

**HELP FOR PARENTS OF CHILDREN
WITH AUTISM...IN THE PALMS
OF THEIR HANDS**



University of California, Santa Barbara

2021-2022

RE:LAUNCH

The Research Magazine of the Gevirtz Graduate School of Education

RE:LAUNCH

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UC SANTA BARBARA

from **Ocean & El Colegio**
The Gevirtz School Newsletter

Spring 2021

A Zoom with an (inter)view: applying to the Gevirtz School in 2021

This COVID year led to numerous questions about what the application, selection, and matriculation process would be for Gevirtz School graduate students hoping to start their programs in 2021. Would people even want to apply to a graduate program given the uncertainty of in-person classes? Would the crippled economy hurt application numbers? Would the lack of in-person information sessions and interviews make creating connections and developing a sense of candidates' strengths and weaknesses too difficult? [Read more](#)

Leading Social and Educational Justice: Service and Research for Communities
2021 GGSE RESEARCH YEARBOOK

EDUCATION, DIVERSITY & DEMOCRACY
'Who do we impact and why?' The GGSE Research

Be sure to keep up with all the School's news with our quarterly e-letter, *From Ocean & El Colegio*.

Sign up here:
<https://bit.ly/3h9Ck8A>

And if you're an alumnus, be sure to send us all your news (george@education.ucsb.edu) so we can share it!

MAJOR GRANT AWARDS FUNDED IN FISCAL YEAR, 2020-21

PI/Co-PI(s)	Projects & Sponsors	Total Amounts
Tine Sloan (PI)	California Teacher Education Research & Improvement NetworkUC Multi-campus Research Programs and Initiatives	\$341,909
Tine Sloan (PI)	Development of California's data system to understand the efficacy of residencies and other pathways Bill & Melinda Gates Foundation	\$250,656
Tarek Azzam (PI) Natalie Jones (Co-PI)	Artificial Intelligence for Sustainable Water, Nutrient, Salinity, and Pest Management UC Riverside (part of grant from USDA National Institute for Food and Agriculture)	\$240,000
Jill Sharkey (PI)	Evaluation of a Socio-Ecological Model of Tobacco Use Prevention amongst Students in Grades 6-12 Fighting Back Santa Maria Valley (part of grant from California Department of Education)	\$172,854
Miya Barnett (PI)	Lay Health Worker Mobilization to Address Disparities in Parent Training Services National Institute of Mental Health	\$149,718
Natalie Larez (PI) Jill Sharkey (Co-PI)	Health Policy Research Scholars Cohort Four - 2020 Robert Wood Johnson Foundation	\$124,000
Maryam Kia-Keating (PI) Miya Barnett (Co-PI)	Santa Barbara Resiliency Project Santa Barbara Neighborhood Clinics	\$75,600
Jeff Milem (PI) Tim Dewar (Co-PI)	California Writing Project UC California Subject Matter Project	\$75,009
Danielle Harlow (PI)	Collaborative Research: EPIQC: Enabling Practical-Scale Quantum Computation National Science Foundation	\$72,116
Miya Barnett (PI)	Adapting Family Navigation to Improve Access to Mental Health Services for LGBTQ+ Youth Boston Medical Center Corporation (part of grant from National Institute of Health)	\$64,938

For more information about external funding at the Gevirtz School, see the Contracts & Grants pages: <https://education.ucsb.edu/contracts-grants>

CAROLYN SATTIN-BAJAJ EXPLORES THE MANY WAYS IMMIGRATION AFFECTS EDUCATION



In the early 2000s before she earned her Ph.D., Carolyn Sattin-Bajaj worked at the New York City Department of Education helping to develop alternative high school programs for students. Despite the fact that there were hundreds of thousands of Spanish-speaking families in NYC schools, somehow she was the only one in her office who spoke Spanish. So, when materials went out to recruit students, they featured her work number. “The majority of phone calls I got were from Spanish-speaking parents,” she recalls.

“It felt like a huge disconnect between the work we were doing and the population we were hoping to serve,” Sattin-Bajaj says. “It got me really interested in how education policies are designed and whether they take into account the experiences, assets, and challenges of these immigrant-origin families.”

