

advancing

UCI School of Education

Support System

The School of Education's OCEAN network is leading stakeholders across Orange County to improve support for foster and housing insecure youth. Page 3

Bilingual Boomtown

The UCI School of Education is addressing the educational needs for a variety of underrepresented students across the nation. *Page 8*

Cracking the Code

A new collaboration is using a superabundance of data to improve student success and shape institutional practices. *Page 13*

CFEP Turns 25

Looking back – and to the future – on the innovative center that has impacted millions across Southern California. *Page 18*

advancing

IMPROVING LIVES THROUGH ADVANCING THE SCIENCE OF EDUCATION

Aldrich Park in the center of UCI

» FEATURES

3



Support System

The School of Education's OCEAN network is leading stakeholders across Orange County to improve support for foster and housing insecure youth.

8



Bilingual Boomtown

With a stable of world-class faculty dedicated to research on bilingualism and a new bilingual specialization in its teacher preparation program, the UCI School of Education is addressing the educational needs for a variety of underrepresented students across the nation.

On the Cover: The UCI Campus, centered in Irvine and Orange County, with the Pacific Ocean in the background.

13



Cracking the Code

A new collaboration between the UCI School of Education and other UCI campus leaders is using a superabundance of data to improve student success and shape institutional practices.



18

Silver Anniversary, Gold Standard

Now in its 25th year, the UCI Center for Educational Partnerships has impacted millions of students, educators and families across Southern California.



DEPARTMENTS

- 2 Dean's Message
- 3 Features
- 23 Faculty News
- 34 School Facts
- 36 Alumni
- 44 Giving



Richard Arum | Dean, Professor of Sociology and Education

Welcome to the fifth annual issue of the UCI School of Education magazine, *Advancing*.

The past academic year proved to be everything but ordinary. In the face of unprecedented circumstances, the UCI School of Education continued making significant strides in its mission to improve the educational opportunities and outcomes for students of all backgrounds.

Our Orange County Educational Advancement Network (OCEAN) is leading a county-wide project to improve the support for foster and housing insecure youth. Now in its third year, OCEAN is a network of research-practice partnerships between the School of Education and K-12 schools in Orange County. This project, supported by the Spencer Foundation, is the first opportunity in which OCEAN will be implementing a county-wide improvement initiative, and features several partners, including the Orange County Department of Education, the OC Social Services Agency, the Orangewood Foundation, the Samuelli Academy and other youth-serving partners. You can learn more about this critical work on Page 3.

The School of Education is the home to a large group of world-class faculty dedicated to research on the multiple facets of bilingualism – dialect, literacy, language development, and more. This summer, we also introduced a Bilingual Authorization Program to our teacher education program, which equips teacher candidates with the skills necessary to lead dual immersion programs and instruction. With a talented faculty and graduate student body, we are leading the conversation on how best to support an underrepresented yet rapidly growing population. Learn more about this research on Page 8.

We're also working to support the undergraduate experience for universities across the nation. This summer, we established the Collaboratory for Data Analytics for Student Success (CODAS). Working with several on-campus partners, CODAS is utilizing data to improve student learning and outcomes, and to develop and deploy cutting-edge measures to better support student success. Our research will be shared out to higher education administrators across the nation, including community college leaders. You can read more about this exciting new center on Page 13.

One of the hallmarks of our School is the Center for Educational Partnerships (CFEP). Established in 1996, CFEP serves as a national model for how to best partner with K-12 districts, community colleges, nonprofits, municipalities and more to support preparation for, and success in, higher education. This year, CFEP is celebrating its 25th anniversary. Learn more about its successes, along with its plans for the future, on Page 18.

Next year, our School will celebrate its 10th anniversary. It's remarkable to look back on its meteoric ascent. In 2012, our faculty were principal investigators on grants whose combined total was \$5 million. Today, our faculty – which consists of 39 world-class researchers – are principal investigators on more than 100 grants totaling more than \$110 million. More impressive is the wide range of fields in which our faculty focus their research: Child Development, Cognitive Processes, Racial Equity, STEM Education, Teacher Preparation and Professional Development, and more. Taken together, the School of Education studies human development – and the associated learning opportunities and outcomes – to promote knowledge and personal enrichment throughout life.

Moving forward, our perpetually growing community serves as an exemplar of inclusive excellence in our programs, research, partnerships, centers, programs, curriculum, admissions, hiring practices and more. I invite you to learn more about what makes our school special and support our people, programs and partnerships.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Arum', written in a cursive style.

Richard Arum
Dean and Professor
UCI School of Education



Support System

The School of Education’s OCEAN network is leading stakeholders across Orange County to improve support for foster and housing insecure youth.

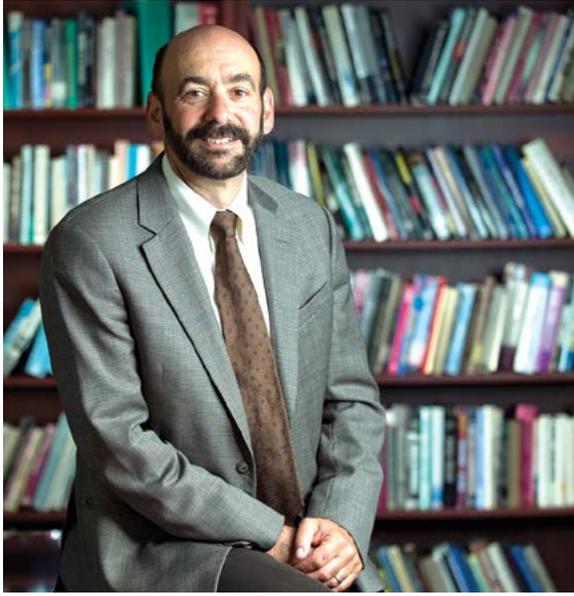
Established in 2018, the UCI School of Education’s Orange County Educational Advancement Network (OCEAN) began with a long-term goal of mobilizing a group of K-12 schools and implementing a systematic, sustained improvement plan that identifies and disseminates effective practices across the network and region.

Following thousands of hours of partnership research and hundreds of conversations with superintendents, principals, administrators, business and nonprofit leaders, the network is undertaking a transformative project – improving the support for foster and housing insecure youth in Orange County.

Funded by a two-year, \$400,000 grant from the Spencer Foundation, the OCEAN research team will identify and enumerate the range of issues that

OCEAN partner schools deal with as they support housing insecure and foster youth, evaluate the strategies that OCEAN schools enact to support said populations, and suggest high-leverage practices that the entire OCEAN network can test in a coordinated fashion.

“The research we will conduct as a result of this grant is the exact type of work we envisioned when establishing OCEAN,” said Richard Arum, dean and professor, UCI School of Education and co-principal investigator on the grant. “With a strong network of school sites in place, and funding to study this important, under-researched area, we will improve the educational and living experiences of thousands of housing insecure and foster youth in our community and identify research-based solutions for the larger field of education nationally.”



Richard Arum, dean and professor, UCI School of Education and co-principal investigator on the grant.

“This is the first attempt to bring a county-wide initiative to fruition for OCEAN,” said June Ahn, associate professor, UCI School of Education, OCEAN director and co-principal investigator on the grant. “We have been discussing salient issues with our partners since 2019 and our partner schools continuously identified this as a critical need.”

There are an estimated 2,000 teenage foster youth in Orange County, and approximately 27,000 youth who experience housing insecurity per year. Housing insecurity, Ahn described, encompasses those who are experiencing long-term or short-term homelessness. It also includes families who are doubled or tripled up in a small apartment without much stability in their residency.

Nationwide, roughly half of all foster youth complete high school, and less than three percent earn a college degree, according to the National Foster Youth Institute.

“There are thousands of potential projects that came up during our meetings with our partner OCEAN schools,” Ahn said. “After discussions, I have confidence that this is the issue that matters for us in Orange County.”

“There is a clear need to design systems for schools and social service agencies to figure out mechanisms to work together and better support this population of students.” - Richard Arum

IDENTIFYING THE NEEDS

The OCEAN Network – which consists of a dozen K-12 schools across Orange County, the UCI School of Education and its faculty and graduate students – is partnering with several additional organizations for this project. This includes the Anaheim Union High School District, the Orange County Department of Education, Orange County Social Services Department, Orangewood Foundation, the Samueli Academy, Santa Ana Unified School District, and Scholarship Prep Public Schools.

Partners began meeting in January 2021. During these discussions, School of Education professors and graduate student researchers (GSRs) guided partners through a process that identified the key issues they face in supporting housing insecure and



June Ahn, associate professor at the UCI School of Education and director, OCEAN, is serving as co-principal investigator on the grant. “Our project is a continuous improvement initiative, which means we’re constantly working together to pinpoint issues relevant to our county, and developing tweaks and solutions in our county,” Ahn said.



Anthony Saba, executive director of Samueli Academy, is serving as co-principal investigator on the grant.

Kids all over this country really deserve for us to do this work.

- Anthony Saba

foster youth populations and the best practices that they enact in their local contexts. Through these meetings, along with field site visits, the School of Education built a rich qualitative corpus of data.

Discussion of the salient issues remain ongoing, but researchers identified two needs that they will design interventions for during the 2021-22 academic year: coordination and communications between agencies and supporting students' social-emotional needs.

Though there exists a slew of parties across the county focused on supporting foster and housing insecure youth, communication between the entities is not always seamless and efficient. As a result, students can oftentimes slip through the cracks.

Take, for example, a student who is evicted from their home. They might attend school the next day, but are still dealing with the trauma of the eviction. Or, they might miss multiple days of school. In either case, the school and others need to be made aware of the student's situation.

"Foster and housing insecure youth are prone to moving from school to school because of instability,"

Arum said. "Those moves increase the risk of academic failure. There is a clear need to design systems for schools and social service agencies to figure out mechanisms to work together and better support this population of students."

Following improved communications and coordinating, there also exists a need to support the social-emotional needs of foster and housing insecure youth.

"There's a reason that foster youth quite often fall through the cracks and don't engage in school," said Anthony Saba, executive director of Samueli Academy, which has been a member of OCEAN since the network's inception. "Some of them have such extreme trauma in their lives that the last thing they could possibly care about at any given moment is Science or English class."

Entering its ninth year in 2021, the Santa Ana-based Samueli Academy, a program of Orangewood Foundation, is particularly adept at attending to the need of foster and housing insecure youth. In summer 2021, the school opened on-campus dormitories in which foster youth can live five days a week and receive support from staff. In doing so, students spend less time commuting from an ever-changing domicile and can instead focus more intentionally on academics while they transition to a more permanent residence.

"One of our goals with this partnership is to learn how we can best socially and emotionally support our students while setting up an academic environment that recognizes what they've gone through and supports them, with the ultimate goal of preparing them for life after high school," Saba said.

IT TAKES A VILLAGE

The process of supporting students who experience housing insecurity is richly complex. Regardless of how much a single entity might try to combat these issues, they cannot succeed unilaterally. With various stakeholders in tow, however, each can play to their strength.



From left: Doctoral candidate Yenda Prado, June Ahn, then-doctoral student Christopher Wegemer '21, and doctoral candidate Jennifer Renick organize community feedback and brainstorming during a convening of OCEAN partners in April 2019. The meeting was one of the first instances in which OCEAN partners convened, and began the process leading to today's work toward supporting foster and housing insecure youth.

"It is vital that we engage with other entities supporting these youth who face great challenges," said Jason Watts, executive director of Scholarship Prep Public Schools. "This work cannot be done fully or effectively without community partnerships. We hope to find new contacts, new partners, and new ideas to better our work."

"Given that foster students are, historically, at a higher risk to drop out and underperform, we need to come together to intervene and implement the required supports to positively change the narrative of this population," said Elida Sanchez, program specialist, Santa Ana Unified School District.

"It is apparent that UCI brings forth both heart and mind in joining with other community partners to invest in youth success and mitigate inequities that present obstacles to them becoming who they are meant to be," said Jaime Muñoz, administrative manager, OC Social Services Agency. "I hope this work will bridge new partnerships that will continue

to grow to serve vulnerable youth, and that it brings a clearer understanding of how we can better come together to support improved life outcomes for vulnerable youth."

In addition to coordinating and leading the project, the UCI School of Education offers a full ensemble of world-class researchers to address any needs that arise throughout the process.

"We have faculty that are experts on everything from early childhood development to afterschool programs, to the social and institutional dimensions of school," Arum said. "You need that level of expertise to address the challenging, multi-faceted problems of this nature."

Graduate student researchers participating on the project include Lora Cawelti, Verenisse Ponce-Soria and Christopher Wegemer. Postdoctoral scholar Dr. Erica Van Steenis has aided in coordinating the project.

Saba reiterates his desire to create best practices and research that can be disseminated across the country.

“If there was a silver bullet out there or a magic answer, we’d know it by now – this issue doesn’t just affect Orange County, or California, or even the country,” Saba said. “It’s my hope we identify some tangible, best practice approaches, research it – and who does research better than UCI – and publish the data and scream it from the rooftops.

“Kids all over this country really deserve for us to do this work.”

THE OCEAN ADVANTAGE

This project is made possible by three years of groundwork and relationship building between the School of Education and OCEAN partner sites. Each year, at each site, a GSR and faculty member work with school leadership to identify the greatest needs and goals of the school, and in turn conduct research that will positively impact the school. From those partnerships, along with the regular convenings of partner schools, trust and relationships are built to help facilitate the county-wide work.

“We can be nimble and jumpstart a project quickly due to years of relationship building and the infrastructure we’ve developed,” Ahn said. “We don’t come in as researchers with a research topic; instead, we match people together, and allow the research expertise and the community’s need to align, and then mobilize quickly to address an issue.”

Ahn envisions that the work supporting foster and housing insecure youth will continue after the two-year grant concludes, and for other county-wide networked improvement communities to emerge.

OCEAN is emblematic of the School of Education’s focus on improving the educational opportunities and outcomes of all students across the lifespan.

“This type of work leads us to accept a broader conceptualization of what a School of Education is and can do,” Arum said. “We can serve as the hub

that connects other agencies that support youth, family and communities. You need that broader conceptualization if you’re going to address issues such as foster and housing insecure youth.”

The success and performance of OCEAN is made possible from a perpetual and cyclical motion, Ahn explained. The network came into existence due to private support, which in turn helped the School of Education develop relationships with schools and identify issues of need. After showing what Ahn calls a “proof of concept,” OCEAN has been able to secure more than \$8 million in grant funding for various partnership projects from external funders. After the grants are conducted, private support could once again lead the way toward future research into myriad areas.

“Our project is a continuous improvement initiative, which means we’re constantly working together to pinpoint issues relevant to our county, and developing tweaks and solutions in our county,” Ahn said.

“That work does not just end after two years; ideally you’d want to keep funding the relationship and continuously improving and identifying the issues. There needs to be a sustained commitment to keep things moving.”

To better support foster and housing insecure youth, the UCI School of Education’s OCEAN network has brought together several partners from across Orange County. By leveraging the expertise of these various agencies, who all share a common goal, each entity can play to its strength. Over the next year, common issues and needs will be discussed and addressed, including the need to improve communication and collaboration, and to support the social and emotional needs of the youth.

Anaheim Union High School District
Orange County Department of Education
Orange County Social Services Agency
Orangewood Foundation
Samueli Academy
Santa Ana Unified School District
Scholarship Prep
UCI School of Education
Willard Intermediate School



Boomtown

With a stable of world-class faculty dedicated to research on bilingualism and a new bilingual specialization in its teacher preparation program, the UCI School of Education is addressing the educational needs for a variety of underrepresented students across the nation.

