

TINA L. VEGA, PHD

tina.vega@utsa.edu

EDUCATION

The University of Texas

Doctor of Philosophy in Mathematics Education **2015**

Dissertation: *“Professional development for high school teachers: An investigation of its effect on student achievement and long-term effect on teacher knowledge and practice”*

Advisor: Dr. Cesar Delgado

The University of Texas at San Antonio

Master of Science in Mathematics **2008**

Thesis: *“A Multi-district analysis of the effectiveness and efficacy of reform mathematics curricula”*

Advisor: Dr. Betty Travis

The University of Texas at San Antonio

Bachelor of Science in Mathematics magna cum laude **2006**
Honors College

Honors Thesis: *“An Investigation of the effectiveness of high school mathematics reform curriculum analyzed by factors of gender and ethnicity”*

Advisor: Dr. Betty Travis

TEACHING EXPERIENCE

The University of Texas at San Antonio

Mathematics Department Faculty: Lecturer II **Fall 2018 to present**

Introduction to Mathematics (Quantitative Reasoning)

Intermediate Algebra

Implemented an active-learning approach where students explore and understand mathematics through collaborative learning and pre/post assignments

Provided opportunities for in class exploration of mathematics where struggle and mistakes are valued

The University of Texas at San Antonio

Adjunct Faculty

Intro to Learning and Teaching in a Culturally Diverse Society **Spring 2016**

STEM in Social Contexts

Essential Elements of Mathematics I **Fall 2013**

Designed and implemented discussion based lessons over complex issues teachers face in diverse schools such as promoting equity and social justice

Evaluated and selected digital media for the purpose of providing exploration of complex issues in education and a basis for reflection and discussion

Provided rich learning experiences for prospective teachers to contemplate the nature of inquiry and knowledge and its development over time, in particular the relationship between STEM and the social context in which STEM developed

Created interactive digitally based platforms for prospective teachers to present and share ideas in class and linked for future review through google docs and presentations
Designed and selected appropriate learning activities and explorations for mathematics content in class and through online digital media

North East ISD

K-12 Teacher:

Winston Churchill High School, 11th and 12th grade Precalculus, 2016-2018

Theodore Roosevelt High School, 10th grade Geometry, 2012-2013

Claudia Taylor Johnson High School, 10th grade Geometry, 2011-2012

James Madison High School, 10th grade Geometry, 2007-2010

Robert E. Lee High School, 9th and 11th grade Algebra I and Algebra II, 2006-2007

Designed and executed interactive, technology based lessons

Provided opportunities for student exploration and discovery of concepts as well as group collaboration

Analyzed student assessment data to design appropriate lessons

Actively contributed to team planning; served as team leader for Geometry 2008-2010

CERTIFICATIONS

Pedagogy and Professional Responsibilities

Secondary Mathematics Grades 8-12th

RELATED EXPERIENCE

The University of Texas at San Antonio

Teaching Assistant Co-Supervisor

Fall 2019 to present

Assign, monitor, and support TA's in the teaching of courses and assigning grades

Manage and oversee TA's hours and compliance with University policies

The University of Texas at San Antonio

NTT Search Committee

Summer 2019

Reviewed candidates for open positions, provided feedback into selection of candidates to interview,

actively participated in interviews of candidates

The University of Texas at San Antonio

Developmental Mathematics Coordinator

Fall 2018 to present

Created assessments for developmental mathematics courses

Oversee and support new co-requisite courses as new state model is implemented for developmental mathematics

The University of Texas at San Antonio

Independent Evaluator, San Antonio Science and Mathematics Collaborative (SASMC),

Teacher Quality Grant, Texas Higher Education Coordinating Board (THECB)

Fall 2014 – Spring 2016

Observe and evaluate teachers participating in a long-term professional

development; Coach and provide feedback to teachers as requested

The University of Texas

Research Assistant: Supporting Scientific Practices in Elementary and Middle School Classrooms

Fall 2011 – Spring 2012

Disaggregated video data from classroom discourse on student model making

The University of Texas at San Antonio

Research Assistant: TRC Mid-Career Teacher Recruitment Grant

Summer 2009

Compiled relevant research

The University of Texas at San Antonio

Master Teacher: San Antonio Science and Mathematics Collaborative (SASMC), Teacher Quality Grant, Texas Higher Education Coordinating Board (THECB)

