

William Haviland Robertson, Ph. D. – Curriculum Vitae

College of Health Sciences:

Dean's Office, Room 368-Q
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College of Education:

Teacher Education, Room 807
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Highlights

- Dean of the College of Health Sciences at the University of Texas at El Paso (UTEP) and Leavell Endowed Chair in Health Sciences
- National Museum of American History – 2020 Smithsonian Distinguished Research Scholar
- Interim Dean of the College of Education (2017-18) at the University of Texas at El Paso (UTEP) and Tenured Professor in Teacher Education
- Ten years of experience in Higher Education Administration including positions in Provost's Office, Dean's Office and as Department Chair at UTEP
- 25 years of experience in science and education in both public, private and government sectors, 10 years at Los Alamos National Laboratory (LANL)
- 2018-2020 Provost's Faculty Fellow at UTEP
- 2019 Inductee – Academy of Distinguished Teachers (ADT) at UTEP
- 2019 TEDxUTEP Talk on The Intersection of STEM Education and Skateboarding
- 2016 President's Meritorious Service Award at UTEP
- 2014 Higher Education Management Institute – Peabody College, Vanderbilt University
- 2013 TEDxEIPaso Talk on Dr. Skateboard's Action Science
- 2012 Participant – Leadership El Paso, Class 34
- 2010-2011 Participant – UTEP Leadership Development Institute
- 2009 Recipient – University of Texas Regents' Outstanding Teaching Award
- 2009 Recipient – UTEP College of Education (COE) Excellence in Scholarship Award
- 2008 Recipient – Fulbright U.S. Scholar Program – Santiago, Chile

Education

Ph. D. in Multicultural Teacher and Childhood Education

- 2000, University of New Mexico, Albuquerque, NM
- Emphasis in Science and Technology Curriculum and Instruction
- Doctoral Dissertation: The Critical Thinking Curriculum Model

M.A. in Education

- 1992, University of Colorado, Boulder, CO
- Emphasis in Science Education

B.A. in Spanish

- 2009, The University of Texas at El Paso, El Paso, TX
- Emphasis in an academic ability to read, write and speak in Spanish

B.S. in Zoology

- 1987, Northern Arizona University, Flagstaff, AZ
- Emphasis in Animal Physiology and Genetics

B.A. in History

- 1985, Duke University, Durham, NC
- Cum Laude graduate with academic honors

Relevant Skills and Experience

Leadership Skills

- Experienced leader in higher education with over 10 years at senior management and leadership levels
- Managed as Interim Dean in 2 Colleges at UTEP with a combined annual budget of 15.5 million dollars
- Collaborated with all levels of personnel in K-12, health care, higher education and governmental settings
- Evaluated programs, managed budgets and facilitated design, development and implementation processes

Instructional Skills

- Utilized creative pedagogical approaches as an award-winning, bilingual, STEM educator
- Taught undergraduate, graduate and doctoral courses in teacher education as professor at UTEP
- Fostered partnerships with governmental agencies, educational institutions, clinical settings and industry
- Designed, implemented, executed, and evaluated education programs for students and teachers

Communication Skills

- Acted as a university and national laboratory spokesperson in public forums, news outlets and print media
- Presented to over 150 international, national and state conferences, seminars and workshops
- Demonstrated skills in program and project reports, grant proposals and published writings
- Conducted multiple group facilitation and negotiation sessions with all levels of organizational structures

Technology Skills

- Managed university center where all hybrid, blended and online distance learning environments were designed, developed and implemented across campus
- Designed, developed and implemented hybrid, blended and online learning environments, including mobile learning, learning management systems (LMS) integration and innovations in academic technologies
- Highly experienced computer technology abilities including instruction integration of technology on Windows, Macintosh and UNIX platforms

Work Experience

Administrative Positions

- 2022 – Present University of Texas at El Paso (UTEP), Dean, College of Health Sciences, El Paso, TX
- Managed a \$9.5 M budget for the College as it applied to approximately 70 faculty, 35 staff, an advising center, and the Dean’s Office
 - Developed and maintained a comprehensive project list that was manifested in the Dean’s Leadership Team, Dean’s Office Staff and Departments
 - Provided overall leadership and accountability for the faculty, staff and students within the College
 - Oversaw the tenure and promotion process for faculty, hiring of faculty and staff, as well as annual reviews for faculty and staff across the College

- 2021 – 2022 University of Texas at El Paso (UTEP), Acting and Interim Dean, College of Health Sciences, El Paso, TX
- Managed a \$9.5 M budget for the College as it applied to approximately 70 faculty, 35 staff, an advising center, and the Dean’s Office
 - Developed and maintained a comprehensive project list that was manifested in the Dean’s Leadership Team, Dean’s Office Staff and Departments
 - Provided overall leadership and accountability for the faculty, staff and students within the College
 - Oversaw the tenure and promotion process for faculty, hiring of faculty and staff, as well as annual reviews for faculty and staff across the College
- 2017 – 2018 University of Texas at El Paso (UTEP), Interim Dean, College of Education, El Paso, TX
- Managed a \$5.5 M budget for the College as it applied to approximately 60 faculty, 35 staff in 3 departments, an advising center, and the Dean’s Office
 - Developed and maintained a comprehensive project list that was manifested in the Dean’s Leadership Team, Dean’s Office Staff and Departments
 - Provided overall leadership and accountability for the faculty, staff and students within the College
 - Led activities in strategic planning, program development, grant acquisition, teaching improvements and facilities maintenance
 - Oversaw the tenure and promotion process for faculty, as well as annual reviews for faculty and staff across the College
- 2015 – 2017 University of Texas at El Paso (UTEP), co-Chair of the Teacher Education Department and Director of STEM Education Division, El Paso, TX
- Managed activities and programs in science, technology, engineering and mathematics (STEM) education in the College of Education
 - Direct reports of fifteen faculty and 2 staff members within department structure with budget responsibilities
 - Developed programs that focused on faculty and staff awards, leadership development and skill enhancement in technology, teaching and learning
 - Experienced with accreditation issues, tenure and promotion, process remediation, group facilitation and conflict resolution
- 2012 – 2015 University of Texas at El Paso (UTEP), Associate Provost in the Provost’s Office, El Paso, TX
- Supervised 30 employees in Academic Technologies (AT) in the areas of distance learning, new media, technology development and integration for faculty and students, with an annual operating budget of \$2.4M
 - Managed university programs and initiatives related to curriculum implementation and innovation to include distance learning and new technology across UTEP
 - Managed the global programs opportunities within the Provost’s Office including the Fulbright Scholars Program and International Memorandums of Understanding
 - Developed programs that focused on faculty and staff awards, leadership development and skill enhancement in technology, teaching and learning
 - Experienced with accreditation issues, tenure and promotion, process remediation, group facilitation and conflict resolution

- 2010 – 2011 University of Texas at El Paso (UTEP), Associate Dean - College of Education, El Paso, TX
- Managed the implementation of technology across the College of Education including Web Sites, Online Class Development Platforms, and Institutional Databases for Faculty information
 - Experienced in internal and external communications and the management and implementation of grant funding and operating budgets
 - Developed training and educational support mechanisms for faculty development in technology integration, educational pedagogy and curriculum development
 - Managed the Graduate Programs Office within the College of Education
 - Designed, developed, and implemented classes in technology integration, science education and curriculum development for undergraduate and graduate students
 - Conducted research in areas including Action Science and Problem-Based Learning

Academic Positions

- 2016 – Present University of Texas at El Paso (UTEP), Professor, El Paso, TX
- Designed, developed, and implemented classes in technology integration, science education and curriculum development for undergraduate and graduate students
 - Conducted research in areas including quantitative assessment of critical thinking and problem solving
 - Received a National Science Foundation LSAMP grant which was funded for over \$4.0 M for five years from 2018-2023
 - Highly experienced computer technology abilities in areas including Web (HTML) programming, telecommunications, databases, and presentations
 - Provided service to area communities and school districts
- 2010 – 2016 University of Texas at El Paso (UTEP), Associate Professor, El Paso, TX
- Designed, developed, and implemented classes in technology integration, science education and curriculum development for undergraduate and graduate students
 - Conducted research in areas including quantitative assessment of critical thinking and problem solving
 - Received a National Science Foundation GK-12 grant which was funded for over \$2.8 M for six years from 2010 - 2016
 - Highly experienced computer technology abilities in areas including Web (HTML) programming, telecommunications, databases, and presentations
 - Provided service to area communities and school districts
 - Developed *Dr. Skateboard's Action Science*, a physical science video and activity curriculum supplement utilized in over 100 middle schools in El Paso area
- 2004 – 2010 University of Texas at El Paso (UTEP), Assistant Professor, El Paso, TX
- Designed, developed, and implemented classes in technology integration, science education and curriculum development for undergraduate and graduate students
 - Conducted research in areas including quantitative assessment of critical thinking and problem solving
 - Highly experienced computer technology abilities in areas including Web (HTML) programming, telecommunications, databases, and presentations
 - Provided service to area communities and school districts

Additional Work Experience

- 1994 – 2004 Los Alamos National Laboratory (LANL), Team Leader, Science and Technology Educator, Los Alamos, NM
- Designed, developed, administered and implemented multiple concurrent computer and technology education projects and curricula
 - Instructed and facilitated computer education and training in Web-based technologies including Web design and development
 - Managed and supervised collaborative research grants between New Mexico Universities, University of California campuses and LANL, annual budget of \$5M
 - Managed personnel and special projects in the areas of Web development, marketing, community outreach and student activities
- 1992 - 1994 Science Educator in Public Schools
- Pojoaque Valley Schools, Middle School Science Teacher, Pojoaque, NM
 - University of Colorado, Chemistry Instructor, Boulder, CO
 - Adams-12 Public Schools, High School Science Teacher, Denver, CO
- 1986 - Present Motivational Educational Program Instructor
- Developed curriculum and classroom activities for middle school physical science
 - Provided Educational entertainment for elementary through college level students
 - Delivered over 350 performances in settings from classrooms to arena audiences

Leadership Training

- Academy for Innovation in Higher Education Leadership – Arizona State University/Georgetown University – Cohort 8 – October 2021-June 2022.
- New Department Chair Orientation – UT System, Austin, TX – August 2015
- Higher Education Management Institute – Peabody College, Vanderbilt University – June 2014
- Leadership El Paso, Class 34 – 2012 Calendar Year Participant
- UTEP Leadership Development Institute – 2010-2011 Academic Year Participant
- Pearson Leadership Summit, Dallas, TX – October 2012
- National Network for Educational Renewal (NNER) Summer Institute, Seattle, WA – July 2010
- Apple Education Leadership Summit 2010, Dallas, TX – April 2010
- National Science Foundation (NSF) UTEP IMPACT Fellow – 2008-2009
- Financial and Accounting for Non-Financial Managers Seminar, Santa Fe, NM – November, 1999
- Exploring Management Workshop, LANL – November, 1999

