

Curriculum Vitae

Hamide Dogan-Dunlap
University of Texas at El Paso (UTEP)
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EDUCATION

2001 Ph.D. in Mathematics, University of Oklahoma, Norman. *Graduated in May, 2001.*
Dissertation Advisor : Dr. Curtis McKnight, Professor of Mathematics,
University of Oklahoma.
Dissertation title: *"A comparison study between a traditional and experimental first
year linear algebra program."*

1995 MA Mathematics, University of Oklahoma, Norman. December, 1995.

1991 BS. Mathematics, Middle East Technical University (M.E.T.U), Ankara, Turkey
(Turkiye). May, 1991.

WORK HISTORY

2007-Present Associate Professor of Mathematics at the University of Texas at El Paso
(with Tenure).

2002-2007 Graduate Advisor for the Master of Arts in Teaching (MAT) in Mathematics
at UTEP, Mathematical Sciences (over 50 students).

2001(Sept)- 2007 Assistant Professor of Mathematics at the University of Texas at El
Paso (UTEP).

2000-2001 Assistant Professor. Eastern Connecticut State University as ABD.

PUBLICATIONS AND RESEARCH ACTIVITIES

Books

S. Villa and H. Dogan-Dunlap. *Mathematics Performance and Reading Skills* (In press).

H. Dogan-Dunlap. (2008). *Linear Algebra Teaching and Learning: Visualization*. VDM
Verlag Dr. Müller Aktiengesellschaft & Co. KG Publishing.

Book Chapters

- H. Doğan-Dunlap, E. Özdemir Erdoğan and Ç. Kılıç (2008). *Mathematical Induction: Misconceptions and Learning Difficulties* (Mathematıksel Tımevarım: Karsılasılan Kavram Yangıları ve Öğrenme Güçlükleri). In M. F. Özınantar, E. Bingölbali, and H. Akkoç (Eds.) *Matematıksel Kavram Yanılığaları ve Çözüm Önerileri* (Conceptual Understanding in Mathematics and Recommendations). Pegem Academy Publishing. Chapter 11, pp. 293-330 (Invited chapter).
- H. Dogan-Dunlap and M. Ramos. (2007) *Transitioning from University Math Education to First-Year Math Teacher: Examining Data Analysis in a Qualitative Study*. In E. Hampton, and S. Peregrino (Eds.) *A Toolkit for Educator Research: Research for Mutual Understanding in Diverse Communities*. Kendall/Hunt Publishing. Chapter 9 pp. 124-142.

Papers

- H. Dogan-Dunlap and F. P. Meza. (2008). *Summaries of Two Theses on Student Thinking in Linear Algebra*. IMAGE, The Bulletin of the International Linear Algebra Society (ILAS). Spring 2008, issue number 40, Spring 2008. pp.18-20.
- H. Dogan-Dunlap and R. Jordan (2008). *Modeling Spiral Growth in a GSP Environment*. Journal of Online Mathematics and its Applications (JOMA). Volume 8. February 2008. 18 pages.
- H. Dogan-Dunlap, (2007). *Reasoning with metaphors and constructing an understanding of the mathematical function concept*. In J. Woo, H. Lew, K. Park and D. Seo (Eds.) *Proceedings of the 31st Conference of the International Group for the Psychology of Mathematics Education (PME) Seoul, Korea, July 8-13, 2007*. Refereed Research papers. pp. 209-217, Volume 2.
- H. Dogan-Dunlap, J. Dunlap, E. Izquierdo and O. Kosheleva (2007). *Learn by Teaching: A Mediating Approach to Teaching and Learning Mathematics for Prospective Teachers*.Journal of Issues in the Undergraduate Mathematics Preparation of School Teachers (IUMPST), April, 2007. pp. 1-15.
- H. Dogan-Dunlap. (2006). *Socialization in Online Mathematics Learning Environments*. The Journal of Technology and Teacher Education, 2006, Vol. 6, pp. 3712-3717. (Award winning research paper at the Society for Information Technology and Teacher Education International Conference (ISTE)).
- H. Dogan-Dunlap and Q. Liang, (2006) "Affect Factors: Case of a Pedagogical approach for prospective teachers." Alatorre, S., Cortina J.L., Saiz, M., and Mendez, A. (Eds), The proceedings of 28th annual meeting of the North American Chapter of