Her dissertation at New York University became the book *Unaccompanied Minors: Immigrant Youth, School Choice, and the Pursuit of Equity* (Harvard Education Press 2014), an ethnographic look at the experience of immigrant students and their families navigating New York City’s mandatory high school choice program she knew so well.

Today, as an Associate Professor in UCSB’s Department of Education, she’s still researching immigrant-origin students, in ways both deeper and wider. After all, during her first academic job at Seton Hall University, the 2016 presidential election made clear that such families had much bigger concerns than school choice. Given many of her students at the time were principals and school district leaders, she wanted to examine how school systems could deal with the toxic increase in anti-immigrant rhetoric and policies. That work led to what’s become an evolving Spencer Foundation Small Grant to explore school leaders’ responses to immigration enforcement and how they’ve worked to support children in immigrant families before and during the pandemic.

Here at the Gevirtz School, Sattin-Bajaj taught an inquiry class, her first for the Teacher Education Program. Working with teacher candidates prompted her to think about their experiences with immigration policy and serving immigrant students. She says, “I wondered how teacher candidates understand their role and enact their role, without a clear mandate, in terms of immigration enforcement?” These questions led to her securing a grant from the UCSB Academic Senate for a pilot study of how four University of California Teacher Education Programs prepare teacher candidates to teach children in immigrant families, focusing on how/whether they teach about immigration policies, immigrant students’ rights, and the developmental and other influences of growing up in immigrant families.

“These teachers are on the front lines, working as crisis managers,” she explains, “so I wanted to explore how teacher ed programs prepare teachers for these conditions.” With additional funding from the UCSB Migration Initiative and a second UCSB Academic Senate grant, the study expanded from a curricular audit to a large study including interviews and surveys with TEP instructors and administrators.

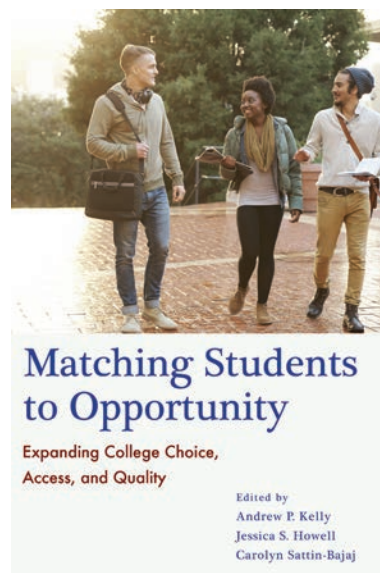
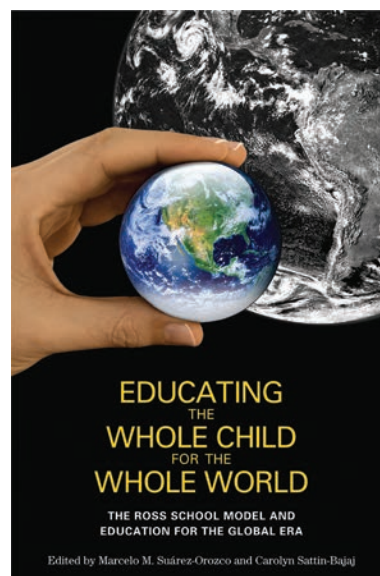
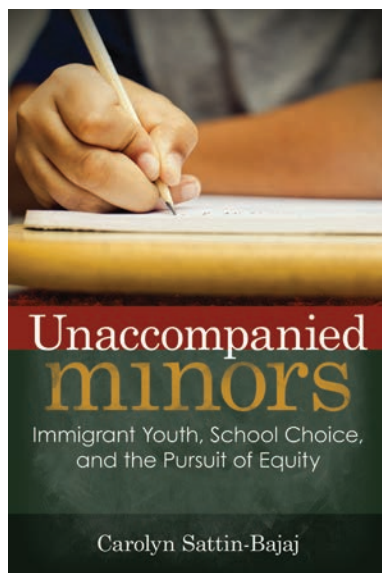
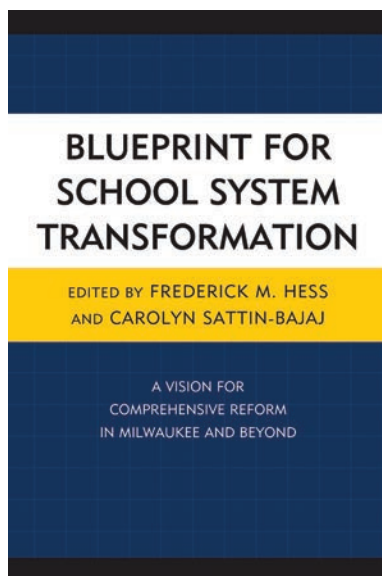
A final area of her work, which received funding from UC PromISE (UC Collaborative to Promote

