

Dr. Jaime Curts  
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The University of Texas Pan American  
College of Education  
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#### EDUCATION

- Ph. D.** University of Wisconsin-Madison. Curriculum & Instruction. Major: May 1985  
Mathematics Education. Minor: Quantitative Educational Psychology.
- M. Ed.** Colorado State University at Fort Collins. Curriculum and Instruction. December  
1981
- Bachelor in Science**, Universidad Nacional Autónoma de México. Major: January  
1979  
Biomathematics

#### PUBLICATIONS

##### Refereed Papers or Book Chapters

- Curts, J., Tanguma, J., & Peña, C (in press). Predictors of Hispanic School Teachers' Self-efficacy in the Pedagogical Use of Technology. *Computers in the Schools*.
- Curts, J. (2006). Utilización de los Mapas Conceptuales como Herramienta Meta-cognitiva Bilingüe. *The Texas Association Bilingual Journal*. Vol 9(1):82-93  
[http://www.tabe.org/members/Mapas\\_Conceptuales.pdf](http://www.tabe.org/members/Mapas_Conceptuales.pdf)
- Yanes, M.J., Pena, C., Curts, J.B. (2006) An Emerging Hybrid Model for Interactive Online Learning. In Szymanski, C.S., Wilson, E.K., & Wright, V.H. (Eds), *Perspectives on distance learning series: Research on enhancing the interactivity of online learning*. Tuscaloosa, AL: Info Age Publishing.
- Peña, C., Curts, J., & McWright, B. (2004). Access to Technology: A Necessary but not sufficient condition. *International Journal of Instructional Media*, Vol 34(3)
- Chiappa\_Carrara, X., Gallardo-Cabello, M., & Curts, J. (1993). Estudio del regimen alimentario de la anchoveta *Engraulis mordax* Girard por medio de la aplicacion de un modelo de analisis de varianza robusto de dos vias. *Temas de Investigacion III*(2):9-15. (Mexico)
- Curts, J. Alcantara, L., & Chiappa-Carrara, X. (1987). Introducción al análisis exploratorio de datos multidimensionales. *Ciencias*, 11:30-35.  
<http://www.ejournal.unam.mx/ciencias/no11/CNS01106.pdf>
- Curts, J. (1986). El diagrama de tallo-y-hoja. *Biología*, 15(1-4):7-12. (Mexico)
- Curts, J. (1984). Introducción al análisis de residuos en biología. *Biótica*, 9(3):271-278. (Mexico)
- Almeida, R.A., A. Búrquez, J. Curts, C. González, L. Herrera, A. Lazcano, A. Martínez, & A. Picones. 1984. Descripción morfométrica de ammonitas Mexicanas del Cretácico y Jurásico. *Revista de la Sociedad Mexicana de Historia Natural* 35:225-248.

##### Non-Refereed Papers/Book Chapters

- Curts, J. (1996). Dos principios para la visualización de datos. *Datos* 12(4):12-13. Boletín de la Asociación Mexicana de Estadística. (México)
- Curts, J., & Silva, A. (1992). Análisis Exploratorio de Datos. En Silva, A. (Ed.). *Métodos*

*Cuantitativos en Psicología*. Trillas: Mexico, D.F.

Salgado-Ugarte, I. & Curts, J. (1993). Twice reroughing procedure for resistant nonlinear smoothing. *The STATA Technical Bulletin* 11:8-11. (USA)

Salgado-Ugarte, I. & Curts, J. (1992). Resistant Smoothing using Stata. *The StATA Technical Bulletin* 7:8-11. (USA)

Curts, J. (1986). Teaching college biology students the simple linear regression model using an interactive microcomputer graphics software package. *Dissertation Abstracts International*. Vol. 46 (7 Sec. A)

### **Printed Instructional materials with copy rights**

Marquez, R., & Curts, J. (2004). Student Bilingual Vocabulary Book for Science. 2<sup>nd</sup> Edition. Marqcom, Inc.: Dallas, TX

Marquez, R., & Curts, J. (2004). Student Bilingual Vocabulary Book for Math. 2<sup>nd</sup> Edition. Marqcom, Inc.: Dallas, TX

### **Refereed Proceeding Papers**

Curts, J. & Tanguma, J. (2007). Preservice Teachers' Technology Competence Survey Skills Applying Technology in Educational Settings: An Exploratory Factor Analysis. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 2980-2984). Chesapeake, VA: AACE.

