScholarWorks. https://scholarworks.uttyler.edu/education_grad/

Appendix 15: References

Dr. Alisa White
President
Sam Houston State University
arwhite@shsu.edu

Dr. Wesley Hickey (Former Dean)
University of Texas at Tyler
Professor, Educational Leadership
whickey@uttyler.edu

Dr. Jo Ann Simmons
Superintendent of Laboratory Schools
UT Tyler University Academies
josimmons@uttyler.edu

Dr. James Nelson
Assistant Vice Chancellor
Director of Special Academic Initiatives
Texas A&M University
jknelson@tamu.edu

Michael Donley, (J.D.) (Former UT Tyler General Counsel)
General Counsel
Department of Administrative Services
State of Nebraska
michael.donley@nebraska.gov