Honors and Awards

- 2021-2022 Charles H. and Shirley T. Leavell Endowed Chair in Health Sciences
- 2020-2022 Smithsonian Institute Distinguished Research Scholar
- 2019 Minnie Stevens Piper Award – UTEP Nominee
- 2019 Center for Faculty Leadership and Development – Outstanding Teaching Practitioner
- 2019 Inductee – Academy for Distinguished Teachers (ADT) at UTEP
- 2018-2010 Provost's Faculty Fellow
- 2019 TEDxUTEP Talk on The Intersection of STEM Education and Skateboarding
- 2016 President's Meritorious Award for Service - UTEP
- 2015 New Media Consortium Center of Excellence Award for Academic Technologies at UTEP
- 2014 Commissioned Kentucky Colonel – Commonwealth of Kentucky
- 2014 Feature on *Edutopia* for Action Science and the Master's of Physics Documentary

- 2013 TEDxEIPaso Talk on Dr. Skateboard's Action Science
- 2011 Nominee – Texas Higher Education Coordinating Board Star Award for UG Teaching
- 2010 Recipient - UTEP College of Education (COE) Excellence in Service Award
- 2010 Nominee – U.S. Professor of the Year Teaching Award
- 2009 Recipient - University of Texas (UT) Regents' Outstanding Teaching Award
- 2009 Recipient - UTEP College of Education (COE) Excellence in Scholarship Award
- 2009-2012 Center for Effective Teaching and Learning (CETaL) UTEP Fellow
- 2009 Outstanding Graduating Faculty Spanish Major, Dept. of Languages & Linguistics, UTEP
- 2008 Recipient - Fulbright US Scholar Program – Santiago, Chile
- 2007 Recipient - UTEP College of Education (COE) Excellence in Teaching Award
- 2006 Phi Kappa Phi – Honor Society, Invited Member
- 2006 Recipient - Teachers for a New Era (TNE) Outstanding Performer at UTEP
- 2001 Eisenhower National Clearinghouse Featured Web Site
- 1999 Recipient - DOE Award - Top Developer of Online Science Education
- 1998 Recipient - NSF Uniguide Education Web Site Award Winner

Research and Scholarship

Peer Reviewed National and International Journals

- Robertson, W.H., (2021). A course redesign project: Adaptive courseware in biology, *International Journal for Innovation Education and Research*, Volume 9, Number 10, pp. 333-341.
- Robertson, W.H. (2021). The constructivist flipped classroom. *Journal of College Science Teaching*, (Accepted for publication, August 2021).
- Acevedo, R., Robertson, W.H., Olivarez, A., Brunk-Chavez, B. (2021). Student self-regulation learning strategies in online courses at a minority serving institution. *Latino Research in Education*, (Under Review).
- Robertson, W.H. (2021). Personal and professional health when teaching online: A six faceted approach, *The Scholarly Teacher*, February 11, 2021. Retrieved from <https://www.scholarlyteacher.com/post/personal-and-professional-health-when-teaching-online-a-six-faceted-approach>.
- Robertson, W.H., (2020). To teach or not to teach online: Pedagogical considerations about distance learning, *Research Journal of Education*, Volume 6, Number 8, pp. 97-108.
- Robertson, W.H. (2019). Dr. Skateboard's Action Science and the Masters of Physics. *Journal of Computers in Mathematics and Science Teaching*, 38(4), 375-383. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE).
- Robertson, W.H., (2019). The oasis skateboard factory: Return to the one-room schoolhouse, *International Journal for Innovation Education and Research*, Volume 7, Number 3, pp. 162-171.
- Robertson, W.H., (2019). The master of physics: Critical thinking through skateboarding, *Advances in Social Sciences Research Journal*, Volume 6, Number 3, pp. 323-328.
- An, S. A., Kim, S. J., Tillman, D., Robertson, W., Juarez, M. & Guo, C. (2017). It Doesn't Feel Like a Job to Learn: Hispanic preservice teachers' perceptions of dance-themed mathematics education. *Journal of Dance Education*, Volume 17, Number 4, pp. 138-146.
- Robertson, W.H., (2017). The physics of skateboarding: Making science relevant, engaging and motivational, *American Physical Society News*, Volume 26, Number 1.
- Robertson, W.H., (2016). Mathematics uncovered through action science, *Journal of Mathematics Education*, Volume 9, Number 2, pp. 90-96.
- An, S. A., Tillman, D., Robertson, W., Zhang, M., Siemssen, A., & Paez, C. (2016). Astronauts in outer space teaching students science: Comparing Chinese and American implementations of space-

- to-earth virtual classrooms. *European Journal of Science and Mathematics Education*, 4(3), 397-412.
- Robertson, W.H., (2015). The Skatepark mathematics extravaganza, *The US-China education review A&B*, Volume 5, Number 5, pp. 314-319.
 - Robertson, W.H. & Barbosa, A.C. (2015). Global climate change and the need for relevant curriculum, *International journal of learning, teaching and educational research*, Volume 10, Number 1, pp. 35-44.
 - An, S. A., Tillman, Zhang, M., D., Robertson, W., & Tinajero, J. (2015). Hispanic pre-service teachers' peer evaluations of interdisciplinary curriculum development: A self-referenced comparison between monolingual generalists and bilingual generalists, *Journal of hispanic higher education*, Volume 15, Number 4, pp. 291-309.
<http://jhh.sagepub.com/content/early/2015/11/05/1538192715612912.full.pdf+html>.
 - Robertson, W.H., Munter, Judith, McKinley, Lyn (2014). Redefining pedagogy: Dialogues on transformative immersion, praxis and reflection, *International journal of education and research*, Volume 2, Number 1, pp. 13-24.
 - Robertson, W.H. (2014). Learning the Physics of Skateboarding, *Connecticut journal of science education*, Volume 51 Number 2, pp. 27-29.
 - Robertson, W.H. & Lesser, Larry (2013). Scientific skateboarding and mathematical music: Edutainment that actively engages middle school students, *European journal of science and mathematics education*, Volume 1, Number 2, pp. 60-68.
 - Garcia, C.V., Robertson, W.H., Lougheed, V.L., Tweedie, C.E., Velasco, A. (2013). Journey to the end of the earth: Analyzing the outcomes of a field-based research program in Antarctica, *The journal of college science teaching*, Volume 42, Number 4, pp. 82-90.
 - Robertson, W.H., Meyer, R. & Wilkerson, T. (2012). The mathematics of skateboarding: A relevant application of the 5Es of constructivism, *The journal of education and learning*, Volume 2, Number 1, December.
 - Carrejo, D. & Robertson, W.H., (2011). Integrating mathematical modeling for undergraduate pre-service science education learning and instruction in the middle school classroom, *The US-China education review*, Volume 8, Number 4.
 - Lougheed, V.L., Herrera J., Robertson, W.H., Tweedie, C.E. (2010). Out of the frying pan and into the freezer: Students from the desert travel to Antarctica! *Polar science and global climate: An international resource for education and outreach*. Kaiser, B. (editor). Pearson Education Limited. Great Britain.
 - Garcia, C.V., Giangiulio, A., Lougheed, V.L. Robertson, W.H., Tweedie, C.E. (2010). Polar feasts! *Polar science and global climate: An international resource for education and outreach*. Kaiser, B. (editor). Pearson Education Limited. Great Britain.
 - Robertson, W.H. (2009). Dr. Skateboard's action science: Transforming science education for middle school students, *The south eastern teacher education journal*, Volume 2, Number 1, Winter, pp. 23-29.
 - Robertson, W.H., Garcia, C.V., Lougheed, V.L., Tweedie, C.E., Velasco, A. (2009). Bridging the gap between real world polar science and the classroom, *The journal of college science teaching*, Volume 39, Issue 2, pp. 33-37.
 - Robertson, W.H. (2009). Dr. Skateboard's action science: Teaching physics in context, *The science education review*, Volume 8, Number 1, pp. 30-34.
 - Robertson, W.H. (2009). Skateboard: Ciencia de acción de Doctor Skateboard: Educacion transformativa en física (in Spanish), *Perspectivas educacionales*. Number 9, pages 343-350.
 - Robertson, W.H., Garcia, C.V., Lougheed, V.L., Tweedie, C.E., Velasco, A. (2009). Construyendo un puente entre ciencia polar en el mundo real y el aula (in Spanish), *Revista chilena de educación científica*, Volume 8, Number 1.

- Robertson, W.H. (2008). The greatest constructivist ever: The pedagogy of Jesus Christ in the Gospel of Matthew in the context of the 5Es, *Christian perspectives in education*, Liberty University Press, Volume 1, Number 2, Spring, Article 5, pp. 1-17.
- Robertson, W.H. (2007). El uso de preguntas y descubrimiento en el contexto de química (in Spanish), *Revista chilena de educación científica*, Volume 6, Number 1, pp. 9-12.
- Robertson, W.H., Munter, J., and Garcia, C.V. (2006). Science education on the U.S./Mexico border: Field-based studies for future teachers in bilingual/binational schools, *Journal of praxis in multicultural education*, Volume 1, Number 1, pp. 45 - 63.
- Giza, B. H., Hampton, E. & Robertson, W.H., (2006). Implementing the Texas master science teacher program, *The Texas science teacher*, Fall.
- Robertson, W.H. (2006). A practical approach to building web sites in the classroom, *National social science perspectives journal*, Volume 32, Number 1, pp. 181-188.

