

Major Grant Awards Funded in Fiscal Year 2024-2025

| Principal Investigator | Project & Sponsor | Total Award |
|------------------------|--|--|
| Amber Moran | SBCEO Residency Implementation Project in Teacher Education <i>Santa Barbara County Education Office</i> | \$ 1,470,000 |
| Shane Jimerson | Preparing Professionals to Promote Justice, Equity, Diversity, and Inclusion in Mental Health Services at School <i>U.S. Department of Education, Elementary & Secondary Education</i> | \$ 1,177,337 Terminated |
| Alison Cerezo | Program Evaluation of the LBTQ Health Equity Initiative <i>California Health & Wellness, California Department of Public Health</i> | \$ 554,934 |
| Shane Jimerson | Project TEAMS: Collaboration to Train Special Education and School Psychology Scholars to Advance Equity in the Study of Mental Health Among Students <i>U.S. Department of Education, Miscellaneous Agencies</i> | \$ 491,432 |
| Miya Barnett | Design of a Lay Health Worker Training Intervention to Promote Mental Health Care Access for Racially Diverse Transgender Youth <i>National Institutes of Health</i> | \$ 416,299 Terminated Reinstated |
| Jin Sook Lee | Increasing the Recruitment and Retention of Multilingual Teachers Through the Language in Society Teaching Apprenticeship (LISTA) Program <i>U.S. Department of Education, Miscellaneous Agencies</i> | \$ 360,506 Terminated |
| Lucy Arellano | National Science Foundation, INCLUDES Alliance: ALRISE - Accelerate Latinx Representation In STEM Education with Institutional Intentionality and Capacity Building for Experiential Learning <i>Arizona State University-Tempe</i> | \$ 271,577 Terminated Reinstated |
| Erin Dowdy | Establishment of the Mental Health Evaluation, Training, Research, and Innovation Center for Schools (METRICS) <i>University Of Wisconsin</i> | \$ 223,867 Terminated |
| Shane Jimerson | Supporting Social Emotional Development at School <i>Goleta Union School District</i> | \$ 178,679 |
| Jill Sharkey | Reentry, Early Action, and Diversion (READY) <i>County of Santa Barbara</i> | \$ 153,921 |



A Game Changer For Math Education

Associate Professor Rachel Lambert is on a mission to make math learning fun.

After more than a decade teaching math in elementary school classrooms, Rachel Lambert, experienced firsthand how students struggled with the subject and were often bored, disconnected or convinced they weren't good at math. Now an associate professor of special education and mathematics education in the Gevirtz School Department of Education, Lambert has made it her mission to change that by finding ways of making math accessible, engaging and above all, fun.

Today, Lambert and Gevirtz graduate students, Jennifer Goldberg and Tomy Nguyen, are carrying that mission into classrooms. For the last four years they have studied how teachers, special educators and instructional assistants use games to improve math learning, boost confidence and turn problem-solving into play.

In 2021, Lambert and her research team launched the GAME (Growing Access to Mathematical Engagement) Project for third- and fourth-grade students at Harding University Partnership School and Cleveland Elementary in Santa Barbara to provide enrichment and intervention using non-digital board and card games.

During "games time," teachers are given high-quality math games and observed on how they use them with students, how they organize play, which games succeed and which fall flat. Favorites include Set, a logic game, and Allowance, which is like Monopoly for kids. Some of the most popular



Photographs by Maria Zate

games tend to be the ones that are tactile, fun to touch and feel, like the game Fraction Fortress, in which kids build towers out of fractional pieces. "When kids were playing without a teacher, they were spending a ton of time just exploring," noted Lambert. "These third- and fourth-graders

Left-right: Rachel Lambert, Levi Vogel, teacher Kimberly Lynch, Emily Diaz, Teya Cooney, at Harding University Partnership School.

who needed to learn fractions were handling the pieces, comparing them and figuring things out. I think we underestimate how much more they might learn from doing this than from a worksheet on the same skill."