Curts, J. & Lopez-Estrada, V. (2006). Preservice Teachers' Meaningful Understanding of Constructivist Instruction: Social Interaction Strategies and Web-based Communication processes. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2006* (pp. 863-864). Chesapeake, VA: AACE.

Peña, C.M., Kimmel, J., & **Curts, J.** (2004). Online mentoring of Preservice Teachers. *Proceedings of the 15<sup>th</sup> International Conference of the Society for Information Technology & Teacher Education (SITE)*, Atlanta, GA, pp. 626-631

Yanes, M. & **Curts, J.** (2002). *Integrating Technology into a Secondary Education Teacher Preparation Program*. In Simonson, M., & Crawford, M. (Co-Eds.), (2002). *The 25<sup>th</sup> Annual Proceedings of the National Convention of the Association for Educational Communication and Technology (AECT), Selected Research Papers. Research and Theory. Volume 1*. Dallas, Texas, USA, p. 491-499

Yanes, M. & **Curts, J.** (2002). Toward Improving Reflective Practice: An Online Model for Student Teaching. *Proceedings of the Society for Information Technology & Teacher Education. 13<sup>th</sup> International Conference*. Nashville, Tennessee, USA, p. 1860-1863

### **Non-Refereed Book Chapters**

Medrano, H., & **Curts, J.** (2004). [\*Alignment of State Standards and Teacher Preparation Program Standards\*](#). In: *What is A Qualified, Capable Teacher?* 19<sup>th</sup> Annual Conference, of The National Evaluation System, Inc (NES). [http://www.nesinc.com/PDFs/2004\\_12Medrano.pdf](http://www.nesinc.com/PDFs/2004_12Medrano.pdf)

**Curts, J.B.**, Yanes, M.J., McWright, B., 2003, *Assessment of preservice teachers' web-based electronic portfolios*. In: *Educational Technology for Teacher Preparation and Certification*, 18<sup>th</sup> Annual Conference, National Evaluation Systems, Inc (NES).

[http://www.nesinc.com/PDFs/2003\\_11Curts.pdf](http://www.nesinc.com/PDFs/2003_11Curts.pdf)

**Curts, J.** (2003). A constructivist approach for teaching how polls work. In Henson, K. T. *Constructivist Methods for Teaching in Diverse Middle Level Classroom*. [Chapter 8: Teaching in Multicultural Settings. Case Study, p. 233-238]. Needham Heights, MA: Allyn & Bacon.

### **Customized Book**

Pena, C. and **Curts, J.** (2003). Human Development and Learning Theory for Secondary School Teachers. Implications for Instructional Planning. Boston: Pearson Custom Publishing. ISBN 0-536-72569-1

### ACADEMIC APPOINTMENTS

**The University of Texas Pan-American (UTPA)** 2000 - present

- **Associate Professor** (tenured), Department of Curriculum and Instruction.
- **Associate Graduate Faculty**. UTPA Graduate Council. October 20, 2005
- **Assistant Professor**, 6-year tenure-track. Department of Curriculum and Instruction. FY 2000-2001. Reappointed for FY 2001-2002, FY 2002-2003, FY 2003-2004, FY 2004-2005 and FY 2005-2006.
- **Lecturer**, Secondary Field-based Education Program, Department of Curriculum and Instruction, January 01, 2000.