Books, Book Chapters, Graphic Novels and Video Curriculum

- Robertson, W.H. (2020). *Ciencia de acción de Dr. Skateboard – Leyes de Movimiento de Newton* graphic novel, Creative Studios Comics, El Paso, TX. – ISBN # 978-164871857-1
- Robertson, W.H. (2020). *Dr. Skateboard’s Action Science – Newton’s Laws* graphic novel, Creative Studios Comics, El Paso, TX. – ISBN # 978-164871878-6
- Robertson, W.H. (2020). *Ciencia de acción de Dr. Skateboard – Movimiento* graphic novel, Creative Studios Comics, El Paso, TX. – ISBN # 978-164826553-2
- Robertson, W.H. (2020). *Dr. Skateboard’s Action Science – Motion* graphic novel, Creative Studios Comics, El Paso, TX. – ISBN # 978-164826609-6
- Robertson, W.H. (2019). *Ciencia de acción de Dr. Skateboard –Fuerzas* graphic novel, Creative Studios Comics, El Paso, TX. – ISBN # 978-164786987-8
- Robertson, W.H. (2019). *Dr. Skateboard’s Action Science – Forces* graphic novel, Creative Studios Comics, El Paso, TX. – ISBN # 978-164713300-9
- Robertson, W.H. (2019). *Ciencia de acción de Dr. Skateboard – Máquinas Simples* graphic novel, Creative Studios Comics, El Paso, TX. – ISBN # 978-164713064-0
- Robertson, W.H. (2019). *Dr. Skateboard’s Action Science – Simple Machines* graphic novel, Creative Studios Comics, El Paso, TX. – ISBN # 978-164633978-5
- Tillman, D. A., An, S. A., & Robertson, W. H. (2019). The relationship between formal and informal learning. In J. C. de Mora & K. J. Kennedy (Eds.), *Informal Learning in Schools*. New York, NY: Routledge.
- Robertson, W.H. (2015). *Transformed by Fulbright: A Scholar’s personal journey in South America*, Amazon E-books, Cupertino, CA. – ISBN # 978-1-62890-555-7 (e-book)
- Robertson, W.H. (2014). *Action science: Relevant teaching and active learning*, Corwin Publishers, Thousand Oaks, CA. - ISBN #978-1452256566 (paperback)
- Robertson, W.H. (2011). *Ciencia de Acción del Dr. Skateboard para Maestros*, UTEP Pay Dirt Press, El Paso, Texas.
- Robertson, W.H. (2011). *Ciencia de Acción del Dr. Skateboard para Estudiantes*, UTEP Pay Dirt Press, El Paso, Texas.
- Robertson, W.H. (2010). *Dr. Skateboard’s Action Science Teacher Manual*, UTEP Pay Dirt Press, El Paso, Texas.
- Robertson, W.H. (2010). *Dr. Skateboard’s Action Science Student Workbook*, UTEP Pay Dirt Press, El Paso, Texas.
- Robertson, W.H. (2008). *Developing problem-based curriculum: Unlocking student success utilizing critical thinking and inquiry*, Kendall Hunt Publishers, Des Moines, Iowa. - ISBN #978-0757553462 (paperback)
- Robertson, W.H. (2008). *Dr. Skateboard’s Action Science*, Disc 2 Day Publishers, Tempe, Arizona.

Peer Reviewed Conference Proceedings & Professional Writings

- Robertson, W. (2021). Using Video, Graphic Novels, Video Games and Active Learning to Impact Pre-Service Teachers. In E. Langran & L. Archambault (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 1478-1482). Association for the Advancement of Computing in Education (AACE). Retrieved from <https://www.learntechlib.org/primary/p/219389/>.
- Robertson, W.H. (2020). *Adaptive Courseware Redesign in High Enrollment Introductory Biology Courses: A Case Study*, 2020 Innovate Learning Summit, Online Conference, November, 2020.
- Gorbett, D. M., Shenberger-Trujillo, J. M., Quintana-Baker, M., Rodriguez, S. E., Arciero, A. V., Knaust, H., Robertson, W. H., Villalobos, C. C., & Flores, B. C. (2020). *UT System LSAMP: Perceptions of Mentorship and Support During COVID-19* [Paper presentation]. 13th Annual Mentoring Conference: High-Quality Connections, Albuquerque, New Mexico.
- Gorbett, D. M., Shenberger-Trujillo, J. M., Quintana-Baker, M., Rodriguez, S. E., Arciero, A. V., Knaust, H., Robertson, W. H., Villalobos, C. C., & Flores, B. C. (2020). *UT System LSAMP: (2019) Undergraduate Student Perceptions of Mentorship and Research Experiences* [Paper presentation]. 13th Annual Mentoring Conference: High-Quality Connections, Albuquerque, New Mexico.
- Robertson, W.H. (2019). Dr. Skateboard's Action Science and the Masters of Physics. In K. Graziano (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 112-119). Chesapeake, VA, United States: Association for the Advancement of Computing in Education (AACE). Retrieved from <https://www.learntechlib.org/primary/p/208486/>
- Tillman, D.A., Robertson, W.H. & An, S.A. (2019). An Asset-Based Approach to Integrating Formal and Informal Education During Teacher Preparation. In K. Graziano (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 1427-1431). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved from <https://www.learntechlib.org/primary/p/207833/>.
- Tillman, D.A., Tinajero, J.V., Brown, C.H., Robertson, W.H. & An, S.A. (2019). Fostering School Security During Teacher Preparation. In K. Graziano (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 695-699). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved from <https://www.learntechlib.org/primary/p/207717/>.
- Teller, R.C., Tillman, D.A., Robertson, W.H., Tinajero, J.V. & An, S.A. (2019). Preparing Bilingual Teachers to Integrate the Engineering Design Process into Upper-Elementary and Middle School Classrooms. In K. Graziano (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 1646-1652). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved from <https://www.learntechlib.org/primary/p/207864/>.
- Robertson, W.H. (2018). On the Intersection of media and STEM Education, *Proceedings of 12th Annual International Conference of Education, Research and Innovation (ICERI), ICERI, fall 2018*.
- Robertson, W.H. (2018). Edutainment: Weaving Your Passion into the Process of STEM Education, *Proceedings of 2018 Arts, Humanities, Social Science and Education Conference, 2018 Hawaii University International Conferences (HUIC)*.
- Robertson, W.H. (2015). The Skatepark Mathematics Extravaganza, *Corwin Connect*, text and video available online at <http://corwin-connect.com/2015/01/skatepark-mathematics-extravaganza/>.
- Robertson, W.H. (2014). Action Science: Relevant Teaching and Active Learning, *Corwin Connect*, text and video available online at <http://corwin-connect.com/2014/06/action-science-relevant-teaching-active-learning/>.
- Robertson, W.H. (2014). Learning the Physics of Skateboarding Engages Kids in Science, *Edutopia*, text and video available online at <http://www.edutopia.org/video/learning-physics-skateboarding-engages-kids-science>.

- Robertson, W.H. (2013). Dr. Skateboard's Action Science: Dr. Bill Robertson at TEDx El Paso, *TEDx Talks*, text and video available online at <http://tedxtalks.ted.com/video/Dr-Skateboards-Action-Science-D>.
- Robertson, W.H. (2013). Edutainment: Using Media and Video Instruction as Methods of Disseminating Content in Science, Technology, Engineering and Mathematics (STEM) Instruction, *Proceedings of International Conference on Education and New Learning Technologies, EDULEARN13*, pp. 5438-5443.
- Robertson, W.H. (2012). Making Learning a Blast: Engaging Children on a New PBS-TV Show, *Proceedings of National Network for Educational Renewal Annual Conference*.
- Robertson, W.H., & Carrejo, D. (2010). Project STIMMULIS: Science Teachers Integrating Mathematical Modeling for Undergraduate Learning and Instruction in Schools, In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education (SITE) International Conference 2010*, pp. 1612-1619.
- Robertson, W.H. (2010). Dr. Skateboard's action science: Increasing science knowledge and skills for middle school teachers, *Proceedings of American Institute of Higher Education (AIHE) International Conference 2010*, Volume 3, Number 1, pp. 288-297.
- Robertson, W.H. (2009). Transforming Middle School Science Education Through Action Science. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education (SITE) International Conference 2009*, pp. 3686-3690.
- Robertson, W.H. (2007). Field-based science education with a community service learning focus, *Proceedings of American Educational Research Association (AERA) International Conference 2007*.
- Robertson, W.H., Giza, B. & Kuehne, S. (2007). Increasing Pre-service Teacher Science Test Success with a Tutorial CD. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education (SITE) International Conference 2007* (pp. 3467-3471).
- Robertson, W.H. (2006). Utilizing Web Based Technologies In Problem-Based Learning. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education (SITE) International Conference 2006*, pp. 4052-4056.
- Robertson, W.H. (2005). Phases Of Web Based Curriculum Development. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education (SITE) International Conference 2005*, pp. 3740-3744.
- Robertson, W.H. (2005). School university Collaborations at UTEP: Problem-Based Learning in Teacher Preparation for Science and Mathematics, *Proceedings of Innovación en la Enseñanza de la Ciencia (INNOVEC) International Conference 2005*.

Grants - Funded

Principal Investigator (PI)

- 2019 Robertson, W.H., Adaptive Courseware in Teaching and Learning, Association of Public and Land-grant Universities (APLU), \$25,000.
- 2017 Robertson, W.H., Student Transformation Employment Program (STEP), Les and Harriet Dodson Endowment, \$50,000.
- 2014 Robertson, W.H. & Varela, S., Day of the Dead and Second Life, Smithsonian Latino Center, \$10,000.
- 2014 Robertson, W.H. & Varela, S., Ethics Modules for Integration into Core Curriculum Project, Texas Holocaust and Genocide Commission, \$155,000.

