Curriculum Vitae Spring 2025

# David J. Carrejo, Ph.D. Associate Professor, Mathematics Education <u>Distinguished Teaching Professor</u>

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ResearchGate: <a href="https://www.researchgate.net/profile/David">https://www.researchgate.net/profile/David</a> Carrejo

#### **CHRONOLOGY OF EDUCATION**

2004 Ph.D., Mathematics Education, Department of Curriculum & Instruction, University of Texas at Austin

1998 M.A.T., Mathematics, Department of Mathematical Sciences, University of Texas at El Paso

1995 B.S., Mathematics, Department of Mathematical Sciences, University of Texas at El Paso

**Research Interests:** Models and Modeling in Math & Science Education; Algebraic Reasoning & Foundations of Analytic Geometry; History and Philosophy of Mathematics in Mathematics Education; Curriculum & Instruction in Mathematics Education; Integrated STEM Education

#### PROFESSIONAL EMPLOYMENT

Current Associate Professor of Mathematics Education, Department of Teacher Education/STEM Education Division, College of Education, UTEP

2015 <u>University of Texas Regents Outstanding Teaching Award recipient</u> 2019 <u>Inaugural Member</u>, <u>UTEP Academy of Distinguished Teachers</u>

2015 - 2018 Associate Dean of Undergraduate Studies and Educator Preparation, College of Education, UTEP

• Oversaw the Center for Student Success (Advising, Field Experience, and Certification Offices) and its processes to ensure alignment with the Texas Administrative Code.

- In conjunction with Department Chairs and the College Curriculum Committee, oversaw Educator Preparation Program curriculum changes and ensured alignment with Texas certification standards and the Texas Administrative Code.
- Addressed undergraduate and graduate student appeals and grievances related to certification and the Educator Preparation Program.
- Coordinated educator preparation with Colleges of Science, Liberal Arts, Health Sciences, and Engineering.
- Informed all faculty of development and changes in teacher education standards, certification testing, and Texas Administrative Code.
- Coordinated and convened the Teacher Preparation Advisory Committee (TPAC) with the Dean.
- In conjunction with the Dean, established and maintained affiliation agreements related to the Educator Preparation Program with K-12 partners.
- In conjunction with the Dean, actively represented the College of Education on both the Educator Preparation Program and certification matters within and outside the University.
- In conjunction with the Dean, oversaw and updated the College of Education's strategic plan and alignment with the University's strategic plan.
- Performed duties and accepted responsibilities as assigned by the Dean.

# 2012 - 2015 Assistant Chair of Teacher Education & Director, Teacher Preparation Program, College of Education, UTEP

- In conjunction with the Department Chair, oversaw and updated the department's strategic plan and its alignment with the college and university's strategic plan.
- Oversaw and participated in the continued accreditation of the department in conjunction with the department chair.
- Collected, managed, and analyzed all pertinent data related to accreditation and certification.
- Met regularly with the Chair and Dean and reported to the faculty on matters related to accreditation and certification.
- Oversaw and coordinated curriculum changes for undergraduate, graduate, and doctoral programs in the Teacher Education department.
- Evaluated and monitored course syllabi for alignment and adherence to TExES certification standards.
- Informed all faculty of changes in teacher education standards, developments, and changes in state standardized testing.
- Worked with the advising center to provide information regarding developments and changes in curriculum and policies and procedures for the teacher preparation program.
- Performed duties and accepted responsibilities as assigned by the Chair.

# **GRANTS & CONTRACTS**

Current

Senior Personnel, *RAISE - Research Academic-Work Integration in STEM Education*, *University of Texas Regents*, College of Education in collaboration with the College of Engineering, UTEP. Amount: \$775,897.

**Pending** 

Co-PI, National STEM Teacher Corps Pilot Program: The Borderlands Alliance for Culturally Responsive Middle Grades Math and Science Teaching (BA), in collaboration with the University of Arizona and New Mexico State University. The National Science Foundation. Amount requested: \$851,511.

PI, *Developing Partnerships to Improve Curriculum and Instruction in Elementary Mathematics Education (PRIME)*. The National Science Foundation, DRK-12 Partnership Development research program. Amount requested: \$99,292.

In progress

PI, Cultivating Engineering Identity through Diverse Experiences in an Undergraduate Engineering Pathway (DEEP), in partnership with UTEP's Industrial Manufacturing and System Engineering and El Paso Community College's Engineering and Architecture programs. To be submitted to the National Science Foundation, Improving Undergraduate STEM Education (IUSE) program.