Over the past few years, the UCI School of Education has added a cadre of prominent researchers and experts on various topics related to bilingualism, resulting in an ecosystem of grants, publications, research centers and community-focused work.

This summer, the school also introduced a Bilingual Authorization Program, which trains teacher candidates to become leaders in K-12 dual immersion schools.

Coupled together, the UCI School of Education has quickly become a paragon in research and training on topics related to bilingualism.

“Not only are we the home to several world-class faculty dedicated to bilingualism, but the research they are conducting focuses on different facets of bilingualism, including dialect, literacy, language development and more,” said Richard Arum, dean and professor, UCI School of Education. “With

this multi-faceted approach, the School of Education is equipped to support the rapidly increasing educational demands of several underrepresented populations.”

THE MANY FACETS OF BILINGUALISM

Faculty at the School of Education focus on a variety of issues related to bilingualism, including language and literacy acquisition, language variation, multilingualism, linguistic diversity, and more.

Elizabeth Peña, professor and associate dean of faculty development and diversity, focuses her research on how children develop, store and access two languages, and the consequences – advantages and challenges – of knowing two languages. Peña is particularly interested in studying children with developmental language disabilities (DLD).

DLD is one of the most common childhood disabilities, Peña explained, affecting roughly seven to ten percent of the population. Additionally, there exists a high co-morbidity with DLD and other areas, including ADHD, math disabilities, reading disabilities and learning disabilities.

Through a \$3.18 million grant from the National Institute on Deafness and Other Communication Disorders, Peña and her research team are creating and validating a tablet-based test that speech-language pathologists can administer, in English, to children who are in the process of learning English as a second language. The test, which will target Spanish- and Vietnamese-speaking English Language Learners ages four to nine, is meant to properly identify DLDs by differentiating language impairment from language difference.

“This is a completely new approach – the two groups of children that will be tested use very different languages,” Peña said. “We will be tracking normal developmental errors, acquisition errors, and DLD and comparing our findings between the two languages.”

Peña is optimistic that results from the grant will expand to serve most children who may be

experiencing DLDs; she anticipates the test will be useful with similar Romance and Austroasiatic languages, and thus apply to 90 percent of the languages spoken in the U.S.

Professor and Senior Associate Dean Young-Suk Kim’s primary research areas include development of language, cognition, literacy skills and effective instruction of language and literacy skills across languages and writing systems. In her work, Kim proposes and tests theories on factors that influence reading, writing, and language skills for children from diverse linguistic and socio-economic backgrounds, including English-speaking children, dual language learners, English learners, and children learning to read and write in languages other than English, including Korean, Spanish and Chinese.

Kim’s recent work, funded by the Institute of Education Sciences, has shown the importance of higher-order cognitions – such as making inferences, perspective taking and comprehension monitoring – for dual language learners of Spanish and English. In a recent study, Kim and her team analyzed writing skills and higher-order cognitions among dual language learners in first through third grades to see if the writing skills and higher order cognitions were a single skill across languages, or two related skills organized by language, or have an alternative structure.

Kim found that writing skills were a single skill – i.e., dual language learners who write a coherent quality text in English also write a coherent text in Spanish. Additionally, dual language learners’ higher-order cognitions captured in English and Spanish were best described to have a bifactor structure – one that captures higher-order skills across English and Spanish, and language-specific aspects. Importantly, higher-order cognitions were fairly strongly related to their writing skills.

“These results indicate that higher-order cognitive skills that develop in a particular language context likely transfer to another language, and they are important to writing skills for dual language learners,” Kim said. “These findings indicate the importance of



Professor Julie Washington, who joined the School of Education in January, focuses her research on bidialectalism.

higher-order thinking skills in students' first language or second language for students' writing development."

Professor Julie Washington joined the UCI School of Education in January from Georgia State University. Her research is focused not on bilingualism, but bidialectalism. Bidialectalism refers to within language variation, whereas bilingualism refers to across language variation.

Washington studies a dialect within American English, called African American English (AAE), and focuses on the intersection of language variation, poverty and reading development. Specifically, she is focused on how the use of AAE impacts the development of early reading skills in African American children growing up in poverty. Her research seeks to move the perception about dialect/language variation away from deficit-based thinking.

"It is true that African American children who are dense users of African American English struggle with development of early literacy skills, but this does not mean that AAE cannot or should not be used to support the development of these important early skills," Washington said.

Through a project funded by the National Institutes of Health, Washington is developing an assessment

for African American children in third through fifth grade that considers the degree of dialect use, which has been an important indicator of success with language-based skills such as reading, writing and spelling.

"Traditional language measures often conflate dialect use and communicative competence, and children who use the most dialect are seen as the least competent speakers," Washington said. "This project focuses on measuring linguistic competence in African American children who are high-density speakers of AAE."

Washington proposes that the impact of density on assessment has resulted in an underestimation of the linguistic competence of African American children, particularly those growing up in poverty, and who are most likely to be dense users of AAE.

Distinguished Professor Judith Kroll joined the UCI School of Education in July. Recently elected a fellow by the American Academy of Arts & Sciences, Kroll focuses her research on the cognitive and neural processes that support language learning and active bilingualism.

Kroll's research has shown that both languages are always active in bilingual individuals, creating a dynamic exchange that shapes language use. From this, Kroll and her Bilingualism, Mind and Brain Lab are studying a multitude of impacts of being bilingual, including language learning in childhood, adult literacy, and benefits of new language learning for older adults. A particularly exciting finding in their research is that individuals who are immersed in a linguistically diverse environment, like Southern California, may be advantaged in learning a new language.

Through an NSF PIRE (Partnerships for International Research and Education) project, Kroll and her team have developed an international network of bilingualism research to understand the nature of the bilingual mind and brain, the processes of bilingual language development, and the consequences of bilingualism for cognition.



In fall 2021, Kroll and Peña, together with others in the School of Education and at UCI, will co-direct a new branch of Bilingualism Matters, an international service organization that brings the research on bilingualism to the public and that enables community experience to be brought into the university.

For example, many families are conflicted on whether or not to continue using a “home language” in contexts where the home language is not the language of the community. Research is clear, Kroll explained – it is overwhelmingly beneficial to maintain the home language and to seek dual language immersion opportunities.

“For many, this is a counterintuitive observation,” Kroll said. “But, the research shows that young children benefit early on from instructions that builds on their stronger language, typically the home language, in acquiring literacy and other academic skills.”

Bilingualism Matters hopes to work with stakeholders in the community to support opportunities for enhancing maintenance of the home language.

Associate Professor Penelope Collins’ research focuses on language and literacy development for individuals from early childhood through college. She studies bilingualism not only in the U.S. context, but also researches English as a foreign language. For example, she is currently studying the use of bilingual e-books to help Chinese families promote English development with their children.

Like others, Collins wants to position her work so that it does not focus on the deficits that a language minority child might have, but rather the assets he or she has.

“Even in early childhood we are finding that multilingualism can be an asset in developing early literacy skills,” Collins said.

Collins is also director of the Collins Literacy Lab, which focuses on literacy attainment for youth and children from linguistically diverse backgrounds.

SALUT!

Current research projects include explorations of home-literacy environments of young bilingual children, discipline-specific writing in history and STEM, the use of technology to support literacy instruction, and how literacy interventions can be used to support content learning in biology classes.

“The group of people that the School of Education has focused on bilingualism and what the school is doing toward these issues, compared to other schools – I would say that we’re probably one of the best in the country,” Collins said.

Assistant Professor Brandy Gatlin-Nash studies language and literacy skills of children who are learning to read and write, along with linguistic diversity among both children and adults as it relates to education in general.

In a recent paper, Gatlin-Nash and Peña analyzed African American English use among young Latinx bilingual children. In the study, they also sought to determine the accuracy of the Bilingual English Spanish Assessment (BESA) in classifying children with and without developmental language disorder. They found that children with language disorders tended to use some features of AAE more frequently than their typically developing peers and that the BESA appears to be a valid tool for the identification of developmental language disorder among children exposed to both AAE and Spanish.

“The UCI School of Education has purposely sought out researchers who focus on linguistic diversity and issues related to equity and diversity,” Gatlin-Nash said. “In my four years at UCI, the School of Education’s faculty has grown immensely, not just in number, but in terms of broadness and scope of research backgrounds.”

TRAINING THE FUTURE

With a strong nexus of research and community-engagement opportunities, graduate students are imbued with the skills necessary to carry this work further in the future.

“I always tell any prospective graduate students to go to a place where there are multiple people doing what you’re interested in,” Collins said. “That makes it easier to have really strong committees for your research, but it also provides you with a real richness and breadth of knowledge.”

“At the School of Education, work on language and literacy acquisition, language variation, multilingualism, and linguistic diversity are the norm, not exceptions or special topics,” Kim said. “Faculty on the language and literacy topics have different disciplinary training – such as psychology, speech and language, education and special education – and they collaborate. This means students will experience cross-disciplinary work, which is necessary but is not always found in schools of education. Students will have chances to be mentored by a team of experts.”



The Class of 2020 cohort, MAT + Credential Bilingual Authorization Program

“Southern California is an area of the U.S. that is culturally and linguistically diverse, but the country at large is predominantly an English-only monolingual context in which there are profound misunderstandings and a great deal of mythology about what it means to be bilingual,” Kroll said. “Most of our students at UCI are bilingual and many have grown up with a home language or dialect other than General American English. Having an opportunity to conduct research and take classes that illuminate the power of learning

and using two or more languages or dialects can be a transformative experience.”

In addition to research, the School of Education this summer added a Bilingual Authorization Program (BAP) to its Master’s of Arts in Teaching + Credential Program.

By participating in the program, teacher candidates will receive the skills necessary to excel as leaders of dual immersion programs and instruction. In a dual immersion program, students learn and are taught in both English and a second language over the course of their K-12 education. The main goals for all dual immersion programs are for students to achieve strong levels of academic proficiency in all subject areas, become bilingual and biliterate and to develop sociocultural competence.

More than half of Orange County’s 28 school districts offer dual immersion programs in their schools, and more than a thousand additional schools across California offer dual immersion programs. There is an increasing demand for both admission to these programs and for teachers to staff the schools. UCI currently partners with dual immersion schools in the Anaheim Elementary School District, Capistrano Unified School District, Garden Grove Unified School District, Magnolia School District, Newport-Mesa Unified School District, Saddleback Valley Unified School District, and Santa Ana Unified School District.

“I am so proud of the work our team has done to build a strong bilingual program, and pleased that our BAP graduates will continue to promote linguistic diversity in our local schools and communities,” said Virginia Panish, director of teacher education, UCI School of Education.

Overall, the School of Education is an unparalleled, one-stop shop for everything related to bilingualism.

“It’s really fun and interesting to have people who study literacy, dialect, oral language development, and bilingualism, including bimodal bilinguals,” Peña said. “I don’t think any place in the country has people who do all of these things in one place.”



CRACKING THE CODE

A new collaboration between the UCI School of Education and other UCI campus leaders is using a superabundance of data to improve student success and shape institutional practices.

Widely regarded as a national leader in utilizing sophisticated data to improve student success, the University of California, Irvine bolstered its stature further this summer with the establishment of the Collaboratory for Data Analytics for Student Success (CODAS).

CODAS brings together leaders from the UCI School of Education, the UCI Education Research Initiative, the UCI Office of the Vice Provost for Teaching and Learning and more to support instructors in the collection and analysis of quantitative and qualitative data from within UCI.

CODAS will use a cornucopia of data to improve student learning and outcomes and to develop and deploy cutting-edge measures to understand the student experience and support student success.

Its research will not only focus on UCI undergraduates, but will be shared out to higher education administrators across the nation, including community colleges.

“CODAS will not just be a traditional academic research center that generates findings for the field as a whole, but one that also inspires the shaping of internal institutional practices and improves performance,” said Richard Arum, dean and professor, UCI School of Education and co-principal investigator of CODAS. “Combining the world-class research of its participants with UCI professors who are already working to improve teaching in their particular fields and disciplines makes this collaborative unique, and it will serve as a model to colleges across the nation.”

A WEALTH OF DATA

CODAS is the byproduct of several pre-existing data sets at UCI.

The first comes from the School of Education's *Next Generation Undergraduate Success Measurement Project*, also known as the *UCI Measuring Undergraduate Success Trajectories project (UCI-MUST)*. Supported by the Andrew W. Mellon foundation and led by Arum, the project seeks to improve the understanding of the value of undergraduate educational experiences and promote evidence-based models of undergraduate student success. Over the past two years, the project's research team has tracked a random sample of two cohorts, each with more than 1,200 UCI undergraduates. Data is being collected in three different strands, each overseen by a School of Education faculty member. Everything from transcripts to online classroom behavior, living situations to student moods is being considered.

CODAS also utilizes the work of the UCI Education Research Initiative. Established in 2018, the ERI is a multidisciplinary community that seeks to improve the educational experiences of UCI undergraduates, particularly underrepresented minorities, first-generation and low-income students. The ERI has a research mission that identifies and disseminates interventions, instructional practices and policies to increase postsecondary success and reduce racial inequality, and an implementation mission that supports and facilitates the application of research into practice.

In July 2022, Associate Professor Ben Castleman will join the UCI School of Education. Castleman is currently the Newton and Rita Meyers Associate Professor in the Economics of Education at the University of Virginia and founder and director of the NUDGE⁴ Solutions Lab.

NUDGE⁴, which will be brought to UCI and serve as a prominent feature of CODAS, works with public agencies and organizations to design and test strategies to improve educational and workforce

success for lower-income and traditionally underrepresented populations. The solutions developed draw on insights from behavioral economics and data science approaches to support people to pursue well-aligned educational and career pathways.

School of Education Professor Mark Warschauer recently completed a five-year, \$2.5 million National Science Foundation-funded grant, *Investigating Virtual Learning Environments*, which analyzed survey, clickstream, and learner outcome data from tens of thousands of students in hundreds of online classes to understand and support students' online learning. This data will also be leveraged in CODAS.

CODAS is working with the UCI Office for Data and Information Technology for the data analytics platform. In addition to these data streams, the existing research of several professors will be folded into CODAS. (See Page 17 for a full list of participating professors.)

Higher Education Leadership Meets Innovating: Teaching and Learning in a Data Driven Era

CODAS is the host to an annual weeklong institute designed for higher education leaders who want to understand and use the latest in pedagogical advances and new instructional technology in their universities. Offered by the School of Education and co-sponsored by the Office of the Vice Provost for Teaching and Learning Innovation and assisted by the Division of Continuing Education, the inaugural institute, hosted in September, developed in participants a new understanding of the ways that data can be used to assess and improve teaching and learning; shared the latest research and practice in pedagogical advances and how they can be used to improve undergraduate and graduate instruction; and provided guidance to leaders as to how to introduce change related to pedagogy in a university. Stay connected with the UCI School of Education for news on the next institute, coming summer 2022.



Richard Arum, dean and professor of the UCI School of Education and co-principal investigator of CODAS.

CODAS will not just be a traditional academic research center that generates findings for the field as a whole, but one that also inspires the shaping of internal institutional practices and improves performance.

- Richard Arum

USING DATA TO INFORM PRACTICE

CODAS is set up to be both an internal- and external-facing organization. For the former, CODAS will generate detailed reports on student experience and learning outcomes, which could be used in myriad ways.

