

WILLIAM MEDINA-JEREZ

Professional Address

University of Texas at El Paso
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Communication

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EDUCATIONAL BACKGROUND

Ph. D. May 2005.

Curriculum and Instruction/Science Education. The University of Iowa.
Iowa City, IA.

Dissertation: *Student border crossings between local culture and classroom science: The transition of urban and provincial students in Colombia.*

Dr. Robert E. Yager, Dissertation Advisor.

M. S. May 2002.

Curriculum and Instruction/Science Education. The University of Iowa,
Iowa City, IA.

B. S. December 1990

Chemistry and Biology Education. Universidad de Pamplona. Pamplona, Colombia.

APPOINTMENTS

Associate Professor/Science Education

August 2011-Present

Responsibilities include teaching undergraduate and graduate science education courses in the Teacher Education Department, pursuing a professional agenda of research and service in the field of science education supported by external funding, and advising graduate students. STEM Division-Teacher Education Department. University of Texas at El Paso.

Assistant Professor/Science Education

2006-2010

Responsibilities included teaching undergraduate science education courses in the Department of Secondary Education, pursuing a professional agenda of research and service in the field of science education supported by external funding, advising undergraduate and graduate students, clinical and student teaching supervision, and preparation of program evaluation reports (NCATE). College of Education. University of Wyoming. Laramie, WY.

Post-doctoral Associate

2005-2006

Department of Curriculum and Instruction/College of Education (in collaboration with Dr. Douglas Clark) and School of Life Sciences (in Collaboration with Dr. Kevin J. McGraw). Arizona State University. Tempe, AZ.

Responsibilities included collecting, processing, analyzing data, and preparing reports on research projects related to the use of technology in elementary school classrooms with English Language Learners (ELLs) (College of Education); collecting data (bird trapping and banding, and blood sampling), maintaining the project's data base, running laboratory tests, and preparing manuscripts on aggression behavior studies on house finches (School of Life Sciences).

Graduate Research Assistant

2002-2005

Responsibilities included maintaining data bases for the Vision of Inventiveness and the Invent Iowa programs; assisting administrators in the organization of annual events (Wallace Symposium and the Invent Iowa Invention Convention) and translating curricular materials into Spanish. Belin-Blank International Center for Gifted Education and Talent Development. College of Education. The University of Iowa. Iowa City, IA.

Graduate Teaching Assistant

2000-2002

Responsibilities included teaching Spanish introductory courses. Department of Spanish and Portuguese. The University of Iowa. Iowa City, IA.

Spanish Teacher

1999-2000

Responsibilities included assisting the Spanish Department Teachers. Burlington Community High School. Burlington, IA.

Science Teacher

1995-1999

Responsibilities included teaching biology and chemistry classes and coordinating the science department. *Gimnasio Saucará. Bucaramanga, Colombia.*

Science Teacher

1991-1995

Responsibilities included teaching biology and chemistry classes and coordinating the science department. Instituto Cultural de Santander. Bucaramanga, Colombia.

TEACHING EXPERIENCE

Associate Professor, University of Texas-El Paso. El Paso, TX. (January 2011 – present)

TED 6398 (Fall 2014)

TED 6399: Dissertation (Spring 2015, spring 2023)

TED 5398: Thesis I (spring 2013, fall 2013, and spring 2023)

TED 5399: Thesis II (fall 2014, spring 2015, and summer 2015 & 2023)

TED 6394: Portfolio Development (Fall 2025)

SIED 5325: Inquiry Science Education in Bilingual Settings (Spring 2011 – Present. Every spring semester).

This course provides a review of the historical and instructional aspects of scientific inquiry as an instructional methodology in K-12 learning settings with emphasis on English Language Learners (ELLs) classrooms.

BED 4311: Teaching Science in Elementary Schools (Spring 2011 – present. Spring and Fall semesters)

This course has been constructed to assist you in critically examining the philosophies, theories, research, pedagogical techniques, and materials associated with effective learning and teaching in an elementary science classroom.

ELED 4311: Teaching Science in Dual Language Classrooms (Spring 2011 – present. Spring and fall semesters).

This course has been constructed to assist you in critically examining the philosophies, theories, research, pedagogical techniques, and materials associated with effective learning and teaching in an elementary science classroom.

TED 5319: The Nature of Science in K-12 Classrooms (Course designed for the Summer I sessions).

This course offers an introduction to the historical aspects of knowledge construction about the natural world and to the character and role of science that can be incorporated into science instruction in K-12 educational settings.

SIED 5323: Societal Context of Science Education (Fall 2011, Fall 2017, Fall 2018)

This course develops and applies understanding of the field, community, and cultural resources and explores historical perspectives of science and the role of science in societal decisions.

Assistant Professor, University of Wyoming. Laramie, WY.

Science Methods I (Fall 2006, fall 2007, fall 2008, fall 2009, fall 2010)

The Science Methods I course served as an introduction to science teaching. Our focus will be to identify attributes of teaching and learning science that are critical to effective instruction.

Science Methods II (Fall 2006, fall 2007, fall 2008, fall 2009, fall 2010)

The purpose of this course is to help pre-service science teachers prepare for student teaching and a professional career in secondary school settings. EDSE 4275 is designed to offer experiences that enhance pre-service teacher's Pedagogical Content Knowledge (PCK) and the skills you need to successfully make science education appropriate for all students.

Advanced Topics in Pedagogy (Fall 2006, fall 2007, fall 2008, fall 2009, and fall 2010)

This course serves as an introduction to science teaching. Our focus will be to identify attributes of teaching and learning science that are critical to effective instruction.

Residency in Teaching (Spring 2007, spring 2008, spring 2009, spring 2010)

Student teaching supervision (15 credit semester hours)

This course comprises the final professional academic semester of the teacher education program. A full-time residency, including a period of being intensively mentored and coached, a period of independent teaching and a period of team teaching.

Environmental Education for Teachers (Spring 2009, spring 2010)

The purpose of the course is to introduce the philosophy, methods, and content of environmental education for junior/senior students in elementary and secondary education. A variety of instruction procedures will supplement our understanding of these topics, including group work, modeling, microteaching, independent reading and research, technology and guest lecture/workshops.

GRANT/FUNDING ACTIVITY

Under Review Activities

National Science Foundation (NSF)

2025

CultureSTEM: Nurturing Informal STEM Learning Through Community Wisdom. Submitted by **William Medina-Jerez**, PhD (PI), Mourat Tchoshanov, PhD (Co-PI), and Ruby Lynch-Arroyo, PhD (Co-PI). Total funds requested: \$364,653.

National Science Foundation (NSF)

2024

National STEM Teacher Corps Pilot Program: The Borderlands Alliance for Culturally Responsive Middle Grades Math and Science Teaching. Submitted by Erin Turner, PhD (PI), Iliana Reyes, PhD (Co-PI), David Carrejo, PhD (Co-PI), and **William Medina-Jerez**, PhD (Co-PI). Total funds requested: \$851,511.

Funded Activities

Building Collaborative Teams between The University of Texas at El Paso and The University of Texas Rio Grande Valley

2024

CultureSTEM: Nurturing Informal STEM Learning through Community Wisdom. Submitted by Angela Chapman, PhD (PI), **William Medina-Jerez**, PhD (Co-PI), Ruby Lynch-Arroyo, PhD (Key Personnel), Mourat Tchoshanov, PhD (Co-PI), Uma Ganesan, PhD (Co-PI), Miriam Ortiz, PhD, (Key Personnel), and Janine Schall, PhD (Co-PI). Total funds requested: \$6,000.