Immigrant and Student Equity), examines the impacts of immigration enforcement activities using large-scale quantitative data. She does this work in collaboration with the recently graduated Jacob Kirksey (Education, Ph.D., '20). It looks at the social-emotional and academic effects of deportations and arrests and considers how enforcement activities can affect non-immigrant peers and teachers of immigrant-origin students.

Needless to say, there's a political edge to this work. Therefore, Sattin-Bajaj insists, "I know I have biases, so I have to do everything I can in the study design and sampling, and use validity and reliability strategies to counter those biases. That's our job, especially as qualitative researchers."

She also points out the review process is another great tool for helping you find your blind spots.

Of course, the hope is all this research can inform practice and policy. Sattin-Bajaj has a dream list of people she hopes to work with to create interventions, from the already mentioned Jacob Kirksey to her former Gevirtz School colleague



Hunter Gehlbach, now teaching at Johns Hopkins (his work about social perceptiveness and empathy seem crucial to her). She also hopes to work with groups like Re-Imagining Migration, who are pioneering the development of content and

methods to teach about migration in classrooms, museums, and other educational spaces.

Sattin-Bajaj is enthusiastic about working with the next generation of scholars on this research. "Being here in California and at UCSB, there are a growing number of doctoral students who themselves are immigrants or second-generation children of immigrants," she points out. "They have insight and experience that I don't." In fact, she proudly shares that her four new incoming doctoral advisees are all immigrants

or children of immigrants to the U.S., including two students who received the prestigious Chancellors Fellowship, Jing Su and Maria Romo-Gonzalez.

PIVOTAL TO PROVIDE HOPE FOR PARENTS OF CHILDREN WITH AUTISM

researchers Alexis Arias, Kaylin Russell, Rachel Schuck, and Kaitlynn Penner (CCSP & ED doctoral students), and a group of UCSB undergraduates.

This work grew out of research by alumna Liz McGarry (CCSP, Ph.D., '20) who created an online autism training program that proved parents could learn intervention techniques and make progress on their own. As successful as McGarry's project was, the biggest issues were technological. Vernon says, "Our solution was, 'OK, if we had a single, seamless user-friendly app experience that combined the intervention lessons with the ability to upload user videos, that would solve a lot of these problems.'"

The prototype—developed with Santa Barbara software company Novacoast—is an app called Pivotal that consists of eight learning modules. Concepts and key points are illuminated by video examples of real parents and children demonstrating the intervention components. The app also offers interactive activities and daily challenges.

At the end of each module, the app asks parents to record a five-minute video while using Pivotal Response Treatment (PRT) to motivate their child to interact and talk. For example, child choice is one of the module concepts. While a child is engaged with a favorite toy, this is the ideal time to try to get them to talk for the first time. A parent might hold the toy up while saying its name. The child will try a number of things—maybe grabbing for the toy, screeching—and eventually they might make a vocalization. "If they do that, and you hand them the toy right away, they start to make this connection, 'When I make sounds from my mouth, I get access to the things I really want,'" Vernon explains. "This is a powerful realization. Over time they start to learn, 'When I say different words I get access to my favorite treats and play activities with my parents,' and language starts to take off. At the same time, signs of social engagement start to emerge as they realize, 'When other people are around, not only do I get access to my favorite things, but I also get to participate in engaging, interactive games with them.'"

We know when children get early autism intervention, the course of their development is fundamentally transformed," says Dr. Ty Vernon (Ph.D., '10), Associate Professor in the Department of Counseling, Clinical, & School Psychology (CCSP) and the Koegel Autism Center (KAC) Director. "The problem is that, due to cost or limited access to quality support services in various communities around the country, many people are using outdated interventions that were developed twenty or thirty years ago.