For example, the ERI awards “mini grants” to promote and support UCI faculty working on improving instruction in their area. According to Brian Sato, ERI director, professor of teaching, School of Biological Sciences and associate dean, Division of Teaching and Excellence, data from CODAS can aid in supplementing and enhancing faculty projects, and result in a new pool of potential collaborators.

“CODAS’ work to provide greater access to various types of institutional data will greatly enhance the potential projects being undertaken by ERI,” Sato said. “UCI is already at the forefront of data access and utilization to improve teaching and learning, and CODAS’ efforts will push the envelope even further.”

As detailed previously, CODAS will utilize multiple data sets. Simply identifying and determining which data to use can be beneficial to improving instruction and student outcomes.

“One of the challenges with leveraging data for student outcomes is understanding which data to use,” said Michael Dennin, vice provost of teaching and learning; dean, Division of Undergraduate Education; and co-principal investigator of CODAS. “The advantage of CODAS is combining the research on what data is most useful with research on how best to utilize the data once it is identified. CODAS then allows us to turn that research into practice in a way that is truly impactful.”

CODAS can also conduct targeted research on campus to support larger institutional goals, such as the accreditation process.



Michael Dennin, vice provost of teaching and learning; dean, Division of Undergraduate Education and co-principal investigator of CODAS.

CODAS provides a structure and framework for bringing together the different elements of a university that are necessary for supporting students as broadly as possible.

- Michael Dennin

“We’re not just working to improve institutional performance in general, but are working to provide concrete assistance in supporting processes, such as accreditation, that ask institutions to rigorously assess undergraduate experiences and outcomes,” Arum said. “With CODAS, we will be able to do it in a way that’s much more sophisticated than any other university in the country today.”

SUPPORTING HIGHER EDUCATION

Externally, CODAS will reach out to and support data analytics for student success at other institutions of higher education across the state and nation. This



Brian Sato, director, UCI Education Research Initiative; professor of teaching, School of Biological Sciences and associate dean, Division of Teaching and Excellence.

By changing how we view and measure student success, we will hopefully be able to create a more diverse and equitable higher education landscape.

- Brian Sato

includes supporting instruction and improving student outcomes at community colleges, which educate a high percentage of underrepresented students, and which serve as a major gateway for such students to transfer to the University of California.

“Community colleges are a key institution in supporting broad access to higher education,” Arum said. “Higher education as a whole needs to improve, but if you’re concerned with equity and inclusion, community college needs are critically important.”

Associate Professor Di Xu’s research focuses on online learning, community colleges, instructor productivity and more. Xu and ERI have been in conversation with local community colleges to better understand policies and to identify what research can be conducted collaboratively. CODAS will allow current research to be disseminated to community colleges, and for researchers to better understand the challenges students are facing, which can in turn inform new research.

Xu is also hopeful that new partnerships with UCI can be forged, and that the work will eventually facilitate interventions.

“So far, our work is exploratory, but these exploratory studies could inform the next generation of interventions,” Xu said. “Interventions involve partners much more strongly, so having CODAS, which provides support for researchers and practitioners, will serve as a great resource for facilitating interventions.”

Through the NUDGE⁴ Lab, Castleman is leading a project focused on increasing community college student transfer rates. Using the same machine learning strategies that Netflix uses to recommend movies and TV shows, Castleman and his team designed an algorithm that provides students with personalized recommendations of courses that fulfill degree and transfer requirements and that maximized their predicted probability of academic success.

“I am very excited to explore ways that the combination of research-policy partnerships,

behavioral economics insights, and data science strategies can be applied to improve educational success and workforce transitions for UCI students as well as to support broader educational and economic equity across California,” Castleman said.

CODAS also seeks to serve as a model for other four-year institutions interested in better understanding its student body and improving teaching and learning outcomes, as well as more equitable opportunities for underrepresented students.

“CODAS provides a structure and framework for bringing together the different elements of a university that are necessary for supporting students as broadly as possible,” Dennin said. “Also, for universities that

do not have the resources of CODAS, we have a vision by which CODAS ultimately can provide support for other institutions.”

“I hope that the work being undertaken by CODAS is widely disseminated and adopted by universities and researchers across the world,” Sato said. “By creating additional metrics by which we consider student success, as opposed to relying solely on GPA and graduation rates, we will have a much better understanding of the student experience, and thus be able to consider ways to holistically improve this experience. By changing how we view and measure student success, we will hopefully be able to create a more diverse and equitable higher education landscape.”

The CODAS Team

Faculty, staff and professors of teaching involved in CODAS:

Nancy Aguilar-Roca, Associate Professor of Teaching, School of Biological Sciences

Richard Arum, Dean and Professor, School of Education; Co-Principal Investigator, CODAS

Rachel Baker, Associate Professor, School of Education

Suzanne Bohlson, Professor of Teaching, School of Biological Sciences

Natascha Buswell, Co-Director, Education Research Initiative

Gustavo Carlo, Professor, School of Education

Anita Casavantes-Bradford, Associate Professor, School of Social Sciences, Dept. of Chicano/Latino Studies

Benjamin Castleman, Associate Professor, School of Education

Quoc-Viet Dang, Assistant Professor of Teaching, Henry Samueli School of Engineering

Chris Davis, Associate Professor of Teaching, Mathematics Department

Michael Dennin, Vice Provost of Teaching and Learning; Dean, Division of Undergraduate Education; Co-Principal Investigator, CODAS

Mine Dogucu, Assistant Professor of Teaching, Department of Statistics

Nia Dowell, Assistant Professor, School of Education

Qian Du, Assistant Professor of Teaching, School of Humanities

Jacquelynne Eccles, Distinguished Professor, School of Education

Jutta Heckhausen, Professor of Psychological Science, School of Social Ecology

Angela Jenks, Associate Professor of Teaching, Department of Anthropology

Pavan Kadandale, Assistant Professor of Teaching, School of Biological Sciences

Christine King, Assistant Professor of Teaching, Henry Samueli School of Engineering

Daniel Knight, Assistant Professor of Teaching, Henry Samueli School of Engineering

Renee Link, Associate Professor of Teaching, Department of Chemistry

Fernando Rodriguez, Assistant Professor of Teaching, School of Education

Brian Sato, Director, UCI Education Research Initiative; Professor of Teaching, School of Biological Sciences; Associate Dean, Division of Teaching and Excellence

Laura Tucker, Associate Director, Education Research Initiative

Mark Warschauer, Professor, School of Education

Adrienne Williams, Associate Director, Education Research Initiative

Charles Wright, Associate Professor, Cognitive Sciences, School of Social Sciences

Di Xu, Associate Professor, School of Education; Co-Director, Education Research Initiative



Silver Anniversary, Gold Standard

Now in its 25th year, the UCI Center for Educational Partnerships has impacted millions of students, educators and families across Southern California.

During the 2021-22 academic year, the UCI Center for Educational Partnerships (CFEP) – a robust center in the School of Education that creates collaborations that support preparation for and success in higher education – is celebrating its 25th anniversary.

CFEP's programs, partnerships and initiatives target the unique needs of four separate but interconnected groups: K-12 students, K-12 teachers, community college students looking to transfer, and UCI undergraduates. Combined, CFEP supports more than 13,000 students and families annually.

CFEP was the first such center in the UC system, and its overarching structure and the design of its programs have since been emulated at every UC campus.

“For the past quarter century, CFEP has focused on equity and access for all students across Southern California,” said Stephanie Reyes-Tuccio, assistant vice chancellor, educational partnerships. “Our innovative partnerships with schools and communities change lives by helping students make their dreams of college a reality.”

THE VISION

CFEP was formed in 1996 in response to California Proposition 209, which prohibited state governmental institutions from considering race, sex, or ethnicity in several areas, including college admissions. UCI felt it necessary to identify alternate means to ensure the continued enrollment of a diverse and highly qualified student population.

Above: Stephanie Reyes-Tuccio, assistant vice chancellor, educational partnerships, speaks to students at Compton High School, 2016.

Key stakeholders at UCI – including former CFEP Director Juan Francisco Lara, and Manuel Gómez, former vice chancellor, student affairs – decided to organize and expand existing outreach programs and house them under one roof – CFEP.

The programs bucked two trends in higher education partnerships that were predominant at the time. First, many universities believed student inequity was primarily a result of a lack of information on various topics, such as financial aid, application and graduation requirements, and more. Second, universities were connecting with local K-12 schools by bringing together multiple district superintendents into one group, and then trying to effect change through the various needs and goals of the superintendents.

CFEP instead forged deep partnerships with local underserved schools and districts, most of which also serve students of color predominantly. By doing so, it eschewed both the simple “information dump” and the multiple superintendent approach, and was able to develop close, meaningful relationships that live on and continue to create lasting change today.

“We began a new concept of connecting UCI faculty with entire, specific schools in areas such as Santa Ana, Compton and Anaheim,” Gómez said. “This represented a major shift from information distribution models to academic, faculty-led preparatory models.”

Resources soon followed that led CFEP to create summer academic programs. With momentum now on its side, CFEP had extraordinary success in bringing K-12 students and teachers together with UCI faculty to strengthen K-12 curricula and teachers’ pedagogical practices.

Another major milestone occurred in 2002, when the National Science Foundation awarded CFEP a \$14.2 million grant known as FOCUS: Faculty Outreach Collaborations Uniting Scientists, Students and Schools. The grant led to the creation of several STEM outreach programs, which collectively impacted more than 100,000 students from the Compton, Santa Ana, and Newport-Mesa school districts.

“This was and is astounding – for an administrative center to have received a grant from the NSF,” Gómez said. “It just doesn’t happen.”

Advancing through the 21st century, as CFEP became more sophisticated and robust, the center began adding programs that Gómez describes as “intergenerational.” In these, UCI undergraduates began working with K-12 students, UCI graduates worked with undergraduates, and UCI professors worked with all the aforementioned groups.

“We were looking at how to permanently restructure the curricular experiences for these students so that they better understood the university system,” Gómez said. “We brought them onto campus so that they could experience and feel the campus and feel that it was part of their home.”

In 1996, when UC campuses were still figuring out how to adapt to life post-Proposition 209, CFEP served as a beacon for others to emulate.

“Juan and Manuel were ahead of the game,” said Dennis Galligani, who previously worked as the assistant vice chancellor, academic affairs for UCI and, at the time of CFEP’s creation, served as the associate vice president, student academic services for the UC Office of the President. “In 1996, the



K-12 educators work at a UCI Teacher Academy workshop. Established in 2018, the Teacher Academy provides a home for K-12 teachers and school leaders to develop and enhance their professional practice.

UC Office of the President was looking to enhance the outreach and partnerships that the UCs engaged in. UCI was the leader in those areas, and now it's spread system-wide."

While CFEP has been emulated in some fashion at all UC campuses, UCI remains the only such CFEP that focuses on K-12 students, teachers, community college students, and UCI undergraduates.

"This goes back to the vision of Dr. Lara," Reyes-Tuccio said. "All these groups of students are connected. If you want to effect change for any one group, and you don't have an understanding and an awareness of what's going on with the other groups, then you're always going to be missing a piece of the puzzle."

A PLETHORA OF PARTNERSHIPS

Over the years, CFEP has been home to dozens of programs, partnerships, and initiatives.

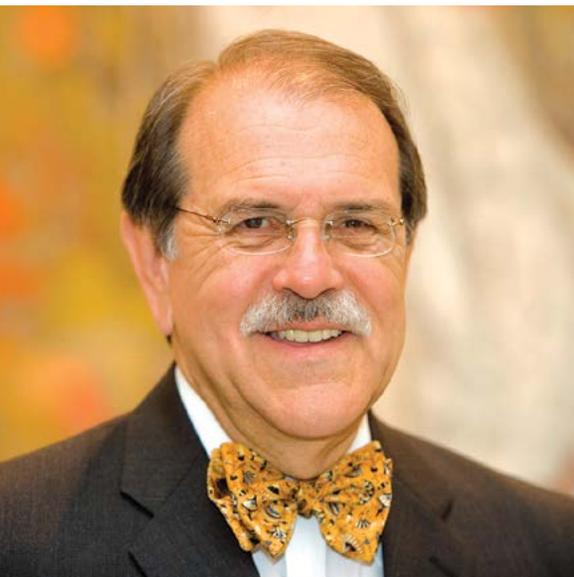
This includes the Anaheim Pledge – a partnership signed in 2017 with the Anaheim Union High School District, the North Orange Community College District, California State University, Fullerton, the City of Anaheim, and local nonprofits, business and civic partners. The pledge is a commitment to provide

all students with an intentional, comprehensive support system that is designed to ensure access to opportunities and services that prepares students to successfully complete their college and career goals.

In 2018, CFEP began hosting the UCI Teacher Academy, a professional development center that provides a home for K-12 teachers and school leaders to develop and enhance their professional practice. Through a multi-faceted approach, the Teacher Academy supports all teachers throughout the entire educator lifecycle – from aspiring teachers to senior administrators. In three years, the Teacher Academy network has grown to include more than 10,000 educators representing 173 school districts from across California.

CFEP also hosts programs that predate the center itself, including the Early Academic Outreach Program (EAOP). Since 1983, the EAOP has helped students in underserved schools prepare for college and the workforce through academic enrichment programs, academic advising, test preparation, and college enrollment workshops.

"Everything is built around the EAOP," Reyes-Tuccio explained. "At its core, the EAOP helps ensure students are taking and passing A-G courses and filling out their FAFSA and college applications.



Juan Francisco Lara, former director, CFEP



Students in the California Alliance for Minority Participation (CAMP), 1995.

Helping students and families make these critical steps is job number one.”

AN INDELIBLE IMPACT

Through its partnerships, CFEP has had an indelible and incalculable impact on Orange County and the Southern California region.

At the K-12 level, one need not look further than the Santa Ana Partnership (SAP) to understand the impact CFEP has had on supporting under-resourced and underrepresented students gain access to college.

In 1983 and in response to data that showed an increasing number of Latinos in the Santa Ana community were becoming less academically prepared for college, UCI, the Santa Ana Unified School District (SAUSD), Santa Ana College (SAC) and CSU, Fullerton formed SAP. The partnership’s multi-faceted goals include increasing the academic readiness of secondary school students for college-level work; streamlining the process for moving through SAC and transferring to upper-division work at a university; and engaging parents, community members and schools in an attempt to increase college-going knowledge and aspirations among Latinx youth.

“The Santa Ana Partnership is one of the first, longest-running and most successful educational partnerships in the U.S.,” Reyes-Tuccio said. “It’s become a national model of how to send more youth to college and ensure their success.”

The SAP is emblematic of an altruistic tenet of CFEP: to increase K-12 student achievement and enrollment at any college, not exclusively UCI.

“When establishing and cultivating partnerships with schools, students and families, we make it clear that we’re here for your children and their best fit,” Reyes-Tuccio said. “Once you come from that position, the schools and families see you as a true partner.”

Meanwhile, on the UCI campus, several programs are working diligently to support current undergraduates. Examples include SAGE and CAMP.

The Student Achievement Guided by Experience (SAGE) Scholars Program provides undergraduates who have significant financial need with the tools to invest in their future through leadership training, career exploration, graduate school planning, and access to internship and scholarship opportunities. Since its inception in 1999, every student who participated in the SAGE Scholars program has graduated.

Established in 1991, the California Alliance for Minority Participation (CAMP) provides programming, resources and mentorship to underrepresented students pursuing STEM degrees at UCI. On average, CAMP serves approximately 700 minoritized students annually across all STEM disciplines and reverses the nationwide trends of STEM degree completion for underrepresented students.