**Other appointments at UTPA** 2001 - present

- **College of Education Assessment Coordinator**. Sept 2006 –up to date.
- **Faculty Senator**. 2005-2006
- **Program Coordinator**. All-Level, Middle School and Secondary School Field-Based Teacher Preparation Program. Department of Curriculum and Instruction. Sept 2001 – Sept 2004
- **Program Coordinator**. Secondary School Field-Based Teacher Preparation Program. Department of Curriculum and Instruction. Sept 2005 – Sept 2007
- **Co-Chair** of the Institutional Planning and Assessment Committee. 2005-2007
- **Chair**, Teacher Education Committee. 2004-2005.

### CONFERENCE PRESENTATIONS

**International, national and local** 2000 - present

- **Curts, J., & Tanguma, J.** (2007). Preservice Teachers' Technology Competence Survey Skills Applying Technology in Educational Settings: An Exploratory Factor Analysis. Conference and short paper presented at the Society for Information Technology & Teacher Education (SITE) International Conference, March 21-22, 2007, San Antonio, TX
- **Curts, J.** (2006). Bloom's Taxonomy Revised: A focus for TAKS. Conference presented at the Hispanic Engineering Science and Technology Week. September 26, 2006. The University of Texas Pan American.
- **Curts, J.** (2006). Arriba y Adelante con Algebra. Conference presented at the American Association of Hispanics in Higher Education, Inc. March 02-04, 2006. San Antonio, Texas.
- **Curts, J.** (2005). Concept Mapping in Science Education. Conference presented at the Hispanic Engineering Science and Technology. September 26, 2005. The

University of Texas Pan American.

- Curts, J., & Estrada, V.** (2006). *Preservice Teachers' Meaningful Understanding of Constructivist Instruction: Social Interaction Strategies and Web-based Communication processes*. Conference and short paper presented at the Society for Information Technology & Teacher Education (SITE) International Conference, March 21-22, 2006, Orlando, FL.
- Curts, J., Márquez, R., & Cabazos, S.** (2006). Reading plus Mathematics equals Cognitive Success. Conference presented at the National Council for Community and Education Partnerships (NCCEP) Annual GEAR-UP National Conference. July 23-26, 2006. Washington, D.C.
- Curts, J.** (2004). Concept mapping for mathematics education. Conference presented at the Rio Grande Valley Council of Teachers of Mathematics. 39<sup>th</sup> Annual Mathematics Conference. November 11, 2000. University of Texas Pan Am.
- Curts, J.** (2004). An introduction to concept Mapping. Conference presented at HESTEC 2004 Educator Day, September 27, 2004. UTPA
- Yanes, M.J. and **Curts, J.** and *Discussion in Face-to-Face Instruction: Enhancing Reflective Practice*, Association for Educational Communications and Technology (AECT), University of North Texas, Denton, TX, June 19, 2004
- Curts, J.** (2004). Learning with Understanding: Seven Principles. Second Internacional Congreso on Teaching and Learning.. Unidad Academica Multidisciplinaria Reynosa-Aztlan. Universidad Autonoma de Tamaulipas. May 27-28, 2004.
- Curts, J.** and Yanes, M.J., (2004). *Discussion in Face-to-Face Instruction: Enhancing Collaborative Learning*, Texas Distance Learning Association (TxDLA) 2004 Conference, Galveston, TX, March 21, 2004
- Curts, J., Yanes, M., & Peña, C.** (2003). Current uses of technology of mentor teachers from Texas Rio Grande Valley. Poster presented at the 14<sup>th</sup> International Conference of the Society for Information Technology & Teacher Education, March 27, 2003, Albuquerque, NM
- Curts, J.** and Yanes, M. (2003). Education and Technology Integration. HESTEC 2003 Educator Day, September 27, 2003. UTPA
- Yanes, M. & **Curts, J.**, (2003). *Integrating Technology into a Secondary Education Teacher Preparation Program*, Paper presented at the Association for Educational Communications and Technology (AECT), October, Dallas, Texas,
- Curts, J.** and Yanes, M. (2003). Education and Technology Integration. HESTEC 2003 Educator Day, September 27, 2003. UTPA
- Yanes, M. & **Curts, J.**, (2003). *Integrating Technology into a Secondary Education Teacher Preparation Program*, Paper presented at the Association for Educational Communications and Technology (AECT), October, Dallas, Texas,
- Curts, J., & Yanes, M.** (2002). *The Electronic Learning Community for Rio Grande Valley Teachers*. Conference presented at the Hispanic Engineering Science & Technology Week. The University of Texas Pan American, October 14, 2002. Edinburg, TX
- Yanes, M., & **Curts, J.** (2002). *The Electronic Learning Community: What it can do for Bilingual Teachers and Bilingual Education*. Conference presented at the 11<sup>th</sup> Annual Rio Grande Valley/Texas Association for Bilingual Education Conference. November, Padre Island, Texas
- Yanes, M.J. and **Curts, J.** (2002). *An Online Model for Student Teaching, Information Technology and Distance Education* Conference (ITDE), May, UTPA
- Curts, J.** and Yanes M.J. (2002). Poster Session: *Interpreting Factor Assessment Scores Using Schematic Diagrams Combines with Profile Plots*, American Association of Higher Education Assessment Conference, June, Boston, Mass.
- Yanes, M. J. and **Curts, J.** (2002). *Creating Online Learning Communities for Professional Preparation and Development*, Association for Supervision and Curriculum Development (ASCD), National Conference, March, San Antonio, Texas