- the International Group for the Psychology of Mathematics Education (PME-NA). Research Papers. Mérida, México, Vol.2, pp. 717-723.
- H. Dogan-Dunlap, (2006). “*Intermediate algebra students’ nonmathematical prior knowledge and conceptualization of function.*” Proceedings of the Third International Conference on the Teaching of Mathematics (at the undergraduate level). Istanbul, Turkey. Refereed paper number 429. 7 pages.
- H. Dogan-Dunlap, (2006). “*Pre-service Teachers’ Attitude Toward and Perception of Mathematics: Case of a pedagogical approach to teaching and learning.*” Proceedings of the Third International Conference on the Teaching of Mathematics (at the undergraduate level). Istanbul, Turkey. Refereed paper number 430. 6 pages.
- H. Dogan-Dunlap. (2006) “*Socialization in Online Mathematics Learning Environments.*” The proceedings of the 2006 Society for Information Technology and Teacher Education International Conference. Orlando, Florida, pp. 3712-3717.
- H. Dogan-Dunlap. (2006) “*Lack of Set Theory-Relevant Prerequisite Knowledge.*” International Journal of Mathematical Education in Science and Technology (IJMEST). Vol. 37, No. 4, June 2006. pp. 401-410.
- H. Dogan-Dunlap, J. Peebles and S. Lewis (2006). “*Women in Math Play.*” Association for Women in Mathematics Newsletter, Vol. 36. No. 3. May-June, 2006. pp. 22-23 .
- C. Torres and H. Dogan-Dunlap (2006) “*Technology use in ability-grouped high school mathematics classrooms.*” E-Journal of Instructional Science and Technology (e-JIST). Vol. 9, No. 1 (13 pages).
- H. Dogan-Dunlap, C. Torres and F. Chan (2005). “*Language-Based Prior Knowledge and Transition to Mathematics.*” ERIC Education Resources Publication. ED490513.
- H. Dogan-Dunlap (2004) “*Changing Students’ Perception of Mathematics through An Integrated, Collaborative, Field-Based Approach To Teaching and Learning Mathematics.*” ERIC Education Resources Publication. ED490407.
- H. Dogan-Dunlap (2004). “*Pedagogy of Online Courses: Case of Matrix and a Research Mathematics Courses.*” The proceedings of the 17th ICTCM (International Conference on Technology in Collegiate Mathematics) conference. New Orleans. pp. 68-73.
- H. Dogan-Dunlap, (2004). “*Computers and Linear Algebra.*” WSEAS Transactions on Mathematics. Vol. 3, Issue 3, pp. 537-542.

- H. Dogan-Dunlap, (2004) “*Computers and Linear Algebra.*” The CD-ROM proceedings of the 2004 WSEAS International Conference on Applied Mathematics. ISBN: 968-8457--01-7.
- H. Dogan (2004). “*A comparison Study Between a Traditional and Experimental Program.*” Paper presented at the ISCA 10th international conference on Intelligent Systems. ERIC Education Resources Publication. ED482567.
- H. Dogan-Dunlap. (2004) “*Visual Instruction of Abstract Concepts for Non-major Students.*” The International Journal of Engineering Education (IJEE). Vol. 20. n.4. pp 671-676.
- H. Dogan-Dunlap, (2003). “*Technology-Supported Inquiry Based Learning in Collegiate Mathematics.*” The Electronic Proceedings of the 16th annual ICTCM (International Conference on Technology in Collegiate Mathematics), Chicago, November 2003 (6 pages).
- H. Dogan, (2001). “*A Comparison Study Between a Traditional and Experimental Program*” published in the Proceedings of the ISCA 10th International Conference on Intelligent Systems, June 13-15, 2001 the Hyatt Arlington, Virginia.
- H. Dogan, (2001). “*A comparison study between a traditional and experimental first year linear algebra program.*” Unpublished Dissertation, University of Oklahoma, Norman.
It can be found at www.math.utep.edu/Faculty/hdogan/home.htm.

Others

- H. Dogan-Dunlap. (2008). *Making Transition to Linear Independence Through Set Theory and a Web Module*. Presentations made at the Joint Meetings of the MAA and AMS from the contributed papers sessions on Innovative and Effective Ways to Teach Linear Algebra. San Diego, 2008.
<http://math.pepperdine.edu/dstrong/LinearAlgebra/2008/index.html>
- H. Dogan-Dunlap. Virtual interactive activities for linear algebra.
www.math.utep.edu/Faculty/hdogan/home.htm.

Theses

- Hong Yue (Thesis) (2008) *Concept Maps as Assessment Tools in Mathematics: Comparison with Clinical Interviews*. Master’s Thesis directed by Dogan-Dunlap, H. May 7th, 2008 Master’s Thesis, University of Texas at El Paso Library, electronic resources. Best thesis award winner.

