# Lynette Guzman Curriculum and Instruction Kremen School of Education and Human Development Idguzman@csufresno.edu

Academic Degrees: (Include teaching credentials, if any)

Degree	Institution	Area of Emphasis
PhD	Michigan State University	Mathematics Education
BS	University of Arizona	Mathematics

## **Professional Experience:**

Dates	Position/Institution
2019-present	Assistant Professor of STEM Education, California State University, Fresno
2018-2019	Postdoctoral Research Associate, University of Arizona
2017-2018	Postdoctoral Research Associate, University of Arizona

# Faculty and Administrative Load: (Should total 12 units each semester)Fall 2018Spring 2019

# **Community Service**

Dates	Organization	Activity/Accomplishments
Mar-16	Middle School Girls Math and Science Day (East Lansing, MI)	facilitated "Geometric Bubblesâ€□ activity
Feb-13	Math in Action (Allendale, MI)	Conference Volunteer
Jan-12	Mathematics Educator Appreciation Day (Tucson, AZ)	Conference Volunteer

#### **University/School Service**

Dates	Committee	Activity/Accomplishments
2017-2019	Association of Women in Mathematics Graduate Chapter (University of Arizona)	Faculty Affiliate
2017-2018	Mathematics Instruction Colloquium (University of Arizona)	Planning Committee member
2014-2017	Ph.D. Practicum Research Project (Michigan State University)	Graduate Student Member/Mentor
2014-2017	SACNAS Chapter (Michigan State University)	member, Vice President
2014-2016	Council of Graduate Students (Michigan State University)	Full Council Representative (Program in Mathematics

Education), Vice President

Internal Affairs

#### **Professional Association Memberships**

Dates	Association/Organization	Role
	Association of Mathematics	member
	Teacher Educators (AMTE)	
	North American Chapter of the	member
	International Group for the	
	Psychology of Mathematics	
	Education (PME-NA)	
	SIGMAA on Research in	member
	Undergraduate Mathematics	
	Education (RUME)	
	Society for Advancement of	member; candidate for
	Chicanos/Hispanics and Native	Graduate Student
	Americans in Science (SACNAS)	Representative on SACNAS
		Board
	TODOS: Mathematics for ALL	member

## **Publications (Selected)**

Guzman, L. D. (2019). Complex and contradictory conversations: Prospective teachers interrogating dominant narratives within mathematics education discourse. Mathematics Teacher Educator, 8(1), 8-22.

Guzman, L. D. (2019). Beyond hidden figures: Shining a spotlight on constructed hierarchies of gender, age, and elementary mathematics. Gender Issues, 36(4), 392-414. https://doi.org/10.1007/s12147-019-09241-3

Guzman, L. D., & Craig, J. (2019). A curriculum in your pocket: Digital media as invitations for transdisciplinary inquiry in mathematics classrooms. Bank Street Occasional Paper Series, 2019(41), Article 6. https://educate.bankstreet.edu/occasional-paper-series/vol2019/iss41/6/