- 2012 Robertson, W.H. & Palsole, S., Library, Equipment, Repair and Rehabilitation (LERR) Grant: Increasing Access and Mobility for Students Via Adopting Mobility Solutions, University of Texas at El Paso – Office of Business Affairs, \$100,000.
- 2011 Robertson, W.H., Boeing Grant Commission, The UTEP STEM Teacher Project \$50,000.
- 2011 Robertson, W.H., U.S. Department of Energy, Improving Decadal Prediction of Artic Climate Variability and Change Using a Regional Artic System Model (RASM), \$149,555 for 4 years.
- 2011 Robertson, W.H., El Paso Independent School District, Ray Bradbury Planetarium Project, \$3,500.
- 2010 Robertson, W.H., Boeing Grant Commission, Dr. Skateboard’s Action Science, \$10,000.
- 2008 Robertson, W.H., Fulbright US Scholars Program, Fulbright Scholarship Commission, \$20,000.
- 2008 Robertson, W.H., IMPACT Seminar Professional Development Program, University of Texas at El Paso, \$4,000.
- 2007 Robertson, W.H., University Research Institute Grant, University of Texas at El Paso – Office of Research and Sponsored Projects, \$3,000.
- 2007 Robertson, W.H. National Science Foundation grant – International Polar Year Grant - Development of a Community Ice Sheet Model with Specific Applications to Admunsen Sea Embayment Stability \$79,998.00 for 2 years.
- 2005 Robertson, W.H. Fund for the Improvement of Post-Secondary Education (FIPSE) Mini-Grant, Science in our Homes, funds provided by University of Texas at El Paso College of Education, \$500.
- 2005 Robertson, W.H. & Becvar, J. Teachers for a New Era (TNE) Initiative Mini-Grant Proposal, Strengthening Pedagogy within the Context of Chemistry, University of Texas at El Paso – Teacher Education, \$10,000.
- 2004 Robertson, W.H. Fund for the Improvement of Post-Secondary Education (FIPSE) Mini-Grant, Family Science Nights, funds provided by University of Texas at El Paso College of Education, \$400.
- 2004 Robertson, W.H. University Research Institute Grant, University of Texas at El Paso – Office of Research and Sponsored Projects, \$1,900.
- 1998 Robertson, W.H. & Parker, R. *Teacher Opportunities to Promote Science (TOPS)*. Department of Energy - Defense Programs, \$372,500.
- 1998 Robertson, W.H. & Alexander, R. *The Critical Issues Forum*. Department of Energy - Defense Programs, \$176,000.
- 1997 Robertson, W.H. *Teacher Opportunities to Promote Science (TOPS)*. Department of Energy - Defense Programs, \$372,500.
- 1997 Robertson, W.H. & Alexander, R. *The Critical Issues Forum*. Department of Energy - Defense Programs, \$176,000.

- 1996 Robertson, W.H. & Alexander, R. *The Critical Issues Forum*. Department of Energy - Defense Programs, \$160,000.
- 1996 Robertson, W.H. *Science 2000*. Department of Energy - Defense Programs, \$180,000.
- 1996 Robertson, W.H. Project SEED. American Chemical Society, \$12,500.
- 1995 Robertson, W.H. & Alexander, R. *The Critical Issues Forum*. Department of Energy - Defense Programs, \$228,000.
- 1995 Robertson, W.H. *Project SEED*. Department of Energy - Defense Programs, \$52,000.
- 1995 Robertson, W.H. *Science Bowl*. Department of Energy - Defense Programs, \$36,000.
- 1995 Robertson, W.H. *Project SEED*. American Chemical Society, \$15,000.

Co-Principal Investigator (co-PI)

- 2022 Tosh, D., H., Ceberio M., and Robertson, W.H., National Science Foundation, Research Experiences for Teachers, “Cybersecurity Research Experience for Educators Through Data Science (CREEDS)”, \$600,000 for 3 years (8/1/22-7/31/25).
- 2019 Argus-Calvo, B., Robertson, W.H., Carrejo, D. & Wagler, R. – El Paso Children’s Museum Grant, “Unheard Voices: Building El Paso Children’s Museum for All,” total award: \$46,310.
- 2018 Flores, B.C., Knaust, H., Robertson, W.H., and Villalobos M.C., National Science Foundation, Louis Stokes Alliances for Minority Participation – STEM Pathways and Research Alliances, “Louis Stokes STEM Pathways and Research Alliance: University of Texas System LSAMP”, \$4,000,000 for 5 years.
- 2012 Sowards, S., Robertson, W.H., Tweedie, C. & Lougheed, V. - USAID/Indonesia, “University Partnerships Across the Pacific,” total award: \$997,313; total budget with cost share: US\$1,399,643 for 3 years, March 2012.
- 2010 Velasco, A., Lougheed, V. L. & Robertson, W.H. - National Science Foundation Grant "Science for a Sustainable Future: Developing the Next Generation of Diverse Scientists", \$2,857,595 for 5 years.
- 2009 Riskowski, J. & Robertson, W.H., Health Science Education Meets the Middle Grades, College of Health Sciences, University of Texas at El Paso, \$10,000.
- 2007 Giza, B., Robertson, W.H., & Suskavcevic, M., Teacher Quality Grant, Texas Higher Education Coordinating Board, Austin, Texas, \$86,766.
- 2006 Tweedie, C.E., Lougheed, V.L. Robertson, W.H., & Velasco, A. National Science Foundation – International Polar Year Grant - ROAM: Research and Educational Opportunities in Antarctica for Minorities, 500,000 for 2 years.
- 2006 Palyu, G. & Robertson, W.H., Master Science Teacher Mini-Grant, University of Texas at El Paso, \$4,000.
- 2005 Giza, B., Robertson, W.H., & Suskavcevic, M., Teacher Quality Grant, Texas Higher Education Coordinating Board, Austin, Texas, \$90,000.

- 2004 Tinajero, J. & Robertson, W.H., Science Education Start up Grant in order to set up Science Laboratory Classroom, University of Texas at El Paso, \$92,000.

Grants – Submitted & Reviewed, Not Funded

Principal Investigator (PI)

- 2014 Robertson, W.H., Desing, M.V., Tsutsui, H., and Varela, S., University of Texas at El Paso Interdisciplinary Research Enhancement Program, \$20,000.
- 2014 Robertson, W.H., National Science Foundation, “EaSM-3 Collaborative Research: Investigation of seasonal to decadal prediction of Arctic climate change using the Regional Arctic System Model and Community Earth System Model”, \$199,742.
- 2013 Robertson, W.H. & Brunk-Chavez, B. Project ACCESS (Adaptive Course Content Enhancing Student Success), Adaptive Learning Market Accelerator Program, Gates Foundation grant, \$187,152.
- 2008 Robertson, W.H. - National Science Foundation, "ARMAP Maintenance – Phase 3", \$43,121.
- 2006 Robertson, W.H. - National Science Foundation, "New Era for Science and Technology in Teacher Education (NESTED)", \$164,734.
- 2005 Robertson, W.H. – UT Telecampus, "Master's of Education, Instructional Specialist in Early Childhood Education", \$32,592.

Co-Principal Investigator (co-PI)

- 2021 Flores, B.C., Knaust, H., Robertson, W.H., and Schenburger-Trujillo, J., National Science Foundation, Louis Stokes Alliances for Minority Participation – STEM Pathways and Research Alliances, “LSAMP BD: The University of Texas at El Paso - The University of Texas System LSAMP”, \$4,000,000 for 3 years. (submitted November 2021)
- 2021 Zubia, D., Robertson, W.H., Gonzalez, V. and Erives H., National Science Foundation, IUSE – Engaged Student Learning “Cyber-Physical System for Engaged Student Learning in Linear Circuits Course”, \$300,000 for 3 years.
- 2020 Tosh, D., H., Robertson, W.H., and Ceberio M., National Science Foundation, Research Experiences for Teachers, “AI and Cybersecurity Research Experiences for El Paso Teachers (ACREET)”, \$600,000 for 3 years.
- 2017 Serpa, L., Robertson, W.H., and Varela, S., National Science Foundation, S-STEM – Design and Development – Track 2, “S-STEM Scholars on the Border: Increasing the number of Hispanic Students in STEM”, \$1,000,000 for 5 years.
- 2016 Serpa, L., Mariani, M., Robertson, W.H., and Varela, S., National Science Foundation, IUSE-Development and Implementation – Engaging Student Learning, “Opening Avenues in STEM Integration for Students (OASIS) Project”, \$300,00 for 3 years.
- 2016 Robinson, N., Ferret, J., Gibson, S., Robertson, W.H., Brown, S. – National Institutes of Health (NIH), “The Physiology of Leeloominaï”, \$825,000 for 4 years.

- 2014 Reyes, R. Robertson, W.H., Wagler A. & Wagler, R. - National Science Foundation Grant “STEM Community Mentoring & Cyberlearning for At-Risk Youth”, \$2,833,245 for 5 years.
- 2011 Velasco, A. & Robertson, W.H. - National Science Foundation, "Motivating 21st Century Students for a STEM Future Through Informal Education Opportunities", \$221,016 for 2 years.
- 2011 Xu, L. R., Cabrera, S. D. Han, K., Li, C., Robertson, W.H. – Department of Education, “Enhance Minority Students’ STEM Motivation and Learning”, \$250,000 for 2 years.
- 2011 Xu, L. R., K., Li, C., Robertson, W.H. – Google, "New Research/Education YouTube Videos as Engineering and Science Education Innovation”, \$103,747.
- 2011 Xu, L. R., Cabrera, S. D. Han, K., Robertson, W.H., Xiao, C., – National Science Foundation "Using New Media Impact Index to Evaluate the Dissemination Effectiveness of Online Research and Scholarship Work”, \$ 1,150,622 for 5 years.
- 2011 Xu, L. R., Cabrera, S. D. Han, K., Li, C., Robertson, W.H. – National Science Foundation, “Advanced Science and Technology Experiences for Students and Teachers Using YouTube”, \$ 1,183,437 for 4 years.
- 2010 Xu, L. R., & Robertson, W.H. – National Science Foundation, “Research Initiation Grant: Integrating Engineering Research /Education with YouTube Videos, Scientific Blogs and Websites”, \$150,00 for 2 years.
- 2010 Xu, L. R., & Robertson, W.H. – National Science Foundation, “A media impact index approach to evaluate the education impact on using multimedia in STEM education”, \$250,000 for 2 years.
- 2010 Gosselink, K & Robertson, W. H. - College and Career Readiness Initiative (CCRI) of the Texas Faculty Collaboratives in Science, “Demonstration-based modules for interactive and effective teaching in physiology”, \$10,000.
- 2010 Xu, L. R., Cabrera, S. D. Han, K., Robertson, W.H., Xiao, C., – National Science Foundation "Enhance Undergraduate Students’ STEM Motivation and Learning Effectiveness Using Combined YouTube Videos, Blogs and Websites”, \$ 599,800 for 4 years.
- 2009 Carrejo, D. & Robertson, W.H. - National Science Foundation Grant: Course, Curriculum, and Laboratory Improvement (CCLI) and “Generative Teacher Knowledge through Mathematical Modeling: Creating Opportunities for Pre-Service Teachers to Learn Mathematics and Science”, \$272,586 for 2 years.

Conference Presentations

National and International

Acevedo, R., Olivarez, A., Robertson, W.H. and Brunk-Chavez, B. (2022). *Student Self-Regulated Learning Strategies in Online Courses at a Minority-Serving Institution*, American Educational Research Association (AERA), April, 2022.

Robertson, W.H. (2021). *A Course Redesign Project: Adaptive Courseware in Biology*, 2021 REMOTE Faculty Summit, Online Conference from Arizona State University, June, 2021.