Early intervention is key to the new phone-based app at the heart of an adaptive online parent education program being developed by Vernon and his team: Associate Professor Andrew Maul (Education), project coordinators Emily Ferguson and Maria Jimenez Munoz (CCSP doctoral students), graduate student





The parent-recorded videos are a self-teaching tool, but they are also sent to the UCSB research team, where they are analyzed as the primary outcomes for the project and used to create better content for the app.

“Any time you have a self-guided learning experience, whether online or book-based, the training outcomes are never as good as those from an in-person professional experience,” Vernon relates. However, as parents review their own videos, “the app serves as this sort of virtual clinician that gives them feedback on their performance and suggests the next lesson to them in this adaptive way.” The clinical trial will test this theory: one group of users will be able to review and score their own videos, and the other won’t. The expectation is that the first group will have superior outcomes.

That’s where Andrew Maul comes in. “I’ll be doing the statistical modeling of how these families improve over time,” Maul says, “using growth curve models to look both at variation in how families change over time and how this variation is related to the other key variables in the study.” Since the project collects videos at every step, the feedback is truly granular. Some families might learn the concepts right away and maintain them over time while some might be slower to pick things up. Vernon is excited by this prospect, claiming, “We can look at these different profiles and then modify the app so that the majority of families benefit.”

Maul also has additional research interests in this project, given his specialty is measurement. “We’ll be carefully scrutinizing the instruments we use to measure this change over time,” he says, “and depending on how that goes, we might even wind up having something to say about how we might improve the measurement of outcomes in this kind of research in general.”

Funding from the Department of Defense’s Clinical Translational Research Award supports ongoing improvements in the content, and the UCSB team eventually plans to translate the app into Spanish, Mandarin, and other languages, making it globally effective. “We’re looking to apply for an even larger clinical trial that will include hundreds or even thousands of families worldwide,” Vernon says. “When the app is eventually commercialized and made available in app stores for the general public, the revenue can be reinvested into further development of the app and additional motivation-based intervention programs that can help families around the globe.”

Top to Bottom: Ty Vernon, Andrew Maul, Emily Ferguson, Maria Jimenez Munoz

RACHEL LAMBERT AND REBECA MIRELES-RIOS EXAMINE MATH IDENTITY FORMATION IN LATINAS WITH LDS



Rachel Lambert and
Rebeca Mireles-Rios

After teaching in Harlem, Rachel Lambert, now an Assistant Professor in the Department of Education, set out to learn how students developed math identities. “I came to that interest as a teacher by watching kids come into my classroom, some feeling confident and others that would just tell me ‘I’m not a math person,’” she says. “At that point, it was very upsetting to me. I knew that they had been given messages and that some of them took up negative messages or positive messages and other kids didn’t.” Driven to understand more, she went back for her doctorate at the City University of New York. “I did a dissertation study where I followed a group of Latinx kids in New York City,” she says. “I followed them in their sixth-grade and seventh-grade years. I did an ethnography of their classroom in both years, and I interviewed them multiple times.”

Lambert published multiple articles after her dissertation, “But there was some analysis of how kids construct identities that I couldn’t actually figure out,” she explains. “I kept trying to write papers about it, and I would sort of start, and I would stop because I felt stuck.”

That’s where Rebeca Mireles-Rios, Associate Professor in the Department of Education, comes in. Her story runs parallel to Lambert’s. “When I was teaching junior high, I was doing English history, but working with many of the Latina girls at my school,” Mireles-Rios recalls. “They were very interested in math and liked math coming into junior high. Then midway through sixth grade, they were failing math. I had to talk to their parents, and their parents said, ‘I want my child to go to college’ or ‘to be a doctor,’ and all of these things... That started my research into parent-child communication around schooling and teachers’ relationships with students and building confidence around math.”

Lambert contacted Mireles-Rios and shared a research paper about a young Latina who had identified her relationship with a math teacher as a source of success in seventh-grade math class. They quickly found common ground. “Rebeca and I ended up having some conversations about mathematics and identity,” Lambert says. “I could see that we had shared a passion for that and that it was personal for both of us. So, we started working together to bring our different fields together for this inquiry.”