- Boeing Company-STEM Education* 2013
Improving Elementary STEM Education through Inquiry-Based Curriculum. Submitted by Elsa Villa, PhD (PI), Eric Hagedorn, PhD (Co-PI), and **William Medina-Jerez**, PhD (Co-PI). Funded for \$45,000.
- UTEP College of Education. Research Funds for Associate Professors* 2013
Bridging Home and School Literacies: A Culture-Based, Corn-Themed Afterschool Curriculum Merging Science, Math, Geography, History, Reading, and Writing. Submitted by: **William Medina-Jerez**, (PI), Lucía Durá, PhD (Co-PI), Meredith Abarca, PhD (Co-PI), and Ms. Consuelo Salas (Co-PI). Funded for \$5,000.
- UTEP Interdisciplinary Research (IDR) Enhancement Program* 2012
STEM Graduate Education between the United States and England: Emerging and Continuing Patterns for Select Minority Groups (Level 1 proposal). Submitted by **William Medina-Jerez**, PhD (PI) and Beverly Lindsay, PhD (Co-PI). Funded for \$5,000.
- UTEP College of Education Research Funds for Associate Professors* 2012
The HACEP-UTEP after school pilot project: Promoting scientific and literacy skills through culture-based activities. Submitted by **William Medina-Jerez**, PhD (PI). Funded for \$5,000.
- National Science Foundation (NSF)* 2012
A Comparative Study of STEM Graduate Education between the United States and England: Emerging and Continuing Patterns for Select Minority Groups. Submitted by Beverly Lindsay, PhD (PI), Abdalla Darwish PhD (Co-PI), **William Medina-Jerez**, PhD (Co-PI), Michael Reiss, PhD (Co-PI). Funded for \$73,834.
- UTEP Interdisciplinary Research (IDR) Enhancement Program* 2012
Socio-ecology of Hispanics: a translational research agenda for the human development of Hispanics in the U.S. Submitted by Hector Olvera, PhD (PI), Ernesto Castañeda-Tinoco, PhD (Co-PI), **William Medina-Jerez**, PhD (Co-PI), and Holly Mata, PhD (Co-PI). Funded for \$20,000.
- University of Wyoming International Travel Grant* 2009
Initiating and Acting upon the Terms of a Memorandum of Agreement among the UW College of Education, the *Instituto Normal Superior Simón Bolívar*, the Wyoming-Bolivia Partnership, and the *Educadores para la Democracia*. Submitted by Carol Bryant, PhD (PI), Carolyn Taylor, PhD (Co-PI), and **William Medina-Jerez**, PhD (Co-PI). Funded for \$1,984.
- Wyoming Department of Education. Math and Science Partnership Grant* 2009
Inquiry and Technology Summer Teacher Institute. Submitted by Mark Stansbury, MS (PI), **William Medina-Jerez**, PhD (co-PI), and Mark Lyford, PhD (co-PI). Funded for \$111,083.

University of Wyoming Social Justice Research Center 2008

How does Project Citizen and Science Education Practices Address Environmental Concerns in Marginalized Sectors of La Paz, Bolivia? Submitted by **William Medina-Jerez**, PhD (PI). Funded for \$1,200.

University of Wyoming - Support for Faculty Scholarly Activity 2007

How Pre-service Teachers' Civic Dispositions Evolve as a Result of their Participation in a Cross-cultural Project Citizen Experience: A Comparative Study of Project Citizen Trained Pre-service Teachers in Wyoming and Bolivia. Submitted by Carol Bryant, PhD (PI), **William Medina-Jerez**, PhD (Co-PI), and Carolyn Taylor, PhD (Co-PI). Funded for \$6,533.77.

Unfunded Activities

NSF-Advancing Informal STEM Learning (AISL) 2023

Culturally Relevant and Engaging Approaches toward Education in Science, Technology, Engineering, and Math (CREATE STEM). Submitted by **William Medina-Jerez**, PhD (PI), Lucía Durá, PhD (Co-PI), and Mourat Tchoshanov, PhD (Co-PI). Total funds requested \$352,683.

The Housing Authority of the City of El Paso (HACEP) 2021

LifgthSTREAM. Submitted Juan Ferret, PhD (PI), Lucía Durá, PhD (Co-PI), **William Medina-Jerez**, PhD (Co-PI), María Perez, M.S. (Co-PI), Mika Cohen Jones, María Perez M.S. (Co-PI), and Kimberly Diaz, PhD (Co-PI). Total funds requested \$16,000.

NSF-Advancing Informal STEM Learning (AISL) 2021

Culturally Relevant and Engaging Approaches toward Education in Science, Technology, Engineering, and Math (CREATE STEM). Submitted by **William Medina-Jerez**, PhD (PI), Lucía Durá, PhD (Co-PI), and Mourat Tchoshanov, PhD (Co-PI). Total funds requested \$300,000.

NSF-Advancing Informal STEM Learning (AISL) 2019

Culturally Relevant and Engaging Approaches toward Education in Science, Technology, Engineering, and Math (CREATE STEM). Submitted by **William Medina-Jerez**, PhD (PI), Lucía Durá, PhD (Co-PI), and Mourat Tchoshanov, PhD (Co-PI). Total funds requested \$300,000.

American Honda Foundation 2018

PickSTEAM: Partnerships Investing in Children's Knowledge of Science, Technology, Engineering, and Mathematics. Submitted by David Carrejo, PhD (PI), Maria Teresa de la Piedra, PhD (Co-PI), Peter Golding, PhD (Co-PI), **William Medina-Jerez**, PhD (Co-PI), and William H. Robertson, PhD (Co-PI). Total funds requested \$75,000.

- IES-Institute of Education Sciences* 2016
 PickSTEAM: Partnerships Investigating in Children's Knowledge of Science, Technology, Engineering, & Mathematics. Submitted by David Carrejo, PhD (PI), Darren Cone, PhD (Co-PI), Nicole Louie, PhD (Co-PI), **William Medina-Jerez**, PhD (Co-PI), and William H. Robertson, PhD, (Co-PI). Total funds requested \$ 1,395,414.
- NSF-Advancing Informal STEM Learning (AISL)* 2014
 Broadening the Participation of Hispanic Young Female Learners in STEM Learning through Community-Based Competitions. Submitted by **William Medina-Jerez**, PhD (PI) and Hector Olvera, PhD (Co-PI). Total funds requested \$296,916.
- NSF-Advancing Informal STEM Learning (AISL)* 2013
 The Science Literacy Involving Cultural Knowledge (SLICK) Project. Submitted by **William Medina-Jerez**, PhD (PI), Lucía Durá, PhD (Co-PI), Ernesto Castañeda, PhD (Co-PI), Holly Mata, PhD (Co-PI), and Hector Olvera, PhD (Co-PI). Total funds requested \$245,087.
- UTEP College of Education. Education Research Colloquia Series* 2013
 Learning across Borders: Promoting Research on Transnational Student Success. Submitted by Eduardo Arellano, PhD (PI), Beverley Calvo, PhD (Co-PI), Tim Cashman, PhD (Co-PI), **William Medina-Jerez**, PhD (Co-PI), Erika Mein, PhD (Co-PI), Judith Munter, PhD (Co-PI), Cesar Rosatto, PhD (Co-PI), and Song An, PhD (Co-PI). Total funds requested \$7,500.
- MacArthur Foundation* 2013
 Housing that Really Works: What Policy Makers Can Learn from the Housing Authority of the City of El Paso. Submitted by Ernesto Castañeda, PhD (PI), María Flores, (Co-PI), **William Medina-Jerez**, Ph.D (Co-PI), Lucía Durá, PhD (Co-PI), Hector Olvera, PhD (Co-PI), and Holly Mata, PhD (Co-PI). Total funds requested \$282,722.
- William T. Grant Foundation* 2013
 Homeless and Foster Care Youth Enrolled in College: Testing Successful Interventions in University Settings. Submitted by Ernesto Castañeda, PhD (PI), Holly Mata, PhD (Co-PI), Hector Olvera, PhD (Co-PI), and **William Medina-Jerez**, PhD (Co-PI). Total funds requested \$284,000.
- The Stanford Center on Poverty and Inequality (2012-2013 Grant Competition)* 2012
 Mobility, poverty, and structural assimilation among Hispanics on the Texas-Mexico border. Submitted by Ernesto Castañeda, PhD (PI), **William Medina-Jerez**, PhD (Co-PI), Hector Olvera, PhD (Co-PI), and Holly Mata, PhD (Co-PI). Total funds requested \$25,000.00.