All the programs, partnerships, initiatives mentioned in this article, and more, will be featured this fall in the “CFEP: 25 Years of Impact” series (see next page).

In 2018, CFEP was integrated into the UCI School of Education to leverage world-class researchers for its mission, and support the growth of new research practice partnerships with local schools.



A group of Edison Scholars, 2010. Beginning in 2000, Edison has provided \$100,000 a year for scholarships to support incoming transfer students majoring in STEM.



The UCI SAGE Scholars Class of 2019. For 22 years, SAGE has provided UCI undergraduates who have significant financial need with the tools to invest in their future.

“For 25 years, CFEP has forged innovative partnerships, established ground-breaking programs, and led in the transformation of K-12 education in Southern California,” said Richard Arum, dean and professor, UCI School of Education. “Combining CFEP with the world-class research and community at the School of Education – a top-10 public school of education in the nation – allows us to carry out our collective mission of providing every child with an opportunity to achieve their American dream.”

Working closely with various stakeholders at the K-12, community college, nonprofit, private and municipal levels, CFEP remains ahead of the curve in identifying the needs of students and communities and developing collaborative solutions so that every student and family is equipped for success.

In this time of great need for schools and underserved communities, CFEP is working aggressively to connect researchers with CFEP partner schools to address the critical needs of our time.

New projects and initiatives are underway to combat learning loss due to the COVID-19 pandemic, support schools in efforts to achieve racial equity and justice, build pathways from K-12 through college to meaningful careers, create community schools

integrating resources from UCI Health and the UCI School of Law, further involvement in the School of Education’s OCEAN network (see Page 3), create new opportunities for students to explore degrees and careers through UCI Health, and more.

“For 25 years, CFEP has served as a national model for other universities on how to do this work,” Reyes-Tuccio said. “Our success is grounded in our relationships and our shared belief that every young person in our community deserves the chance to access the world-class education we offer at UCI. While the circumstances have changed over the past quarter century, CFEP is needed more now than ever.”

CELEBRATE WITH CFEP

CFEP and the School of Education are planning several events and tributes over the 2021-22 academic year. This includes a “25 Years of Impact” series, which will highlight 25 programs, people, partnerships and more that impacted the Orange County community over the past quarter century. To learn more about these stories of impact, plus other events, please visit: <http://education.uci.edu/cfep-25.html>

Positive Reinforcement

Working with a wide range of ethnicities and races and in various regions across the nation, Professor Gustavo Carlo is dedicated to understanding the positive social development in culturally diverse children and adolescents.



Sitting in his Irvine office, Professor Gustavo Carlo pores over data from one of his latest research grants – studying the health and safety risks of cattle feedlot workers in Kansas and Nebraska, and the consequences of their stress and injuries on their children’s development.

It might not make much sense why a professor at a school of education in Southern California is studying farm workers in the Midwest. It would, however, if you knew Carlo, who jokes, “My research is all over the place.”

The common thread across his varied research is an emphasis on positive social development and health in culturally diverse children and adolescents.

“A lot of research, especially research that focuses on ethnic and racial minority populations, tends to emphasize deficit and risk factors, and I believe that overemphasis can contribute to negative stereotypes and stigma,” Carlo said. “I tend to focus on what are the predictors and correlates of positive outcomes.”

As of summer 2021, he has published more than 200 books, chapters and research papers. To date, his research has studied Latino/a, African American and Asian American kids in Arizona, Nebraska, Missouri, Florida, California, Michigan, Pennsylvania, Kansas, and Texas. And that’s just the United States; his studies also include populations in Turkey, Argentina, Nicaragua, Korea, Germany and more.

“We don’t really set any limits in terms of the diversity and the range of cultural backgrounds we’re interested in because, ultimately, it’s important to learn from all different backgrounds so that the work can inform the core theories and models that we’re trying to develop to explain positive social development,” Carlo said.

One of the first milestones for Carlo came from a National Science Foundation-funded grant that studied the socialization of positive social behavior in Mexican American adolescents. It was not only the first study ever that focused on positive youth development in a Latino/a sample, but was also the first study in which researchers examined culture-related mechanisms and identified which mechanisms could predict prosocial behaviors – behaviors such as helping, sharing, cooperating and volunteering.

Several research papers were borne out of the grant. Chief among the findings: kids who more strongly

endorsed a sense of ethnic identity reported higher levels of prosocial behaviors; cultural-related mechanisms had their own unique, predictive effects; there exists prosocial behaviors unique to Mexican heritage kids; and parents who engaged in practices that taught children about their ethnicity reported higher instances of prosocial behaviors in their kids.

“That broke a lot of new ground for us and in the field,” Carlo said.

Since then, Carlo has led research into myriad topics, and produced many “firsts.”

In a 2018 article published in *Child Development*, Carlo studied a unique way of parenting that Mexican-heritage fathers exhibited. The style, called “no-nonsense” parenting, is akin to what’s called “authoritarian” parenting in White, European American families. Authoritarian parenting has previously shown to be detrimental to a White, European American child’s health and development. The “no-nonsense” parenting style in Mexican-heritage fathers, on the other hand, did not show any positive or negative effects on their teens’ prosocial behaviors.

“This is consistent with work that has been done in Asian American and African American families –

where it’s referred to as ‘tiger parenting’ and ‘no-nonsense’ parenting, respectively – and where there is also no detrimental effect under this parenting style,” Carlo explained. “This is the first study to demonstrate that it also has no effect on Latino/a kids’ prosocial behaviors.”

The same study also, for the first time, demonstrated that kids who exhibit high levels of prosocial behaviors early in life achieved better academic outcomes later in life – in this case the prosocial behaviors in seventh grade and the academic outcomes in 10th grade.

“This has major implications and opens the door to potential interventions where you can address the academic disparities that exist,” Carlo said.

Carlo is currently working on a grant from the John Templeton Foundation, which will be the first study to demonstrate the “altruism born of suffering” concept in an ethnic minority sample.

The study analyzes kids who reported traumatic experiences in fifth grade and their eventual propensity to engage in altruistic or morally exemplar behaviors. Preliminary evidence shows that there is a small group of Mexican-heritage kids who demonstrate high levels of altruistic behavior in young adulthood,

Carlo works on a manuscript alongside students at the University of Missouri. To Carlo’s right is Zehra Gülseven, who is currently a postdoctoral scholar at the UCI School of Education.



and that there exists a growth trigger mechanism that leads to an increase in such behaviors. Furthermore, the growth trigger mechanism differs between boys and girls.

“For girls, those who reported higher levels of *familismo* showed increases in altruistic behaviors,” Carlo explained. “For boys, it was those who utilized active coping mechanisms that reported an increase in altruistic behaviors. It’s very exciting to show supportive evidence for this idea of ‘altruism born of suffering,’ but even better to show that there can be mechanisms that trigger it, and that they differ for Latino boys versus Latino girls.”

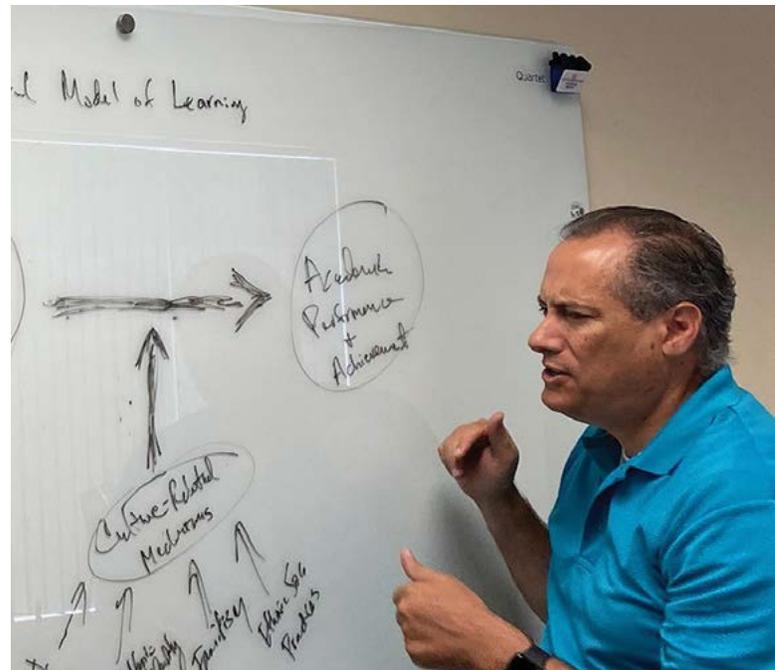
This has major implications and opens the door to potential interventions where you can address the academic disparities that exist.

Born in San Juan, Puerto Rico, Carlo spent his high school and college years in Miami. His interest in academia and research piqued during an undergraduate Psychology class at Florida International University, when he volunteered to conduct research alongside Professor Bill Kurtines.

“He took me under his wing and transformed my life. I found possibilities that I had never known about before, and before I knew it, I was drawn into this field of moral development.”

Carlo attended Arizona State University and earned a Ph.D. in Developmental Psychology. There he worked with Nancy Eisenberg and George Knight, both of whom he cites as mentors.

“They opened my eyes to this void in the field of positive development in Latino kids and in ethnic- and racial-minority kids,” Carlo said. “That became my niche.”



Carlo works on developing a conceptual model on how culture influences academic achievement in Latinx youth.

Prior to joining the UCI School of Education in summer 2020, Carlo was the Millsap Endowed Professor of Diversity and Multicultural Studies at the University of Missouri and co-director and founder of the university’s Center for Children and Families Across Cultures.

It was not easy to leave an endowed professorship, Carlo said, but ultimately the impressive faculty – both senior and junior – and diversity of the UCI School of Education convinced him to move.

As did the school’s multidisciplinary nature. This facet, Carlo explains, gives him the freedom to conduct his research.

“My work isn’t what you would expect a school of education professor to be doing, but it’s the real world, and the real world is complex – it isn’t a matter of one factor predicting outcomes and explaining everything that happens,” Carlo said. “That complexity necessitates that we think outside of the box, and that’s what we all do at the UCI School of Education.”

Play to Learn

Assistant Professor Andres Bustamante is transforming everyday community spaces into fun learning environments that informally foster STEM skills.



Kareem Abdul-Jabbar had the skyhook. Michael Jordan had the clutch gene. Steph Curry has the pinpoint shooting accuracy. And Assistant Professor Andres Bustamante has Fraction Ball.

In Fraction Ball – an innovative game designed to foster math skills – lines, arcs and colors are added to the design of a basketball court to emphasize fraction and decimal learning. The traditional 3-point arc is converted to 1 point, and smaller arcs closer to the basket represent shots worth $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ points on one end of the court and $\frac{1}{3}$ and $\frac{2}{3}$ points on the opposite end. Fractions are represented on one side of the court and decimals on the other.

As a result of the design, children can visualize both equivalencies between fractions and decimals and the magnitude of different fractions, seeing clearly that fractions are just a whole divided into parts. A number line on the side of the court helps them keep track of their score.

“Fractions are a notoriously difficult content area for young students, and they represent a barrier to engage in more complex math like algebra,” Bustamante said. “Many students begin to disengage with math when they struggle with fractions and develop insecure math identities. Fraction Ball is a more accessible way for students to learn fractions; it’s playful, hands-on, physically active, and based in the latest research in math learning.”

Bustamante designed the game after meeting with teachers and administrators at the El Sol Science and Arts Academy of Santa Ana. He was meeting with school staff to discuss the possibility of math installations at the school, and the teachers asked what they might be able to install and begin “tomorrow.”

The school staff then mentioned they had just paved the basketball court and not drawn the lines yet. Bustamante and his colleague, School of Education Research Scientist Kreshnik Begolli, drew up initial plans on a napkin over breakfast burritos that same day, then went to an on-campus park with Associate Professor Drew Bailey to sketch out lines on a court in chalk.

The game launched in 2019 at El Sol Academy, where it was “received with excitement and enthusiasm by students and teachers,” Bustamante said.

More importantly, it has since shown to improve math skills.

“Our work at El Sol Academy showed the students who were randomly assigned to play six 50-minute sessions of Fraction Ball during P.E. class made significantly greater gains on a fraction knowledge test than students assigned to remain in P.E., business as usual,” Bustamante said.

Now, through a three-year, \$1.25 million research award from the NewSchools Venture Fund’s EF+Math

Program, Bustamante and UCI professors June Ahn, Lindsey Richland, Drew Bailey, Katherine Rhodes, and Begolli are adapting the game district-wide for the Santa Ana Unified School District (SAUSD).

Due to the pandemic, the painting and installation of the courts was delayed to the upcoming academic year. Instead, Bustamante and his team have led a series of design sessions with SAUSD educators in which they adapted the game for a virtual classroom, designed new activities to be used on the Fraction Ball court, designed new classroom lessons to coincide with Fraction Ball, and planned for implementation and sustainability in the district.

“We sent out Fraction Ball kits for teachers to emulate the game at their home and replicate the common experience of playing the game together,” Bustamante said. “Teachers are so good at generating high-quality ideas for how to make valuable classroom learning opportunities.”

By the end of the five-year project, Bustamante said there will be Fraction Ball courts at all 36 SAUSD elementary schools, and they will study the impacts on 10,000 students across the district.

Fraction Ball is just one playful learning project that Bustamante is spearheading. In 2020, he, Ahn, and Temple University Professor Kathy Hirsh-Pasek received a \$2.57 million grant from the National Science Foundation to co-design a series of installations in Santa Ana that encourage engagement in informal STEM learning.

Bustamante wants the installations to reflect the goals, values and cultural capital of the Latinx community, which is predominant in Santa Ana. To achieve this, he and his research team are partnering with the Santa Ana Early Learning Initiative (SAELI) – a group of hundreds of local parents, educators, and community leaders dedicated to providing enrichment opportunities to Santa Ana children ages 0-9.

A game of Fraction Ball in action at El Sol Science and Arts Academy of Santa Ana.



“I believe our community partnerships are the biggest strength of this project,” Bustamante said. “Our SAELI partners are leading the way on where project installations go and what they look like. It’s been incredibly fun to hear their insights, as we make sure that every installation is reflective of the community culture and history.”

During the first year of the project, the team held seven two-hour design sessions with roughly 40 SAELI parents. Sessions were held in Spanish and parents told stories about their experiences in the spaces of their community and engaged in design activities to brainstorm and build design prototypes. The UCI team is now drawing out themes around culture, values and strengths from the stories families told and using their design ideas as inspiration for a series of installations that will be fabricated and implemented in the coming year. Examples include a giant version of the game “Lotería” at the bus stop, and an interactive mural that displays local heroes and demonstrates the step-by-step process for drawing a proportional face.

Following the installations, Bustamante sees data collection and research taking place on several levels. At the most proximal level, he and his team will observe families interacting with the installations and

take note of conversations – is there an increase in discussion about math and science, or an increase in familial engagement and interaction? Bustamante and Ahn also received an \$800,000 grant from the Heising Simons Foundation to implement technology enhancements to these installations to make them more flexible, dynamic and accessible.

“We want to see if these installations are promoting caregiver-child interactions and dialogue,” Bustamante said. “There’s a lot of previous research to suggest such interactions predict positive development and later school success.”

We want to see if these installations are promoting caregiver-child interactions and dialogue.

The research team will also train community partners to go out and collect data on how families are interacting with the installations. Bustamante hopes this step will bolster employment and civic pride, while also producing more naturalistic behaviors among families.

“You might behave differently if your neighbor is observing you than if a university research team that you’ve never seen before is observing you,” Bustamante said.