- Sandra Villa (Thesis) (2008) *Correlation between Reading and Mathematics performance: An analysis of Stanford Achievement Test Scores in Grades 6-11*. Master's Thesis directed by Dogan-Dunlap, H. April 29th, 2008 Master's Thesis, University of Texas at El Paso Library, electronic resources.
- Robert Trejo (Thesis). (2007). "*Student Thinking Modes Expressed while Determining Linear Independence/Dependence of Sets of Vectors.*" Trejo, R., Master's Thesis directed by Dogan-Dunlap, H. May 7th, 2007 Master's Thesis, University of Texas at El Paso Library, electronic resources. 6375.
- Fara Meza (Thesis). (2007). "*Student Thinking Modes: The Case of Solution Sets and Linear Independence from First Year Linear Algebra.*" Meza, F., Master's Thesis directed by Dogan-Dunlap, H. May 17th 2007. Master's Thesis, University of Texas at El Paso Library, electronic resources. 6391.
- Lorraine Melgoza (Thesis). (2007). "*The Implementation of Positive Descriptive Feedback Based on Daily Assessment in a College Developmental Mathematics Class.*" Melgoza, Lorraine., Master's Thesis directed by Dogan-Dunlap, H. and co-chaired by Lesser, L. April 24th, 2007. Master's Thesis, University of Texas at El Paso Library, electronic resources.
- Melinda Ramos (Thesis). (2006). "*Do Pre-service Teachers' beliefs and classroom practices towards mathematics change when they begin teaching?*" Ramos J. M., Master's Thesis directed by Dogan-Dunlap, H. Master's Thesis, University of Texas at El Paso Library, electronic resources no: 6255. May, 2006.
- Christina Torres (Thesis). (2005). "*Differences in teachers' choice of technology and its implementation amongst ability-grouped high school math classes.*" Torres, E. C. Master's Thesis directed by Dogan-Dunlap, H. University of Texas at El Paso Library, electronic resources no: 6070.
- German Moreno (Thesis). (2003). "*Relationships between Interaction, Definition, and Proof.*" by Moreno, G. A. Master Thesis directed by Dogan-Dunlap, H. University of Texas at El Paso Library, electronic resources no. 5921, 2003. He successfully defended his thesis in fall 2003, and received the Department's **outstanding thesis** award.

Papers Graduate Students Published

- M. Ramos. (2007) Qualitative Data Analysis: Practicing with raw Data. In E. Hampton, and S. Peregrino (Eds.) *A Toolkit for Educator Research: Research for Mutual Understanding in Diverse Communities*. Kendall/Hunt Publishing. Chapter 8. pp.100-123.

FUNDED GRANT and SCHOLARSHIPS

2008-2010 NSF/CCLI Grant: *Interactive Online Modules and Take-Home Assignments for Inquiry-Learning to Provide First-Hand Experience in Matrix Algebra Course*. Co-PI: Piotr Wojciechowski. \$149,939. Only Ten percent of the submitted proposals are funded.

2008 NSF/AWM Mathematics Education Research Travel Grant. Provided support to research conferences. \$789

2007 The Richard Skemp Memorial Grant through PME that provides support for research activities. \$500.

2005 Wolfram. Inc. grant: Four copies of *Mathematica* to be given to the best two undergraduate and two graduate presentations at the MAA Southwest section meeting in April 2005.

2005 Association for Women in Mathematics (AWM) travel grant to support Tensor groups' performances at conferences.

2004 "Encountering women in mathematics' past." MAA Tensor grant for women in mathematics project with J. Peeples from EPCC. \$5000.

2002 UTEP Minority Alliance Program (LS AMP) (Partnership between UTEP and the El Paso Community college to gain high potential students from the Community College to Research programs at UTEP)-\$1500 for materials to be used for the research I am conducting with a student from the Community College. \$1500.

2002 UTEP University Research Institute (URI) scholarship. \$1500.

2002 "An interactive online Laboratory for the enhancement of matrix algebra and calculus III courses" Wolfram Inc. project grant. Grant provided licensing for 25 computers (grant paid partially the cost of the licensing for the first three years) as well as 25 copies of *Mathematica* and *WebMathematica* for Mathematics faculty. Total grant approximated to \$5000.

2001 The Summer AAUP Curriculum Development Award for Placement of In Coming First Year Students in Computer Science Classes with Dr. Rommel from Eastern Connecticut State University. \$2500.