2024

Co-PI, Developing, Validating, and Scaling an Assessment Instrument for Measuring Community Cultural Wealth in Mathematics Courses. In partnership with UT Rio Grande Valley. National Science Foundation, IUSE Research program. \$397, 871 (not funded).

2022 - 23

PI, Building Engineering Systems Thinking through STEM Learning Environments (BEST STEM). National Science Foundation, IUSE Research program. \$534,835 (not funded).

2021

PI, *Data-Driven Decision Making (3DM) Supporting Coherent Instructional Improvement in Mathematics*. National Science Foundation, DRK-12 research program. \$448,897 (not funded).

Co-PI, *RET Site: Water Security & Data Science (H2OData)*. National Science Foundation, Research Experience for Teachers program. \$600,000 (not funded).

2020

PI, *Growth Mindsets for Algebra Proficiency (GMAP)*, Bill & Melinda Gates Foundation, Balance the Equation: A Grand Challenge for Algebra I. \$89,381.54 (not funded).

Co-PI, *Unheard Voices: Building the El Paso Children's Museum for All.* The El Paso Children's Museum. <u>Funded: \$46,310.</u>

2017 - 2020

Co-PI, Assessing the Impact of Texas Science, Technology, Engineering, and Mathematics Academies on Students: Learning Environments, Educational Outcomes, and Career Path Decisions, National Science Foundation. Funded: \$589,407.

2018

PI, Partnerships Investing in Children's Knowledge of Science, Technology, Engineering, & Mathematics (PickSTEM), American Honda Foundation, \$75,000 (not funded).

2017 - 2018

PI, Building Capacity for Elementary Environmental Science and Engineering Education, The Boeing Company. Funded: \$27,000

2016	PI, Partnerships Investing in Children's Knowledge of Science, Technology, Engineering, & Mathematics (PickSTEM), Institute of Education Sciences, U.S. Department of Education, \$1,139,362 (not funded).
2015	Co-PI, <i>Pathways to Education Science Research for UTEP Fellows</i> , Institute of Education Sciences Pathways, U.S. Department of Education. \$1,199,161 (not funded).
2014	Co-PI, Co-Director, <i>UTeach El Paso</i> , The National Mathematics and Science Institute, \$1,161,237 (not funded).
2011 - 2016	Co-PI, Co-Program Director, <i>Local Education Agencies Partnership (LEAP) Project</i> , Transition to Teaching, U.S. Department of Education. <u>Funded: \$3,200,000</u>
2014 - 2015	Co-PI, Building Capacity for Preparing Teacher-Engineers for 21 <sup>st</sup> Century Engineering, National Science Foundation. <u>Funded: \$287,703</u>
2009 - 2010	Principal Investigator for Teachers for a New Era (TNE) exploratory study, <i>Middle School Mathematics Teacher Induction through Comprehensive Professional Development</i> , The Carnegie Foundation. <u>Funded: \$4,000</u>
2008 - 2009	Co-PI, Strategic Learning Opportunities for Promoting Earth Science (Project SLOPES), Teacher Quality Grant, Texas Higher Education Coordinating Board. Funded: \$70,133
2007 - 2008	Co-PI, <i>The Earth Science Academy</i> , Teacher Quality Grant, Texas Higher Education Coordinating Board. <u>Funded:</u> \$86,999
2006 - 2007	Faculty Research Associate, Reaching Out across Disciplines: Learning from Each Other to Produce More Graduates in Computer Science, Texas Engineering and Technical Consortium (TETC). Funded: \$284,882

# **PUBLICATIONS**

# **Books**

Forthcoming

Mathematics: An Investigation to Re-envision the Intended Curricula for Mathematics
Education. To be published by Springer International.

Carrejo, D. Foundations for Teaching Elementary and Middle School Mathematics (2<sup>nd</sup> edition). Available from: Kendall-Hunt Publishing. Dubuque, IA: Kendall-Hunt Publishing.