The research team will then conduct interviews with families to learn more about their attitudes toward the installations, and how they foster STEM identity and empower caregivers to be catalysts in their children’s education.

“We want to know what these installations mean for a parent and their identity as someone who can facilitate their child’s STEM learning in the places they go every day,” Bustamante said.

Lastly, Bustamante plans to track progress using a county-wide dataset collected by First 5 Orange County, which assesses school readiness for every



An example of a playful learning installation that Bustamante and his team are installing in grocery stores across Santa Ana. In this example, kids are asked to guess the weight of items before weighing and to record the actual weight after weighing. In addition to analyzing the difference, kids are exposed to a conversion scale between pounds and kilograms.



A human-sized board game that Bustamante helped develop with Playful Learning Landscapes, called “Parkopolis.” The game maximizes fun while teaching math and science. Currently installed at the Please Touch Museum in Philadelphia.

child in the county when they enter kindergarten. He will examine readiness levels in neighborhoods that have project installations and compare to similar neighborhoods without the installation to explore community level impacts on child development.

Moving forward, Bustamante will work alongside the city of Santa Ana to include playful installations in future revitalizations or redesign efforts by the city.

“One really exciting aspect of this project is how much enthusiasm there is from the city to adopt this initiative,” Bustamante said. “City leadership is already reaching out to our team because they want to integrate these ideas into their other ongoing construction projects.”

Bustamante played basketball as an undergraduate at Emmanuel College in Boston before obtaining his Ph.D. in Developmental Psychology from the University of Miami, where he studied early childhood science education with Professor Daryl Greenfield. As a postdoc at Temple University, he was mentored by Dr. Annemarie Hindman and Dr. Kathy Hirsh-Pasek,

who is also a co-PI on Bustamante’s NSF grant. While at Temple, Bustamante designed, implemented, and evaluated a life-size board game, “Parkopolis,” which combined evidence-based math and science content with play, physical activity, and gross motor development.

In March, the Association for Psychological Science awarded Bustamante a Rising Star designation, given to psychological scientists in the earliest stages of their post-Ph.D. research careers whose innovative work has already advanced the psychological science field.

At the UCI School of Education, Bustamante feels supported by his colleagues, whom he calls a “super team.”

“No matter what research challenges arise, we have an expert at the top of the field on our faculty that I can turn to for support and collaboration,” Bustamante said. “There’s such a diverse set of skills here, and my development as a scholar has been transformed by being a part of this community.”

Perfecting Ethnic Studies Pedagogy

Emily Penner, assistant professor and 2021 William T. Grant Scholar, is studying how to effectively teach Ethnic Studies classes in K-12 schools.



In 2014, Assistant Professor Emily Penner embarked on a project that examined the efficacy of Ethnic Studies classes in K-12 schools. Studying a group of ninth graders in the San Francisco Unified School District, she and her collaborator, Thomas S. Dee, found that the class had a tremendous impact: attendance increased 21 percentage points, credits earned increased by 23, and a students' GPA increased by an impressive 1.4 grade points.

All wonderful news. But there was not a discussion as to why. Until now.

In April, the William T. Grant Foundation named Penner a William T. Grant Scholar. The highly prestigious award is given annually to only a handful of early-career researchers nationwide. As a William T. Grant Scholar, Penner will, over the next five years, explore effective pedagogy for teaching Ethnic Studies and how this pedagogy contributes to reducing inequality in academic outcomes for racially and ethnically minoritized students.

"Our previous study showed that Ethnic Studies had an impact, but it didn't really say anything about why," Penner said. "The idea now is to dig into why – prior work has examined Ethnic Studies practice and a small number of studies have examined the effects of taking these courses, finding evidence of substantial benefits for students. But no large-scale study has linked pedagogical practices to student outcomes.

"This hasn't been done at this scale before."

WHAT IS ETHNIC STUDIES?

Ethnic Studies, Penner describes, is an umbrella term for courses that explicitly center the experiences and histories of historically marginalized groups. They could have a wide scope and focus on many communities simultaneously, as in general "Ethnic Studies" courses, or be more specific, such as "Mexican American Studies."

The prevalence of Ethnic Studies classes at the K-12 level has increased rapidly across the country. States vary on their stance and interest in Ethnic Studies curriculum – some state legislatures have passed laws to introduce or even require Ethnic Studies for K-12 students, while others remain mired in debate about the details and whether to include Ethnic Studies in the curriculum.

Its rapid growth creates an even stronger need and desire to study the efficacy of pedagogy and practice.

"We need to think about how new teachers are being recruited and trained to step into these classrooms that didn't exist before," Penner said. "We have robust pipelines to train teachers to become Science or English teachers, but that doesn't exist yet for Ethnic Studies. A lot of districts are going to expand their class offerings, but then will need to go and find teachers to teach the classes and others to build skills."

PEDAGOGIES AND PRACTICES

Penner will begin research by synthesizing current approaches to Ethnic Studies teaching and mentoring practices. To achieve this, Penner will observe Ethnic Studies classrooms and conduct interviews and focus groups with teachers to better understand core aspects of effective practices.

In the later stage of the project, Penner will link these data to student records and examine how the observed teaching practices predict student outcomes. Using data from interviews with district leaders and teachers, as well as observations of Ethnic Studies professional development activities, Penner will investigate how school districts can recruit and train new Ethnic Studies teachers to use effective practices.

“There have been a number of recent collaborative efforts to formalize and share Ethnic Studies curricula and pedagogy to support district efforts to expand their Ethnic Studies course offerings,” Penner said. “It’s going to be really exciting to see how teachers are enacting these resources in their classrooms and how they’re engaging students through that work.”

We need to think about how new teachers are being recruited and trained to step into these classrooms that didn’t exist before.

Penner is also looking forward to branching out and learning new skills. She possesses a strong quantitative background, she explains, but does not have as much training in how to observe teacher classrooms for research purposes.

“My two goals are to dig into the literature on Ethnic Studies and obtain a better sense of what truly constitutes Ethnic Studies teaching and pedagogy, and to spend time learning from experts who measure teaching in other disciplines,” Penner said.

To assist with each goal, Penner is working with a pair of mentors: Christine E. Sleeter, professor emerita at the College of Education, California State University, Monterey Bay; and Heather C. Hill, the Jerome T. Murphy Professor at the Harvard University Graduate School of Education.

Ultimately, Penner’s goal in her efforts is to learn from and support Ethnic Studies teachers in ways that foster engaging, critical, and caring experiences for all students.

“I hope that by the end of this grant we have developed a good understanding of the most effective teaching techniques and practices that Ethnic Studies teachers are engaging in, and that we communicate those out to other locations trying to build their Ethnic Studies programs,” Penner said.



Assistant Professor Emily Penner graduating in 2014 from the UCI School of Education with a Ph.D. in Education.

THE WEALTH OF THE COMMUNITY

Penner, who is also an alumna of the School of Education's Ph.D. in Education program, previously taught at an elementary school in Oakland. While there, her school was temporarily closed due to a "failing grade," as deemed by the standards of the No Child Left Behind Act.

Following the school's closure, administrators and teachers worked with the predominantly Latinx, low-income community to revamp the curriculum and programming. The school re-opened and is now considered one of Oakland Unified School District's more successful schools.

"The experience helped me recognize the importance and the wealth of knowledge out there in communities," Penner said. "It was integral in getting the school turned around; there are other schools that existed a mile down the road, that were closed down, that didn't engage the community in the same way, and that have continued to struggle."

While working as a teacher and pursuing her master's degree, Penner read the research and scholarship of Greg Duncan and George Farkas. When she was considering where to enroll for her doctorate, she

noticed that UCI had recently hired Duncan and Farkas to join what was then the Department of Education. Their presence made the choice of where to enroll that much easier. Duncan, who like Farkas is now a distinguished professor at the School of Education, would ultimately serve as Penner's dissertation chair.

After a stint as a postdoc at Stanford University, Penner returned to the School of Education as assistant professor. She appreciates the School of Education's focus on school-based research and hopes to contribute to the mission of improving educational opportunities and outcomes for students of all backgrounds.

"The point of school-based research is to identify the ways that schools are, or are not, supporting students of all backgrounds," Penner said. "Ethnic Studies is a type of programming that is explicitly about trying to center the experiences and histories of marginalized and ethnic groups."

"With proper practices, we can transform not only student experiences in Ethnic Studies classes, but long-term trajectories as well."

"I hope that by the end of this grant, we have developed a good understanding of the teaching techniques and practices that Ethnic Studies teachers are engaging in, and that we communicate those out to other locations trying to build their Ethnic Studies programs."

The UCI School of Education is pleased to welcome two new professors to its diverse and internationally recognized group of faculty.



Benjamin L. Castleman

Castleman is the Newton and Rita Meyers Associate Professor in the Economics of Education at the University of Virginia, and the Founder and Director of the NUDGE⁴ Solutions Lab at UVA. He is the Faculty Director of the University of Virginia - U.S. Army Partnership on Veterans' Education. His research develops scalable solutions in education and public policy by leveraging behavioral economics and strategies and research-policy partnerships. He was a senior advisor to former First Lady Michelle Obama's Reach Higher Initiative. He has presented his research at several White House convenings and in testimony before Congress. Castleman's research has appeared in top public policy and economics journals, including *The Journal of Labor Economics*, *The Journal of Policy Analysis and Management*, and *The Journal of Human Resources*. Additionally, his research has been generously supported by numerous philanthropic foundations and has received extensive media coverage, including *The New York Times*, *National Public Radio*, *Time Magazine*, and *The Washington Post*. Castleman is a graduate of Brown University, and completed his doctoral work at Harvard University. Before returning to graduate school, he was a public school teacher and administrator in Providence, Rhode Island. He will join the UCI School of Education in July 2022.



Judith F. Kroll

Kroll is a distinguished professor at UCI and joins the UCI School of Education from the UCI School of Social Sciences. She is the former director of the Center for Language Science at Pennsylvania State University, and has held faculty positions at Swarthmore College, Rutgers University, Mount Holyoke College, Penn State University, and University of California, Riverside. Her research uses the tools of cognitive neuroscience to examine the way that bilinguals and language learners juggle the presence of two languages in one mind and brain. Her work, supported by grants from NSF and NIH, shows that bilingualism provides a tool for revealing the interplay between language and cognition that is otherwise obscure in speakers of one language alone. She is a Fellow of the American Association for the Advancement of Science, the American Academy of Arts and Sciences, the American Psychological Association, the American Physiological Society, the Psychonomic Society, and the Society of Experimental Psychologists. She was one of the founding editors of the journal, *Bilingualism: Language and Cognition* (Cambridge University Press), and one of the founding organizers of Women in Cognitive Science, a group – supported by the NSF – developed to promote the advancement of women in the cognitive sciences. With Penn State colleagues, she is a principal investigator on an NSF PIRE grant to develop an international research network and program of training to translate the science of bilingualism to learning environments in the U.S. and abroad.

By the Numbers

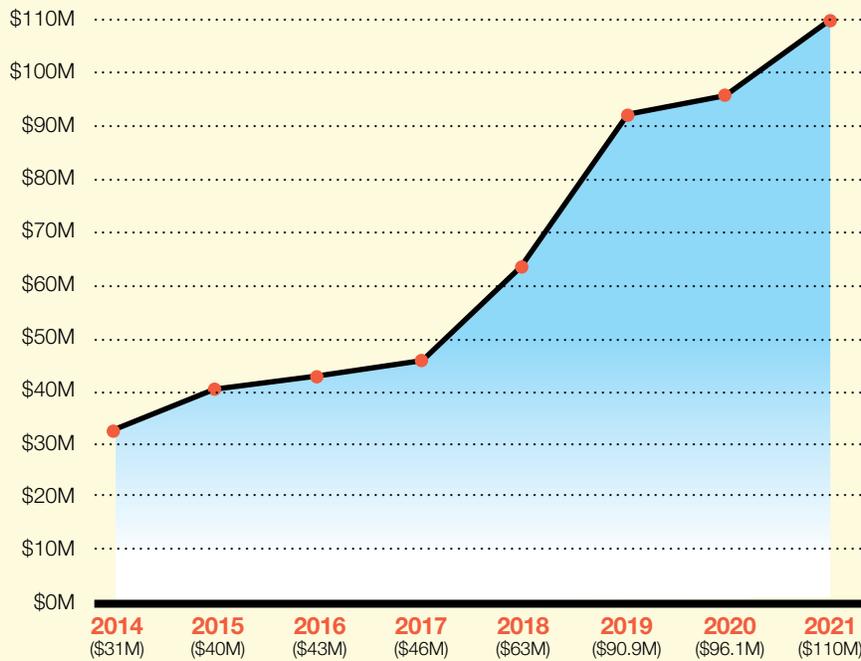
\$110+M

Active grant funding, among 39 full-time faculty

102

Active grants, among 39 full-time faculty

RISE IN FUNDED RESEARCH BY YEAR



24

Active grants from the National Science Foundation

20

Active grants from the National Institutes of Health

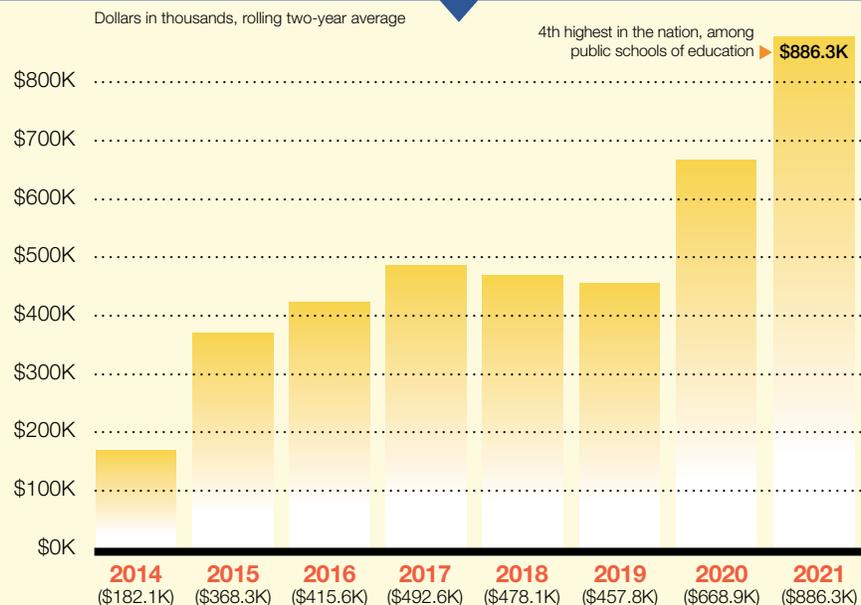
14

Active grants from the Institute of Education Sciences

5

Active Grants from the U.S. Department of Education

RESEARCH EXPENDITURES PER FACULTY



*All data as of July 2021

RECENT GRANTS

The UCI School of Education's diverse and internationally recognized group of faculty is dedicated to research that advances educational science and improves learning outcomes for all students, regardless of background. Our faculty's research interests are wide-ranging, and collectively address the entire lifespan of human development and learning. Below are a few research areas in which multiple School of Education professors are principal investigators on multiple grants:

- ▶ Child Development
- ▶ Cognitive Abilities/Function
- ▶ College Enrollment & Student Success
- ▶ Early Childcare Programs
- ▶ Language Development & Disorders
- ▶ Literacy
- ▶ Organized Activities in Elementary & Middle School
- ▶ Racial Equality
- ▶ Research Practice Partnerships
- ▶ Schooling & Success
- ▶ STEM Learning
- ▶ Teacher Preparation/Professional Development
- ▶ Training Grants
- ▶ And more!