- National Science Foundation* 2012
Gender, Connectedness, and Mathematics: Case of Spatial Reasoning. Submitted by Mourat Tchoshanov, ScD (PI), **William Medina-Jerez**, PhD (Co-PI), and Osvaldo Morera, PhD (Co-PI). Total funds requested \$511,449.
- UTEP College of Education Grant Proposal Preparation Program (Course Release Requested)* 2012
Using the arts and culture for community building an after-school program for the academic development of students at risk. Submitted by **William Medina-Jerez**, PhD.
- UTEP Interdisciplinary Research (IDR) Enhancement Program* 2012
A comparative analysis of African American, Mexican American, and Mexican with African English, Caribbean English, and Pakistani English university STEM students. Submitted by **William Medina-Jerez**, PhD (PI) and Beverly Lindsay, PhD (Co-PI). Total funds requested \$18,437.
- National Science Foundation (NSF)* 2011
NSF- UTEP GeoScience Education Leadership Program (UTEP GeoSciEdLead). Submitted by Brian H. Giza, PhD (PI), Laura Serpa, PhD (PI), Aaron Velazco PhD (PI), **William Medina-Jerez**, PhD (Co-PI), and Richard Harvis, PhD (Co-PI). Total funds requested \$149,999.
- MacArthur Foundation Badges Request* 2011
B@²DGE²S: Biology Alternative Assessment Development Geared via Ethno-science, Engineering, and Sustainability. Submitted by Cesar Rossatto, PhD (PI), **William Medina-Jerez**, PhD (Co-PI), Erik Smith, PhD (Co-PI), Noe Vargas-Hernández, PhD (Co-PI), and Angela Valenzuela (Co-PI). Total funds requested are \$180,000.
- U.S. Department of Education.* 2011
Project STEM up: An Interdisciplinary Social Transformative Initiative. Submitted by Cesar Rossatto, PhD (PI), and Erik Smith, PhD (Co-PI), **William Medina-Jerez**, PhD (Co-PI), Elena Izquierdo (Co-Pi). Total funds requested \$300,000
- National Institute of Health (NIH)* 2011
Blueprint for Neuroscience Research Science Education Award (R25). UTEP Laboratory Experiences in Active Research in Neurobiology for Educators (UTEP Project LEARN-Ed). Submitted by Brian H. Giza, PhD (PI), and Kyunghan Han, PhD (Co-PI) and **William Medina-Jerez**, PhD (Co-PI). Total funds requested \$1,713,146.
- National Science Foundation (NSF)* 2011
NSF-Ethics, Ethno Science, and Decision-Making Education for Personal and Collective Transformation. Submitted by Cesar Rossatto, PhD (PI), Erik

Smith, PhD (Co-PI) and **William Medina-Jerez**, PhD (Co-PI). Total funds requested \$300,000.

NSF-Research in Disabilities Education (RDE) Grant Online 2008

The Use of Video Games and Simulations in Science Education for students with Learning Disabilities. Submitted by Elizabeth Simpson, PhD (PI), and **William Medina-Jerez**, PhD (Co-PI). Total funds requested \$374,956.

RESEARCH SUPERVISION

Chair PhD Students

- Cynthia C. Ontiveros (PhD, 2015). *Latin@ high school students' standpoint on environmental justice issues in a border community: A phenomenological study*. University of Texas at El Paso (Doctoral Dissertation).
- Elizabeth Biney (In progress). *Environmental teacher education in Ghana*. University of Texas at El Paso (Portfolio Development).

Committee Member PhD Students

- Jesús Villa (PhD, 2025). *Performance of elementary school students in Dual Language Programs during the pandemic*.
- José Manuel Flores Fuentes (PhD, 2024). *Border soundscapes: Latinidad, belonging and sense of place in the El Paso del Norte region*.
- Estella Valles (PhD, 2020). *Border crossing in sacred grounds: Indigenizing traditional quantitative methods in educational research*. University of Texas at El Paso (Doctoral Dissertation).
- Isaac Martinez (PhD, 2019). *Deconstructing socially engineered hegemonic paradigms: Restraining temporal ideologies and their impact on schooling*. University of Texas at El Paso (Doctoral Dissertation).
- Ruby Lynch-Arroyo (PhD, 2013). *Complexity of affective disposition and reflective transphenomenality: An exploratory study of middle school mathematics teacher and student self-positioning and positioning-by-others toward mathematics, mathematics teaching and learning*. University of Texas at El Paso (Doctoral Dissertation).

Chair M.S. Students

- María Fernanda Moya (M.S. 2023). *Translanguaging in the science classroom*.
- Veronica Jackson (M.S. 2014). *Understanding the constructivist learning environment in teacher education methodology courses*. University of Texas at El Paso.

Committee Member M.S. Students

- Cameron K. Wilson (M.S. 2014). *Hispanic high school students' perspectives on the nature of science*. University of Texas at El Paso.
- Valente Francisco Saenz (Master of Arts in Interdisciplinary Studies [MAIS], 2013). *An examination of the UTEP's Centennial Museum and the Stanlee and Gerald Rubin Center for the visual arts and their relationship with the student community*. University of Texas at El Paso.

OTHER TEACHING EXPERIENCES

La Escuelita After-School Program

Fall 2012-Present

This project builds on the HACEP-UTEP after-school pilot project: Promoting Scientific and Literacy Skills through Culture-based Activities (2012-2013) which took place at '*La Escuelita*,' an after-school program held in residential communities managed by The Housing Authority of the City of El Paso (HACEP). I served as PI of two grants awarded by the UTEP CoED. I have co-delivered two sessions per month to elementary school students attending *La Escuelita* program at the Cramer (2012-2013), Martin Luther King (2013-2014), and Salazar (2015-present) Communities.

Workshop Co-Instructor

Fall 2012, spring 2013, 2014

Co-delivered six professional development full-day sessions to elementary school teachers from the El Paso Independent School District focused on the Engineering is Elementary (EiE) curriculum.

Workshop Co-Instructor

July, 2008

Wyoming Geographic Alliance's one-week workshop. Educators for Democracy, La Paz, Bolivia.

Instructor for WINGS Program (Weekend Institute for Gifted Students) summer 2001

Three-hour Saturday class for 4th-6th grade students.