Carrejo, D., Dennis, D., & Addington, S. (2025). Connecting History to Secondary School

## Refereed Journals

- Under review Carrejo, D., Dennis, D., & Addington, S. Engaging students in advanced mathematical reasoning: An epistemologically oriented analysis of two pre-service elementary teachers' geometric activity. Submitted to *Interchange: A Quarterly Review of Education*.
- Salcedo, O.H., Carrejo, D.J., & Luna, S. (2024). Engineering praxis ethos: Designing experiences to support curricular and instructional improvement in STEM education. *International Journal of Education in Mathematics, Science, and Technology (IJEMST)*, 12(1), 20-39.
- Carrejo, D., & Reinhartz, J. (2014). Facilitating conceptual change through modeling in the middle school science classroom. *Middle School Journal*, 46(2), 10-19.
- Carrejo, D., & Reinhartz, J. (2014). Teachers fostering the co-development of science literacy and language literacy with English Language Learners. *Teacher Development: An International Journal of Teachers' Professional Development*, 18(3), 334-348.
- Carrejo, D., & Reinhartz, J. (2012, Summer). Exploring the synergy between science literacy and language literacy with English Language Learners: Lessons learned within a sustained professional development program. *Journal of the Southeastern Regional Association of Teacher Educators*, 21(3), 33 38.
- Carrejo, D., & Reinhartz, J. (2012, October). Modeling light and shadows. Science and Children, 78 80.
- Carrejo, D., & Reinhartz, J. (2012). Exploring connections between science teacher learning and designing quality professional development. *The Teacher Educators' Journal*, 19, 23 41.
- Carrejo, D., & Robertson, W.H. (2011). Integrating mathematical modeling for undergraduate pre-service science education learning and instruction in middle school classrooms. *US-China Education Review* 8(4), 499 509.
- Carrejo, D., Cortez, T., & Reinhartz, J. (2010). Exploring principal leadership roles within a community of practice to promote science performance of English Language Learners. *Academic Leadership*, 8(4).
- Marshall, J., & Carrejo, D. (2008). Students' mathematical modeling of motion. *Journal of Research in Science Teaching* 45(2), 153-173.
- Carrejo, D., & Marshall, J. (2007). What is mathematical modeling? Exploring prospective teachers' use of experiments to connect mathematics to the study of motion. *Mathematics Education Research Journal* 19(1), 45-76.

Confrey, J., & Carrejo D. (2005). Ratio and fraction: The difference between epistemological complementarity and conflict, v1.0 [Videopaper]. In *Medium and Meaning: Video Papers in Mathematics Education Research, Journal for Research in Mathematics Education Monograph, Vol.* 13. 11.5 min. video (38.6 MB), 21 pages text (65.1 KB), 20 images (556 KB), 13 animations (92.6 KB).

# **Conference Proceedings**

- Salcido, S., Ortiz, M., & Carrejo, D. (2014). Cross-Cultural Teacher Practices in a Mathematical Constructivist Setting. Proceedings of the Scottish Educational Research Association (SERA) Annual Conference.
- Robertson, W.H., and Carrejo, D. (2010). Project STIMMULIS: Science Teachers Integrating Mathematical Modeling for Undergraduate Learning and Instruction in Schools. In C. Crawford et al. (Eds.), *The Proceedings of Society for Information Technology and Teacher Education (SITE) International Conference (pp. 1612-1619)*. San Diego, CA.
- Carrejo, D., & Reinhartz, J. (2010). Exploring connections between learning science and mathematics content and English language acquisition: A literacy framework for English Language Learners. In Duschl, R.A., Zeidler, D.L., Kyle, Jr., W.C., & Sondergard, T.A. (Eds.), *The Proceedings of the Annual International Conference of the National Association for Research in Science Teaching (NARST)* [CD-ROM]. Philadelphia, PA.
- Carrejo, D., & Marshall, J. (2004). Motion and mathematical modeling: A study of emerging themes and their impact on science education. *The Proceedings of the annual meeting of the National Association for Research in Science Teaching (NARST)* [CD-ROM]. Reston, VA: National Association for Research in Science Teaching.
- Confrey, J., & Carrejo, D. (2002). A content analysis of exit level mathematics on the Texas Assessment of Academic Skills: Addressing the issue of instructional decision-making in Texas. In D. S. Mewborn, P. Sztajn, D.Y. White, H.G. Wiegel, R. L. Bryant, and K. Nooney (Eds.), *Proceedings of the twenty-fourth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp.* 539-550). Columbus, OH: ERIC Clearinghouse.
- Confrey J., & Carrejo, D. (2002). Can high-stakes testing in Texas inform instructional decision-making? In D.S. Mewborn, P. Sztajn, D.Y. White, H.G. Wiegel, R. L. Bryant, and K. Nooney (Eds.), *Proceedings of the twenty-fourth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 551-564)*. Columbus, OH: ERIC Clearinghouse.