In one of her earliest teaching experiences, a combined fifth- and sixth-grade, multi-age class in Harlem, New York, where nearly a third of the students had IEPs (Independent education programs), Lambert learned that a one-size-fits-all approach to math would not work for all of her students: "It always has to be engaging and meaningful and meet kids where they are," she said.

After the pandemic, as classrooms filled with students whose math skills ranged more widely than ever, the Santa Barbara Unified School District approached Lambert about building an intervention program that could reach every child. She had been leading small-group interventions, but the school district wanted a "push in" intervention that could reach all kids in a classroom. Their idea was to center it on board and card games, and not digital screens. For Lambert, it was a natural fit.

"I deeply loved that idea," said Lambert. "As a teacher, I had a ton of math games in my classroom and I used them as tools. If a kid didn't understand fractions, I had a game I could pull out and use for that."

The GAME Project is a design research study in which researchers work closely with teachers, administrators and districts to design interventions that work in the unique contexts of schools. Through extensive interviews with students, teachers and administrators, Lambert and her co-researchers have documented the success of the project.

Students overwhelmingly endorse the time spent playing games and report that they enjoy the practice that the games provide. Teachers describe positive shifts in how the students feel about mathematics.

Teachers noticed that students seem more willing to take risks with challenging topics like fractions while playing games. And both teachers and students note that the quality of the games really matters to their learning. Both schools have made gains on math test scores in the last few years, with Harding, in particular, making dramatic progress last year.

Through her work as a special educator, Lambert became convinced that math classes could be radically improved for students with disabilities. These students often faced the most inaccessible and one-size-fits-all curriculum.

Transforming the math classroom experience from boring and inaccessible to fun and meaningful is a passion that inspired Lambert to write her first book, "Rethinking Disability and Mathematics: A UDL Math Classroom Guide for Grades K-8." Published in 2024, the book has sold more than 12,000 copies. For an academic title those numbers are considered remarkable, Lambert said.

The book's success surprised its publishers but confirmed Lambert's belief that educators were hungry for this type of research. At an early meeting with a publisher, Lambert was told not to expect large sales.

"They told me it wasn't going to sell," recalled Lambert. "They said, 'Teachers don't want to read about math and math teachers don't see themselves as special educators, so who's going to buy the book?' But the need was there."

Her book looks at shifting away from focusing on what students with disabilities can't do to a model that highlights their unique strengths.

The stories she tells feature real classrooms where neurodiverse students not only learn math but thrive at it, as well as teachers who excel at making mathematics both accessible and rigorous.

Neurodiversity describes cognitive differences in how people think, learn and behave. In Lambert's book, she focuses on neurodiversity to include dyslexia, autism, intellectual disabilities and ADHD.

"Most of the book is about



Teachers noticed that students seem more willing to take risks with challenging topics like fractions while playing games.

rethinking disability, moving away from a deficit model to a strength-based model," she said. "What does that look like in math? How can we rethink who can be good at math?"

Lambert, who is working on a second book about educational research in the area of mathematics, never intended to become a math teacher.

"I thought I was a creative person and that creative people weren't good at math," she recalled. "But when I started teaching math, I found out I was really good at it, mainly because I needed it to be fun. I needed it to be super engaging for me and for the kids and I found that it was very successful."

Lambert's work is as much about fun and joy as it is about the practice of teaching. The research matters, but what stays with her are the moments when students light up, when math becomes something they look forward to with anticipation, rather than something they endure.

"I walked into a classroom and one kid yelled, 'The games lady is here!' and then nearly fell off his chair, he was so excited," Lambert recalled. "I love my job!"