- Yanes, M. J. and **Curts, J.** (2002). *Toward Improving Reflective Practice: An Online Model for Student Teaching*, Society for Information Technology & Teacher Education (SITE) International Conference, March, Nashville, Tennessee
- Curts, J.** (2002). *Teaching variability through computer experiments*. Paper presented at the National Science Teachers Association 50<sup>th</sup> National Convention. March 27, 2002, San Diego, CA
- Curts, J.** and Yanes M.J. (2002). Poster Session: *Interpreting Factor Assessment Scores Using Schematic Diagrams Combines with Profile Plots*, American Association of Higher Education Assessment Conference, June, Boston, Mass.
- Yanes, M. J. and **Curts, J.** (2002). *Creating Online Learning Communities for Professional Preparation and Development*, Association for Supervision and Curriculum Development (ASCD), National Conference, March, San Antonio, Texas
- Yanes, M. J. and **Curts, J.** (2002). *Toward Improving Reflective Practice: An Online Model for Student Teaching*, Society for Information Technology & Teacher Education (SITE) International Conference, March, Nashville, Tennessee
- Curts, J.** (2002). *Teaching variability through computer experiments*. Paper presented at the National Science Teachers Association 50<sup>th</sup> National Convention. March 27, 2002, San Diego, CA
- Curts, J.** (2001). Teaching probability decision analysis with computer simulation experiments. 6<sup>th</sup> International Conference of The Decision Science Institute. Instituto Tecnológico Autónomo de México (ITESM), Campus Chihuahua.
- Curts, J.** & Wagner, E. (2001). *Integrating Constructivism into Probability Lesson Plans*. Paper presented at the Rio Grande Valley Council of Teachers of Mathematics. 36<sup>th</sup> Annual Mathematics Conference. November 3, 2001. University of Texas Pan Am
- Curts, J.** & Wagner, E. (2000). *Experiencing with Randomness*. Paper presented at the Rio Grande Valley Council of Teachers of Mathematics. 35<sup>th</sup> Annual Mathematics Conference. November 11, 2000. University of Texas Pan Am.
- Curts, J.** & Wagner, E. (2000). *Teaching Probability Distribution Functions: Bridging the Gap!*. Paper presented at the Rio Grande Valley Council of Teachers of Mathematics. 35<sup>th</sup> Annual Mathematics Conference. November 11, 2000. University of Texas Pan Am.