- Guzman, L. D. (2019). Academia will not save you: Stories of being continually "underrepresented.†□ Journal of Humanistic Mathematics, 9(1), 326-343. https://scholarship.claremont.edu/jhm/vol9/iss1/20
- Lamar, A. I., & Guzman, L. D. (2019). Conocimientos mÃ-os: Engaging possibilities for school curriculum. In T. R. Berry, C. Kalinec-Craig, & M. Rodriguez (Eds.), Latinx Curriculum Theorizing (pp. 99-116). Lanham, MD: Lexington Books.
- Craig, J., Guzman, L., & Harper, F. (2019). Quantitative literacy scholarship from individualist, collectivist, and activist perspectives. In V. Piercey, G. Karaali, & L. Tunstall (Eds.), Shifting Contexts, Stable Core: Advancing Quantitative Literacy in Higher Education (pp. 211-218). Washington, D.C.: Mathematical Association of America
- Guzman, L. D. (2018). Using concept maps in teacher education: Building connections among multiple mathematical knowledge bases and assessing mathematical understanding. In T. Bartell (Ed.), Toward Equity and Social Justice in Mathematics Education (pp. 287-307). Springer.
- Craig, J. & Guzman, L. (2018). Six propositions of a social theory of numeracy: Interpreting an influential theory of literacy. Numeracy, 11(2), Article 2. http://scholarcommons.usf.edu/numeracy/vol11/iss2/art2
- Mehta, R., & Guzman, L. D. (2018). Fake or visual trickery? Understanding the quantitative visual rhetoric in the news. Journal of Media Literacy Education, 10(2), 104-122. https://digitalcommons.uri.edu/jmle/vol10/iss2/6/
- Guzman, L. D. (2016). Unpacking expectations and lenses in mathematics classroom observationsâ€"A commentary on White's case. In D. Y. White, S. Crespo, & M. Civil (Eds.), Cases for teacher educators: Facilitating conversations about inequities in mathematics classrooms (pp. 197-201). Charlotte, NC: Association of Mathematics Teacher Educators and Information Age Publishing.

#### **Papers and Presentations (Selected)**

- Fellus, O. O, Guzman, L. D., Kasman, A., Mason, R. T., & Low, D. E. (2020, February). The coconstruction of mathematical identity with picturebooks: Shetterly, M. L. (2018) Hidden figures: The true story of four black women and the space race. New York, NY: HarperCollins. uOttawa Women in Mathematics. Ottawa, ON.
- Fellus, O. O, Guzman, L. D., Kasman, A., Mason, R. T., & Low, D. E. (2020, January). The coconstruction of mathematical identities with picturebooks: Zachary Zormer shape transformer. uOttawa Women in Mathematics. Ottawa, ON.
- Mason, R. T., Fellus, O. O., Low, D. E., Kasman, A., & Guzman, L. D. (2020, January). Myths, identities, and socioculturally available narratives: Toward understanding how picturebooks shape children's mathematical identities. Math Ed Forum. The Fields Institute for Research in Mathematical Sciences. Toronto, ON.
- Guzman, L. D., Anhalt, C., & Sheldon, J. (2019, February). Interrogating identity narratives within academic, social, and cultural contexts for mathematics teaching. Presented at the 23rd annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Raygoza, M., Harper, F., Leyva, L., & Guzman, L. (2019, February). A process of "becoming†□: Transitioning into equity, social justice-oriented mathematics teacher educator roles. Panelist at the 23rd annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Craig, J., Guzman, L., & Krause, A. (2018, February). The potential virtues of wicked problems for education. Paper presented at the 22nd annual conference on Research on Undergraduate Mathematics Education, San Diego, CA.