At The Intersection of Culture, Autism, and Inclusion

Q&A with Assistant Professor Fernanda Castellón

BY ASHLEY HABCHI '25



Fernanda Castellón joined the Gevirtz School as a new assistant professor in the Department of Counseling, Clinical & School Psychology at the Gevirtz School, and associate director of the Koegel Autism Center. She completed her B.A. in Psychology and Chicana & Chicano Studies from UC Santa Barbara and her Ph.D. in Human Development and Psychology at UC Los Angeles. Fernanda's passion for research originates from her personal experience as a sibling of an autistic adult, witnessing the difficulty of accessing services in Spanish and serving as the translator in her family.

asked to leave. Eventually, my parents converted part of our backyard into a therapy room. They even flew in specialists from the U.S. and Canada because local resources were so limited. My dad often tells the story of attending a conference in Monterrey where he asked a speaker what advice she'd give to someone considering moving to the U.S. for autism services. Her response was, "Why are you still here?" Six months later, we were in San Diego. That move shaped the rest of my life.

Did the backyard therapy room help you realize this would become your life's work?

How did you become interested in autism research?

I'm a first-generation immigrant from Mexico. I'm the middle child of six, and my younger brothers are twins on the autism spectrum. Their diagnosis changed the dynamic of our entire family. One of them had high support needs. He was a selective eater, displayed aggressive behaviors, and had limited verbal communication.

My mom tried everything to support them. She signed them up for schools, but they were often

It definitely planted the seed. Once we were in San Diego and started receiving in-home services, I became fascinated by the strategies therapists used with my brother. I'd translate what they suggested to my mom because she only spoke Spanish. At the same time, I took on extra responsibilities at home to free up my mom's time. I realized I loved seeing the ways small changes could make a big difference for my brother.

How did that experience translate into your education and research?

In middle school, I volunteered in specialized classrooms and noticed how students used vocalizing or singing to self-soothe. In high school, I kept volunteering and focused on promoting inclusion and educating my peers so they'd see people like my brother as friends, and not as someone "different."

When I got to UC Santa Barbara as an undergraduate, I became a McNair Scholar. It changed everything.

(Note: The McNair Scholar Program prepares undergraduate students through research and faculty mentorship, with the goal of increasing the number of first-generation, low-income and underrepresented students who pursue Ph.D. degrees.)

I joined the Koegel Autism Center as an undergrad researcher, and then a private Applied Behavioral Analysis (ABA) practice. I supported graduate students with their research, learning how to collect data and conduct studies. I earned my first publication through a summer program.

Honestly, I didn't even know what graduate school was before McNair.

Castellón continued on page 6

Photographs by Oli Thacher



From First Generation College Student to Professor

Q&A with Associate Professor Lucy Arellano

Lucy Arellano is an associate professor in the Department of Education, associate dean, and faculty equity advisor at the Gevirtz School. Inspired by her own college experience, Arellano is helping Latinx students navigate and thrive in higher education. She is part of a \$10 million, five-year project called ALRISE (Accelerate Latinx Representation In STEM Education). The NSF-funded grant aimed to increase Latinx student retention and completion in pursuing STEM degrees at two- and four-year Hispanic-Serving Institutions (HSIs) and emerging HSIs.

Tell us a little about yourself.

I'm a first generation college student and first-gen U.S. citizen. My parents came from Mexico in the mid 70s. Both of them were factory workers in the downtown

Los Angeles garment district making something like two cents per shirt.

My trajectory to college was literally just something I had to figure out. I did not have any friends or family that had gone to college to guide me as role models. I ended up going to college because I was part of a middle-school summer pre-college outreach program (Jaime Escalante Math and Science Program) out of East L.A. College. By the time I was in high school I was with all the gifted, magnet, and honors kids. That gave me exposure to college because I heard my peers talking about it.

How did your college experience shape your research?

My assumption was that all the good schools were what I saw on TV. If they have a good sports team,

that's a good college. So, I applied everywhere across the country. In the end, my choice was between USC or the University of Michigan, and they both offered me the same amount of loans in the financial aid package. I wanted to move away from home to be independent, so I decided to go to the University of Michigan, 2,500 miles away!