## PROFESSIONAL DEVELOPMENT

2001 - present

- Responsive Research on Teacher Quality. A professional Development Series. The Center for Research, Evaluation and Advancement of Teacher Education. January – August, 2007.
- The 6<sup>th</sup> Annual Assessment Conference. February 23-25, 2006. College Station, Texas.
- International Mathematics Education Conference, The University of Texas at San Antonio, Texas. July 7-9, 2005
- Texas Instrument T3 2005 International Conference. Washington, D.C. March 18-20, 2005.
- Critical Thinking Workshop. The University of Texas Pan American. April 14-15, 2005.
- LASER Middle School Science Education Planning Symposium. Atlanta, GA, December 01-03, 2004
- First International Conference on Concept Mapping. Universidad Pública de Navarra, Spain. September 14-17, 2004
- National Conference on Online Interactive Learning: Best Practices in Using Online Learning for the Professional Education of Teachers & College Faculty. Bryant Conference Center. The University of Alabama, Tuscaloosa, AL, June 10-11, 2002
- Professional Development Academy workshops prepared by the Texas Regional Collaborative for Excellence in Science Teaching, Austin, TX. April 19-20; May 16-18, August 27-29 and November 29-30, 2002.

- Teaching Online in Higher Education”, taught by the Center of Distance Learning, University of Texas Pan American, , Edinburg, TX. December 18, 2001.
- Charles A. Dana Center October Pre-service Conference “Linking Standards and Instruction”, Austin, TX. October 4-6, 2001
- American Association for Higher Education (AAHE) Conference on Faculty Roles and Rewards, Tampa, FL. February 1-4, 2001
- National Middle School Association Symposium on Middle Level Teacher Preparation “Tomorrow’s Teachers Today” , Dallas, TX. January 19-20, 2001.

## **Grants, Proposal, indirect costs and awards**

2001 - present

### **Funded Grants**

Curts, J. (2004). The Use of Graphing Calculators in Improving the Mathematics Achievement of Students in the Rio Grande Valley. Proposal submitted to Texas Instrument, Phase I September 01, 2004 . \$65,000-funded. Phase II, July-August, 2004, \$15,000-funded

Curts, J., & Yanes, M,J. (2001), *Preparing Tomorrows Teachers to Use Technology*. Co-PI and Co-Director, *PT3 at UTPA*, Department of Education (DOE), , \$1.3 million, funded. July 2001-May 2004.

Curts, J. “*Introducing Computer Data Simulation in Science and Math Classes*”. (2000). Exxon-Mobil Regional Collaborative Mini-Grant for Excellence in Science Teaching on. Funded: \$2 000

### **UTPA indirect cost awards**

**Curts, J.** (2007). College of Education Indirect Cost award to attend Society for Information Technology & Teacher Education (SITE) International Conference, March 21-22, 2007, San Antonio, TX. Total awarded \$350.00

**Curts, J.** (2006). College of Education Indirect Cost award to attend the American Association of Hispanics in Higher Education, Inc. March 02-04, 2006. San Antonio, Texas, San Antonio, TX. Total awarded \$500.00

**Curts, J., & Yanes, M.** (2006). PT3 Indirect Cost Proposal. Total awarded \$6,324.37. The University of Texas Pan American. College of Education.

### **Proposals pending notification**

**Curts, J., & Menchaca, V.** (2007). The Rio Grande Valley Mathematics Learning Community. Proposal submitted April, 2007 to the Meadows Foundation

### **Proposals not funded**

Bubb, P., & **Curts, J.** (2006). A\_MAN Technology Scholars Academy. Proposal submitted June 30, 2006 to The National Science Foundation (No. 0639682). Pending

**Curts, J., & Guerrero, M.** (2006). Comparison of three language interventions in gate-keeping mathematics courses: A longitudinal study. Proposal submitted to the QEP/UTPA Committee. Not funded