Belin and Blank International Center for Gifted Education and Talent Development

The University of Iowa, Iowa City, IA

LANGUAGES

Spanish, Portuguese, and English

CERTIFICATES

- Project Citizen
- Project Learning Tree
- Project Wild

PROFESSIONAL AFFILIATIONS

Association for Science Teacher Education (ASTE) (2007-present)
National Science Teacher Association (NSTA) (2005- present)
National Association of Research in Science Teaching (NARST) (2007-present)
Science Teacher Association of Texas (STAT) (2016 – present)
Texas Association of Bilingual Education (TABE) (2016 – present)
El Paso/Trans-Pecos Audubon Society (2011 – present)

RESEARCH

Research Interests

Cultural studies in science education

- Border crossing pedagogy
- Science education in Latin America
- Science education for English learners
- The integration of art and science education

PUBLICATIONS

Book Chapters

- **Medina-Jerez, W.**, Jackson, V., & Olivarez A. (2019). Understanding the constructivist learning environment in teacher education methods courses. In P. Barrera Valdivia, G. Mendoza Meraz, & I. Rivera Herrera (Eds.). *Algunas Aportaciones Psicológicas y Sociológicas a la Educación* (pp. 9-27). Buenos Aires, Argentina: Alfagrama Ediciones.
- Dura, L., Salas, C., **Medina-Jerez, W.**, Hill, V. (2015). *De aquí y de allá*: Changing perceptions of literacy through food pedagogy, asset-based narratives, and hybrid spaces. Community Literacy Journal, 10(1) pp. 21-39. In Best of the Journals in Rhetoric and Composition 2017, Vieira, K. Portillo, V. Luther, J. Blakesley, B. and S. Parks (Eds.). Parlor Press.
- Clark, D. B., Nelson, B., Atkinson, R., Ramirez, F., & **Medina-Jerez, W.** (2014). Integrating flexible language supports within online science learning Environments. In R. Bloymeyer, T. Ganesh, & H. Waxman (Eds.). *Research on Technology Use in Multicultural Settings*. Charlotte, NC: Information Age Publications.

Refereed Articles (Published)

- Biney, E.,* & **Medina-Jerez, W.** (2025). Dialogic inquiry into problem-based learning in environmental education: A Ghanaian preservice teacher's perspective. *Educational Point*, 2(2), e128. <https://doi.org/10.71176/edup/16804>.
- Saadati, F. **Medina-Jerez, W.**, & Fuenzalida, N. (2023). Teaching during the pandemic: The case of Chilean mathematics teachers. *Journal of Technology and Science Education*, 13(3), 901-916. DOI: 10.3926/jotse.2155.

- **Medina-Jerez, W.**, Durá, L., & Pérez-Piza, M*. (2023). Pictorial representations of pre-service elementary teachers' views about science teaching and learning. *Cultural Studies of Science Education*, 18(2), 499-520. DOI: 10.1007/s11422-023-10185-0.
- Esther, A. T., Abiodun, A. A., Simon, M., Taiye, A. A., Crossby, O.T., **Medina-Jerez, W.**, Essien Y. U., Prokop, P. (2023). Human-bat relationships in southwestern Nigerian communities. *Anthrozoös*, 36(3), 407-425. DOI: 10.1080/08927936.2023.2166715.
- Lynch Arroyo, R. L., Tchoshanov, M. & **Medina-Jerez, W.** (2023). Math is beautifully intimidating: Conflict between teacher affective disposition and observed positioning-by-others. *International Electronic Journal of Mathematics Education*, 18(1), em0722. DOI: org/10.29333/iejme/12627
- **Medina-Jerez, W.**, & K. Middleton. (2022). Examining Hispanic preservice teachers' perceptions of scientists in a science methods course. *International Journal on Studies in Education*, 4(1), 70-87. DOI: org/10.46328/ijonse.62
- Fančovičová, J., Prokop, P., Repáková, R., & **Medina-Jerez, W.** (2022). Factors influencing the adoption of animals in Slovak zoos. *Animals*, 12(1), 21. DOI: org/10.3390/ani12010021.
- **Medina-Jerez, W.**, Tchoshanov, M., Lynch Arroyo, R., Iturralde, C., Freire, L., Quiñones, M., Giaconi, V., Saadati, F., Bertelle, A., Rocha, A., Fuhr Stoessel, L., & Molina Andrade, A. (2021). STEM teacher educators' professional trajectories: A cross-national comparison. *Journal of Teacher Education and Educators*, 10(2), 196-221.
- Zvaríková, M., Prokop, P., Zvarík, M., Ježová, Z., **Medina-Jerez, W.**, & Fedor, P. (2021). What makes spiders frightening and disgusting to people? *Frontiers in Ecology and Evolution*, 9:1-9. DOI:10.3389/fevo.2021.694569
- Randler, C., Ballouard, J. M., Bonnet, X., Chandrakar, P., Pati, K., **Medina-Jerez, W.**, Pande, B., & Sahu, S. (2021). Attitudes toward animal welfare among adolescents from Colombia, France, Germany, and India. *Anthrozoös*, 34(3), 359-374. DOI: 10.1080/08927936.2021.1898212
- Randler, C., Adan, A., Antofie, M., Arrona Palacios, A., Azevedo M., Boeve de Pauw, J., Chandrakar, P., Demirhan, E., Detsis, V., Di Milia, L., Fančovičová, J., Gericke, N., Haldar, P., Heidari, Z., Jankowski, K., Lehto, J., Lundell-Creagh, R., **Medina-Jerez, W.**, Meule, A., Milfont, T., Orgilés, M., Morales, A., Natale, V., Ortiz, X., Pande, B., Portonen, T., Kumar Pati, A., Prokop, P., Rahafar, A., Scheuuch, M., Sahu, S., Tomažič, I., Tonetti, L., Vallejo-Medina, P., Van Petegem, P., Vargas, A., & Vollmer, C. (2021). Animal welfare attitudes: A cross-cultural comparison among 24 cultures in 22 countries. *Animals*, 11, 1-14. DOI:10.3390/ani11071893

- Fančovičová, J., Prokop, P., Šramelová, D., Thiebaut, G., Méot, A., Witt, A., Bonin, P., & **Medina-Jerez, W.** (2021). Does food play a prominent role in visual attention to disgusting stimuli? *Journal of Ethology*, 40(1), 23-29.
<https://doi.org/10.1007/s10164-021-00722-1>.
- Prokop, P., Molnárová, D., Fančovičová, J., & **Medina-Jerez, W.** (2021). Seasonal variability in flower lifespan in common chicory (*Cichorium intybus* L.). *Flora*, 284, 151935.
- **Medina-Jerez, W.**, & Durá, L. (2020). Food pedagogy as an instructional resource in a science methods course. *Innovations in Science Teacher Education*, 5(3), 1-15.
- del Hierro, V., Saenz, F. V., Gonzales, L., Durá, L. & **Medina-Jerez, W.** (2019). Nutrition, health, and wellness at *La Escuelita*: A community-driven effort toward food and environmental justice. *Community Literacy Journal*, 14(1), 26-43.
- **Medina-Jerez, W.** (2018). Science education research trends in Latin America. *International Journal of Science and Mathematics Education*, 16(3), 465-485.
- Benavides, R.* & **Medina-Jerez, W.** (2017). *No Puedo*, I don't get it: Assisting Spanglish-speaking students in the science classroom. *The Science Teacher*, 84(4), 30-35.
- Prokop, P., **Medina-Jerez, W.**, Coleman, J., Fančovičová, J., Özel, M., & Fedor, P. (2016). Tolerance of frogs among high school students: Influences of disgust and culture. *Eurasia Journal of Mathematics, Science & Technology Education*, 12(6), 1499-1505.
- Green, C., **Medina-Jerez, W.**, Bryant, C. (2016). Cultivating environmental citizenship in teacher education. *Teaching Education*, 27(2), 117-135.
- **Medina-Jerez, W.**, & Campbell, T. (2015). Myths about English language learning: Implications for science instruction in light of the Next Generation Science Standards. *The Science Teacher*, 82(4): 53-59.
- **Medina-Jerez, W.**, Melville, W. & Walker, D*. (2015). Using biographical letters to draw on the nature of science. *Science Scope*, 39(2), 45-49.
- Durá, L., Salas, C*, **Medina-Jerez, W.**, & Hill, V. (2015). *De aquí y de allá*: Changing perceptions of literacy through food pedagogy, asset-based narratives, and hybrid spaces. *Community Literacy Journal*, 10(1), 21-39.
- Hummel, E., Ozel, M., **Medina-Jerez, W.**, Fančovičová, J., Usak, M., Prokop, P., & Randler, C. (2015). Interest in birds and its relationship with attitude and myths: A cross-cultural study in countries with different levels of economic development. *Educational Sciences: Theory and Practice*, 15(1): 285-296.