I had never really traveled except to Mexico to visit family. I didn't have the lived experience of what it was to be in an environment where I was "othered." In East L.A. everyone looked like me, they talked like me.

At college check-in, I experienced my first microaggression. The person asked me my last name and

was annoyed that they couldn't understand me and find it on the list. Then the student behind me gave his name, 'John Smith,' and he's greeted with "Oh, that's such an American name." All while I'm still standing there with my mom right next to me. That's where I first learned how racism felt.

As a 17-year-old, moving through higher-ed, I kept trying to understand what happened in that environment. Why was I treated that way? Why are there so many Latinx students that don't finish? So that became my research question for my dissertation. How can I find answers so that other students don't have to figure it out for themselves? How can I generate knowledge that they can then tap into?

You returned to the University of Michigan for graduate school. Did you feel more accepted and less "othered" the second time?

Because it was four years later, I think I knew what to expect and I knew what support systems I needed. It was a whole new way to traverse the same geographical location but different because I was

Arellano continued on page 6

Castellón continued from page 4

Later, I landed an external summer internship with a professor who became my Ph.D. advisor. We worked one-on-one with autistic children in summer school programs, focusing on how to make services more equitable. That included tackling racial and income disparities in autism services and empowering parents to advocate for their children in special education.

Another area I explored was bilingualism in autism. Both of my brothers are bilingual, but most of their services were only in English. I began asking the question, would services be more effective if offered in Spanish? There's a paper I read called "Unintended Consequences" (y Garcia, E. F., Breslau, J., Hansen, R., & Miller, E.) and it talks about how offering only English services can sometimes sever the parent-child bond if the child speaks English but the parent only speaks Spanish. That felt deeply unfair to me since that was the reality for my mom and brother.

Do you hope your work will bridge the gap for Spanish-speaking families in both the U.S. and Mexico?

Absolutely. One of our goals is to build a cultural toolbox for practitioners. Something that helps them understand the values families hold, especially when they don't share the same cultural background.

In the field, there's still this myth that children on the spectrum can't be bilingual. But I always ask: Is that true, or is it just because you can't provide services in both languages? If a neurotypical child can be bilingual, why deny that to a child with a disability? That mindset has been one of the most frustrating barriers.

What drives you at the heart of all this?

At the end of the day, I want autistic children and their families to have the best life possible. That means better access to education, better access to services, and honoring

their vision of a high quality of life. Too often, researchers focus on the "research impact" instead of the "person impact." But these are people we're working with, and that has to come first.

As you begin your time at the Gevirtz School and the autism center, what projects are you most excited about?

I'm thrilled to be establishing my own lab, that's been a dream for a long time. I'm also working with a colleague to create a collective for families with autistic children. I want it to feel like a second home, a place where no one has to mask who they are. Parents, kids, students, and researchers will all be welcome.

I also plan to connect with local autism organizations here in Santa Barbara to build a strong community. My vision is to have my work feel like a home base for families, so they know that they belong and that they're supported.

Arellano continued from page 5

a grad student. That didn't mean it was easier to navigate. So I tapped into more professional spaces and where the Latinx staff and faculty congregated. It was a different way of navigating.

What was grad school like during that period?

At the time, anything related to higher education theories were created and normed on white males. Scholars would use models generated on this population and apply them to Black students, Latinx students, Asian students... all students. At the time, that's all there was. But now, twenty-some years later, we're in a place where there's enough knowledge generated in the field to begin to question those theories. Now, we can begin to develop new theories that are normed on the populations that we study. I would love to keep pushing forward and thinking about ways of how to create frameworks

and theories that are based on the Latinx community.

What changes would you like to see in terms of Latinx students navigating institutions that are very different from where they came from?

As Latinxs, we know that we're attending schools that were never created or intended for us. Even at HSIs, which is another arm of my research, HSIs are enrollment-based, they're not mission-based.