#### Manuscripts in Preparation

Alarcon-Fernandez, A.R., Carrejo, D., & Ortiz, M. A reexamination of mathematical literacy development in English language learners: Multiple representations and meaning-making. In preparation for the *International Journal of Bilingual Education and Bilingualism*.

- Carrejo, D., Dennis, D., & Addington, S. The epistemology of Gottfried W. Leibniz's transmutation method. In preparation for *History of Science*.
- Carrejo, D. & Ortiz, M. Visualizing trigonometric functions: Examining Cartesian competence through an epistemology of multiple representations. In preparation for the *Mathematics Education Research Journal*.
- Dasgupta, D., & Carrejo, D. Replacing STEM with natural philosophy: Chemistry and mathematics as wisdom practices and other similar things. In preparation for *Foundations of Science*.
- Saldaña, C., Argus-Calvo, B., & Carrejo, D. Unheard voices: Building the El Paso Children's Museum for all. In preparation for the *International Journal of the Inclusive Museum*.

#### **CONFERENCE PRESENTATIONS**

- Under review Luna, S., Carrejo, D., & Salcedo, O. *A Systems Engineering Approach to Elementary School Robotics*. Submitted to the 2025 American Society for Engineering Education (ASEE) Annual Conference & Exposition, Montreal, Canada.
- Carrejo, D., & Williams, M. *STEM T3 Project: Engineering Pathways*. 25<sup>th</sup> annual National Association for Alternative Certification (NAAC) Conference, Chicago, IL.
  - Carrejo, D., Williams, M., & Hernandez, S. *Taking the LEAP: A Multi-dimensional STEM Project.* 8<sup>th</sup> annual Texas STEM Conference of the Texas STEM Coalition, Austin, TX.
- Carrejo, D., & Reinhartz, J. Fostering Science Literacy and Its Role in Developing Language Literacy for English Language Learners: A Study in Teaching for Understanding. Paper proposal submitted to the annual meeting of the American Educational Research Association (AERA), San Francisco, CA.
- Carrejo, D., & Reinhartz, J. (April) *Integrating Science and Mathematics within an Engineering Context to Foster STEM Literacy among Middle School Students*. Paper presented at the annual meeting of the American Educational Research Association (AERA), New Orleans, LA.
- 2010 Carrejo, D. (June). *Developing a Theoretical Framework for Novice Mathematics Teacher Induction: A Case Study of a University-School Partnership.* Paper presented at the Teachers for a New Era (TNE) Education Research Symposium, El Paso, TX.
  - Robertson, W., & Carrejo, D. (March) *Science Teachers Integrating Mathematical Modeling in Undergraduate Learning for Instruction in Schools*. Paper presented at the annual conference of the Society for Information Technology and Teacher Education (SITE), San Diego, CA.

- Carrejo, D., & Reinhartz, J. (March) *Exploring Connections Between Learning Science and Mathematics Content and English Language Acquisition: A Literacy Framework for English Language Learners.* Paper presented at the annual conference of the National Association for Research in Science Teaching (NARST), Philadelphia, PA.
- 2009 Carrejo, D., Cortez, T., & Reinhartz, J. (April). Developing Leadership Roles within a Community of Practice for Promoting Academic Performance of ELL Students. Paper presented at the annual meeting of the American Educational Research Association (AERA), San Diego, CA.
  - Reinhartz, J., & Carrejo, D. (February) *Producing Teachers Who Meet the Needs of English Language Learners in Middle School Science: Integrating Content with Language Development (ICLD)*. Paper presented at the 61<sup>st</sup> annual meeting of the American Association of Colleges for Teacher Education (AACTE), Chicago, IL.
- Soto-Mas, F., Villaverde, G., Carrejo, D., & Balcázar, H. (May). *Health Literacy among College Students*. Poster presented at the Seventh Annual Health Literacy Conference: Health Literacy in Primary Care: Best Practices and Skill Building. Irvine, CA.
  - Carrejo, D., & Reinhartz, J. (February). *An Innovative Professional Development Plan for Implementing Best Teaching Practices in Middle School Science and Mathematics.* Paper presented at the 60<sup>th</sup> annual meeting of the American Association of Colleges for Teacher Education (AACTE), New Orleans, LA.
- 2007 Carrejo, D., & Reinhartz, J. (April). *Promoting Middle School Science and Mathematical Reasoning through Modeling*. Paper presented at the annual meeting of the American Educational Research Association (AERA), Chicago, IL
  - Carrejo, D., & Reinhartz, J. (February). *From Vision to Action: Serving Diverse Learners through a Systemic Approach to Teaching and Learning.* Paper presented at the 59<sup>th</sup> annual meeting of the American Association of Colleges for Teacher Education (AACTE), New York, NY.
- Marshall, J., & Carrejo, D. (October). *Pre-college teachers: Construction of the velocity concept.*American Physical Society (APS), Texas Section. Waco, TX.
  - Carrejo, D., & Marshall, J. (August). *Teachers' mathematical modeling of motion*. Paper presented at the 129<sup>th</sup> national meeting of the American Association of Physics Teachers (AAPT). Sacramento, CA.
- Confrey J., & Carrejo, D. (October). A content analysis of exit level mathematics on the Texas Assessment of Academic Skills: Addressing the issue of instructional decision-making in Texas.

