



Ruby L. Lynch-Arroyo, Ph.D.

Education

Doctorate of Philosophy, University of Texas at El Paso, Teaching, Learning & Culture,
Mathematics Education

Dissertation: *Complexity of Affective Disposition and Reflective Transphenomenality: An Exploratory Study of Middle School Mathematics Teacher and Student Self-Positioning and Positioning-by-Others toward Mathematics, Mathematics Teaching, and Learning*

Dissertation Committee:

Mourat Tchoshanov, Ph.D. (Chair)

William Medina-Jerez, Ph.D. (Member)

Lawrence Lesser, Ph.D. (Member)

Teacher Preparation, University of Texas at El Paso. Concentration: Secondary Education
and Special Education

Masters of Arts, Public Administration, University of New Mexico Concentration: Public
Health and Personnel

Bachelors of Arts, Sociology and Social Work, New Mexico State University, Concentration:
Juvenile & Adult Protective Services and Adolescent Behavior Problems

Certifications/Professional Development

Specialized Content Knowledge (SCK) Institute: University of Michigan. 2016.

4- 8 Texas Teaching Certificate, Mathematics

4- 8 Texas Teaching Certificate, Language Arts

K- 12 Texas Teaching Certificate, Special Education

Gifted and Talented Certificate

Certified SIM Professional Staff Developer, University of Kansas-Center for Research and Learning

Higher Education Courses Taught

Secondary, Middle & Elementary Mathematics Methods, Secondary Science Methods,
Secondary General Methods, Secondary Curriculum & Lesson Planning, Educational
Technology, Teaching Math/Dual Language Classroom, Secondary & Middle Teaching
Internships, Independent Studies, Honors Contracts, and Certification Review Sessions

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Ruby L. Lynch-Arroyo, PhD

Positions Held

Assistant Professor, Practice (Clinical), Teacher Education Department, University of Texas at El Paso, El Paso, Texas. Fall 2014—Present

Lecturer, Elementary and Secondary Mathematics Methods, Teacher Education Department, University of Texas at El Paso, El Paso, Texas. Spring 2011—May 2014

Administrator, Campus Support, Evaluator, and Benchmark Specialist II, Curriculum & Instruction, Accountability, El Paso Independent School District, El Paso, Texas. June 2010-August 2014

Instructional Math Coach and Classroom Teacher, 6-8 Mathematics. El Paso ISD, El Paso, Texas, 1991-2010

Special Education, Site Specialist, Transition Specialist and Classroom Teacher. 6-12, El Paso ISD, 1991-2010

Publications

Lynch Arroyo, R. L. & Tchoshanov, M. (in draft, 2017). Math is Beautifully Intimidating: Conflict between Teacher Affective Self-Reported Disposition and Observed Positioning-by-Others

Lynch-Arroyo, R. L. & Asing-Cashman, J. (2017). Integrating Edutainment to Reinforce Mathematical Learning: Pedagogic Intention of Pre-Service Secondary Mathematics Students. Society for Information Technology & Teacher Education International Conference 2017 (Mar 05, 2017) pp. 1960–1967

Lynch-Arroyo, R.L. & Asing-Cashman, J. (2016). Using Edutainment to Facilitate Mathematical Thinking and Learning: An Exploratory Study. Journal of Mathematics Education. December 2016. 9:2 (pp. 37-52).

Lynch Arroyo, R. L. & Tchoshanov, M. (2014). Sage and Thyme: Cases of Teacher Affective Disposition Through the Lens of Reflective Transphenomenality. In Proceedings of the 41th Annual Meeting of the Research Council on Mathematics Learning 2014 (pp. 72-79).

Lynch Arroyo, R., McDermott, B. & Tchoshanov, M. (2012). Assessing Pre-Service Elementary Teachers Disposition toward Mathematics Using Open-Ended Metaphor. In Van Zoest, L.R., Lo, J.-J., Kratky, J.L. (Eds.), Proceedings of the 34th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Kalamazoo, Michigan: Western Michigan University (pp. 598-692).

Lynch Arroyo, R., & Lucero, L. (2012, March). Enabling Mathematical Voices through Instructional Technology Integration. In Society for Information Technology & Teacher Education International Conference (Vol. 2012, No. 1, pp. 1559-1564).

Arroyo, R. L., McDermott, B., & Tchoshanov, M. (2012). Pre-service elementary teachers' affective disposition toward mathematics. In V. Gabdulhakov (Ed.), Development of creative abilities of students: In the context of implementation of federal state educational standards of new generation (pp. 18-23). Kazan, Russia: The National Book Center



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Fields of Research Interest

Complexity Theory and Pre-Service Teacher Preparation and Disposition/Positioning Toward Mathematics, Mathematics Teaching and Mathematics Learning

Teacher and Student Disposition and Positioning Toward Mathematics, Mathematics Teaching, and Mathematics Learning

Pre-Service/In-Service Teacher Disposition and Positioning Toward Mathematics, Mathematics Teaching, and Mathematics Learning: Comparative US-Russian Study

Disposition toward Mathematics and Gender: Contributions to the body of research of gender gap/equity in STEM education

Exploration of the effects of technology integration on pedagogical approaches to teaching and content development.