- Robertson, W.H. (2021). *Using Video, Graphic Novels, Video Games and Active Learning to Impact Pre-Service Teachers*. 2021 Society for Information Technology & Teacher Education International Conference, March, 2021.
- Robertson, W.H. (2020). *Adaptive Courseware Redesign in High Enrollment Introductory Biology Courses: A Case Study*, 2020 Innovate Learning Summit, Online Conference, November, 2020.
- Robertson, W.H. (2020). *Dr. Skateboard's Action Science: Video, Graphic Novels and Active Learning*, 2020 Lilly Conference on Designing Effective Teaching, San Diego, CA, February, 2020.
- Robertson, W.H. (2019). *The Ideal Mix of Face-to-Face, Hybrid and Online Courses*, 2019 Lilly Conference on Designing Effective Teaching, Bethesda, Maryland, May, 2019.
- Viera, J., Kosheleva, O. M. and Robertson, W.H. (2019) *Toward Development of a STEM Framework Based on Cultural-Historical Activity Theory*, Annual Meeting of the American Educational Research Association (AERA), Toronto, Canada, April, 2019.
- Robertson, W.H. (2019). *Dr. Skateboard's Action Science and the Masters of Physics*, 2019 Society for Information Technology & Teacher Education (SITE), Las Vegas, Nevada, March, 2019.
- Tillman, D., An. S. and Robertson, W.H. (2019). *Asset-Based Approach to Integrating Formal and Informal Education During Teacher Preparation*, 2019 Society for Information Technology & Teacher Education (SITE), Las Vegas, Nevada, March, 2019.
- Tillman, D., Tinajero, J., Brown, C.H., Robertson, W.H. and An. S. (2019). *Fostering School Security During Teacher Preparation*, 2019 Society for Information Technology & Teacher Education (SITE), Las Vegas, Nevada, March, 2019.
- Teller, R., Tillman, D., Robertson, W.H., Tinajero, J., and An. S. (2019). *Preparing Bilingual Teachers to Integrate the Engineering Design Process into Upper-Elementary and Middle School Classrooms*, 2019 Society for Information Technology & Teacher Education (SITE), Las Vegas, Nevada, March, 2019.
- Robertson, W.H. (2018). *On the Intersection of media and STEM Education*, 2018 International Conference on Education, Research and Innovation (ICERI), Seville, Spain, November, 2018.
- Robertson, W.H. (2018). *Edutainment: Weaving Your Passion into the Process of STEM Education*, 2018 Hawaii University International Conferences (HUIC), Honolulu, Hawaii, January, 2018.
- Robertson, W.H., *El Punto de Equilibrio: Un Taller por Maestros* (in Spanish), Esquina Franklin, Chihuahua, Mexico, August, 2016.
- Robertson, W.H., *¿Qué es y para qué sirve un Makerspace?* (in Spanish), Esquina Franklin, Chihuahua, Mexico, August, 2016.
- Robertson, W.H., *That's Edutainment: Video Instruction as a Method of Motivating Students (featured presentation)*, Greater Edmonton Teacher's Convention 2016, Greater Edmonton Teacher's Convention Association (GETCA), Edmonton, Alberta, Canada, February, 2016.
- Robertson, W.H., *Dr. Skateboard's Action Science (featured presentation)*, Greater Edmonton Teacher's Convention 2016, Greater Edmonton Teacher's Convention Association (GETCA), Edmonton, Alberta, Canada, February, 2016.

- Robertson, W.H. (2016). The Impact of University Students as Scientist in Residence on Early College High School Campuses, *2016 Hawaii International Conference on Education (HICE), Honolulu, Hawaii, January, 2016.*
- Robertson, W.H., *Edutainment: Using Media and Video Instruction as Methods of STEM Content Dissemination*, National Science Teacher's Association (NSTA) Regional Conference, Philadelphia, Pennsylvania, November, 2015.
- Robertson, W.H., *El Uso de Investigación en Aprendizaje Activo* (in Spanish), Esquina Ben Franklin, Consulate General of the United States, Chihuahua, Chihuahua, Mexico, August, 2015.
- Robertson, W.H., *El Uso de Investigación en Aprendizaje Activo* (in Spanish), Instituto Promotor de la Educacion, Consulate General of the United States, Juárez, Chihuahua, Mexico, July, 2015.
- Robertson, W.H., *El Uso de Investigación en Aprendizaje Activo* (in Spanish), La Rodadora Children's Museum, Consulate General of the United States, Juárez, Chihuahua, Mexico, July, 2015.
- Robertson, W.H., *Dr. Skateboard's Action Science*, Five Minutes of Fame Keynote Assembly, New Media Consortium Annual Conference, Washington, DC, June, 2015.
- Robertson, W.H., *That's Edutainment: Video Instruction as a Method of Motivating Students*, New Media Consortium Annual Conference, Washington, DC, June, 2015.
- Robertson, W.H., *Dr. Skateboard's Action Science (featured keynote presentation)*, Seventh Annual STEM Conference, Reedley College, Reedley, California, April, 2015.
- Robertson, W.H., *Dr. Skateboard's Action Science (featured presentation)*, Calgary City Teacher's Convention 2015, Calgary City Teacher's Convention Association (CCTCA), Calgary, Alberta, Canada, February, 2015.
- Robertson, W.H., *Action Science: Relevant Teaching and Active Learning*, Calgary City Teacher's Convention 2015, Calgary City Teacher's Convention Association (CCTCA), Calgary, Alberta, Canada, February, 2015.
- Robertson, W.H., *Workshop on the Use of Action Science*, Alberta Teacher's Association Science Conference, Alberta Teacher's Association (ATA), Banff, Alberta, Canada, November, 2014.
- Robertson, W.H., *Edutainment: Using Media and Video Instruction as Methods of STEM Content Dissemination*, Alberta Teacher's Association Science Conference, Alberta Teacher's Association (ATA), Banff, Alberta, Canada, November, 2014.
- Robertson, W.H., *Action Science: Relevant Teaching and Active Learning*, Alberta Teacher's Association Science Conference, Alberta Teacher's Association (ATA), Banff, Alberta, Canada, November, 2014.
- Robertson, W.H., *Edutainment: Using Media and Video Instruction as Methods of STEM Content Dissemination*, National Science Teacher's Association Area Conference, National Science Teacher's Association (NSTA), Richmond, Virginia, October, 2014.

- Robertson, W.H., *Action Science: Relevant Teaching and Active Learning*, National Science Teacher's Association Area Conference, National Science Teacher's Association (NSTA), Richmond, Virginia, October, 2014.
- Robertson, W.H., *We're not IT, We're AT - Academic Technologies*, New Media Consortium Annual Conference, Portland, OR, June, 2014.
- Robertson, W.H., *To Teach or Not To Teach Online: A Comprehensive Survey of UTEP Faculty*, New Media Consortium Annual Conference, Portland, OR, June, 2014.
- Robertson, W.H., *Action Science and the 5Es of Constructivism*, International SUN Conference on Teaching and Learning, El Paso, TX, March, 2014.
- Robertson, W.H., *Motivation and Innovation*, International SUN Conference on Teaching and Learning, El Paso, TX, March, 2014.
- Robertson, W.H., *Action Science and the 5Es of Constructivism*, Calgary City Teacher's Convention 2014, Calgary City Teacher's Convention Association (CCTCA), Calgary, Alberta, Canada, February, 2014.
- Robertson, W.H., *Dr. Skateboard's Action Science: Using YouTube to Promote Physics*, Calgary City Teacher's Convention 2014, Calgary City Teacher's Convention Association (CCTCA), Calgary, Alberta, Canada, February, 2014.
- Robertson, W.H., *Edutainment: Using Media and Video Instruction as Methods of STEM Content Dissemination*, The Sloan Consortium Annual Conference, Orlando, Florida, November, 2013.
- Robertson, W.H., *Dr. Skateboard's Action Science*, TEDxEIPaso 2013, El Paso, Texas, September, 2013 (available online at the following URL: <http://www.youtube.com/watch?v=dArNGJlqHKc>).
- Barbosa, A.C. & W. H. Robertson, "Development of Curricular Materials based on Climate Change Datasets and Measurements", American Meteorological Society, Seattle, WA, May, 2013.
- Robertson, W.H., Golding, Peter, Caire, Juliette, *Leadership Engineering Engaging Tomorrow's Work*, National Council for Community and Education Partnerships (NCCEP) Annual Conference, San Francisco, CA, July, 2013.
- Robertson, W.H. & Garcia, C.V., *Journey to the End of the Earth*, International SUN Conference on Teaching and Learning, El Paso, TX, March, 2013.
- Robertson, W.H., *Edutainment: Using Media and Video Instruction as Methods of STEM Content Dissemination*, Calgary City Teacher's Convention 2013, Calgary City Teacher's Convention Association (CCTCA), Calgary, Alberta, Canada, February, 2013.
- Robertson, W.H., *Dr. Skateboard's Action Science: Relevant Physical Science for the Middle School Curriculum*, Calgary City Teacher's Convention 2013, Calgary City Teacher's Convention Association (CCTCA), Calgary, Alberta, Canada, February, 2013.
- Robertson, W.H., *Skatepark Mathematics: Making Algebra and Geometry Relevant for High School Students*, Calgary City Teacher's Convention 2012, Calgary City Teacher's Convention Association (CCTCA), Calgary, Alberta, Canada, February, 2012.

Robertson, W.H., *Dr. Skateboards' Action Science: Relevant STEM Education*, Calgary City Teacher's Convention 2012, Calgary City Teacher's Convention Association (CCTCA), Calgary, Alberta, Canada, February, 2012.

Robertson, W.H., *Skatepark Mathematics: Making Algebra and Geometry Relevant for High School Students*, Transforming Education: From Innovation to Implementation Conference, Purdue University, Lafayette, IN, October, 2011.

Robertson, W.H., *Dr. Skateboard's Action Science: Relevant STEM Education*, National Council for Community and Education Partnerships (NCCPEP) Annual Conference, San Francisco, CA, July, 2011.

Robertson, W.H., *Skatepark Mathematics: A Constructivists Approach to Teaching Concepts in Algebra and Geometry*, International SUN Conference on Teaching and Learning, El Paso, TX, March, 2011.

Robertson, W.H., *Project STIMMULIS: Science Teachers Integrating Mathematical Modeling for Undergraduate Learning and Instruction in Schools*, Society for Information Technology and Teacher Education (SITE) National Conference, San Diego, CA, March, 2010.

Robertson, W.H., *NSF GK-12 Program*, National Science Foundation (NSF) Graduate STEM Fellows in K-12 Education Annual Conference, Washington, DC, March, 2010.