At HBCUs (Historically Black Colleges and Universities) and tribal colleges, it's their mission, and they were founded on serving that specific community. Whereas HSIs become HSIs because they have a 25 percent enrollment of Latinx students, which means nothing in terms of how it actually functions. Most HSIs are still predominantly white institutions.

The current framework is 'how do we fix the student, and how do we empower them to navigate the

institutions?' I would flip it and ask, 'how do we transform the institutions who made a commitment to those students by admitting them.' It's (the institution's) job to make sure they graduate and provide them requisite resources. In my mind, change the institutional practices, change the culture and policies, and consider how all of these things can better serve rather than be a barrier.

With all of the federal funding cuts, how are you continuing to do your research and what gives you hope?

For me, it's how do I continue serving this group of students when there's quite literally no other way. HSI funding is in jeopardy. There's no NSF funding directed towards underrepresented students in STEM. It's the most underserved populations that needed it the most, and that's exactly what was obliterated. It's a hard time to be doing this kind of work, but the need is still there. So that's what keeps me going.

Counseling, Clinical, and School Psychology 2024 Research Festival Presenters

"Yes, we have a job to do, but also I'm here as a person: Resilience Amid Compassion Fatigue and Secondary Trauma Among Community Service Providers"
Miguel (Mikey) A. Arana

"Unique Benefits of In-Person and Virtual Social Interaction Programs for Autistic Adolescents: Preliminary Results of a Randomized Controlled Trial"
Juliana Ison

"Realized Mental Health Care Access for Depression by Mexican-Americans: Barriers and Bridges"
Evelyn A. Melendez

"Family Conflict, Anxiety, Somatic Symptoms, and Adult Support Among At Risk Latinx Youth"
Jean Pauline Serrano

"Latent Class Analysis Examining Perceptions of School Climate Among 10th Grade Black Adolescents"
Shemiyah Holland

"School Psychologists' Perspectives on the Use of Art to Promote Social Emotional Learning"
Samantha Hutchinson

"Conducting a Mental Health Training Needs Assessment for 'Promotores de Salud' Using a Community-Based Framework"
Aniela Bordofsky

"Black Parents' Perceptions of the Cultural Fit of Parent-Child Interaction Therapy (PCIT)"
Kaela Farrise Beauvoir

"Experiences of Black Families Seeking Autism Assessment: An Exploratory Analysis of Cultural Distinctions"
Helen Folasade Branyan

"Breathwork, Creativity, and Identity"
Amanda Andersen

"Bringing CRISPR-Based Inquiry into High Schools"
Trisha Dharapuri, Melina Magno, Drew McDonald, Lekha Reddy, Norbert Reich, Gulistan Tansik, Daniel Wong-Moon

"Climate Change Awareness Among Undergraduates: A Case Study of the Partisan Divide in Environmental and Economic Perspectives"
Aaron Chen, Christina Jiang, Ron Skinner

"Embodied Discourse to Make Math Language Routines (MLRs) accessible"
Lakshmi Garcia, Nurgul Isik, Sarah Roberts, Evelyn Vera-Flandez

"Access and Agency: Co-Creating Parent Resources for Inclusive Education"
Ruchi Mendiratta Khanna

"Evaluating Variance in Student Preparation by School Using Ordinal Logistic Regression"
Taytum Cameron, Travis Candieas, Holden Ellis, Ellie Huang, Tamar Montes, Sarah Sault

"Fewer Questions, Sharper Insights: Using Item Response Theory to Improve Evaluation of College Access Programs"
Travis Candieas, Holden Ellis

"Fostering Positive STEM Outcomes for Women: The Impact of Mentoring K-12 Students"
Sophie Esquinias, Verut Kooanupong, Nandini Kuppa, Nora Thomas, Desriree Vu de Leon