  Paper presented at the 24<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA). Athens, GA

2001 Confrey, J., Bell, K., & Carrejo, D. (April). *Systemic crossfire: What implementation research reveals about urban reform in mathematics.* Paper presented at the annual meeting of the American Educational Research Association (AERA). Seattle, WA.

#### ACADEMIC/TEACHING EXPERIENCE

2005 – present Associate Professor, Mathematics Education, Department of Teacher Education/STEM Education Division, College of Education, UTEP

- o Undergraduate courses:
  - ELED 4310 Teaching Mathematics in Elementary Schools
  - ELED 4311 Teaching Science in Elementary Schools
  - MSED 4310 Teaching Mathematics in the Intermediate and Middle Grades
  - MSED 4311 Teaching Science in the Intermediate and Middle Grades
- o Graduate courses:
  - MTED 5318 Learning Theory in K 12 Mathematics Education
  - MTED 5318 Teaching and Learning with Technology in the Mathematics Classroom
  - MTED 5320 Research-Based Practices in the Mathematics Classroom
  - MTED 5322 Fostering Algebraic Reasoning
  - MTED 5322 Fostering Geometric Thinking
  - MTED 5322 Development of Quantitative Reasoning
  - MTED 5326 Cultural Historical Epistemology and Didactics of Mathematics
- o Doctoral level courses:

1996 - 1998

1994 - 1997

- STEM 6305 Philosophy, History, and Nature of Mathematics and Science
- STEM 6301 Integration of STEM Education Curriculum

2006 – 2007	Faculty for Summer Science Academy, Department of Teacher Education, College of Education, UTEP
2005 - 2006	Instructor, Department of Curriculum & Instruction, University of Texas at Austin
2000 - 2004	Graduate Research & Teaching Assistant, Department of Curriculum & Instruction, UTeach program, University of Texas at Austin
1998 - 1999	Instructor, Department of Mathematical Sciences, UTEP
1997 - 1998	Teaching Assistant, Department of Mathematical Sciences, UTEP

Pre-Calculus/Calculus teacher, Cathedral High School, El Paso, Texas

Mathematics instructor, Academic Development Center, UTEP

#### **STUDENTS MENTORED**

#### Doctoral

Current Chair for **Ana Rosina Alarcon**, PhD, *Teaching, Learning, & Culture* (STEM specialization)

<u>Dissertation:</u> Designing Semiotic Multimodal Practices for Proportional Reasoning in Middle
School Mathematics Instruction to Enhance English Language Learning.

Advisor for Jessica Yildirim, PhD, Teaching, Learning, & Culture (STEM specialization)

Advisor for Raul Villagrana, PhD, Teaching, Learning, & Culture (STEM specialization)

Advisor for **Ericka Diaz**, PhD, *Teaching, Learning, & Culture* (STEM specialization)

- Committee Member for **Michael Lewis**, PhD, *Teaching, Learning, & Culture* (Sociocultural Foundations of Education specialization)

  <u>Dissertation:</u> A Phenomenological Case Study Exploring the In-home Experiences of African Americans Pursuing STEM Degrees at a Historically Black College.
- 2018 Committee Member for **Hector Hernandez**, EdD, Educational Leadership & Foundations

  <u>Dissertation:</u> Examining Paths to Success by Assessing Undergraduate Pre-Service Teachers'