- Guzman, L. (2018, February). #iteachmath: Reflecting on identities and teaching philosophies. Interactive session presented at the University of Arizona Noyce MaTh Seminar, Tucson, AZ.
- Guzman, L. (2018, January). Using media artifacts as invitations to engage with local and global contexts. Interactive session presented at the Mathematics Educator Appreciation Day (MEAD) conference of the Center for Recruitment and Retention of Mathematics Teachers at the University of Arizona, Tucson, AZ.
- Guzman, L. (2017, November). More than  $\hat{a} \in \omega$  just  $\hat{a} \in \Box$  mathematics: Using digital media as invitations to engage with local and global contexts. Interactive session presented at the University of Arizona Mathematics Instruction Colloquium, Tucson, AZ.
- Craig, J. C. & Guzman, L. (2017). No, we didn't light it, but we tried to fight it: Bringing one crisis of many into the classroom. In A. Chronaki (Ed.), Mathematics Education and Life at Times of Crisis: Proceedings of the Ninth International Mathematics Education and Society Conference (Vol. 1, pp. 212-217), Volos, Greece: University of Thessaly.
- Beavers, A., Brown, T., Guzman, L., Jones, D., Lamar, A. I., Vellanki, V. (2017, April). Tracing our stories: Graduate students of color reflect on racialized experiences through political autobiographies. Performance and panel at the symposium Seditious Acts: Graduate Students of Color Interrogating the Neoliberal University, University of Minnesota  $\hat{a} \in ``$ Twin Cities, Minneapolis, MN.
- *Guzman, L. D. (2017, February). Learning to notice childrenâ*€<sup>™</sup>*s mathematics across contexts through a prospective elementary teacher working group. Poster presented at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.*
- Guzman, L. D. (2016). "It's what society thinks†□: Exploring narratives in learning to notice children's mathematics across contexts. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli (Eds.), Proceedings of the 38th annual meeting of the North-American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA) (pp. 873-876). Tucson, AZ: University of Arizona.
- Shah, N., Reinholz, D., Guzman, L., Bradfield, K., Beaudine, G., & Low, S. (2016). Equitable participation in a mathematics classroom from a quantitative perspective. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli (Eds.), Proceedings of the 38th annual meeting of the North-American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA) (pp. 1259-1265). Tucson, AZ: University of Arizona.
- Guzman, L. D. (2016, October). Prospective Elementary Teachers Interrogating "Math Is Everywhere†☐ through Learning to Notice Children's Mathematics Across Contexts. Presented at the annual meeting of the Society for Advancing Chicanos and Native Americans in Science, Long Beach, CA.
- Shah, N., Reinholz, D., Guzman, L., Bradfield, K., & Fernandes, J. A. (2016, April). Analyzing Equity in Whole-Class Discussions in Mathematics Classrooms. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C.
- Guzman, L. D. (2015). Connecting multiple mathematical knowledge bases: Prospective teachersâ€<sup>™</sup> concept maps of assessing childrenâ€<sup>™</sup>s understanding of fractions. In Bartell, T. G., Bieda, K. N., Putnam, R. T., Bradfield, K., & Dominguez, H. (Eds.), Proceedings of the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 687-694). East Lansing, MI: Michigan State University.
- Guzman, L. D. (2015, May). Bridging Latin@ Students' Mathematical Experiences in the Classroom. Invited speaker at the Michigan State University SACNISTA Research Forum: Science on the Edge, East Lansing, MI.

- Guzman, L. (2015, February). "Something that you should do always†□: Connecting mathematics to children's lives in the elementary classroom. Presentation at the 7th annual Graduate Academic Conference, Michigan State University, East Lansing, MI.
- Stehr, E. M. & Guzman, L. D. (2014). Technology and algebra in secondary mathematics teacher preparation programs. In (Eds.) T. Fukawa-Connolly, G. Karakok, K. Keene, and M. Zandieh, Proceedings of the 17th annual conference on Research in Undergraduate Mathematics Education, Denver, CO.
- Guzman, L. D. (2014, October). Prospective elementary teachers' concept map representations of assessing children's understanding of fractions. Presentation at the annual meeting of the Society for Advancing Chicanos and Native Americans in Science, Los Angeles, CA.
- Guzman, L., Harper, F., Aguirre, J., Bartell, T., Drake, C., Foote, M., Roth McDuffie, A., Turner, E. (2014, June). Exploring mathematical modeling reflected in elementary mathematics lesson plans. Presentation at the 1st annual meeting of the TODOS: Mathematics for ALL Conference, Phoenix, AZ.
- Danielson, K., Guzman, L. D., & McKeague, G. (2014, May) Preparing Future Educators: Teaching Practices for Equitable Instruction. Symposium co-organizer and presenter at the Fellowship for Global Understanding Study Tour, Southwest University, Chongqing, China
- Stehr, E. & Guzman, L. (2014, March). Examining opportunities in teacher preparation programs that integrate pre-service secondary teachers' experiences with technology and algebra. Presentation at the 6th annual Graduate Academic Conference, Michigan State University, East Lansing, MI.
- Guzman, L. D. (2014, January). Providing opportunities for prospective teachers to engage in mathematical practice and mathematize situations outside of school mathematics. Presentation at the annual Joint Mathematics Meetings, Baltimore, MD.

