

## EDUCATION

**New Mexico State University**, Las Cruces, NM

Ph.D., Curriculum & Instruction, 2010

**The University of Texas at El Paso**, El Paso, TX

M.A., Teacher Education, 2006

M.S., Computer Science, 1991

B. S., Mathematics, 1967

## PROFESSIONAL EXPERIENCE

**Director**, Center for Education Research & Policy Studies, College of Education, UTEP, 2015-Present

**Research Assistant Professor**, Office of Research & Sponsored Projects, UTEP, 2014-Present

**Special Assignment**, College of Education, UTEP, 2015

**Assistant Professor of Practice**, Department of Teacher Education, UTEP College of Education, 2014

**Research Assistant Professor and Co-Director**, Center for Research in Engineering & Technology Education, UTEP College of Engineering, 2011-2014

**Research Associate**, New Mexico State University, Las Cruces, NM, 2010-2011

**Lecturer**, The University of Texas at El Paso, El Paso, TX, 2005-2010

**Director**, The University of Texas at El Paso, El Paso, TX, 1994-2005

**Instructor**, The University of Texas at El Paso, Colleges of Science and Engineering, El Paso, TX, 1995-2005

**Instructor**, El Paso Community College, Division of Mathematics and Science, El Paso, TX, 1991-1993

## SELECTED PUBLICATIONS

**Villa, E. Q.**, Lesser, L., & Mein, E. (2022). Shifting precalculus from gatekeeper to gateway at a Hispanic-Serving Institution. In M. Voigt, J. E. Hagman, J. Gehrtz, B. Ratliff, N. Alexander, & R. Levy (Eds.), *Justice through the lens of calculus: Framing new possibilities for diversity, equity, and inclusion*, pp. 353-362. Mathematical Association of America.

Mein, E., Esquinca, A., **Villa, E.**, & Monarrez, A. (2021). The affordances and constraints of social networks among Latina engineering students. In B. Irby, N. Abdelrahman, B. Polnick, & J. Ballenger (Eds.), *Women of Color in STEM: Navigating the Double Bind in Higher Education* (pp. 23-33). Charlotte, NC: Information Age Publishing Inc.

**Villa, E. Q.**, Hampton, E., Esquinca, A., & Guerra, H. M. (2020). "Is engineering for me?": Examining struggles and challenges of Latinas in undergraduate engineering studies. *Peace and Conflict: Journal of Peace Psychology: Special Edition—The Challenge of Being Latina, Personal, Political, and Economic—Education and Vocational Concerns*, 26(4), 403-413.

**Villa, E. Q.** (2018). Minority voices: Interrupting the social environment to retain undergraduates in computing. *Inroads*, 9(3), 31-33.

**Villa, E. Q.**, Wandermurem, L., Hampton, E. M., & Esquinca, A. (2016). Engineering education through the Latina lens. *Journal of Education and Learning*, 5(4), 113-125. Doi: 10.5539/jel.v5n4p113

**Villa, E. Q.** (2017). Using in-depth interviews as a primary source of data for developing case studies. In B. Flett & F. Bronia (Eds.), *SAGE Research Methods Cases – Education*. London: Sage Publications, Ltd. DOI: <http://dx.doi.org/10.4135/9781473958043>.

Gates, A. Q., **Villa, E. Y.**, & Salamah, S. (2014). Developing communities of practice to prepare software engineers with effective team skills. In L. Yu (Ed.), *Overcoming challenges in software engineering education: Delivering non-technical knowledge and skills* (pp. 52-70). Hershey, PA: IGI Global.

## **CURRENT GRANTS**

Co-Principal Investigator, “CAHSI INCLUDES Community Workshop on Building CISE Research Capacity at Hispanic-Serving Institutions,” with Dr. A. Gates, PI, June 2019-2022, \$194,506.

Co-Principal Investigator, PI S. Salamah and Co-PIs M. Ceberio and C. Convertino, “Developing Software Engineers of Tomorrow,” U.S. Department of Education, \$742,174, October 2019 to September 2022.

## **RECENTLY EXPIRED GRANTS (~30 grants)**

Co-Principal Investigator, PI Ann Gates, “CAHSI INCLUDES Community Workshop on Building CISE Research Capacity at Hispanic-Serving Institutions,” National Science Foundation, \$194,506, May 2019 to May 2021.

Principal Investigator, “Developing Evidence-Based Learning Communities in STEM Gateway Courses: Increasing Persistence and Timely Completion of STEM,” U.S. Department of Education, with Drs. C. Mariani, E. Mein, A. Esquinca, C. Convertino, P. Golding, and A. Duval, October 2016 to September 2020, \$689,243.

Senior Personnel with PI Ann Gates, “IUSE/PFE:RED: Toward a Model of Change for Preparing a New Generation for Professions in Computer Science,” National Science Foundation, July 2015 to June 2021, \$1,433,781.

Co-Principal Investigator with PI Erika Mein and co-PI Alberto Esquinca, “Broadening Participation in Engineering: A Qualitative Study on Latina/o Persistence in and Beyond the Degree,” National Science Foundation, March 2017 to February 2020, \$456,076.

Principal Investigator, “Latinas in Computer Science and Engineering: A Qualitative Study Examining Identity and Agency for Resilience and Persistence,” NSF, 2012-2016, \$524,960.