FAST FACTS

No.15

Graduate School of Education,
No. 7 among public universities,
U.S. News & World Report

66%

Increase in graduate program
applications, last five years

10,000+

Alumni Worldwide

5

Members of the National
Academy of Education

450+

Class of 2021 graduates

UCI is consistently recognized as a trailblazer in a broad range of fields, garnering national and international honors.

No.1

Best College in America
– *Money Magazine*

No.1

University doing the most for
the American Dream
– *New York Times*

No.2

Best College in the Nation for Diversity
– *Wall Street Journal/
Times Higher Education*

Anteaters in Education

Official Alumni Chapter for Education Professionals

To our Valued Alumni Community,

Last spring, the School of Education alumni chapter board voted to officially rename the chapter to 'Anteaters in Education' in an effort to expand membership eligibility across the Anteater family. As of summer 2021, Anteaters in Education Alumni Chapter membership is now inclusive to all School of Education alumni, UCI CalTeach alumni, participants of UCI Teacher Academy workshops, and UCI alumni from any major who currently work in – or are retired from – teaching, district leadership or an education-related non-profit.

This will create a wider network for educators, giving more teachers, administrators, and education professionals access to innovations in teaching and learning, as well as networking events hosted by the chapter.

I am also pleased to announce the 2021-22 Anteaters in Education board members and am grateful for their commitment and service to UCI. We inducted seven new members and welcomed back seven returning members to the board.

While we all missed being in-person this past year, we enjoyed the opportunity to virtually meet Anteaters from across the country through Zoom events. Our programs for the coming year will be a hybrid of in-person, following new safety protocols, and virtual formats for networking, professional development, and resource sharing. We also look forward to planning a 10th anniversary celebration for the School of Education and welcoming students back to campus!



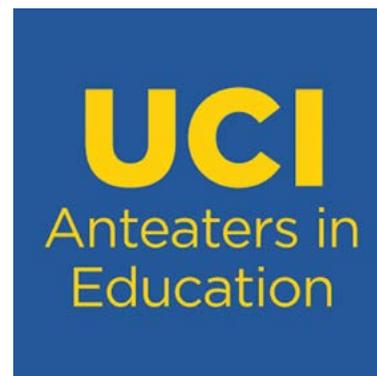
To sign up for the Anteaters in Education Alumni Chapter, open your phone's camera app and position the adjacent QR code in the middle of your screen to be directed to an online sign-up sheet.

I also invite you to stay connected with the School of Education and alumni who are making a difference in the lives of students across our state, country and world.

Zotfully yours,

Dr. Frank Olmos, Ed.D. '10

President, Anteaters in Education Alumni Chapter
Research and Evaluation Coordinator, Los Angeles County
Office of Education
Adjunct Professor, California State University, Los Angeles



Anteaters in Education Alumni Chapter Board Members



Carolyn Brothers
(B.A., Psychology '78,
Credential '80)
Anteaters in Education
Board Liaison to UCI Alumni
Association
Facilitator/Trainer,
Osher Lifelong Learning
Institute at UCI



Dr. Tracy Carmichael
(B.A., Criminology Law &
Society '03, Ph.D.,
Education '13)
Anteaters in Education
Vice President
President and Chief Strategy
Officer, Project Hope Alliance



Belinda Espinoza
(B.A., Social Sciences '05)
Teacher, Fullerton-Based
Foster Agency



Dr. Wenli Jen
(B.A., Social Science '03,
Credential '04)
Chief Executive Officer,
Integral
Prudence Solutions



Blaine Jones
(Credential '13)
Founding Teacher,
Samueli Academy



Kim Mackeand
(B.A., Economics '04,
Credential '05)
Social Sciences Teacher,
Vista Del Lago High School



Yvonne Mansouri
(B.A., Psychology & Social
Behavior '04, MAT +
Credential '05)
Anteaters in Education
Events Chair
Owner and Tutor, Cambridge
Learner's Academy



Dr. Frank Olmos
(Ed.D. '10)
Anteaters in Education President
Research and Evaluation
Coordinator, L.A. County Office of
Education; Adjunct Professor, Charter
College of Education, California State
University, Los Angeles



Brenda Ramos
(B.A., Sociology and
Education Sciences '19,
MAT + Credential '20)
Sixth Grade Teacher,
Southeast Middle School, Los
Angeles Unified School District



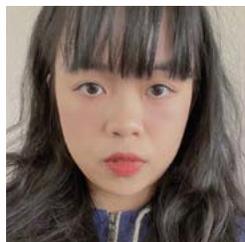
Sabah Rashid
(MAT + Credential '04)
Anteaters in Education
Treasurer
Author, *Upside Down*;
IB PYP Coordinator and
Grade 1-2 Library Specialist,
Saint Andrew's School



Mary Roosevelt
(Credential '75)
Former Program Coordinator,
Multiple Subject Credential
Program; Former
Director of External Relations,
UCI Department of Education



Megumi Tanaka
(B.A., Education Sciences and
Sociology '16)
Anteaters in Education
Communications Chair,
Special Education Coordinator,
Charter School in Las Vegas



Pinyi Wang
(B.A., Education Sciences '20)
Graduate Student,
International Teaching and
Global Leadership,
Johns Hopkins University



Jeff Johnston
Anteaters in Education Faculty
Advisor
Lecturer, UCI School of
Education

To learn more about the Anteaters in Education Alumni Chapter Board Members, visit: <http://education.uci.edu/alumni-board-members.html>

Two Alumni Named California Teachers of the Year

Each year, California selects five Teachers of the Year. Two of the 2021 winners are alumni of the UCI School of Education: Laura Gómez, who earned a B.A. in 1994 and a teaching credential in 1995, and Jim Klipfel, who earned a teaching credential in 1993. Additionally, Klipfel was put forward as the state's nominee for the National Teacher of the Year.



California Teacher of the Year Laura Gómez (Credential '95) with the resolution from the State of California declaring her a Teacher of the Year.

Laura Gómez: Involving the family in children's education

For 2021 California Teacher of the Year Laura Gómez, families at Glenn L. Martin Elementary School are an essential part of the educational experience. She invites parents of her third graders to a Mother's Day tea, donuts with dad, family math nights, and readers' theater performances in the classroom.

"For some families, school might feel a little intimidating. It's my job to remove barriers while fostering communication," Gómez said. "If we're really talking about educating the whole child, then family has to be part of it. The relationships I develop with students and parents cultivate participation, which leads to improvement in my students' achievement and well-being."

As a first-generation college graduate and immigrant growing up in Tijuana, San Diego and Los Angeles,

Gómez is well aware of the transformative power of education. Gómez fell in love with the "safety and coziness" of UCI on her first visit to the campus. Majoring in Spanish, she planned to become a high school Spanish teacher until she spent time as an instructional aide in an elementary school classroom.

"There's something really special about kids that age," she said. "They're so natural, so pure, so honest, and so full of curiosity about the world."

Because she was already an Ant eater and proud of the university's reputation, Gómez decided to earn a multiple subject credential at UCI. Over the years, Gómez has maintained a strong connection to her alma mater, regularly bringing her students on field trips to campus, and by mentoring student teachers from UCI.

Martin Elementary Principal Peter Richardson, who has worked with Gómez for the last 10 years, helped nominate her for Teacher of the Year.

"Laura has this insatiable desire to serve both kids and families," Richardson said. "Plus, she has this rare, amazing mix of being both super intelligent and highly creative. She's never done learning and is always trying to do things better and better."

For example, Gómez developed family math nights that brought parents and children together to play games that build math skills without focusing on memorization. It was so well received that the idea was eventually expanded to the whole school.

"For me, the family math nights combined my love of student leadership, family involvement, academic rigor, and creating family memories," Gómez said. "They remember that experience forever."

Gómez aims to continually evolve to meet her students where they are – certainly a moving target in the age of the internet and COVID-19. When schools were shut down during the pandemic, Gómez handwrote postcards, made phone calls, and delivered school supplies and WiFi hotspots to her students to keep both students and their families connected.

“My educational plan is to focus on each child being ‘seen’ in the classroom, determine their strengths and needs, and then provide the explicit instruction and engaging learning activities they need to grow.”



California Teacher of the Year Jim Klipfel (Credential '93).

Jim Klipfel: A research-driven approach to teaching

“I crave Mondays,” said Jim Klipfel, a 30-year veteran of William S. Hart Union High School District in Los Angeles County and a 2021 California Teacher of the Year. “And I can’t wait for school to start in August.”

An uncommon opinion, perhaps, but not surprising from someone who wanted to become a teacher ever since he was a teenager. Klipfel, the youngest of eight children, found growing up difficult, but that mentors, role models and great teachers could make it better.

After graduating from UC Davis, Klipfel started student teaching and coaching swimming in Huntington Beach, Calif., while commuting to UCI to earn his credential.

“The whole experience was a giant blur, but I loved it and would do it again,” Klipfel said. “I had great, loving, informative and informed professors at UCI.”

Klipfel spent the following three decades teaching History and coaching swimming in Hart UHSD, where his wife and fellow UCI alum, Jennifer, also teaches. He committed himself to continuous improvement from the outset – every spring, he asks his students to evaluate him, and then spends time each summer combing through their input.

“A lot of what I do today, the way I teach, the graphic organizers and prompts that I use, are heavily based on student feedback over the years,” Klipfel said. “Especially in my middle career, that student feedback was so critical.”

His other secret to success: “Read like crazy.”

“People are publishing on the struggles of youth, education, psychology, and the human condition,” Klipfel said. “I think it’s really important for schools and teachers to stay up to date on the latest research.”

Teaching through the COVID-19 pandemic presented unexpected challenges for educators everywhere, but for Klipfel and his colleagues at Saugus High School, the pandemic was just the latest in a string of tragedies. In 2019, some students lost their homes to wildfires. Later that year, an on-campus shooting left three students dead. To address the emotional toll on students, Klipfel now starts each class with a quote, study or article about mental health.

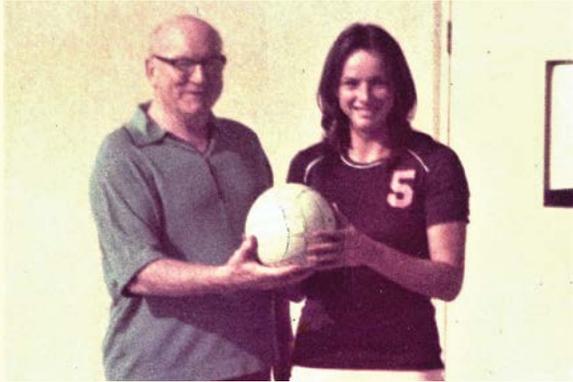
“I’m more aware than ever that if a kid doesn’t feel safe and loved, they are not going to learn,” he said.

For Klipfel, the Teacher of the Year award is about the team he works with and the challenges they’ve overcome together. The greatest moment of joy that came from the award, he said, was getting to gather with colleagues he hadn’t seen in person in months and celebrate with them by eating burritos.

“As a teacher, his students know that he loves them, and he uses his content as a vehicle not only to teach academic skills, but important life skills as well, such as: resiliency, setting goals, fostering relationships and living a life of service,” said Vincent Ferry, Saugus High School principal, who helped nominate Klipfel.

And it’s not only students whom Klipfel pushes to achieve their greatest potential.

“As a colleague,” Ferry said, “Jim challenges us all to try a little harder and to do a little more.”



Darlene Bailey (Teaching Credential '72; B.A., History '71; M.A., Comparative Cultures, '77)

Bailey is a retired educator and collegiate volleyball coach who comes from a family of Anteaters in Education. Bailey recently served on the '71 UCI reunion committee and is working on several history projects. She has presented her research on the history of women's team sports in America to a variety of audiences including the Osher Lifelong Learning Institute at UCI. She served as the Head Women's Volleyball Coach at Boise State University for 19 years, overseeing the program's Title IX transition to the NCAA D1 in 1982. She also taught World History, Physical Education, and American Government in the Newport-Mesa Unified School District for 13 years before and after her time at BSU. Her late father, Dr. Kenneth P. Bailey, was founding director of UCI's Office of Teacher Education and a Professor of History from 1967 to 1981. After retiring, he remained at UCI as a senior lecturer emeritus. Her late brother, Ken J. Bailey, was also a UCI graduate, and worked in the Irvine Unified School District for 30 years. Darlene played on UCI's first women's intercollegiate volleyball team in 1968. She is a member of the UCI Athletic Hall of Fame, and went on to a highly decorated volleyball career. She is pictured with her father in 1976 at UCI.

Edith Esparza (Education Minor '16; B.A., Business Administration '16)

Esparza has combined her passions for marketing and education into a varied professional career. In 2021, she began a new role as communications associate at Early Edge California, where she helps provide quality early learning opportunities to all California children. Prior to joining, she was a marketing specialist at MIND Research Institute, a nonprofit social impact organization that specializes in neuroscience and math education research. In her free time, Esparza volunteers for Girls Inc. of Orange County.

Dr. Wenli Jen (Teaching Credential '04; B.A. Social Sciences '03)

Jen earned a certificate in Higher Education Administration and Leadership from California State University, Dominguez Hills College of Education in May 2021. She is currently the CEO of Integral Prudence Solutions, a boutique Southern California consulting firm. She served as the inaugural president of the UCI School of Education Anteaters in Education Alumni Chapter, a role she held from 2019-21.

Nena Kellar (MAT + Credential '19)

After graduating from the MAT + Credential Program, Kellar made a commitment to providing accessible, engaging, and culturally relevant opportunities for students in Santa Ana while pursuing her own artistic endeavors. She currently teaches drawing and painting at Century High School. During her short time at Century, she has introduced a new and improved student-centered art display to showcase and celebrate students' artistic achievements. She is actively involved with Boca de Oro, a local festival that promotes and celebrates literary, performing, and visual arts/culture within the community. She has engaged in local art competitions with her students, such as the Arts Orange County & Orange County Department of Education's Imagination Celebration. This past year, Kellar received the California Art Education Association's 2021 "Rookie of the Year" award.



Steven Keller (Ed.D., Educational Administration '99)

Keller has more than 35 years' experience in public education, serving for the past 15 years as superintendent of schools for the Redondo Beach Unified School District. In the past year, he has worked to implement a Race and Equity Committee during

the pandemic comprised of staff, parents, local PD, students, and others. He leads with the motto, "say less, do more" and believes, "If there was ever a time when we need great leadership in public education, it's now." Keller is currently a member of the Southern California Superintendent Group and serves on the SchoolsFirst Federal Credit Union's Finance Committee and Advisory Committee. He is also a speaker and presenter for the ACSA Superintendent Academy and a UCI Administrative Credential

Instructor. He is a past UCI Lauds and Laurels Distinguished Alumni Recipient and has also been recognized as Redondo Beach Man of the Year, American Heart Association National School Administrator of the Year, California Association of School Counselors (CASC) Administrator of the Year, and ACSA Region 14 Superintendent of the Year.

Leanne Lupone (UCI CalTeach '18; B.S., Chemistry '18)

After graduating in 2018, Lupone completed an ETA Fulbright Fellowship in Uruguay, teaching at a STEM university, a Uruguayan teacher credential program, and rural schoolhouses. Her UCI thesis, "UTOPIA: An Observation Protocol for Measuring Scientific Inquiry in Undergraduate Laboratory Courses," was recently published in the UCI Undergraduate Research Journal. This fall, Lupone will teach Chemistry at Portola High School in Irvine.