- Mata, H., Flores, M., Castañeda, E., **Medina-Jerez, W.**, Lachica, J., Smith C., & Olvera, H. (2013). Health, hope, and human development: Building capacity in public housing communities on the U.S. – Mexico border. *Journal of Health Care for the Poor and Underserved*, 24(4), 1432-1439.
- Green, C. & **Medina-Jerez, W.** (2012). Project Citizen: Promoting action-oriented citizen science in the classroom. *The Science Teacher*, 79(9), 58-63.
- Dambekalns, L. & **Medina-Jerez, W.** (2012). Cell organelles and silk batik: A model for integrating art and science. *Science Scope*, 36(2), 44-51.
- **Medina-Jerez, W.**, Dambekalns, L. & Middleton, K. V. (2012). Art and science education collaboration in a secondary teacher education program. *Research in Science & Technological Education*, 30(2), 209-224.
- **Medina-Jerez, W.**, Middleton, K. V. & Orihuela-Rabaza, W. (2011). Using the DAST-C to explore Colombian and Bolivian students' perceptions of scientists. *International Journal of Science and Mathematics Education*. 9(3), 657-690.
- **Medina-Jerez, W.**, Bryant, C. & Green, C. (2010). Science students practice democratic principles while conducting their own community projects. *Science Scope*. 33(7), 71-75.
- Campbell, T., **Medina-Jerez, W.**, Erdogan, I., & Zhang, D. (2010). Exploring science teachers' attitudes and knowledge about environmental education in three international teaching communities. *International Journal of Environmental and Science Education*. 5(1), 3-29.
- **Medina-Jerez, W.**, Taylor, C. & Bryant, C. (2009). The implementation of Project Citizen in Bolivian schools: Perspectives from three teacher educators. *International Journal of Progressive Education*, 5(3), 5-25.
- **Medina-Jerez, W.** (2008). Between local culture and school science: The case of urban and provincial students in Eastern Colombia. *Research in Science Education*, 38, 189-212.
- **Medina-Jerez, W.** (2007). Conceptualizations of nature from science students in Northeastern Colombia. *Bulletin of Science, Technology and Society*, 27(5), 377-385.
- **Medina-Jerez, W.**, Clark, D. B., Medina, A., & Ramírez-Marin, F. (2007). Science for ELLs: Re-thinking our approach. *The Science Teacher*, 74(3), 52-56.
- McGraw, K. J., **Medina-Jerez, W.**, & Adams, H. (2007). Carotenoid-based plumage coloration and aggression during molt in male house finches. *Behaviour*, 144, 165-178.

- McGraw, K. J., Crino, A., **Medina-Jerez, W.**, & Nolan, P. (2006). The effect of dietary carotenoid supplementation on food intake and immune function in a songbird with no carotenoid coloration. *Ethology*, 112(12), 1209-1216.
- **Medina-Jerez, W.** (2005). Student's worldviews and science education: A David and Goliath confrontation? *Journal of Science Education*, 6(2), 90-93.

Refereed Articles (Accepted)

- Lynch-Arroyo, R., Chamberlin, A. S., & **Medina-Jerez, W.** Middle grades mathematics affect and identity. *European Journal of Mathematics and Science Education*.

Refereed Articles (Submitted)

- Ortiz, M., Ganesan, U., Chapman, A., **Medina-Jerez, W.**, Lynch-Arroyo, R., Tchoshanov, M. From homes to classrooms: Cultural wisdom as a guide for STEM lesson planning. *Innovations in Science Teacher Education*.
- **Medina-Jerez, W.**, Durá, L. Food-based investigations that engage students with science and engineering practices. *Science & Children*.
- Giaconi, V., Saadati, F., Bertelle, A., Iturralde, C., **Medina-Jerez, W.** *Prácticas y creencias sobre la enseñanza virtual en STEM en Chile y Argentina durante la pandemia* [Instructional practices and beliefs about virtual teaching in STEM in Chile and Argentina during the pandemic]. *Revista de Investigación en Educación*.

Work in Progress

- Chapman, A., **Medina-Jerez, W.**, Schall, J., Ganesan, U., Ortiz, M., Lynch-Arroyo, R. & Tchoshanov, M. A(n) (re)awakening: Preservice teachers connecting their culture to science teaching along the U.S.-Mexi.co border. *Cultural Studies of Science Education*. (Summer 2025, expected completion date).
- **Medina-Jerez, W.** & McGraw, K. J. Students' interpretation of aggressive behavior in House Finches. *International Journal of Science Education*. (Fall 2025, expected completion date).

**Work done with students*

PEER-REVIEWED CONFERENCE PROCEEDINGS

- Akcay, B., Akcay, H., & **Medina-Jerez, W.** (2008). *Students' key ideas on what to teach about the nature of science in science classrooms*. Paper presented at the XIII International Organization for Science and Technology Education (IOSTE) Symposium. Izmir, Turkey. September 21-26, 2008.

Translations (Published)

Translation of Journal Articles (English into Spanish)

- Harman, O. (2013). The mystery of altruism: Does true altruism exist? And can science provide the answer? (*El misterio del altruismo: ¿Existe el verdadero altruismo? ¿Tiene la ciencia una respuesta?*). *Science in School*, 25, 48-53.
- Ranero-Celius, K. (2011). Battle of the birds: Interview with Tim Birkhead (*La batalla de las aves: Entrevista con Tim Birkhead*). *Science in School*, 18, 17-20.
- Rau, M. (2010). Homo sapiens—an endangered species? (*¿Homo sapiens—una especie en vía de extinción?*). *Science in School*, 15, 66-70.
- Shallcross, D. & Harrison, T. (2010). A hole in the sky (*Un agujero en el cielo*). *Science in School*, 17, 46-53.
- Frode Skjold, F. (2008). Curiosity killed the cat—or did it? (*¿Es cierto que la curiosidad mató al gato?*). *Science in School*, 9, 69-73.

Translation of Curricular Materials (English into Spanish)

- *The Invent Iowa Curriculum*. (2007). The University of Iowa, College of Education, Belin-Blank International Center for Gifted Education and Talent Development. Iowa City, IA.