2006-2008

PUBLICATIONS AND PAPERS [HTTPS://WWW.RESEARCHGATE.NET/PROFILE/TINA_VEGA](https://www.researchgate.net/profile/Tina_Vega)

Vega, T. L. (2015). *Professional development for high school teachers: An investigation of its effect on student achievement and long-term effect on teacher knowledge and practice*. (Doctoral Dissertation), UT Electronic Theses and Dissertations. Retrieved from <http://hdl.handle.net/2152/31362>

Vega, T., & Travis, B. (2012). *Factors affecting teacher practice*. Paper presented at the Hawaii International Conference on Education, Honolulu, HI.

Vega, T., & Travis, B. (2011). An investigation of the effectiveness of reform mathematics curricula analyzed by ethnicity, socio-economic status, and limited English proficiency. *Mathematics and Computer Education v. 45 no. 1 (Winter 2011) p. 10-16*.

CONFERENCE PRESENTATIONS OF PROFESSIONAL DEVELOPMENT

“Pythagorean Circles”, Conference on the Teaching of Mathematics 6-12, February 2016

“Exploring Triangle Centers To Create Solar Wind Probe With Sketchpad”, Conference on the Teaching of Mathematics 6-12, February 2013

“Factors affecting teacher practice”, Hawaii International Conference on Education, January 2012

“See and Explore Mathematics Using Geometer’s Sketchpad”,
Conference for the Advancement of Mathematics Teaching, July 2010;
Conference on the Teaching of Mathematics 6-12, February 2010;
San Antonio Mathematics Collaborative Day Seminar, December 2009

“See and Explore Mathematics Using Geometer’s Sketchpad and Smartboard”, NEISD Mathematics Curriculum Day, August 2009

“Allow ELL’s to See and Explore Mathematics Using Geometer’s Sketchpad”, MELL Conference, June 2009

“A Multi-district Analysis of the Effectiveness and Efficacy of Reform Mathematics Curricula”, Conference on the Teaching of Mathematics 6-12, February 2009

“Preparing Middle School Teachers to Teach Geometric Concepts Using Geometer’s Sketchpad”, Co-presented with Dr. Bill Jasper, ICTCM Conference. March 2008

“Discovering concepts in Geometry using Geometer’s Sketchpad”, Conference on the Teaching of Mathematics 6-12, February 2008

“Dynamic Discovery of Geometry”, San Antonio Science and Mathematics Saturday, October 2007

AWARDS AND RECOGNITION

Jewel Popham Raschke Endowed Presidential Scholarship in Mathematics Education, 2011-2012
Graduate School Diversity Mentoring Fellowship, 2010-2011
Young Engineers and Scientist (YES) Program Teacher, Southwest Research Institute, 2010-2011
San Antonio Mathematics Collaborative Master's Grant recipient, 2006-2008
Chosen representative of UTSA's Noyce Scholar program, NSF conference in Washington DC, June 2006
Honors College graduate 2006
Noyce Scholar's Program for Teachers Scholarship, 2005-2006
UTSA's UTeach Program Graduate 2006
National Science Foundation Scholarship, 2003-2005
Presidential Honors Scholarship, 2004-2005

PROFESSIONAL DEVELOPMENT

Corequisite Project Conference, November 2019
National Conference of the Teaching of Mathematics (NCTM), April 2017
Conference of the Teaching of Mathematics 6-12, February 2007, 2008, 2009, 2010, 2013, 2016
Young Engineers and Scientists Program (YES) Program Teacher, 2010-2011
Mathematics for English Language Learners (MELL) Conference, June 2008, 2009
International Conference on Technology in Collegiate Mathematics (ICTCM) Conference, March 2008
San Antonio Mathematics Collaborative (SAMC), 2006-2008
Conference for the Advancement of Mathematics Teaching (CAMT), Summer 2006, 2007, 2010
Sheltered Instruction Observation Protocol (SIOP) Training, Spring 2007
T³ Teachers Teaching with Technology, Spring and Summer 2006

SKILLS

Microsoft Office: Word, Excel, Powerpoint
Google: Drive, Docs, Presentation
Teaching tools: Geometer's Sketchpad, Smart Board, TI Calculators, MyMathLab
SPSS