Robertson, W.H., *Dr. Skateboard's Action Science: Increasing Science Knowledge and Skills for Middle School Teachers*, American Institute of Higher Education (AIHE) International Conference 2010, Williamsburg, VA, March, 2010.

Robertson, W.H. & Casas, Martha, *Reaching the Marginalized Latino High School Student via Transformative Education: A Comparative Analyses of Students in El Paso, Texas and Santiago, Chile*, American Educational Research Association (AERA) National Conference, San Diego, California, April, 2009.

Robertson, W.H., *Transforming Middle School Science Education Through Action Science*, Society for Information Technology and Teacher Education (SITE) National Conference, Charleston, SC, March, 2009.

Robertson, W.H., *Dr. Skateboard's Action Science*, National Science Teacher's Association (NSTA) National Conference, New Orleans, Louisiana, March, 2009.

Robertson, W.H., *The Design, Development and Implementation of a Teaching and Research Experience in Science Education in Santiago, Chile as part of the Fulbright US Scholars program* – UTEP COE EDUCAR, January, 2009.

Robertson, W.H., *¿Cómo ser constructivista en base a una formación conductista?* (in Spanish), V Jornada Científica de Estudiantes de Pedagogía en Ciencias Naturales, Chillan, Chile, November, 2008.

Robertson, W.H., *Educación Transformativa* (Keynote Address in Spanish), II Jornada Estándares y Competencias TIC en la Formación de Profesores, Santiago, Chile, October, 2008.

Robertson, W.H., *Ciencia de Acción* (in Spanish), Congreso Nacional de Educación – Las Practicas Pedagógicas en el Siglo XXI, Santiago, Chile, October, 2008.

- Robertson, W.H., *¿Cómo ser constructivista en base a una formación conductista?* (in Spanish), II Encuentro de Estudiantes de Pedagogía en Ciencias, Santiago, Chile, October, 2008.
- Robertson, W.H., *Choosing a Doctoral Program of Study That Works For You*, Fulbright Chile English Program, Santiago, Chile, September, 2008.
- Robertson, W.H., *Educación Transformativa* (in Spanish), American Academy of Science and Technology, an initiative in partnership with the US Embassy and the University of Talca, Santiago, Chile, August, 2008.
- Robertson, W.H., *Dr. Skateboard's Action Science*, National Science Teacher's Association National Conference, Boston, Massachusetts, March, 2008.
- Robertson, W.H., *Arctic/Antarctica Systems Symposium and Teacher Workshop*, National Science Teacher's Association Regional Conference, Birmingham, Alabama, December, 2007.
- Robertson, W.H., *Dr. Skateboard's Action Science*, National Science Teacher's Association Regional Conference, Birmingham, Alabama, December, 2007.
- Robertson, W.H., *El uso de preguntas y descubrimiento en el contexto de química* (in Spanish), V jornadas internacionales para la enseñanza Preuniversitaria y Universitaria de la Química", Santiago, Chile, November, 2007.
- Robertson, W.H., *Dr. Skateboard's Action Science*, National Science Teacher's Association Regional Conference, Denver, Colorado, November, 2007.
- Robertson, W.H., *IPY-ROAM – Making Science Global*, Smithsonian National Air and Space Museum, Washington, DC, November, 2007.
- Robertson, W.H., *Increasing Pre-service Teacher Science Test Success with a Tutorial CD*, Society for Information Technology & Teacher Education (SITE) International Conference, San Antonio, Texas, March, 2007.
- Robertson, W.H., *Field-based Science Education with a Community Service Learning Focus*, American Educational Research Association (AERA) International Conference, Chicago, IL, April, 2007.
- Robertson, W.H., *Science Education on the U.S./ Mexico Border*, National Technology and Social Science (NSSA) Conference, San Francisco, CA, October, 2006.
- Robertson, W.H., *The Critical Thinking Curriculum Model*, featured speaker at the Advanced Concepts Group (ACG) Critical Thinking Workshop, Sandia National Laboratories, Albuquerque, NM, July 2006.
- Robertson, W.H., *A Practical Approach for Building Web Sites in the Classroom*, National Technology and Social Science (NSSA) Conference, Las Vegas, NV, April, 2006.
- Robertson, W.H., *Utilizing Web Based Technologies in Problem-Based Learning*, Society for Information Technology and Teacher Education (SITE) International Conference, Orlando, FL, March, 2006.
- Robertson, W.H., *Strengthening Inquiry and Discovery within the Context of Chemistry*, International SUN Conference on Teaching and Learning, El Paso, TX, March, 2006.

- Robertson, W.H., *The University of Texas at El Paso (UTEP) Family Science Nights*, 11th Annual National Pre-Service Teacher Annual National Conference, Alexandria VA, February, 2006.
- Robertson, W.H., Tinajero, J. and Kosheleva, O., *School University Collaboration at UTEP: Problem-based Learning in Teacher Preparation for Science and Mathematics*, 3rd International Conference on Science in Basic Education, Monterrey, Mexico, March, 2005.
- Robertson, W.H. *Phases Of Web Based Curriculum Development*. Web page presentation at the 2005 Society for Information Technology & Teacher Education (SITE) International Conference, Phoenix, AZ, March, 2005.
- Robertson, W.H and Munter, J. *Preparing Teachers to Engage Parents*. Parent Education 13th Annual Conference, Denton, TX, February, 2005.
- Robertson, W.H., Tinajero, J. and Kosheleva, O. *School University Collaboration at UTEP: Problem- based learning in Teacher Preparation for Science and Mathematics*, Preliminary Meeting toward the 3rd International Conference on Science in Basic Education, El Paso, TX, January, 2005.
- Robertson, W.H. *Web Programming – Free, Fast and Fun* . Web page presentation at the 2003 Computer Science and Information Technology (CSIT) Symposium, Seattle, WA, June, 2003.
- Robertson, W.H. *Building a Secure Information Community – It’s BASIC*. Web page presentation at the annual meeting for the Federal Training and TRADE Training Leaders Workshop, Albuquerque, NM, August, 2002.
- Robertson, W.H. *An Evaluation of the Critical Thinking Curriculum Model*. Paper and presentation at the annual meeting for the National Association for Research in Science Teaching, St. Louis, MO, March, 2001.
- Robertson, W.H. *Integrating Technology into Science Instruction*. Paper and presentation at the annual meeting for the Association for the Education of Teachers in Science (AETS) Conference, Costa Mesa, CA, January, 2001.
- Robertson, W.H. *An Evaluation of the Critical Thinking Curriculum Model*. Paper and presentation at the annual meeting for the Association for the Education of Teachers in Science (AETS) Conference, Costa Mesa, CA, January, 2001.
- Robertson, W.H. *An Evaluation of the Critical Thinking Curriculum Model*. Web page presentation at the second Website Developers Meeting, Eccles Institute of Human Genetics, The University of Utah, Salt Lake City, UT, November, 2000.
- Robertson, W.H. *A Virtual Resource Center* Accepted paper submitted for presentation at the annual meeting for the Association for Supervision and Curriculum Development (ASCD), New Orleans, LA, March, 2000.
- Robertson, W.H. *Educational Technology and the Internet*. Presentation for faculty and staff at the Exploratorium, San Francisco, CA, January, 2000.
- Robertson, W.H. *A Critical Thinking Curriculum Model*. Web page presentation at the first Website Developers Meeting, Eccles Institute of Human Genetics, The University of Utah, Salt Lake City, UT, November 1999.

- Robertson, W.H. & Alexander, R. *A Critical Thinking Curriculum Model*. Plenary session presentation at the annual meeting for the 16th International Conference on Technology and Education (ICTE), Edinburgh, Scotland, March, 1999.
- Robertson, W.H. & Alexander, R. *A Critical Thinking Curriculum Model*. Accepted paper submitted for presentation at the annual meeting for the Association for Supervision and Curriculum Development (ASCD), San Francisco, CA, March, 1999.
- Robertson, W.H. & Alexander, R. *A Critical Thinking Curriculum Model*. Accepted paper submitted for presentation at the annual meeting for the National Science Teacher's Association (NSTA), Boston, MA, March, 1999.
- Robertson, W.H. *The TOPS (Teacher Opportunities to Promote Science) Program*. Accepted paper submitted for presentation at the annual meeting for the National Science Teacher's Association (NSTA), Boston, MA, March, 1999.
- Robertson, W.H. *The TOPS (Teacher Opportunities to Promote Science) Program*. Accepted paper submitted for presentation at the annual meeting for the Fourth Annual Conference on K-12 Networking: The Consortium for School Networking (COSN), Washington, DC, February, 1999.
- Robertson, W.H. & Alexander, R. *A Critical Thinking Curriculum Model*. Accepted paper submitted for presentation at the annual meeting for the Association for the Education of Teachers in Science (AETS) Conference, Austin, Texas, January, 1999.
- Robertson, W.H. *The TOPS (Teacher Opportunities to Promote Science) Program*. Accepted paper submitted for presentation at the annual meeting for the Association for the Education of Teachers in Science (AETS) Conference, Austin, Texas, January, 1999.
- Robertson, W.H. & Alexander, R. *A Critical Thinking Curriculum Model*. Accepted paper submitted for presentation at the annual meeting for the International Conference of the Learning Sciences (ICLS), Atlanta, Georgia, December, 1998.
- Robertson, W.H. *The TOPS (Teacher Opportunities to Promote Science) Program*. Accepted paper submitted for presentation at the southwestern regional meeting for the National Science Teacher's Association (NSTA), Albuquerque, NM, December, 1998.
- Robertson, W.H. & Alexander, R. *Integrating Multidisciplinary Curriculum and Computer Technology*. Accepted paper submitted for presentation at the southwestern regional meeting for the National Science Teacher's Association (NSTA), Albuquerque, NM, December, 1998.
- Robertson, W.H. *Vertical Curriculum Alignment through a Web-Based Teacher Network*. Paper submitted for presentation at the annual meeting for the 12th Annual Technology and Learning (T+L) Conference, Nashville, Tennessee, November, 1998.
- Robertson, W.H. & Alexander, R. *Integrating Curriculum and Computers*. Web page and paper submitted for presentation at the annual meeting for the National Educational Computing Conference (NECC), San Diego, CA, June, 1998.
- Robertson, W.H. *Internet Based Teacher Networks*. Web page and paper submitted for presentation at the annual meeting for the 15th International Conference on Technology and Education (ICTE), Santa Fe, New Mexico, March, 1998.