Professional Organizations

Society for Integration of Technology in Education [SITE], Member

National Council of Teachers of Mathematics [NCTM}, Member

Research Council of Mathematics Learning [RCML], Member

Association of Mathematics Teacher Educators [AMTE], Member

Conference Papers/Presentations

Tillman, D., Lynch-Arroyo, R., & Juarez, M. (2017). Creating 21st-Century Instructional Technologies. Presented at the NMSU College of Education Inaugural Symposium: Re-Imagining the Future of Learning, Las Cruces, NM.

Integrating Edutainment to Reinforce Mathematical Learning: Pedagogic Intention of PreService Secondary Mathematics Students, Co-Author, Full Paper. 2017 SITE.

Dispositional Positioning in the Mathematics Equation: The Gender Variable, Co-Presenter Round Table Discussion. 2017 AERA .

An Exploratory Study: Using Edutainment to Facilitate Mathematical Thinking and Learning. Co-Presenter Poster Session. 2017 AERA .

Mathematical Positioning Shift: The Gender Factor in the Disposition Equation. Co-Presenter Research Burst Session. 2016 NCTM Regional Conference.

Dynamic Positioning: Pedagogical Strategies Developed by Pre-Service Secondary Mathematics Teachers . Co-Presenter Research Burst Session. 2016 NCTM Regional Conference.

Learn Quadratics with Mario and Angry Birds. Co-Presenter Workshop. 2016 Region XIX Mini-Cast Conference.

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Conference Papers/Presentations

The Gender Variable: Mathematical Positioning Shift in the Disposition Equation , Co-Presenter, 2016
Sun Conference University of Texas at El Paso

Emphasizing TPACK Positioning in Methods Courses for Pre-Service Secondary Mathematics Teachers,
Poster Session Co-Presenter, AMTE 2016 Annual Conference, Irvine, California

The Gender Variable: Mathematical Positioning Shift in the Disposition Equation. Co-Presenter, 2016
SUN Conference, University of Texas at El Paso.

Mathematical Affective Dispositions: Comparative Case Studies of US and Russian Middle School
Teachers, Poster Session Co-Presenter, 2015, ABC Conference, University of Texas at El Paso

Dynamics of Pre-Service Elementary Teachers' Disposition toward Mathematics, Its Learning and
Teaching: Case of Vanity. Co-Presenter, 2013 SUN Conference, University of Texas at El Paso.

Embedding TPACK in Secondary Mathematics Teaching Poster Session Co-Presenter, 2015, ABC
Conference, University of Texas at El Paso

Empowering Cross-Curricular Writing. Co-Presenter, 2014, ABC Conference, University of Texas at El
Paso.

REACT: Reflective Evaluation and Analysis of Classroom Teaching. Co-Presenter, 2014, ABC
Conference, University of Texas at El Paso.

Sage and Thyme: Cases of Teacher Affective Disposition Through the Lens of Reflective
Transphenomenality. Presenter, 2014 RCML Conference, San Antonio, Texas.

Dynamics Among Three Domains in Forming Pre-Service Teachers' Dispositions. Co-Presenter, 2014
RCML Conference, San Antonio, Texas.

Service

Undergraduate STEM Honors Contracts (3), Fall 2017. Allen, Olivas & Olivas

Future Educators of Math & Science (FEMaS), October 2016, Presenter, *Why Lesson Plan*

Blind Peer Reviewer, 2016 PME-NA Conference Proposals

Blind Peer Reviewer, 2016 NCTM Research Conference Proposals

Blind Peer Reviewer, 2016 RCML Conference Proposals

2017, Graduate Seminar Discussant, Baltic Federal University [via SKYPE]

2017, Professional Panel Discussant, UTEP Doctoral Program Proposal Writing Seminar

2016 ABC Conference, Round Table Book Discussant

2016 ABC Conference Committee, Chair

2016 UTEP Doctoral Program Professional Panel: Proposal Writing and Academic Life , February

2015 Education Professional Panel Member, UTEP Career Center, November



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References

Mourat Tchoshanov, Ph.D.

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Olga Kosheleva, Ph.D.

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Denise Wallen, PhD

Research Officer, Research Assistant Professor, College of Education
Senior Fellow, RWJ Foundation Center for Health Policy
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Curtis Barnes, Ed.D.

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