Lani Matsumura (B.A., Education Sciences '18)

A fourth-grade teacher in Santa Clara Unified School District (SCUSD), Matsumura was recognized as one of five 2020-21 LifeChanger of the Year Grand Prize Finalists out of 700 nominees across the United States. As a second-year teacher, she founded her school's Music Club, for which she directed and produced a holiday performance and Motown Musical. She also

created a free teaching resources website to support educators, librarians, and families around the world during distance learning. Though entirely free, more than 600 people across North America donated to support her work. She engaged her students while in distance learning through writing educational and community-building songs, organizing visits with diverse award-winning authors and musicians, and mailing more than 100 handwritten cards and stickers to her students. Matsumura also earned an M.A. in Education and multiple subject credential from Stanford University and spent her first year of teaching in the Los Angeles Unified School District. She was recently selected to be a part of the founding staff at SCUSD's new elementary school, Agnew Elementary, opening in August 2021.

Lisa Moe (Teaching Credential '16)

Since graduating from UCI's MAT + Credential program in 2016, Moe has taught fourth grade in Chino Valley Unified School District. Moe also received a Master's of Science in Educational Technology from

California State University, Fullerton and was named the 2020 Edwin Carr recipient, given to individuals who demonstrate exceptional potential for making significant contributions to the field of education. In 2021, she was named the Inland Area CUE's Blended and Online Educator of the Year for her engaging and impactful lessons, workshops, and online training for fellow teachers, students, and families during the shift to distance learning. She has presented on growth mindset, student engagement, and social emotional learning through the use of technology for several years at large educational conferences and is known amongst educators on social media as @MissMoeTeaches. Most recently, she earned her NGSS Tier 1 certificate through the UCI Science Project. During the summer, she taught writing courses with the UCI Summer Writing Project. This fall, she will be teaching a gifted fourth/fifth-grade combo class and incorporating micro:bits, robotics, and coding into the classroom.

Katia Necoechea Madriz (B.A., Education Sciences '21; B.A., Psychology '21)

Necoechea Madriz in 2021 earned a prestigious Fulbright Scholarship. As part of the program, she will teach high school students in Madrid for nine months. At UCI, Necoechea Madriz served as a teaching assistant for bilingual education, taught in the Upward Bound program, provided support to high school students in her hometown of Chula Vista, and was a SAGE Scholar. Ultimately, she wants to become a principal so that she can enact programs and school cultures that encourage and support students from all backgrounds. She hopes that her time teaching in Spain will give her experience with high school students and provide some new perspective on how education is approached in other cultures.





Virginia Nguyen (MAT + Credential '03, B.A., Political Science '02; B.A., Sociology '02)

Nguyen is a passionate high school history teacher currently teaching at Portola High School in Irvine. Among her many roles, she recently led her district's DEI professional learning, is a regular guest presenter at Southern California universities' teaching credential programs, is a Smithsonian APAC contributor, amateur writer, and a presenter at both the National and California Council for Social Studies. She is a daughter of Vietnamese refugees, which has shaped her passion for AAPI advocacy, commitment to social justice, equity, and leadership in DEI. She has national experience holding workshops, leading presentations, educator training, and curriculum development. She is pursuing a passion project, Educate to Empower, which is committed to the belief that educators committed to diversity, equity, inclusion and allyship can dismantle systems of oppression and change the world.

Jack E. Oakes (Teaching Credential '76; B.A., History '69)

With the support and inspiration of Dr. Kenneth Bailey, the founding director of the UCI Department of Education, Oakes entered the field of education in 1970. Fifty-one years later, he is pleased to be assisting the UCI School of Education by supporting UCI's Network Improvement Community partnership with Valley High School in the Santa Ana Unified School District and the non-profit foundation of High School Inc. In his book, *Maximum Impact Education*, Oakes recorded the birth and successes of High School Inc. as a catalyst for reform in education. He remains an advocate for personalized education and preparing all students to become achievement ready for life after their K-12 education. He is currently an officer on the Executive Committee of the Board of Directors for High School Inc. and consults with school districts across the country on how to raise student achievement.

Katie Oliver (MAT + Credential '17)

This school year, Oliver was thrust into the position of hybrid teacher at Community Roots Academy in Laguna Niguel. In addition to teaching in person with her second graders, she also built a digital platform for the entire lower grades. This included a portal for teachers to build plans, communicate with support staff, and record mandated logs. She was also able to create real world tasks that gave all students hands-on science and math projects. Oliver has always been a proponent of project-based learning and it was inspiring, a colleague explained, for teammates to see her students collaborate in person and through digital platforms. Oliver was the "glue" of the second-grade team and the programs she designed will be used by students and faculty in years to come.

Dr. Frank Olmos (Ed.D., Education Administration Leadership '10)

Olmos was promoted to research and evaluation coordinator for the Los Angeles County Office of Education. In the role, he manages research and evaluates the quantitative and qualitative data elements of a multi-year, quasi-experimental \$17.4 million Community Schools Initiative, which seeks to provide school-based trauma screening, mental health and well-being services for students and their families. He also designs and develops metrics, data collection tools and protocols, analytical frameworks that measure the initiative's immediate impact, and the initiative's connection with long-term outcomes, such as improved student academic GPA, and A-G completions. In July, he was named president of the UCI School of Education Anteaters in Education Alumni Chapter.





Dr. Feliza I. Ortiz-Licon (Ed.D., Education Administration Leadership '08)

Ortiz-Licon is the chief policy and advocacy officer at Latinos for Education, where she leads the organization's policymaking and advocacy efforts to eliminate barriers to equitable, educational opportunities for Latino students. Prior to joining Latinos for Education in May 2021, Ortiz-Licon served as the principal of education programs at UnidosUS,

the largest civil rights and advocacy organization for Latinos in the United States. A champion of education equity, Ortiz-Licon has invested nearly 25 years in the field of education, working in various capacities and remaining focused on issues of diversity, access, and equity, specifically as it relates to Latino students and English learners. In 2015, she was appointed to the California State Board of Education. Her most recent awards and recognitions include the State & National Advocacy Award from The California Latino School Board Association, Courage Award from The California Latino School Board Association, English Learner Champion Award from Californians Together, State Leadership Award Recipient from the National Association of Federal Education Program Administrators (NAFEPA), Distinguished Alumni Award Recipient at UCI's 2016 Lauds & Laurels ceremony, and UCI Top 50 Alumni Honoree at UCI's 2016 Celebration of Graduate Success.

Kevin Perez (B.A., Education Sciences '17; B.A., Korean Literature and Culture '17)

Perez is a sixth-grade dual language immersion teacher at Ladera Palma Elementary School in La Habra. His passion for inclusive and equitable education fueled his interest in working with minoritized bilingual emergent students. In his first year of teaching, he balanced distance learning, completed his master's degree, and worked as a part-time research assistant at San Diego State University. Throughout the pandemic, he asked himself how far, as a dual language immersion teacher, he was willing to go to create an inclusive and equitable environment for students who needed it the most. Educational inequities inspired Perez to pursue a doctoral degree: he was recently admitted to New York University's Ph.D. Program in Bilingual Education.

Sabah Rashid (MAT + Credential '04; B.A., International Studies '03)

After graduating from the MAT + Credential Program, Rashid immediately entered the world of international schools, embracing the International Baccalaureate Organization's Primary Years Programme. Before returning to the United States, Rashid served as the founding head of the Primary School of the Swiss International Scientific School in Dubai. In February 2021, she published a children's picture book, *Upside Down*, about perseverance and doing hard things. The book was featured as a "No. 1 New Release" on Amazon. Rashid currently lives in Boca Raton, Florida where she is a program coordinator and Grade 1-2 Library specialist at Saint Andrew's School.

Michael Ushino (Teaching Credential '14; B.A., Business Economics '10)

Ushino is the choral director at San Juan Hills High School in San Juan Capistrano. When his district moved to hybrid learning, Ushino held choir rehearsals outdoors, competing with other noises and weather fluctuations. When indoor performances were allowed, the school put together Disney's "The Hunchback of Notre Dame." Approximately 200 students participated in the play, which won Best Musical from the MACYs awards. Ushino is also vice president of High School Honor Choirs for the Southern California Vocal Association. The organization organizes choral festivals, vocal competitions and honor choirs for the Southern California region.

Yishan Zou (B.A., Education Sciences '20)

Zou earned her bachelor's degree from UCI in three years. Coming from an international background, Zou said she faced numerous challenges, ranging from culture shock to language barriers. She credits Education classes and research opportunities for pushing her out of her comfort zone, enlarging her vision, and triggering her potential. She was recently accepted to the University of Pennsylvania Graduate School of Education, and looks forward to continuing her academic journey as a scholar, educator and international learner.

► To submit alumni updates for future publications, please email education-communications@uci.edu

Introducing the Dean's Leadership Society



The events of the past year have inspired deep gratitude to the people whose generosity and loyalty led to a top ranked School of Education for the benefit of our community, nation and beyond. To honor these alumni and friends who provide support year after year, the School of Education is launching a new Dean's Leadership Society.

These generous friends share a passion and commitment for the role of education in shaping communities. They make a meaningful difference by providing leadership annual giving support of \$1,000 and above to the Dean's Excellence Fund for the benefit of education students, faculty and outreach programs. Funds are allocated by the dean to the school's core mission and immediate needs in a rapidly changing society, including student emergency grants.

As one of the nation's top ranked public education schools, the UCI School of Education is dedicated to preparing scholars and professionals to contribute to the advancement of teaching, learning and human

development. Private giving from alumni and friends drives this mission forward – advancing innovative research, enhancing teacher diversity with need-based scholarships, supporting local teachers with professional development programs and partnering with school districts to advance educational equity.

By becoming a charter member of the Dean's Leadership Society, you will enjoy a stronger connection to the school through active fellowship with the dean, administrators, faculty and students.

"It is the School of Education's mission to establish partnerships with local schools and create community-driven solutions to educational issues and inequities," said Richard Arum, dean and professor, UCI School of Education. "With community support through the Dean's Leadership Society, we are together transforming educational opportunities and outcomes in Orange County and beyond."

For more information: education.uci.edu/deans_leadership_society.html

"It is a privilege to support teachers and their dreams for a better future. My wife Crissy and I support the UCI School of Education because we believe in its mission of service to the community."

Bill Cheney

President/CEO, SchoolsFirst Federal Credit Union

"We support the dean because educational research can lead to more effective ways of teaching and learning to prepare young people for meaningful, productive lives in the 21st century economy."

Ted and Janice Smith, UCI trustees and former Chairman, MIND Research Institute



Sandra (Sandi) Jackson, UCI Trustee and Chair, School of Education's Dean's Leadership Council.

Lifelong Educator, Lifelong Philanthropist

Sandra (Sandi) Jackson's heart has always been in education. A lifelong advocate for children and a nationally recognized philanthropist, it's natural that she also serves as a passionate ambassador for one of the most innovative schools of education in the nation.

"I consider it very fortunate that my interest and skills matched up with such a great institution, and that I can contribute even if in a small way," Jackson said. "It is an honor to be able to be part of what the School of Education is doing; I'm a whole-hearted cheerleader for everything that is being accomplished."

Jackson earned a bachelor's degree in Occupational Therapy and Psychology through a combined program from Colorado State University and Stanford University. Following graduation, she worked at the University of Southern California, where she conducted further research into pediatric neurology and learning disabilities in children. At USC, she worked with Dr. Jean Ayres, a leading educational psychologist and advocate for individuals with special learning needs.

For decades, Jackson has been a leader in the philanthropic community. She is past board chair of the Memorial Medical Center Foundation/Memorial

Health Services and the Orange County Baron's League of the American Cancer Society. She also served on the Board of Directors of the Opera Pacific.

In 2016, Jackson received the Outstanding Philanthropist Award by the Association of Fundraising Professionals, Orange County, and the Exceptional Citizen Award from the City of Santa Ana.

Since 2004, Jackson has served on the Board of Directors for the Orangewood Foundation, a provider of services to current and former foster youth in Orange County. Early in the 21st century, Jackson became interested in ways to provide greater stability to foster youth. For several years, she researched school districts, nonprofits and other educational models across the U.S. and Europe to learn more about the best practices for supporting this population.

In interviewing foster youth, she and her colleagues learned that foster youth didn't want a school exclusively for them, but a community school that would provide them opportunity, support and the life skills they need to succeed in the future.

Utilizing that research, Jackson – along with friend and UCI supporter Susan Samueli and the Orangewood Foundation – founded in 2013 the

Samueli Academy, a free public charter school in Santa Ana for community and foster youth.

From the beginning, the UCI School of Education played an integral role in the Samueli Academy's development. Former UCI Chancellor and current UC President Michael V. Drake supported the idea of a charter school, Jackson said, and School of Education Founding Dean Deborah Lowe Vandell served on the Academy's original steering committee and its Board of Trustees to help develop the mission and vision for the school. Today, current School of Education Dean Richard Arum serves on the Academy's Board of Trustees and heads the Academic Committee.

Now considered one of the preeminent high schools in the nation, Samueli Academy is also an original member of the School of Education's Orange County Educational Advancement Network (OCEAN). In OCEAN, a School of Education doctoral student and faculty member work closely with school leadership to identify the greatest needs and goals of the school, and in turn conduct research that will positively impact the school. Jackson was one of the charter donors to OCEAN, who combined provided more than \$1 million in seed funding to launch the network.

Jackson said the data and research conducted vis-à-vis OCEAN has a tremendous impact on Samueli Academy's overall strategy.

"In order to have consistent, positive results for our students, we need to be flexible and routinely adjust our education model to meet student needs," Jackson said. "We can do that because of evidence-based data collected and the guidance of UCI – they've had a tremendous impact. This includes data collected throughout the pandemic – we've been able to re-adjust and reach students who had challenges with online learning and who we previously had trouble connecting with."

The School of Education and Samueli Academy are currently co-leading a county-wide project to improve the support for foster and housing insecure youth (see Page 3).

Jackson began serving on the School of Education's Dean's Advisory Board in 2008. Over the past 13 years, she has seen the school add dozens of faculty, thousands of students, millions of dollars in research

funding, and grow from a department to the No. 15 school of education in the nation, all while further embracing the community.

"The School of Education has grown incredibly," Jackson said. "It's remained very flexible and innovative in its vision and become an influencer both in the community and the academic world. They have innovative ideas of how to create more equitable education for all students in Orange County and create coalitions to enable the sharing of these challenges and successes widely."

Jackson said she is impressed with how the School of Education, and UCI more generally, focuses on how individual students learn.

"That aligns with my background – not everyone assimilates information and retains it in the same manner," Jackson said. "It doesn't necessarily have to do exclusively with intelligence, it's just how we're wired."

Since 2015, Jackson has served as the Chair of the School of Education's Dean's Leadership Council, and more recently as a trustee on the UCI Foundation Board. She sees her role as that of an ambassador, and someone who informs and enlightens the community about the various facets of the School of Education.

"Most people have an interest in education if they are aware of the impact and scope of what is being accomplished," Jackson said. "There's not money better spent if you're looking to make an impact both locally and on education more generally. I invest in the School of Education because I believe it is how we impact the future, and innovative education is a powerful way to influence societal change."

"I am deeply grateful to Sandi for her unwavering support to the School of Education and for her leadership of the school's Brilliant Future campaign," said Richard Arum, dean and professor, UCI School of Education. "Her work with the Samueli Academy has improved outcomes for thousands of youths in our community, and her tireless commitment to helping underserved students is a beacon of inspiration to us all."