**Curts, J.** (2004). Arriba y Adelante con Algebra (Up and Forward with Algebra). Proposal submitted December 16, 2004 to the Institute of Education Science, DOE, \$1.2 Not

funded

Yanes, M.J., **Curts, J.**, PT3-ACT Project: Assessment Centered Teaching, U. S. Department of Education, DOE Preparing Tomorrow's Teachers to Use Technology – Not Funded

Yanes, M.J., **Curts, J.**, Ruiz-Escalante, J., Gomez, L., *Enlacémonos Project*, Technology Opportunities Program, U. S. Department of Commerce – Not funded

**Curts, J.** & Yanes, M. *Developing Exemplary Math and Science Programs for Secondary Schools*, Proposal submitted to the National Science Foundation, October. Requested \$1 million

### **Member or collaborator of writing team**

Collaborator with the Texas Regional Collaboratives for Excellence in Mathematics Teaching. Proposal submitted to the Texas Education Agency by Dr. Tina Atkins, Region One Service Center. May 23, 2006. Funded \$200,000

Member and Contributor to the "*Development Planning Grant Proposal for a South Texas Mathematics, Science and Technology Center for Learning and Teaching*," by Dr. Olga Ramirez & Dr. John Bernard (UTPA) to the National Science Foundation.

Member and Contributor of the *Rio Grande Valley* Collaborative for Science Education. Awards for \$12,00 (August 31, 1999 through August 31, 2000) and \$6,225. (August 31, 1999 through August 31, 2000)

### **Awards**

**Curts, J.** (2003). The University of Texas Pan American. Provost's Award of Excellence. Pan American Days 2003.

**Curts, J.** (2002). The University of Texas Pan American, Center for Distance Learning. Award to develop and implement an online course (EDCI 4307), (2002)

**Curts, J.** (2002). The University of Texas Pan American. Award for participating in the TITLE III "*Empowering Students for Success*"

### **Other**

2001 - present

### **Service to the University**

- 2005-2007. Co-Chair, Joint Institutional Assessment and Strategic Planning Committee, UTPA
- 2004-2006. Member of the SACS Compliance Certification Team, UTPA
- 2005-2006. Senator for the College of Education, UTPA
- 2005-2007. Member of the ORACLE ERP Faculty Committee, UTPA
- 2004-2005. Member of the University Task Force on Faculty Workload and Standards, UTPA
- 2004-2005. Chair, Teacher Education Committee, UTPA
- 2003-2005. Member of the Teacher Education Committee, UTPA
- 2004. Member of the State Advisory Council for the UT System Assessment of Teacher Preparation Programs
- 2002-2003. Member of the Academic Advisory Committee of the Center for Latin American Studies, UTPA
- 2002. Member of the Temporary Teacher Education Committee, UTPA

- 2001. Member of the Institutional Assessment Committee, UTPA
- 2001. Member of the Admissions Committee, UTPA

### **Service to the College of Education, UTPA**

- 2005-2006. Program Coordinator for the All-level, Middle School and High School Field-based Teacher Preparation Program
- 2005-2006. Member of the C&I All-level, Middle and High School Search Committee
- 2005-2006. Member of C&I Chair Search Committee
- 2005-2006. Member of the Graduate Alternative Certification Program Task Force
- 2005-2006. Member of the COE Ad Hoc Committee on Mission and Vision Statement
- 2001-2004. Secondary/Middle School Field-based Teacher Preparation Program Coordinator
- 2004. College of Education Excellence Awards Committee, Chair
- 2001-2004. Member of the Search Committee of the Department of Curriculum and Instruction.
- 2001-2003. Member of the Technology Committee, Department of Curriculum and Instruction, UTPA.
- 2002-2003. College of Education ExCET Task Force Committee
- 2003. Member of the Teacher Education Improvement Committee.

### **Member of Professional Organizations**

- American Association of Hispanics in Higher Education (AAHHE)
- International Society for Technology in Education (ISTE)
- Board Member of the Rio Grande Valley Council of Teachers of Mathematics
- Rio Grande Valley Texas Association for Bilingual Education