Robertson, W.H. & Alexander, R. *Integrating Curriculum and Computers*. Web page and paper submitted for presentation at the annual meeting for the 15th International Conference on Technology and Education (ICTE), Santa Fe, New Mexico, March, 1998.

Robertson, W.H. & Alexander, R. *Integrating Curriculum and Computers*. Web page submitted for presentation at the annual meeting for the Third Annual Conference on K-12 Networking: The Consortium for School Networking (COSN), Washington, DC, February, 1998.

Robertson, W.H. & Alexander, R. *Multidisciplinary Science Curriculum*. Web page submitted for presentation at the annual meeting for the Hispanic Association of Colleges and Universities (HACU), San Antonio, TX, October, 1997.

Robertson, W.H. *Using Systems Modeling Software*. Paper submitted for presentation at the annual meeting for the Association for Supervision and Curriculum Development (ASCD), Baltimore, MD, March, 1997.

Robertson, W.H. & Alexander, R. *Multidisciplinary Science Curriculum*. Paper submitted for presentation at the southwestern regional meeting for the National Science Teacher's Association (NSTA), Phoenix, AZ, October, 1996.

Robertson, W.H. *The Critical Issues Forum*. Paper submitted for presentation at the annual meeting for the Association for the Education of Teachers in Science (AETS), Seattle, WA, January, 1996.

State and Regional

Robertson, S.A. & Robertson W. H., *Integrating the 5E Model of Constructivism through Video in Online Classes*, SOL Conference, El Paso, TX, April, 2021.

Tillman, D., An, S. A., Tinajero, J. V., Walker, J. T., Robertson W. H., *Encouraging Creativity Via Innovative Technology*, SOL Conference, El Paso, TX, April, 2021.

Robertson, W.H., *Collaborative and Authentic Leadership*, Power of Collaboration Conference, El Paso, TX, October, 2019.

Robertson, W.H., *Facilitating Thinking with Active Learning*, Power of Collaboration Conference, El Paso, TX, October, 2019.

Robertson, W.H., *Dr. Skateboard's Action Science: Using Video, Graphic Novels and Active Learning to Teach Physical Science*, mini-CAST Conference, El Paso, TX, October, 2019.

Robertson, W.H. *Edutainment: Weaving your Passion into the Process of Education*, Food for Changed Thought Workshop, College of Health Sciences, El Paso, TX, February, 2017.

Robertson, W.H., *Dr. Skateboard's Action Science*, Night at the Museum, mini-CAST, El Paso, TX, October, 2013.

Robertson, W.H., *Dr. Skateboard's Action Science*, Migrant Student Symposium, El Paso, TX, April, 2013.

Robertson, W.H., *To Teach or Not To Teach Online*, Innovations in Online Learning (IOL), San Antonio, TX, May, 2013.

- Robertson, W.H. *Action Science in the K-12 Classroom*, Science Teacher Association of Texas (STAT), El Paso, TX, January, 2013.
- Robertson, W.H. *Edutainment: Using Media and Video Instruction*, Academic Technologies Summit, El Paso, TX, October, 2012.
- Robertson, W.H., *Action Science for University Educators*, Kaleidoscope of Teaching Math & Science Conference, El Paso, TX, February, 2012.
- Robertson, W.H. *Making Learning a Blast: Engaging Children on a New PBS-TV Show*, Conference for International Research on Cross-cultural Learning in Education (CIRCLE), El Paso, TX, June, 2012.
- Robertson, W.H. *DM Learning Fiestas*, Texas Faculty Development Network (TFDN) Conference, El Paso, TX, June, 2011.
- Robertson, W.H. *Action Science: Relevant STEM Education*, Kaleidoscope of Teaching Math & Science Conference, El Paso, TX, March, 2011.
- Robertson, W.H. *The Positive Deviance that is Action Science*, 2010 Plexus Summit Conference, El Paso, TX, November, 2010.
- Robertson, W.H. *Action Science for English Speakers*, 2010 Texas Association for Bilingual Education (TABE) Conference, El Paso, TX, October, 2010.
- Robertson, W.H. *Ciencia de Acción para Estudiantes de Habla Hispana*, 2010 Texas Association for Bilingual Education (TABE) Conference, El Paso, TX, October, 2010.
- Robertson, W.H., and Lesser Larry, *Insights and Strategies Learned from Teaching English Language Learners that Help All Students*, Center for Effective Teaching and Learning (CETaL), The University of Texas at El Paso, El Paso, TX, February 10, 2010.
- Robertson, W.H. Keynote Address – *Real World Prep: Using Technology to Transform Education*, Podstock Southwest Conference, El Paso, TX, August, 2009.
- Robertson, W.H. *El Método Constructivista (in Spanish)*. Third International Summer Research Conference at the University of Texas at El Paso, El Paso, TX, June 2007.
- Robertson, W.H. *IPY-ROAM: International Polar Year: Research and Educational Opportunities in Antarctica for Minorities*, SACNAS Student Expo, The University of Texas at El Paso, April, 2007.
- Robertson, W.H. & Garcia, Claudia *Science Education on the U.S./ Mexico Border: Field Base Studies with a Community Service Learning Focus*. Presentation at the International Summer Research Conference at the University of Texas at El Paso, El Paso, TX, June, 2006.
- Robertson, W.H. *Strengthening Inquiry & Discovery within the Context of Chemistry*. Presentation at the International Summer Research Conference at the University of Texas at El Paso, El Paso, TX, June, 2006.
- Robertson, W.H. *Phases of Curriculum Development*. Web page presentation at the 2004 Texas Association for Bilingual Education (TABE) Conference, El Paso, TX, October, 2004.

- Robertson, W.H. *The Critical Thinking Curriculum Model*. Web page presentation at the 2004 Texas Association for Bilingual Education (TABE) Conference, El Paso, TX, October, 2004.
- Robertson, W.H. *Phases of Curriculum Development for the Internet*. Web page presentation at the 2004 miniCAST Conference, El Paso, TX, October, 2004.
- Robertson, W.H. *Web Programming – Free, Fast and Fun*. Web page presentation at the 2003 Computer Science and Information Technology (CSIT) Symposium, Seattle, WA, June, 2003.
- Robertson, W.H. *Safety and Security Concerns for Students*. Instructional Presentation for LANL All Manager Meeting (AMM), Los Alamos, NM, June, 2003.
- Robertson, W.H. *Safety and Security Concerns for Students*. Instructional Presentation for LANL Manager Meeting (LIM), Los Alamos, NM, May, 2003.
- Robertson, W.H. *The Psychology of Mentoring*. Instructional Presentation as kickoff for LANL Mentor Meeting, Los Alamos, NM, February, 2003.
- Robertson, W.H. *Computer BASIC Training at LANL*. Instructional Presentation on a class for beginning computer users at the LANL Trainer’s Day 2002 Conference, Los Alamos, NM, July, 2001.
- Robertson, W.H. *Dreamweaver Quick Tips & Templates*. Instructional Presentations on the use of Dreamweaver Templates for LANL Web Developers, Design 2001: Making Web Sites That Work Conference, Los Alamos, NM, July, 2001.
- Robertson, W.H. *Team Building for Teachers*. A Series of Activities and Presentations on the Use of Effective Teaming Strategies for the Classroom, SuperComputing Challenge Summer Institute, Socorro, NM, July, 2001.
- Robertson, W.H. *The NUCOR and NMRPI programs at LANL*. Overview of all New Mexico initiatives in the UCDRD program at LANL, LANL-NM Collaboration Meeting, Albuquerque, NM, November, 1999.
- Robertson, W.H. *STB/UC FY99 Progress*. Overview of all fiscal year UCDRD and DRC events at LANL for the Department of Energy-Albuquerque office (DOE-AL), Albuquerque, NM, October, 1999.
- Robertson, W.H. *Careers in Technology*. Four classroom presentations (30 + students each) for the American Indian Educational Organization (AIEO), Incorporated annual meeting for high school students, Albuquerque, NM, May, 1999.
- Robertson, W.H. *The TOPS (Teacher Opportunities to Promote Science) Program*. Accepted paper submitted for presentation at the annual meeting for the 1998 New Mexico Technology Conference, Las Vegas, NM, November, 1998.
- Robertson, W.H. & Alexander, R. *A Critical Thinking Curriculum Model*. Accepted paper submitted for presentation at the annual meeting for the 1998 New Mexico Technology Conference, Las Vegas, NM, November, 1998.
- Robertson, W.H. *The TOPS (Teacher Opportunities to Promote Science) Program*. Accepted paper submitted for presentation at the annual meeting for the 1998 New Mexico Technology in Education Conference, Kirtland, NM, October, 1998.

Robertson, W.H. & Alexander, R. *A Critical Thinking Curriculum Model*. Accepted paper submitted for presentation at the annual meeting for the 1998 New Mexico Technology in Education Conference, Kirtland, NM, October, 1998.

Robertson, W.H. & Alexander, R. *Teacher Development Programs*. Presentation for the US Department of Education and NM State Department of Education, Professional Development Meeting at NM Highlands University, Rio Rancho, NM, May, 1998.

Robertson, W.H. *Science at Home*. Science activity demonstration and presentation at the Third Annual Career Fair for Pojoaque Valley Schools, Pojoaque, NM, May, 1998.

Robertson, W.H. & Alexander, R. *Integrating Curriculum and Computers*. Web page and paper submitted for presentation at the annual meeting for the 1997 New Mexico Technology Conference, Los Lunas, NM, November, 1997.

Robertson, W.H. & Alexander, R. *Integrating Curriculum and Computers*. Web page and paper submitted for presentation at the annual meeting for the 1997 NMSTA Annual Science and Math Convention, Farmington, NM, October, 1997.

Robertson, W.H. & Alexander, R. *Integrating Curriculum and Computers*. Web page and paper submitted for presentation at the annual meeting for the Third Annual New Mexico Computer Expo, Albuquerque, NM, August, 1997.

University Teaching

Undergraduate Classes

- **ECED/BED 4311 - Teaching Science in Primary Grades** - This course explores the methods and materials needed for teaching science in K-3 bilingual and multicultural classrooms. The emphasis of this class is science content and classroom teaching processes in early childhood settings. This includes the utilization of computer applications and field experiences.
- **MSED 4311 - Teaching Science in Intermediate and Middle Grades** - This course explores the methods and materials needed for teaching science in fourth through eighth grade. The emphasis of the class is placed upon inquiry and standards-based teaching and learning in the middle grades. This includes the utilization of computer applications and field experiences.
- **SCED 3311 - Curriculum Planning in the Secondary School** - This course is designed for the prospective secondary teacher in any discipline and the purpose of this class is for the student to become proficient in the educational context of curriculum design and implementation.
- **SIED 3330 – Integrated Basic Science** - This course is a cross-disciplinary course, which integrates basic science principles. Topics will be selected from the various sciences. Course will emphasize interrelationships among the various sciences and alternate conceptual representation of identified basic science principles.