## **Grants and Research**

Dates	Activity/Agency	Amounts
2014-2017	National Science Foundation	\$102,000
	Graduate Research Fellowship	

## Collaborative Works/Projects (with public schools, community agencies, etc.)

Afterschool Mathematics Club Co-OrganizerAug. 2017  $\hat{a} \in May 2019$ Mansfeld Magnet Middle School, Tucson Unified School District (2018-present)Roskruge Bilingual Magnet K-8 School, Tucson Unified School District (2017-2018)Co-organized afterschool mathematics club (two days per week) for 30 students in grades 6-8;Mentored undergraduate facilitators with co-planning and assisting with activities; Math nights for parents and students.

## Collegial Works/Projects (i.e., grants, articles, conference presentations, etc.)

Mathematical Identities in Children's Literature, June 2017 – present

Co-Investigator (with Olga O. Fellus, David E. Low, Alex Kasman, and Ralph Mason)

This project critically analyzes representations of mathematics and mathematicians in children's literature. As part of our deep analysis of mathematical picturebooks we have surfaced several problematic themes that need to be addressed with educators who would use this literature in their teaching of mathematics. While many of the books are expressly inspirational, they also promulgate certain messages about what mathematics is and the attributes possessed by people who are  $\hat{a} \in \alpha$ good at math. $\hat{a} \in \square$ 

*Fellus, O. O., Guzman, L., Kasman, A., Low, D. E., & Mason, R. (forthcoming, April 2020). Hidden figures: How socioculturally available narratives produce and reproduce students' perception of self as learners of mathematics. Carleton Symposium on Science, Technology, Engineering & Mathematics Teaching and Learning. Ottawa, ON.* 

Fellus, O. O, Guzman, L. D., Kasman, A., Mason, R. T., & Low, D. E. (2020, February). The coconstruction of mathematical identity with picturebooks: Shetterly, M. L. (2018) Hidden figures: The true story of four black women and the space race. New York, NY: HarperCollins. uOttawa Women in Mathematics. Ottawa, ON.

Fellus, O. O, Guzman, L. D., Kasman, A., Mason, R. T., & Low, D. E. (2020, January). The coconstruction of mathematical identities with picturebooks: Zachary Zormer shape transformer. uOttawa Women in Mathematics. Ottawa, ON.

Mason, R. T., Fellus, O. O., Low, D. E., Kasman, A., & Guzman, L. D. (2020, January). Myths, identities, and socioculturally available narratives: Toward understanding how picturebooks shape children $\hat{a} \in \mathbb{T}^{M}$ s mathematical identities. Math Ed Forum. The Fields Institute for Research in Mathematical Sciences. Toronto, ON.

Fellus, O. O., Low, D. E., Guzman, L. D., Kasman, A., & Mason, R. T. (in preparation). Hidden figures, hidden messages: The construction of mathematical identities in children $\hat{a} \in \mathsf{TM}$ s picturebooks. To be submitted to Mathematics Teacher: Learning & Teaching PK $\hat{a} \in \mathsf{T12}$ .

Mehta, R., & Guzman, L. D. (2018). Fake or visual trickery? Understanding the quantitative visual rhetoric in the news. Journal of Media Literacy Education, 10(2), 104-122. https://digitalcommons.uri.edu/jmle/vol10/iss2/6/

# **Professional Development**

Introduction to Teaching Online Using QLT training, CSU Quality Learning and Teaching (Fall 2019)

# **Honors (Optional)**

Postdoc Teaching and Service Award, Department of Mathematics, University of Arizona, 2019, received \$200

Graduate Student Leadership Academy, The Graduate School, Michigan State. 2014