CONFERENCE PRESENTATIONS

National/International

- Chapman, A., **Medina-Jerez, W.**, Schall, J., Ganesan, U., Tchoshanov, M., Lynch-Arroyo, R., Ortiz, M. A(n) (Re)awakening: Preservice Teachers Connecting Their Culture to Science Teaching Along the U.S.- Mexico Border. Paper submitted for presentation at the 2026 American Educational Research Association (AERA) Annual Meeting. Los Angeles (CA).
- **Medina-Jerez, W.**, Lynch-Arroyo, R., Tchoshanov, M., Gomez, L., Martinez, A., & Ortiz Galarza, E. (2025) CultureSTEM: Nurturing Informal STEM Learning Through Community Wisdom. Project presented at the 8th Annual STEM Education Conference – University of Texas Rio Grande Valley (UTRGV). South Padre Island, TX.
- Tchoshanov, M., **Medina-Jerez, W.** Invited presentation. Education Seminar at the Suleyman Demirel University, Kazakhstan. (November 8, 2023).
- Lynch-Arroyo, R., Chamberlin, S. A., & **Medina-Jerez, W.** (2023). Demographic effects on middle grades student mathematics affect and identity. Paper presented at the 2023 Annual Convention of the School Science and Mathematics Association (SSMA). Colorado Springs, CO.
- **Medina-Jerez, W.**, Del Hierro, V., Gonzales, L., Dura, L., & Saenz, V. (2020).

- Health and Wellness at *La Escuelita*: A Community-Driven Effort toward Food and Environmental Justice. Paper presented at the 2020 Association for Science Teacher Education (ASTE) International Conference. San Antonio, TX.
- **Medina-Jerez, W.** (2018). Science education research trends in Latin America. Paper presented at the 2018 International Meeting of the Association for Science Teacher Education (ASTE). Baltimore, MD.
 - **Medina-Jerez, W.** (2017). Pictorial representations of pre-service elementary teachers' views about science teaching and learning. Paper accepted for presentation at the 2017 Association for Science Teacher Education (ASTE) International Conference. Des Moines, IA.
 - **Medina-Jerez, W.**, Durá, L., Abarca, M. Salas, C., Lopez, M., Hill, V. & Legarreta S. (2015). Bridging Home and School Literacies through a Food-based Curriculum. Paper submitted for presentation at the 2015 Association for Science Teacher Education (ASTE) International Meeting. Portland, OR.
 - Durá, L., Salas, C., **Medina-Jerez, W.**, Abarca, M., Hill, V. & Legarreta, S. (2014). Re-writing the deficit script: Bridging home and school literacies through a food-based curriculum. Paper submitted for presentation at the 2014 National Council of Teachers of English (NCTE). Washington, D.C.
 - **Medina-Jerez, W.**, Middleton, K. V. (2014). Measuring and influencing pre-service elementary teachers' images of scientists. Paper presented at the 2014 Hawaii International Conference on Education (HICE). Honolulu, Hawaii.
 - **Medina-Jerez, W.**, Durá, L., Abarca M., Salas, C., Hill, V. & Borjas, G. (2014). Using corn to bridge home and school literacies: A culture-based, after-school curriculum merging science, math, geography, history, reading, and writing. Poster accepted for presentation at the 2014 Association for Science Teacher Education (ASTE) International Conference. San Antonio, TX.
 - **Medina-Jerez, W.**, Dura, L., Saenz, V., García, M., Hill, V. Borjas, G., Hurtado, I. (2013). The HACEP-UTEP after school pilot project: Promoting scientific and literacy skills through culture-based activities. Poster presented at the Association for Science Teacher Education (ASTE) 2013 International Conference. Charleston, SC.
 - **Medina-Jerez, W.** & Dambekalns, L. (2012). *Art and science education collaboration in a teacher preparation program*. Paper presented at the National Science Teacher Education (NSTA) National Conference, Teacher Research Day. Indianapolis IN.
 - Lucas, L. K., Gompert, Z., **Medina-Jerez, W.** & Buerkle, A. (2011). *Translating evolutionary biology research into inquiry-based learning experiences in high school science classrooms*. Poster presented at the National Science Teacher Association (NSTA) conference—Teacher Research Day. San Francisco, CA.

- Green, C., **Medina-Jerez, W.** & Bryant, C. (2010). *Collaborating practices of environmental citizenry in pre-service teacher education*. Paper presented at the 7th Annual Research Symposium of the North American Association of Environmental Education (NAAEE). Buffalo, NY.
- **Medina-Jerez, W.** Bryant, C., & Green, C. (2010). *Environmental stewardship and active democracy in pre-service teacher education*. Paper presented at the 2010 National Science Teacher Association Conference. Teacher Researcher Day. Philadelphia, PA.
- **Medina-Jerez, W.**, Bryant, C. & Green, C. (2009). *Community action projects in pre-service teacher education*. Paper presented at the National Network of Educational Renewal Conference. Bellevue, WA.
- Ellsworth, J., Trent, A., Roxas, K., Janak, E., Kambutu, J., Welsh, K., Wiig, D., **Medina-Jerez, W.**, Bryant, C., Berube, W., Duncan, H., James, J., & Deshler, B. (2009). *Developing democratic professionals: Integrating democracy across the WY teacher education program*. Paper presented at the National Network of Educational Renewal Conference. Bellevue, WA.
- Green, C. **Medina-Jerez, W.** & Bryant, C. (2009). *The experiences of pre-service teachers in an environmental action project*. Paper presented at the North American Association for Environmental Education (NAAEE) Research Symposium. Portland, OR.
- **Medina-Jerez, W.**, & Martínez-Hernández, M. (2009). *Use of contextualized stories in the study of students' images of science and scientists*. Poster presented at the International Congress of Science Education. Cartagena, Colombia.
- **Medina-Jerez, W.** & Middleton, K. (2009). *Colombian and Bolivian students' perceptions of science and scientists*. Paper presented at the 24th International Association for Science, Technology and Society (IASTS). Rochester, NY.
- Bryant, C., Taylor, C., & **Medina-Jerez, W.** (2008). *The Wyoming/Bolivia partnership: understanding civic education through a Civitas Latin-America exchange*. Paper presented at the 88th Annual National Council for the Social Studies – International Assembly. Houston, TX.
- Akcay, B., Akcay, H., & **Medina-Jerez, W.** (2008). *Students' key ideas on what to teach about the nature of science in science classrooms*. Paper presented at the XIII International Organization for Science and Technology Education (IOSTE) Symposium. Izmir, Turkey.
- **Medina-Jerez, W.**, & Orihuela-Rabaza, W. (2008). *Assessing Colombian and Bolivian Students' Images of Scientists*. Paper presented at the 12th Consultation of the International Consortium of Research in Science and Mathematics Education (ICRSME). Quito, Ecuador.

- **Medina-Jerez, W.** (2007). *School science and students' worldviews: The case of provincial and urban students from eastern Colombia*. Paper presented at the 22nd International Association for Science Technology and Society (IASTS) conference. Baltimore, MD.

Regional

- Ontiveros, C., **Medina-Jerez, W.** & Hampton, E. (2015). An environmental justice education experience: Preliminary findings of the 'under-and-misrepresented' students living along the U.S.-Mexico border. Paper accepted for presentation at the 2015 National Association for Chicana and Chicano Studies Tejas Foco. Houston, TX.
- **Medina-Jerez, W.**, Bryant, C., & Gribb, W. (2008). *Community Action: Project Citizen and Geography in Bolivia*. Paper presented at the 2008 School Improvement Conference, Wyoming Department of Education. Cheyenne, WY.
- **Medina-Jerez, W.**, Bryant, C. and Green, C. (2010). *Environmental stewardship and active democracy in pre-service teacher education*. Paper presented at the *In Praise of Education Statewide (Wyoming) Conference*. Casper, WY.

