

Curriculum Vita

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Associate Professor

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Education

University of Texas at Austin, Austin, Texas, Ph.D., Mathematics Education, 2001

Texas State University, San Marcos, Texas, M.S., Mathematics, 1995

University of Texas at Austin, Austin, Texas, B.A., Mathematics, 1993

Professional Background

2008-Present: Associate Professor of Mathematics, Tarleton State University

2001-Present: Graduate Coordinator for Masters of Mathematics, Tarleton State University

2001-2008: Assistant Professor of Mathematics, Tarleton State University

1995- 2001: Math Teacher, Leander Independent School District, Leander, Texas

1993-1995: Assistant Instructor, Texas State University, San Marcos, Texas

Publications

- Brawner, Bowen. *The Algebra Debate: Making the Case for a Function-Based Approach*. In *Journal of the Effective Schools Project*, Vol. 12 p. 36-41, 2005. *JESP* is a peer-reviewed practitioner-based journal distributed throughout the A&M System universities as well as state agencies concerned with teacher preparation and classroom instruction.
- Brawner, Bowen. *A Function-Based Approach to Algebra: Its effects on the Achievement and Understanding of Academically Disadvantaged Students*. In *Handheld Technology and Student Achievement: A Collection of Publications*, p.2-49 thru 2-50, 2001.
- Brawner B., Fletcher N. Online Publication: *Acceleration Station: Student benchmarking for Algebra and Geometry*. Cambium Learning, Inc. Natick, MA 2006.
- Lead Writer and Editor for the *Mathematics TEKS Refinement Project –High School*, a professional development module, published by Texas Education Agency and Tarleton State University, 2006.
- Brawner, Bowen. *A Function-based Approach to Algebra: Its Effects on the Achievement and Understanding of Academically Disadvantaged Students*. Published by UMI® Dissertation Publishing, 2001.

Grants

- Texas Essential Knowledge and Skills Refinement Project. Grant award of \$880,000 by the Texas Education Agency, 2005 - 2007.

The purpose of the High School project is to develop high quality professional development to increase teacher content knowledge in statistics, geometry, and algebra. I also served as the lead writer for the project.

- Principle Investigator, *Inquiry-based College Algebra Reform: Phase II*. Amount funded: \$12,602 TxCEPT Level 2 grant supported by National Science Foundation (#DUE9987332) (2003-2004)

- Principle Investigator, *Inquiry-based College Algebra Reform*. Amount funded: \$13,372 TxCEPT Level 2 grant supported by National Science Foundation (#DUE9987332) (2002)

Presentations and Workshops

- Presented *Engaging Students in College Mathematics Courses*, at the **MAA-AMS National Joint Mathematics Meeting** in San Diego, CA on January 6, 2008

- Workshop on Training of Trainers for Mathematics TEKS Refinement Project at Education Service Center 20 in San Antonio, Texas on December 15-16, 2006.

- Workshop on Training of Trainers for Mathematics TEKS Refinement Project at Education Service Center 13 in Austin, Texas on September 22-23, 2006.

- Workshop on Mathematics TEKS Refinement High School Project at Education Service 13 in Austin, Texas on August 23-24, 2006.

- Presented three papers *Exploring the meaning of Function*, *Spaghetti Regression* and *Exploring Correlation* at the **Regional T³ Conference** (Teachers Teaching with Technology) held at Tarleton State University on March 31-April 1, 2006.

- Presented paper *Exploring Correlation and Regression* at the Meeting of the Texas Education Agency Advisory Board in Ft. Worth, Texas on May 23, 2006.

- Presented Mathematics TEKS Refinement Project at the Service Center Panel meeting in Midland, Texas on April 6, 2006.

- Workshop on *The Meaning of Functions* and *Axonometric Views* for the **Rural Systemic Initiative** in San Antonio, Texas held on February 5-6, 2006.

- Workshop on Mathematics TEKS Refinement Project at the Texas Education Agency Meeting in Arlington, Texas on January 11-12, 2006.

- Presented *Dimensional Changes and Axonometric Views* at the Advisory Committee Meeting for the Mathematics TEKS Refinement Project in Dallas, Texas on December 9, 2005.

- Presented paper *A Function-Based Approach to Teaching Mathematics* at the **TEAM** meeting at Tarleton State University on September 13, 2005.
- Presented paper *Situated Learning Activities* at the Annual Convention of the **School Science and Mathematics Association (SSMA)** in Fort Worth, Texas on November 10-12 2005.
- Presented paper *Reinforcing Algebra Through a Function-Based Approach* at the Annual Convention of the **SSMA** in Fort Worth, Texas on November 10-12, 2005.
- Presented paper *Innumeracy – Mathematics Illiteracy and Big Numbers* at the **TEAM** meeting at Tarleton State University on November 13, 2004.
- Presented the contributed paper *Function-based Reform in College Algebra* at the 2004 Meeting of the **Texas Section of the MAA** at Texas A&M University-Corpus Christi held April 1-3, 2004. It was very well received, standing room only.
- Panel speaker on *Teacher Mentoring* at **The Forum for Recruitment, Retention, Novice Teacher Support for Mathematics and Science** hosted by the Texas Collaborative for Excellence in Teacher Preparation (TxCEPT) in Austin, Texas on May 13, 2003.
- Presented *Function-Based Approach to Algebra: Its Effects on Achievement and Understanding* at the **81st National Meeting of NCTM** in San Antonio, Texas on April 12, 2003.
- Presented research on Function-based Algebra at the **Alief Technology Summit** in Houston, Texas on January 15, 2002. Co-presenter was former President for NCTM, Dr. Kathy Sealy.
- Presented *The Status of Mathematics Reform* at **Colloquia Research Seminar** at the University of North Texas in Denton, Texas on March 12, 2001.

Professional Service

- Campus Team Leader for Texas Collaborative for Excellence in Teachers Preparation (TxCETP) for Tarleton State University 2002-2008

TxCETP involves faculty and students from Science, Mathematics, Engineering, and Education from 10 partner institutions, ASU, A&M-C, A&M-CC, A&M-K, PVAMU, TAMIU, TAMU, TSU, TWU, and WTAMU and pre-K-12 teachers.

TxCETP is funded by the National Science Foundation (NSF) and is committed to the

recruitment, education, and retention of the next generation of Science and Mathematics teachers. Grant totals: 5 years - \$5,000,000.

- Texas Education Agency -Algebra I and Geometry End-of-Course Assessment Content Validation Expert, appointed by the Commissioner of Education. 2007
- Texas Education Agency - Geometry End-of-Course Exam Development Committee, 2006
- Reviewer for The AMATYC Review the Journal of the American Mathematical Association of Two-Year Colleges.
- Reviewer for The Texas College Mathematics Journal (TX CMJ), a refereed journal devoted to mathematics and mathematics education.
- Texas Education Agency - Secondary Texas Essential Knowledge and Skills Revision Committee, appointed by the Commissioner of Education. 2004
- TEXTEAM Leader for In-Depth Secondary Mathematics, a project of the Texas Education Agency and the Charles A. Dana Center.
- Advisory board for the Integrated Physics and Chemistry (IPC) with Algebra I Unit and professional development created by Region IV in partnership with Texas Instruments. 2002

Professional Memberships

- National Council of Teachers of Mathematics, NCTM
- Mathematical Association of America, MAA
- School Science and Mathematics Association, SSMA
- National Association for Developmental Education, NADE
- Texas Council of Teachers of Mathematics, TCTM
- Mathematical Association of America Project NeXT
- Texas Association of School Boards, TASB
- Tarleton Educators for the Advancement of Mathematics, TEAM