

Latinxs and Hispanics in Mathematical Sciences



Higinio Dominguez

Higinio Dominguez grew up in the culturally hybrid and linguistically fluid area that connects the México-US border. He completed his elementary and secondary education in México. As part of his embracing of difference as an asset, Higinio intentionally learned English in a naturalistic way by listening to US radio stations during his childhood. Crossing the Matamoros-Brownsville bridge on foot, he attended college on the US side of the border. He graduated from the University of Texas at Brownsville with a B.S. degree in Mathematics along with a Texas Teaching Certificate. Higinio moved to San Antonio, Texas, where he taught mathematics at various community colleges. This work intensified his interest in teaching while supporting his master's studies at the University of Texas at San Antonio, where he received a M.S. degree in Bilingual Bicultural Studies. Higinio combined his academic, work, and life experiences in mathematics and bilingualism to pursue his doctoral studies at the University of Texas at Austin where he received his Ph.D. degree in Bilingual Mathematics Education. After graduation, he moved to Chicago for a postdoctoral fellowship position with the Center for Mathematics Education of Latinas/os at the University of Illinois at Chicago. In this position, Higinio collaborated with Latino/a students and mothers learning about their mathematical ways of knowing. He returned to Texas where he launched his current research program by establishing key school partnerships while working at Texas State University. He brought this program of research to his current position at Michigan State University, where he recently completed his first NSF-funded research project, Reciprocal Noticing: Latino/a Students and Teachers Constructing Common Resources in Mathematics. This project motivated his current research-practice partnerships with Chile, México, and Colombia, where the focus is on opening the classroom walls to connect the schools with the communities they serve.

Higinio Dominguez is an Associate Professor in the Teacher Preparation program of the College of Education at Michigan State University. Dr. Dominguez's research focuses on conceptualizing and operationalizing the elementary mathematics classroom as a complex system that requires innovative methodologies in order to achieve substantive transformations. A recent transformation across multiple classrooms consists of exploring the reciprocity in culture, language, and mathematical thinking in teacher-student interactions as a way of co-constructing common resources for teaching and learning mathematics in diverse contexts. The students in these classrooms belong to important groups, including Latinos/as, immigrants, African Americans, and students whose languages and literacies are often subtracted from their educational experiences.

“El mes de la herencia hispana representa una ventana por la cual se puede ver hacia adentro de nuestra riqueza y fluidez cultural, y hacia afuera para compartir esa riqueza de conocimiento creativo, imaginativo, y relacional de manera que ayude a construir mundos más unidos y generosos. Como educador de matemáticas bilingüe, es para mí muy importante rescatar, reconstruir, y promover estos mundos en las aulas de matemáticas donde la influencia neoliberal empuja cada vez más a separar y competir en lugar de unir y compartir.”

Lathisms was founded in 2016 in order to showcase the contributions of Latinx and Hispanic mathematicians during Hispanic Heritage Month, which is celebrated in the United States from September 15 and October 15 every year. During this time, we feature/reveal a prominent Latinx/Hispanic mathematician daily. See all the featured mathematical scientists at LATHISMS.ORG.

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