In 2020, Lambert and Mireles-Rios received a grant from the Spencer Foundation, a national foundation dedicated to funding education research. Their project, “Theorizing Complex Embodiment in Mathematics,” focuses on the mathematical identity development of Latina students with LDs (Learning Disabilities) or who are neurodiverse. “I’ve never seen any work looking at the specific perspectives of Latinas with disabilities or neurodiverse Latinas, and yet it’s a big group of kids,” Lambert says. “Especially in California schools. Yet we have very little research about their perspectives, who they are, and what matters to them.” Their research will correct some of that disparity.

According to Lambert, complex embodiment is a framework for understanding disability that

them together into a model that helps us understand the complexity of individual development.”

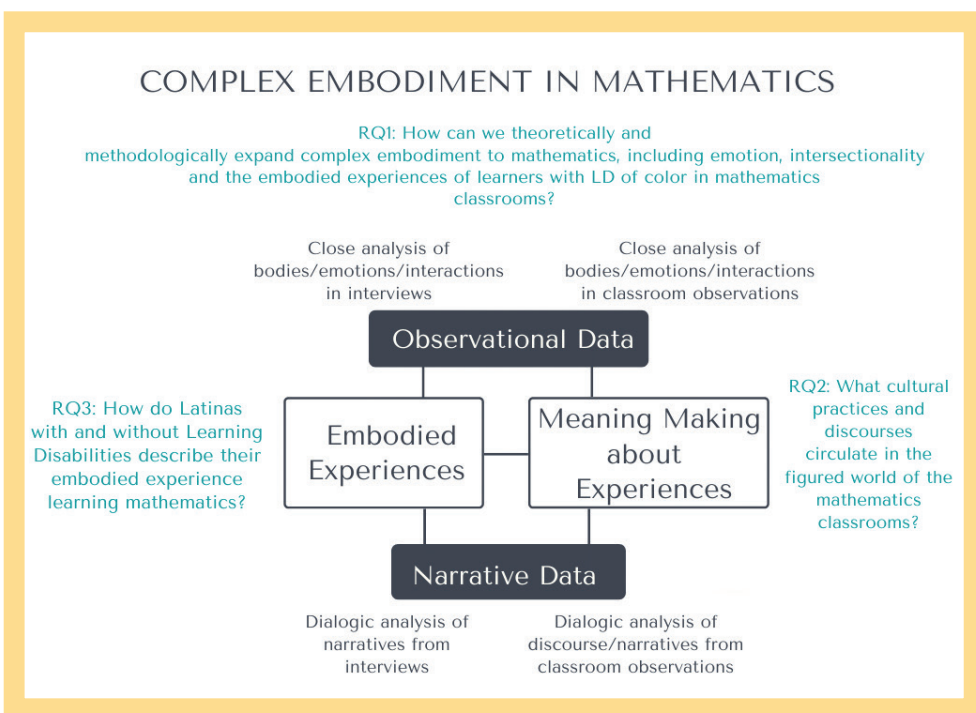
The study will focus on Latinas in middle school. “In junior high, as education content gets more specialized, there is some research that suggests that we need to spend some more time on building relationships with students,” Mireles-Rios explains. “They’re in these very formative years in middle school, and they’re developing these STEM identities. Having role models and seeing themselves as possible ‘math people,’—whatever it means to be a math person—is important.”

Lambert builds on that idea, saying, “Part of the assumptions of our study is that the reasons why kids get less interested in mathematics are related to their experiences in mathematics and how they

make sense of those experiences. We want to understand this process so that we can help kids through it. What helps them reject negative stereotypes they might hear about girls or Latinx kids in math? How do they reject them? How does this connect to how they see themselves as math learners?”

Lambert and Mireles-Rios aren’t the only ones working on the grant. David Hernández-Saca (University of Northern Iowa) and Katherine Lewis (University of Washington) have also spent the last year

preparing to collect data in fall 2021 when they will interview students and teachers in the Rio Union School District in Oxnard. They will continue their research through the next academic year.



acknowledges both the embodied reality of disability and the cultural and societal factors that reinforce it. “What it says is that disability is both real and felt in the body and produced in social concepts, constructs, and also those social constructs then affect how we interpret our own bodies,” she says. Lambert and Mireles-Rios are exploring emotions, relationships, and the complex embodiment theory of disability. Lambert sums up, “We’re trying to put