  Performance on Texas Examinations of Educator Standards (TExES) for Teacher Certification
- 2017 Chair for **Mayra Ortiz-Galarza**, PhD, *Teaching, Learning, & Culture* (Math, Science, & Technology specialization)

<u>Dissertation</u>: The Influence of Multiple Representations on Secondary Students' Understanding of Trigonometric Functions

Chair for **Oscar Salcedo**, PhD, *Teaching, Learning, & Culture* (Math, Science, & Technology specialization)

<u>Dissertation</u>: Towards a Unified Theory of Engineering Education Recipient, 2017-2018 UTEP Outstanding Dissertation Award

Chair for **Abdelghani Setra**, PhD, *Teaching, Learning, & Culture* (Math, Science, & Technology specialization)

<u>Dissertation</u>: Investigating Mathematics Self-Efficacy Beliefs of Elementary Pre-Service Teachers in a Reform-Based Mathematics Methods Course

#### Master's

Committee member for **Jazmyne Del Hierro**, M.S. Systems Engineering, College of Engineering Thesis: Systems Thinking as a Method for Leveraging SMART Classrooms

2017 Chair for **Michael Strange**, M.A., Education (Math, Science, & Technology specialization)

<u>Thesis</u>: The Effects of a Discrete Covariational Approach to Functions through Computer

Programming on Students' Understanding of Rate of Change

#### Student Presentations

**Steve Salcido**, doctoral student, Ph.D., Teaching, Learning, & Culture, & Mayra Ortiz, doctoral student, Ph.D., Teaching, Learning, & Culture

Cross-Cultural Teacher Practices in a Mathematical Constructivist Setting. Paper presented at the Scottish Educational Research Association (SERA) Annual Conference (November 21), University of Edinburgh

2007 Leticia Vasquez, graduate student, M.Ed., Education Technology

Improving Student Comprehension through the Use of the 5-E Model and Journal Writing. Poster presented at the College of Education Third Annual Fall Research Symposium (November 19), UTEP

#### **SERVICE**

Current

# Committees/Appointments

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Faculty Fellow, Hopper-Dean Center for Excellence for K-12 Computer Science Education, College of Education, UTEP

Chair, Annual Review Feedback Committee, College of Education, UTEP

Member, Advisory Board for Engineering and Architecture program, El Paso Community College

Member, STEM Division Annual Faculty Evaluation Committee, Department of Teacher Education, College of Education, UTEP

Co-Founder/Inaugural Editorial Council Member, *Bridging Educational Research and Practice: An Interdisciplinary Journal*, College of Education, UTEP

Member, Graduate Programs Committee, Department of Teacher Education, College of Education, UTEP

Member, Undergraduate Curriculum Committee, Department of Teacher Education, College of Education, UTEP

Member, Committee to design proposal for Ed.D. in Learning, Development, and Transformative Education, Department of Teacher Education, College of Education, UTEP

Member, Task Force, Synchronization of Research Methodology Courses, Ph.D. in Teaching, Learning, and Culture, Department of Teacher Education, College of Education, UTEP

Member, Task Force to design M.A. Artificial Intelligence in Education, Department of Teacher Education, College of Education, UTEP

Member, Committee for PhD in Teaching, Learning, & Culture, College of Education, UTEP

Member, PhD in Teaching, Learning, & Culture Community of Practice, College of Education, UTEP

Member, Teacher Preparation Community of Practice, College of Education, UTEP

Reviewer, University of Texas Regents' Outstanding Teaching Award applications, Center for Faculty Leadership and Development, UTEP

2023 – 2024 UTEP Edge Curriculum Fellow, Office of the Provost and Academic Affairs, UTEP

2020 – 2024 Co-Founder/Member, Paso del Norte Partnership for Education Research, College of Education, UTEP

2019 – 2021 Member, Promotion and Tenure Committee, Department of Teacher Education, College of Education, UTEP

Member, Review Task Force for Outstanding Dissertation Award Nominations, College of Education, UTEP

Member, Post-Tenure Review Committee, Department of Teacher Education, College of Education, UTEP

Member, School Partnership and Field Experiences Focus Team, College of Education, UTEP

2018 – 2019 Member, University Honors Program Vision Committee, Office of the Provost, UTEP