Graduate Classes

- **EDT 5373 - Advanced Productivity Technology Classroom** - This class focuses on curriculum strategies that utilize word processing, presentation programs, and spreadsheets for the EC-12 classroom; development and use of databases; extended web page creation, integrating graphics, web-page scripts, and file transfer; creation and implementation of online collaborative projects; continued portfolio development and peer mentoring experiences.
- **GEOL 5115/6115 – Selected Topics in Geological Sciences** - This class is aligned to help GK-12 Fellows work as Scientists in Residence on cooperating Early College High School campuses. This class is done in order to introduce the Fellows to pedagogical techniques, such as Socratic questioning, cooperative grouping, constructivism, scaffolding and other instructional methods relevant to the content to be explored and explained from the lectures.
- **SIED 5321 – Science Tools, Standards, Technology and Safety/Ethics** - This course takes an integrated approach to science and technology within a thematic learning approach that integrates a constructivist methodology for teaching. The learner will develop an understanding of important science teacher resources, basic science education and lab tools, state and national standards for science teaching, curriculum alignment, laboratory and classroom safety, and professional ethics.
- **SIED 5323 - Societal Context of Science Education** - Societal Context of Science Education develops and applies understanding of field, community, and cultural resources and develops family and community partnerships in a relevant science context. Students develop a learning unit based on instructional models such as the learning cycle lesson design and the 5-E model.
- **SIED 5327 - Chemistry Education in a Feminist and Multicultural Context** - A conceptual understanding of basic chemistry content, including the impact of chemistry in daily life. Develops competencies necessary to provide multicultural education instruction and inclusive pedagogy and the understanding of social, economic, and political influences on access issues in science education for all students. Includes environmental chemistry labs and an environmental action project.
- **TED 5319 - Educational Web Site Design and Development** - This course will explore Educational Web Site design and development. Students will develop a functional Web site that integrates content and graphics into a variety of Web interface strategies. The Phases of Educational Web Site Design and Development are centralized in five basic areas; planning, research, development, refinement and implementation. The scope and sequence of the content area matches the phases and allows for the integration of software tools for concept mapping, word processing, Web browsing, HTML code editing and file transferring.
- **TED 5345 – Dual Credit Teaching and Research** - This course examines local, state, and national issues related to dual credit/dual enrollment. There is a focus on the development of knowledge, skills, and attributes involved in teaching rigorous college-level courses in high school settings. The learner will refine teaching strategies relevant to their content area and school/district to create a syllabus that reflect an authentic college experience for their high school dual credit classroom as well as review literature relevant to current dual credit education issues building foundational knowledge of key local, state, and national issues.
- **TED 6396 – Doctoral Seminar in Teaching, Learning and Culture** - This course will provide an orientation for students into the Teaching, Learning and Culture (TLC) Doctoral Program and academia in general. It is designed to assist the students' successful completion of the doctoral program and for them to be better positioned for careers in the professoriate. To do so, a number of

relevant topics and areas will be explored in the course. The course is organized as a seminar with readings, discussions and guest presenters that focus on the resources, opportunities, and challenges that may shape students' experiences in the doctoral program and in their academic careers.

- **STEM 6304 – Instructional Trends in STEM Education** - This course examines the integration of pedagogical techniques in the STEM education that foster the development of active learning, problem-solving and critical thinking within a STEM curriculum. Students will develop products that emphasize instructional models such as the learning cycle lesson design and the 5E Constructivist model. Instructional Trends in STEM Education explores the intersection of STEM disciplines within an integrative approach that includes research-based principles in STEM teaching and learning.

Doctoral and Master's Committees

- Rocio Sepulveda, Doctoral Committee Chair and Dissertation Committee Chair (2016-Present)
- Ross Teller, Doctoral Committee Chair and Dissertation Committee Chair (2016-2021)
- Diana Camberos, Doctoral Committee Chair and Dissertation Committee Chair (2016-2019)
- Melissa Melendez, Dissertation Committee Member (2012-2018)
- Louis Herman, Dissertation Committee Member (2014-2018)
- Ricardo Acevedo, Dissertation Committee Member (2013-2018)
- Katherine Meraz, Dissertation Committee Member (2012-2014)
- Anna Carolina Barbosa, Doctoral Committee Chair (2011-2014)
- Sunay Palsole, Dissertation Committee Member (2012-2014)
- Heather Click Cuellar, Dissertation Committee Member (2012-2014)
- Raul Medellin, Dissertation Committee Member (2012-2014)
- Holly Field, Dissertation Committee Member (2012-2014)
- Raul Medellin, Dissertation Committee Member (2011-2013)
- Hector Hernandez, Master's Thesis Committee Member (2009-2012)
- Vivian Carrasco, Dissertation Committee Member (2008-2009)
- Claudia Vanessa Garcia, Master's Thesis Committee Member (2007-2009)

Service

Professional Service

- Distinguished Research Fellow – Lemelson Center for Invention and Innovation, Smithsonian Institute, National Museum of American History (2020-2023).
- Board of Directors – Tom Lea Institute, El Paso, Texas (2017-2020)
- Member – Regional Advisory Committee (RAC), Region 19, El Paso, Texas (2017-2018)
- Member – National Network for Educational Renewal (NNER) – Education in a Democracy Journal, Volume Six - Editorial Board (2014)
- Member – Learning Technology Advisory Committee (LTAC) – Texas Higher Education Coordinating Board (THECB), (2014-2016)
- Member – Higher Education Regional Council (HERC) – Region 10 – THECB (2012-2014)
- Chair – Higher Education Regional Council (HERC) – Region 10 – THECB (2012)
- Board of Directors – Insights Science Museum, El Paso, Texas (2011-2013)
- Board of Directors – El Paso Skatepark Association (2007-2012)
- Board of Directors – Calvary Chapel Sun City (2007-2008, 2013)
- Alicia Chacon Family Night for Science with Pre-service Educators (Fall 2005)
- Alicia Chacon Family Night for Math with Pre-service Educators (Fall 2004)

- Chair of the Student Programs Advisory Committee (SPAC) at LANL (2003).
- High School Representative for Planning Committee, National Science Teachers Association, 2002 Area Convention, Albuquerque, NM (2001).
- Student Programs Advisory Committee (SPAC) at Los Alamos National Laboratory, 3-year appointment (January 2002 – December 2004).
- School-To-Work Proposal Review Team, State Department of Education of New Mexico, Albuquerque, NM (April, 2000).
- Commission on Higher Education Technical Review Team, State Department of Education of New Mexico, Santa Fe, NM (November, 1999).
- Exhibits and Evaluation Co-Manager, National Science Teachers Association, 1998 Area Convention, Albuquerque, NM (1997-98).

University Service

- UTEP Provost's Search Committee Member – 2019-2020
- College of Education – STEM Education Faculty Search Member – 2019-2020
- College of Education Organizational Task Force, Facilitator - 2015
- College of Education Dean's Search Committee – 2013-2014
- UTEP's Global Reach – Executive Committee Member – 2012-2013
- UTEP Project MOVE – Liaison Coordinator, 2011, Liaison 2011-2014
- UTEP Opportunity Nation Days – Demonstration Coordinator – 2012
- UTEP Faculty Senate – College of Education Representative – 2008-2009
- UTEP Graduate School – Outstanding Thesis nominations committee – Spring 2008
- UTEP College of Education – Teacher Education Department (TED) – Master Science Teacher Certification program
- UTEP College of Education - TED – Secondary/All Levels Minor Degree Redesign Committee
- UTEP College of Education – Dean's Committee on SACS Web Site
- UTEP College of Education – Committee to Hire the Math and Science Faculty
- UTEP College of Education – Dean's Committee on Technology Issues
- UTEP College of Education – Teachers for a New Era (TNE) Induction Committee
- UTEP College of Education – Teachers for a New Era (TNE) Science Committee
- UTEP College of Education – Graduate Advisory Committee - Member
- UTEP College of Education – Undergraduate Advising Center - Faculty Advisor
- UTEP College of Education – Teacher Education Department - Block 1 & Block 2 Faculty Member
- UTEP College of Education – Teacher Education Department – Web Site Committee Chair
- UTEP College of Science – Advising Committee for MAT Program - Member
- Texas State Board for Educator Certification (SBEC) –Masters Teachers Programs – EC-4 and 4-8

Consulting Experience

- UTSSCA Power of Collaboration Conference, October, 2019
- St. Mary's University, Science, Engineering, Technology (SET) Faculty Development, May, 2015
- Franklin Institute, Philadelphia Science Festival, May 2015
- Franklin Institute, Philadelphia Science Festival, April 2014
- National Science Foundation, Grant proposal reviewer for Widening Implementation and Demonstration of Evidence-Based Reforms (WIDER) program, June-August 2013.
- Public Broadcasting service KCOS Blast Beyond Television Show, 2011-2013
- UTEP Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) Program, Dr. Skateboard's Action Science, 2009-2012
- Project LEAP UP, College of Education, UTEP, 2007-2012

- Project SABEMOS, College of Education, UTEP, 2007-2009.
- Baylor University, Dr. Skateboard's Action Science, July 2010
- Mother Daughter, Father Son Program, College of Education, UTEP, 2004-2011
- El Paso Independent Schools, Dr. Skateboard's Action Science, 2005-2007
- Master Teacher Program, Genetic Science Learning Center, Eccles Institute of Human Genetics, University of Utah, August, 2001
- New Mexico Tech, Socorro, NM, Teaching/Pedagogy Software Package, June-August, 2001
- Genetic Science Learning Center, Eccles Institute of Human Genetics, University of Utah, January – April, 2001
- Peregrine Publishers, Boston, MA, Pedagogical Evaluation of the Biology Place web site resulting in paper to be published, March-May, 2000

Professional Affiliations

- American Council on Education (ACE)
- American Educational Research Association (AERA)
- Association for Supervision and Curriculum Development (ASCD)
- Association for Science Teacher Education (ASTA)
- National Network for Educational Renewal (NNER)
- National Social Science Association (NSSA)
- National Science Teachers Association (NSTA)
- Society for Information Technology and Teacher Education (SITE)