Local

- **Medina-Jerez, W.** (2017). Science Education Research Trends in Latin America. Paper presented at the STEMERS Seminar. UTEP College of Education.
- **Medina-Jerez, W.** & Rodriguez, D. (2016). Using scribbling machines to practice inquiry skills in the elementary classroom. Proposal accepted for presentation at the 2016 El Paso Minicast STEM Conference. El Paso, TX.
- Ontiveros, C., **Medina-Jerez, W.** (2015). Paper presented at the 2015 Culture and Identity in Education Conference. El Paso, TX.
- Bryant, C. & **Medina-Jerez, W.** (2010, April). *Bolivian students speak out on community and environmental issues*. Paper presented at the 2010 Shepard Symposium on Environmental Justice. University of Wyoming, Laramie, WY.
- Neelands, L., Green, C., **Medina-Jerez, W.**, Bryant, C., Masie, E., Pate, C., Cummins, B., & Hardesty, N. (2010). *A global problem individuals can change: An environmental education class project*. Paper presented at the 2010 Shepard Symposium on Environmental Justice. University of Wyoming. Laramie, WY.
- Bryant, C., **Medina-Jerez, W.**, & Taylor, C. (2008). *Examining Social Issues through the Eyes of Bolivian Children: Project Citizen's Role in Empowering Bolivian Youth to Find Their Voice*. Paper presented at the 12th annual Shepard Symposium on Social Justice. University of Wyoming. Laramie, WY.

MEDIA COVERAGE

UTEP, College of Education (November 16, 2019). UTEP Student Teacher to Promote Fun with STEM.

El Paso Times. (February 16, 2014). UTEP, Boeing Further Elementary Engineering Education.

UTEP, College of Engineering (December 18, 2013). Boeing, further elementary engineering education.

<http://engineering.utep.edu/announcement121813.htm>

Ysleta Independent School District (YISD). (January 11, 2013). Cedar Grove students explore science concepts in an after-school program.

<http://www.yisd.net/default.aspx>

Center for Civic Education. Center Correspondent E-News. (December 7, 2012). How to use Project Citizen in a Science Classroom.

<http://www.civiced.org/e-news/?p=973>

UTEP News. (December 5, 2012). Cooking classes help kids learn science skills.

<http://newsuc.utep.edu/index.php/news-latest/769-cooking-classes-help-kids-learn-science-skills>.

SERVICE

University of Texas at El Paso

Research Supervision

Committee Chair– Doctoral Students

- Cynthia Ontiveros (Spring 2014 – Spring 2015)
- Elizabeth Biney (Spring 2025 – present)

Committee Chair– M.S. Students

- María Fernanda Moya (Summer 2023)
- Veronica Jackson (Summer 2011 – Spring 2014)

Committee Member – PhD Students

- José Manuel Flores Fuentes (Fall 2021-Fall 2024)
- Jesús Villa (Spring 2021 – Spring 2025)
- Estela Valles (Summer 2011 – Fall 2020)
- Ruby Lynch-Arroyo (Fall 2011 – Fall 2013)
- Isaac Martinez (Fall 2018 – Fall 2019)

Committee Member – M.S. Students

- Cameron Wilson (Fall 2013 – Fall 2014)
- Valente Sáenz (Fall 2012 – Fall 2013)

Primary Academic Advisor (TLC Doctoral Program)

- Monica Banuelos (Fall 2023-present)
- Elizabeth Biney (Fall 2023-present)

Secondary Academic Advisor (TLC Doctoral Program)

- Jesus Villa (Fall 2018-Spring 2025)

National and International Leadership and Service

- Manuscript reviewer, *Cultural Studies of Science Education* (CSSE). Summer 2023.
- Manuscript reviewer, *International Journal of Science Education* (IJSE). Spring 2023.
- Associate Editor, *Journal of Science Teacher Education* (Flag journal of the Association for Science Teacher Education [ASTE]). Fall 2018-present.
- Manuscript reviewer, *International Journal of Science and Mathematics Education*. Spring 2027 – present.
- Manuscript reviewer, *European Journal of Teacher Education*. Spring 2017.
- Manuscript reviewer, *Teaching and Teacher Education Journal*, spring 2017.
- Manuscript reviewer, *Research in Science and Technological Education*. Fall 2017.
- Conference proposal reviewer, 14th Inter-American Symposium on Ethnography and Education.
- Conference proposal reviewer for the 2017 American Educational Research Association (AERA) Annual Meeting.
- Conference proposal reviewer for the 2016 Conference for the Advancement of Science Teaching (CAST).
- Conference proposal reviewer for the National Association of Research in Science Teaching (NARST) 2016 International Conference.
- Manuscript reviewer for the *Canadian Journal of Physics*. Fall 2016
- Manuscript reviewer for the *Open AERA* journal. Summer 2015.
- Manuscript reviewer for the *Teacher Education and Practice* Journal. (Fall 2011 – fall 2012).
- Reviewer for the *Science Activities* journal. Spring 2015.
- Paper proposal reviewer for the Association for Science Teacher Education (ASTE) 2013 International Conference.
- Translator for the *Science in School* Journal (2008 – 2012).

State and Local Service

- Co-director of the *La Escuelita* after school program, in partnership with The Housing Authority of the City of El Paso (HACEP). (Fall 2012-present).
- Coordinator, along with preservice teachers in the BED/ELED 4311 course of science learning event on the UTEP campus (Fall 2012-present).

- Conference proposal reviewer, 2016 Conference for the Advancement of Science Teaching (miniCAST) Conference. El Paso, TX.
- Undergraduate scholarship applications reviewer. Texas Association of Bilingual Education (TABE) Instructional and Professional Development Committee (2016).
- Science Fair Judge. El Paso Independent School District (EPISD) (2015)
- STEM Education Workshop. Professional Development Day Cooley Elementary School (EPISD) (2015).
- I Spy Be a Playground Private Eye competition judge. The Housing Authority of the City of El Paso (HACEP) (2013).
- Science Fair Judge. Americas High School, El Paso, TX. (2012).
- Science Fair Judge. Socorro Independent School District (SISD) (2012).
- Co-delivered six STEM education workshops to in-service elementary school teachers. El Paso Independent School District (EPISD) (2012).
- Science Fair Judge. Hornedo Middle School. El Paso, TX. (2011).
- Science Fair Judge. Socorro Independent School District (SISD) (2011).
- Co-developed an afterschool science education curriculum based on the food and culture program implemented at the Martin Luther King housing community of El Paso, TX. (Summer 2014).
- Co-designed and co-delivered an afterschool program for elementary schools students at the Martin Luther King housing community of El Paso, TX. (Fall 2013-spring 2014).
- Delivered four art-based activities to elementary school students attending the after-school program at the Martin Luther King HACEP community (August-December 2014)
- Delivered an art and science-based activity at the Alicia Chacón International School (2014).