2017 - 2018	Member, UT System Educator Preparation Policy Advisory Committee, Office of Academic Affairs, University of Texas System
2016 - 2018	Member, Teacher Preparation Advisory Committee, College of Education, UTEP
	Convener and Member, Educator Preparation Program Committee, College of Education, UTEP
2018	Member, Hiring Committee, Chief of Education (COE) for Leadership and Workforce Development Program, Fort Bliss, El Paso, TX
2009 - 2017	Member, Institutional Review Board (IRB), UTEP
2016	Member, Community Engagement Council (CEC), UTEP
	Member, Top Ten Seniors Award Committee, UTEP
2015	Co-Chair, Mathematical Association of America - Southwestern Section Conference
2013 - 2016	Member, Graduate Council, UTEP
2013	Reviewer, College Office of Undergraduate Research Initiatives (COURI) Awards Competition, UTEP
	Member, Outstanding Thesis and Dissertation Committee, Graduate School, UTEP
	Member, Search Committee, Associate Dean of the Graduate School, UTEP
2012 - 2013	Strategic Plan Implementation Committee, College of Education, UTEP
2011 - 2012	Chair, Search Committee, Tenure-Track Position in Education Technology, Department of Teacher Education, UTEP
	Member, TExES Certification Advisory Committee, College of Education, UTEP
2011	Panel Reviewer, Research and Evaluation on Education in Science and Engineering (REESE) Program, National Science Foundation (NSF)
2010	Chair, Search Committee, Tenure-Track Position in Curriculum/Science/Technology, Department of Teacher Education, UTEP
2009 - 2010	Member, Search Committee, Tenure-Track Position in Special Education, Department of Educational Psychology, UTEP

Member, Undergraduate Studies Committee, College of Education, UTEP 2009 2007 - 2010 Member, Professional Development School Planning and Clinical Practice Committee, College of Education, UTEP 2006 - 2008 Member, Search Committee, Tenure-Track Positions for both Mathematics Education and Science Education programs, Department of Teacher Education, UTEP Member, Certification Testing (TExES) Strategic Planning Committee, College of Education, UTEP Member, Professional Development School Planning Committee, College of Education, UTEP Member, Search Committee, Tenure-Track Position for Health Literacy program, 2006 College of Education, UTEP Member, Student Advisory Council, College of Education, UTEP 2005 Professional Development (Teacher Preparation) Facilitator/Designer of virtual review sessions in TEXES mathematics content area for pre-2021 - present service EC-6 teachers, Department of Teacher Education/STEM Division, College of Education, UTEP Co-Facilitator of professional development for pre-service STEM teachers, sponsored 2014 by the Science, Engineering, Mathematics, and Aerospace Academy (SEMAA), College of Engineering, UTEP Facilitator of sustained professional development in mathematics for in-service 2012 mathematics teachers, grades 9 – 12, Cathedral High School, Catholic Diocese of El Paso Facilitator/Instructor for monthly review sessions in TExES mathematics content area 2006 - 2012 for pre-service 4-8 teachers, all specializations, including the Alternative Teacher Certification Program (ATCP) and Master Mathematics Teacher (MMT) Certification, Department of Teacher Education, College of Education, UTEP

Facilitator/Instructor for monthly professional development sessions in mathematics and science for in-service math and science teachers, grades 4 and 5, Capistrano Elementary School, Ysleta Independent School District

Facilitator/Instructor for professional development sessions in quantitative reasoning

for in-service mathematics teachers, grades K - 5, Ysleta Independent School District

2011

2007 - 2010

Facilitator/Instructor for monthly professional development sessions in mathematics and science for in-service math and science teachers, grades 6 – 8, José Alderete Middle School, Canutillo Independent School District

# **Consulting**

Current Rev

Reviewer, International Journal of Education in Mathematics, Science, and Technology

Reviewer, Education Sciences

Reviewer, Teaching Statistics

Reviewer, Mathematics Education Research Journal

Reviewer, Investigations in Mathematics Learning

Reviewer, CRC Press, Taylor & Francis

Reviewer, Mathematical Thinking and Learning

Reviewer, Journal for Research in Mathematics Education

Reviewer, The Teacher Educator

Reviewer, Journal of STEM Education: Innovations and Research

Reviewer, Journal of Mathematics Teacher Education

Reviewer, Middle School Journal

Reviewer, Statistics Education Research Journal

2013 External Reviewer, Southern Association of Colleges and Schools (SACS) Accreditation for

Cathedral High School, El Paso, Texas

2012 Reviewer, Higher Education of Social Science

2009 Reviewer, Teaching Student-Centered Mathematics, Grades 5 - 8, (2<sup>nd</sup> edition) by John

Van de Walle and LouAnn Lovin. Allyn & Bacon Publishing.