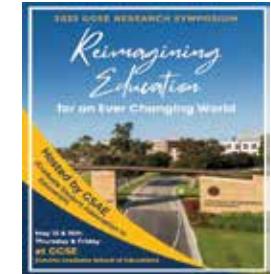
"Black Experiences in U.S. Higher Education: A Comprehensive Review of the Ambiguity of Belonging at a Predominantly Non-Black Institution"
Miriam Burnett



Presenters (left to right): Helen Folasade Branyan, Evelyn Melendez, Aniela Bordofsky, Jean Pauline Serrano, Shemiyah Holland, Mikey Arana, Juliana Ison, Kaela Farrise Beauvoir, Samantha Hutchinson

Photograph by Eric Chen '25

Graduate Student Association in Education 2025 Research Symposium Presentations



"A Black Deaf Woman's Reflections on Peace Corps Deaf Education"
Nicole Mapp

"A Quantitative Examination of Belonging in Latinx STEM Students: Community, Recognition, and Validation as Predictors"
Joseph Clayton

"Access and Agency: Co-Creating Parent Resources for Inclusive Education"
Ruchi Mendiratta Khanna

"Access to Higher Education: Parental Involvement and Underrepresented Students' Educational Outcome"
Alexander Aviña, Travis Candieas

"Beyond Academic Achievement: Pathways in the Relationship Between Competitive School Environments and Adolescent Life Satisfaction"
Siyuan Chen

"Black Experiences in U.S. Higher Education: A Comprehensive Review of the Ambiguity of Belonging at a Predominantly Non-Black Institution"
Miriam Burnett

"Healing Through A Critical Race Nepantla Methodology Approach to Research on Rural Latinx Students' College Choice Processes"
Marlene López Torres, Mayra Puente, Lupita Romo-González

"How Social Capital for Higher Education Varies by School in the California Central Coast"
Alexander Aviña, Travis Candieas, Valerie De La Fuente, Mai Uyen Huynh, Sasha Schotthoefer, Alexa Tran

"Implementing at the Street Level: A Case Study of Academic Advisors' Perspectives and Experiences with Academic Probation and Dismissal Policies"
Juan Barrera Alcazar

"Incorporating Youth Voice into the Development of Online Modules to Enhance Self-Advocacy Skills for Students Receiving Special Education Services with Mental Health Concerns"
Alexandra Allen-Barrett

"Jotería Critical Race Hypotheticals: A Pedagogical Advancement from Bell's 'Space Traders' to Engage QT (Queer and Trans) Latinxs"
Carlos A. Fitch

"On the Clock: Teacher Time Use as a Key to School Improvement"
Babatunde Alford, Ayana Bass, Ashley Carey, Jack Schneider

"Pipettes & Perspectives: Measuring Belonging in STEM Community of Practice One Drop at a Time"
Celeste Elliott, Wendy Ibsen, Alexandria Muller, Jeanice Trat

"Preservice Teachers' Conceptions of and Implementation Practices for Deeper Learning"
Matthew Bennett, Julie Blanchini, Aaliyah Curiel, Jasmine Tan, Ziqian Tan, Han Wang

"Scitrek: High School Inquiry Module on Glucose Sensing Module"
Katherine Duong, Jenny Gibson, Haaris Mobin, Miguel Orozco, Sophia Ramirez, Norbert Reich, Lior Sepunaru, Gulistan Tansik, Letizia Timoni

"Socializing Linguistic and Cultural Awareness Through Metalinguistic Conversations in Preschool"
Hanna Asmaeil, Amy Kyratzis

"Teachers as Designers: Developing a Speculative Curriculum on Climate Hazards"
Kaylee Laub

"The Effects of Visual Imagery on Recall Memory: Dual Coding or Depth of Processing?"
Mary Hegarty, Zoe Ziv

"Translanguaging and Multimodal Practices in a Linguistically Diverse Mathematics Classroom: A Case Study in Southern California"
Nurgul Isik, Amy Kyratzis, Sarah Roberts

"Tui-Manu'a Elisara and His Push for a 'New Normal' Through Western Education"
Brian Tusi Alofaituli