Institutional Service

- UTEP College of Education, Teacher Education Department. Reviewer of applications to the TLC program (Spring 2025).
- UTEP College of Education, STEM Division. Education Preparation Program EC-6 Alignment Chart-science education and science content courses. Texas Education Agency 5-year review (Fall 2024).
- UTEP College of Education, STEM Division Annual Evaluations Committee member (Fall 2024-present).
- UTEP Commencement Faculty Marshall (December 14, 2023).
- UTEP College of Education Teacher Job Fair (November 18, 2023).
- UTEP Centennial Museum Committee (Fall 2021-present).
- UTEP College of Education Search Committee Chair (Assistant professor in STEM Education position). (Fall 2022-Spring 2023).
- UTEP College of Education. Presenter during a test (EC-4) preparation session delivered to a group of pre-service science teachers. (April 28, 2021).
- UTEP College of Education. Teacher Education Department. Reviewer of TED Core Area Exams (March 2021).

- UTEP College of Education. Reviewer of College of Education Outstanding Dissertations (Spring, 2021).
- UTEP College of Education. Presenter during a test (EC-4) preparation session delivered to a group of pre-service science teachers. (November 20, 2020).
- UTEP College of Education. Presenter at the College of Education TLC Virtual New Student Orientation. (August 7, 2020).
- UTEP College of Education. Served as reviewer of questions on the 4-8 science content test (Spring 2020).
- UTEP College of Education. Teacher Education Department. Reviewer of TED Core Area Exams (October 2020).
- UTEP College of Education. Teacher Education Department. Reviewer of TED Core Area Exams (June 2020).
- UTEP College of Education. Teacher Education Department. Reviewer of TED Core Area Exams (March 2020).
- UTEP College of Education. Reviewer of College of Education Outstanding Dissertations (Spring, 2020).
- UTEP College of Education. Reviewer of TLC Outstanding Dissertations (Fall 2020).
- UTEP College of Education Search Committee member (Assistant professor in STEM Education position). (Fall 2019-Spring 2020).
- UTEP Library Committee (Fall 2017-May 2021).
- UTEP College of Education. Coordinated the organization of an international virtual STEMERS seminar with faculty from two Chilean universities (September 27, 2019, and January 2021).
- UTEP College of Education Digital Measures Committee (Fall 2019).
- Member of the UTEP College of Education STEMERS Organizing Committee (Fall 2017-Present).
- UTEP Top 10 Seniors Committee (Spring 2018).
- UTEP College of Education, guest lectures in Dr. Bill Robertson's class (November 2018).
- UTEP Commencement Faculty Marshall (May 2018).
- UTEP College of Education Teacher Job Fair (November 2018).
- Coordinated a virtual STEM seminar with teacher educators from Argentina, Brazil, and Mexico. (May 2018).
- Academic advisor to students admitted to the master's program in STEM Education. UTEP College of Education, Teacher Education Department (Fall 2016-Present).
- Comprehensive Exams (COMPS) reviewer, UTEP College of Education, Teacher Education Department (Fall 2012-Present).
- UTEP College of Education Search Committee member (literacy education tenure track position) (Fall 2017-Spring 2018).
- Faculty reader. UTEP pre-commencement ceremony (December 2017).
- Coordinated one virtual STEM education seminar with teacher educators from Argentina (November 2017).
- UTEP College of Education, Curriculum Committee (Fall 2013-Spring 2017).
- UTEP College of Education, Educator Preparation Committee (Spring 2017-Present).

- 14th Symposium on Ethnography and Education Committee (Fall 2017).
- Hosted an international educator attending the 14th Symposium on Ethnography and Education (Fall 2017).
- UTEP College of Education, STEM Division, Annual Review Committee (Spring 2017).
- UTEP Undergraduate Scholarship Committee member (Fall 2014-Spring 2017).
- UTEP College of Education Master's Admission Committee member (Fall 2015-2017).
- UTEP search committee member (Registrar). Chair: Michael Talamantes. Fall 2016.
- UTEP College of Education, reviewer of presentation proposals submitted to the ABC Conference (Fall 2015).
- UTEP Geology Department, coordinated the end of the year student evaluation session (May 27, 2014).
- Participated as presenter in the student teaching symposium organized by the Teacher Education Department. Spring 2014.
- Designed and coordinated the Science Teaching Day at the UTEP Centennial Museum and Gardens (April 26, 2014).
- UTEP College of Education Search Committee (for 1 Socio-Cultural Foundations position). Department of Teacher Education. Chair: Dr. Cesar Rossatto. Fall 2013-spring 2014.
- Collaborated in the administration of the comprehensive examinations to students from the master's program (spring and fall 2011).
- UTEP PUENTES Program Internal Advisory Board member. Chair: Dr. Ben Flores (Fall 2012- 2013).
- UTEP Undergraduate Scholarship Committee member. (Fall 2014 – 2017)
- UTEP College of Education, Search Committee (for 1 Mathematics Education position). Chair: Dr. Mourat Tchoshanov. Fall 2011 – spring 2012.
- UTEP College of Education, International Initiatives Committee member (IIC). Chair: Dr. Beverly Calvo. (2011 - 2014).
- UTEP College of Education, Undergraduate Studies Committee member. Chair: Dr. David Carrejo (Fall 2013-Spring 2014)
- UTEP College of Education, CIRCLE Conference planning committee member (2012).
- UTEP College of Education, 2011-2012 PUENTES project faculty member. Chair: Dr. Judith Munter.
- Student letters of recommendation (32 letters).
- UTEP College of Education Q&A session for TED doctoral students. (September 16, 2011).
- UTEP, Member of the committee hosting Dr. Primitivo Sierra. President of the Universidad Pontificia Bolivariana. Bucaramanga, Colombia. Chair: Dr. Roberto Osegeda (May 2011).

Course Development

BED 4311: La Enseñanza de la Ciencia en el Aula Bilingüe de la Escuela Primaria.

This course was designed to be offered in Spanish to students in the Bilingual Education program. It is intended to assist preservice teaching in examining theories, research, pedagogical approaches, and materials associated with effective learning and teaching of science in elementary bilingual school classroom.

TED 5319: The Nature of Science in K-12 Classrooms (Course designed for the Summer I session of 2019).

This course offers an introduction to the historical aspects of knowledge construction about the natural world and to the character and role of science that can be incorporated into science instruction in K-12 educational settings.

EDSE 5325: Inquiry Science Education in Bilingual Settings. Fall 2011. Online course designed for graduate students in the master's program (pre- and in-service teachers).

Professional Development Presentations

- Boeing Grant Engineering is Elementary: Attraction is Obvious. 4th grade in-service teachers from El Paso Independent School District (EPISD). April 29, 2014.
- Boeing Grant Engineering is Elementary: An Alarming Idea. 4th grade in-service teachers from El Paso Independent School District (EPISD). April 29, 2014.
- Boeing Grant Engineering is Elementary: Catching the Wind. 6th grade in-service teachers from El Paso Independent School District (EPISD). May 1, 2014.
- Boeing Grant Engineering is Elementary: Now You Are Cooking. 5th grade in-service teachers from El Paso Independent School District (EPISD). May 1, 2014.
- Boeing Grant Engineering is Elementary: Attraction is Obvious. 4th grade in-service teachers from El Paso Independent School District (EPISD). October 12, 2012.
- Boeing Grant Engineering is Elementary: An Alarming Idea. 4th grade in-service teachers from El Paso Independent School District (EPISD). October 17, 2012.
- Boeing Grant Engineering is Elementary: Catching the Wind. 6th grade in-service teachers from El Paso Independent School District (EPISD). October 29, 2012.
- Boeing Grant Engineering is Elementary: Now You Are Cooking. 5th grade in-service teachers from El Paso Independent School District (EPISD). November 30, 2012.