2008 - 2011 Faculty Member, U.S. Department of Education sponsored grant, *Project LEAP UP* 

(Learning, Encouraging, and Planning to Uplift Performance), College of Education,

University of Texas at El Paso

Faculty consultant for math module development, MTC (Math-TEKS Connection)

Project, Texas A&M University, College Station, TX

Contractor for Preparatory Teacher Education Study (PTEDS), Center for Research in Mathematics and Science Education, Michigan State University, East Lansing, MI
 Co-Consultant, Teachers for a New Era (TNE) Mathematics Working Group, University of Texas at El Paso
 Co-Consultant, Mathematics Professional Development Program, the Bob Bullock Texas State History Museum, Austin, TX
 Member, Assessment Expert Panel, TexTeams/SimCalc Project
 Consultant, Girlstart, Austin, Texas

## Mentoring

- Faculty mentor for promotion and tenure, Dr. Song An, PhD, Teacher Education Department, Division of STEM Education, College of Education, UTEP
- Faculty mentor for <u>University of Texas Regents Outstanding Teaching Award Recipient.</u> Dr. Song An, PhD, Teacher Education Department, Division of STEM Education, College of Education, UTEP
- Faculty mentor for <u>University of Texas Regents Outstanding Teaching Award Recipient</u>, Dr. Joyce Asing-Cashman, PhD, Teacher Education Department, Division of STEM Education, College of Education, UTEP

#### PROFESSIONAL DEVELOPMENT ACTIVITIES

- Participant, Teach Tech, sponsored by the UTEP Institute for Scholarship, Pedagogy, Innovation, and Research Excellence (InSPIRE).
- Participant, Teaching with Artificial Intelligence Academy, sponsored by UTEP Center for Instructional Design.
- 2023 Participant, Blackboard Ultra Workshop, sponsored by UTEP Technology Support Services.
- 2022 Participant, Teaching Online Academy, sponsored by the UTEP Center for Instructional Design.
- 2020-21 Participant, Blackboard Institute, Transforming Your Teaching with Blackboard Learn, sponsored by UTEP Technology Support Services.

- Participant, Writing NIH and NSF Proposals: Beyond the Basics Workshop, sponsored by the Office of the Provost, UTEP
  - Participant, Digital Academy, sponsored by Instructional Support Services, UTEP
- 2010 Participant, SmartBoard training, College of Science, UTEP
  - Participant, Digital Measures Learning Fiesta, College of Education, UTEP
- 2008 Participant, K-16 Education Research Conference, UTEP
- 2006 Participant, Digital Academy, sponsored by Instructional Support Services, UTEP

#### **COMMUNITY ACTIVITIES & SERVICE**

- 2019 Consultant, El Paso Children's Museum, El Paso, Texas
- 2018 Historian, Board of Directors, Cathedral High School Alumni Association, El Paso, Texas
- 2017 Organizing Committee member, 8<sup>th</sup> Wall of Giants: Commemorating Saint Patrick Cathedral and Cathedral High School, El Paso Museum of History

#### **AWARDS & HONORS**

- Association of College and University Educators (ACUE) Course in Effective Teaching Practices, sponsored by the Center for Faculty Leadership Development & Office of the Provost, UTEP <a href="mailto:amount: \$1333.00">Amount: \$1333.00</a> This micro-credential signifies my completion of an ACUE course requiring the implementation of evidence-based instructional approaches. The American Council on Education co-issues the credential and distinguishes faculty for their commitment to educational excellence and student success.
- 2019 Inaugural Member, University of Texas at El Paso Academy of Distinguished Teachers Outstanding Dissertation Mentor Award, Graduate School, UTEP
- 2018 Service Award, College of Education, UTEP
  - SEED Volunteer Award, Roman Catholic Diocese of El Paso, Texas
  - Challenge Coin, United States Army Sergeants Major Academy, Fort Bliss, El Paso, Texas
- 2015 City of El Paso Star on the Mountain Award, El Paso City Council, El Paso, Texas

Certificate of Recognition, Senate, State of Texas

University of Texas Regents Outstanding Teaching Award

2005 Publication Award, National Council of Teachers of Mathematics

Jewel Popham Raschke Endowed Presidential Scholarship in Mathematics Education, University of Texas at Austin