Alumna Funds Scholarships Honoring Renowned Leader for Teacher Education

Inspired by a mentor and retired administrator, Vicki Vasques '81 funds scholarships in honor of School of Education legendary teacher educator Mary Roosevelt.



Vicki Vasques '81

In 1980, Vicki Vasques received a simple, yet impactful message that still reverberates with her 40 years later.

At the time, Vasques was a student in the UCI Office of Teacher Education, a precursor to the UCI School of Education. The office's student teacher supervisor, Mary Roosevelt, pulled Vasques aside one day and told her, "You're going to do great things, and you're going to go far."

With this memory engrained in her, Vasques recently decided to reconnect with her former mentor by contacting the School of Education. Vasques wanted to make a donation to honor Roosevelt's impact on her life and decided to fund the Mary Roosevelt Honor Scholarships in Teaching and Learning. Five scholarships of \$3,000 each will be presented to aspiring teachers at an awards ceremony scheduled for fall 2021.

"I wanted to make sure this gift honored Mary and the work she did, and helped students in their pursuit of becoming teachers," Vasques said. "I have a special place in my heart for education and Mary, who had a huge impact on my life. I'm so grateful and fortunate to be able to give back, and hopefully, I can continue to invest in our future teachers."

"Vicki was an excellent teacher, but I think even early on in her career that she had her mind set on other goals," Roosevelt recalled. "She had a passionate course for her background, and she is a very lovely, very special lady."

And the prediction of Vicki's promising future? It was prophetic.

Immediately after obtaining her credential, Vasques began teaching at an elementary school in Mission Viejo. She soon left teaching for a different educational career – one at the U.S. Department of Education in the nation's capital.

"I thought it would be a one-year stint where I could go to D.C. and do some good work," Vasques said. "I ended up catching 'Potomac Fever' and served in various roles and administrations for the next 20 years."

Diegueño of the San Pasqual Band of Mission Indians, Vasques would go on to work in the Departments of Education and Energy under four different presidents. Most recently, Vasques served as Assistant Deputy Secretary of the Office of Indian Education, U.S. Department of Education, during the George W. Bush administration. In the role, Vasques was principal point of contact within the federal government for Indian education across the nation.



Mary Roosevelt (left) and Vicki Vasques.

Prior to that, she served as Director of Indian Affairs at the Department of Energy during the Bill Clinton administration.

“It might sound unheard of, to transition from a republican administration to a democrat administration, but working in a bipartisan manner regarding the issues of our native communities, it afforded me the opportunity to stay in Washington under different administrations,” Vasques said.

Vasques also served as executive director of the White House Initiative on Tribal Colleges and Universities, as an education program specialist in the Office of Indian Education, on the President’s Commission on Indian Reservation Economics, and on the President’s Commission on the HIV Epidemic.

After Vasques retired from government life she founded Tribal Tech LLC, based in Alexandria, Va. Through the guiding principles of “people, performance and partnership,” the company provides management and technical services to federal, state, tribal and corporate clients. She currently serves as owner and chairwoman of Tribal Tech and its subsidiary Cowan & Associates.

It’s been a varied career for Vasques, but one that was nonetheless buoyed by skills she learned in the teaching credential program at UCI.

“One of my positions I held was Director of Scheduling and Logistics for Admiral James Watkins when he was the U.S. Secretary of Energy,” Vasques explained. “It was not an easy office to manage, but my background from UCI and teaching, which

included planning, scheduling and organizing, along with a sense of patience and creativity, gave me the foundation I needed.”

In memory of her father, who started the first education program on the San Pasqual Reservation near Valley Center, Calif., Vasques in 2016 founded the Ronald Maese Peralta (RMP) Foundation, a not-for-profit organization with a mission to improve the education, health and wellness of all people, especially those throughout Native communities.

Roosevelt earned a teaching credential from the UCI Office of Teacher Education, and soon after was hired by the Office. From 1975-90, Roosevelt was a student teacher supervisor, and then served as program coordinator for the multiple subject credential program and as director of external relations for the Department of Education until her retirement in 2002.

Having more than a quarter century of experience in higher education, Roosevelt remembers a time when scholarships were not readily available for students in any profession.

“Many professions, not just teaching, lost many incredibly gifted people because of a financial problem, which is just tragic,” Roosevelt said. “One of the more important things our modern society has done is create scholarships.

“To have a scholarship available is night and day for some of these students,” Roosevelt continued. “It’s also hours and hours of work – I hope that anyone who donates to a scholarship fund understands how hard those students, no matter the profession, work to earn them; it’s not just a freebie.”

Vasques feels it necessary to give back, even if it’s a small amount, so that others can follow their dreams and passions like she did.

“I thought it necessary to help the education industry – it’s difficult now with the COVID pandemic for both students and teachers,” Vasques said. “When you start giving in the beginning, it may be a small amount – where \$5 leads to \$10, leads to \$20. But, before you know it, you’re making a difference.”

Enriching the Climate Change Curriculum

Through a variety of programs, partnerships and workshops, the UCI Science Project is improving how K-12 students learn about climate change and equipping them with the skills to make a difference.



Dr. Kelley Le, director, UCI Science Project

Established in 2020, the UCI Science Project (UCISP) is inspiring and preparing the next generation of students to tackle the most important environmental issues our world will face.

In just one year, the UCISP has hosted – via workshops, conferences, and professional development opportunities – more than 1,000 K-12 teachers and hundreds of students. Looking forward to year two, UCISP Director Dr. Kelley Le hopes to expand the program’s reach to work with tens of thousands more.

One of the main services the UCISP offers are tiered programs for K-12 teachers to become certified in the Next Generation Science Standards (NGSS) through

a science and equity lens. Enacted in California in 2013, the NGSS is a set of research-based K–12 science standards that are meant to give local educators the flexibility to design meaningful learning experiences that stimulate students’ interests in STEM and prepares them for college, careers, and citizenship.

Roughly 30 percent of the NGSS is related (both directly or indirectly) to climate science and the role of humans. Prior to the NGSS, teaching about climate change was optional. Now, it is mandated, and schools are seeking ways to make the curriculum engaging, local and culturally relevant to support students as community change agents.

“The old standards positioned students as noncontributors that were learning to skillfully memorize facts or approaches of what has already been uncovered in science,” Le said. “Our programs allow teachers to reflect deeply on their teaching practices to move toward 21st century teaching and learning in hopes of developing students as diverse, complex and critical thinkers that can tackle real-world issues they currently face.”

Le literally wrote the book on how to teach climate change. Her new book, *Teaching Climate Change for Grades 6-12*, was released in 2021 by Routledge and is an extension of her Ed.D. dissertation at UCLA. The book is used in various workshops to support educators and leaders to teach climate change using evidence-based practices and approaches.

Le is also currently working with both UC and CSU programs to offer workshops on teaching climate

change with faculty from teacher preparation programs. She is working closely with School of Education Dean Richard Arum on the Environmental and Climate Change Literacy Projects (ECCLPs) initiative. This project brings together both the UC and CSU systems to connect current and future K-12 teachers and key stakeholders through a joint center.

“Our goal is to bend the curve by amplifying statewide initiatives to support 500,000 students each year to become literate in environmental and climate change issues and solutions,” Le said.

The UCISP also provides different opportunities to connect students and teachers with researchers and scientists from various UCI departments. This includes an Engineering Classroom Ambassadors Program and the Young Engineers & Scientists (YES) Program.

YES is a free program that builds capacity and STEM identity in K-5 students around engaging hands-on curricula grounded in community environmental issues. The program brings together UCI faculty and students in science and engineering, informal educators from local nonprofit organizations, and teacher leaders to support science and engineering at the elementary school level.

In the past year through YES, kindergarten and first grade students learned about biomimicry and engineering design with The Aquarium of the Pacific and the UCI Department of Civil and Environmental Engineering. Second and third graders learned about environmental science and stewardship with the help of Amigos de Bolsa Chica. In an upcoming YES partnership, fourth and fifth graders will learn about the planet’s oceans and stewardship with The Ocean Agency, a nonprofit that seeks to accelerate ocean science and conservation.

Le expects the reach of the UCISP to grow exponentially over the next year. The UCISP and The Ocean Agency are currently partnering to create a teacher resource hub on ocean literacy, outreach toolkits for the United Nations Educational, Scientific and Cultural Organization, and much more to advance environmental science efforts. As part of the upcoming world’s largest exhibit event, UCISP will help to identify



A student participant in the UCI Science Project's Young Engineers & Scientists (YES) Program

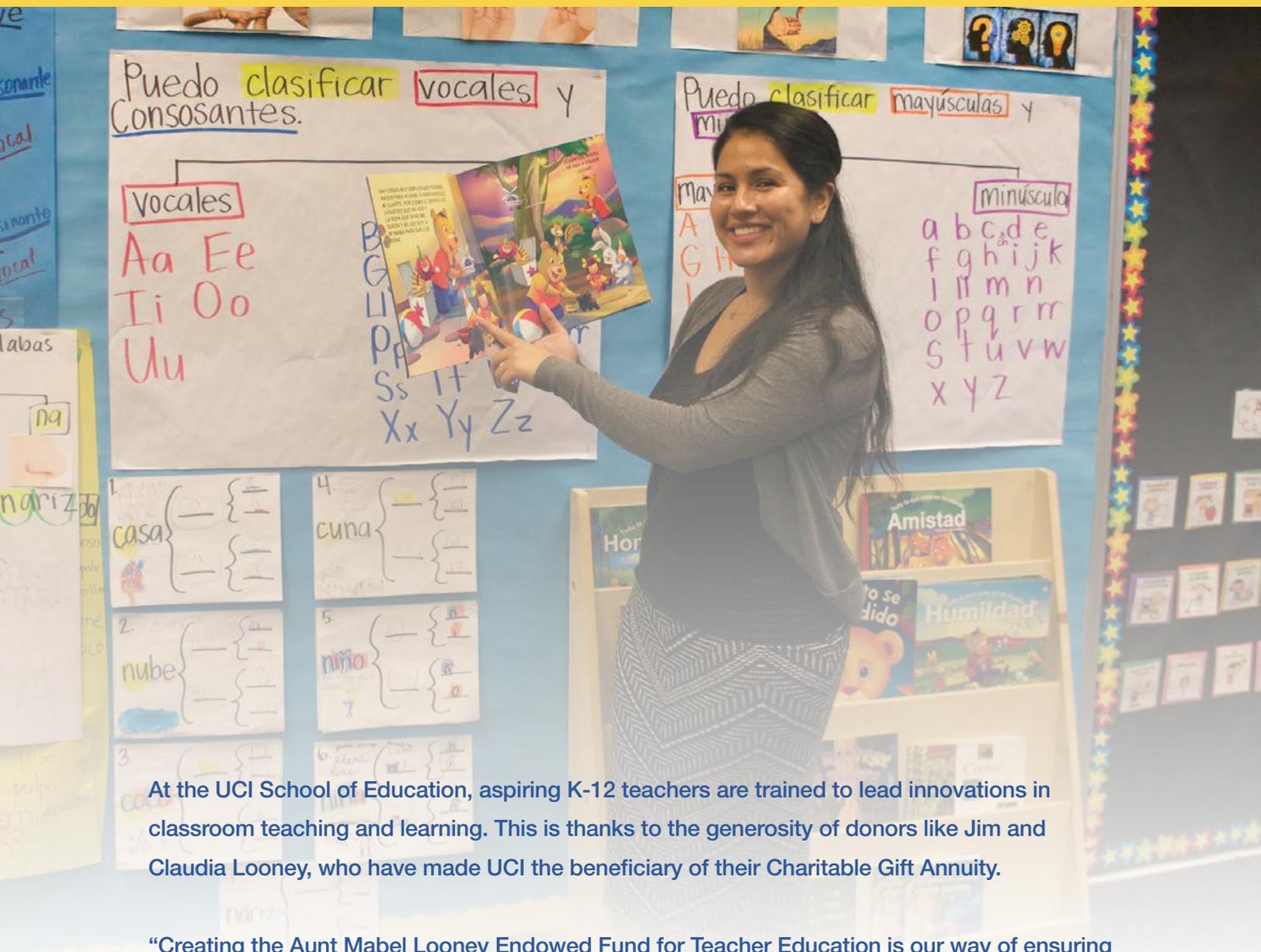
500 schools in the United States and develop a lesson plan for teachers and students to be able to have conversations about our society’s relationship with the ocean and what the ocean can do to curb climate change.

With additional funding to the UCISP, Le envisions being able to leverage local organizations more efficiently and continue providing more meaningful hands-on learning opportunities for K-12 students.

“There are countless organizations in our region that are doing significant work toward these issues, and we would love to partner with them to amplify their work,” Le said. “With additional funds, we can connect schools with local environmental organizations and agencies and support them as informed and skillful agents of change we need.”

The UCISP is one of five subject matter projects in the UCI Teacher Academy, along with the Irvine Math Project, UCI Writing Project, UCI History Project and the California Reading & Literature Project. Founded in 2018 with a generous gift from the SchoolsFirst Federal Credit Union, the UCI Teacher Academy provides a home for teachers and school leaders to develop and enhance their professional practice by offering programs in teacher preparation, professional development, teacher leadership, and administrator leadership.

Ensuring a legacy of exceptional teaching



At the UCI School of Education, aspiring K-12 teachers are trained to lead innovations in classroom teaching and learning. This is thanks to the generosity of donors like Jim and Claudia Looney, who have made UCI the beneficiary of their Charitable Gift Annuity.

“Creating the Aunt Mabel Looney Endowed Fund for Teacher Education is our way of ensuring that our family’s legacy lives on through the work of future teachers.” – Jim and Claudia Looney

If you have questions about the best way for you to benefit through a planned gift, please contact Jennifer Stameson, executive director of development, at jastames@uci.edu.

UCI Planned Giving

www.plannedgiving.uci.edu



Aunt Mabel Looney



Jim and Claudia Looney

Special Thanks to our Supporters

Our accomplishments are possible with support from generous alumni, community friends, corporations, foundations, and government agencies. We are deeply grateful to the following donors for their investment in the Brilliant Future Campaign for the School of Education.

Corporations and Foundations

AbbVie Foundation
Allergan Foundation
AT&T Foundation
Balboa Bay Resort
Bank of America Charitable Foundation
The Boeing Company
Brady Education Foundation
California Casualty Group
Carnegie Corporation of New York
CARS LA
CEO Leadership Alliance Orange County
Edison International
ENO Brands
Bill and Melinda Gates Foundation
Google
William T. Grant Foundation
John Randolph and Dora Haynes Foundation
High School Inc.
Jacobs Foundation
Johnson & Johnson Foundation
Kingston Technology
Lakeshore Learning
Andrew W. Mellon Foundation
MIND Research Institute
Montessori Schools of Irvine
Charles Stewart Mott Foundation
NewSchools Venture Fund
The Nicholas Endowment
Nihon Kohden
Northern Trust Company
Orange County Community Resilience Fund

Orange County Community Foundation
Pacific Life Foundation
David and Lucile Packard Foundation
Parker Hannifin Corporation
The Pew Charitable Trusts
RMP Foundation
The Rockefeller Foundation
Russell Sage Foundation
SchoolsFirst Federal Credit Union
Charles and Lynn Schusterman Family Foundation
Smith Richardson Foundation
Spencer Foundation
Susan Crown Exchange
John Templeton Foundation
TGR Foundation
United Way of Orange County
Wells Fargo Foundation

Government Agencies and National Societies

Administration for Children and Families
American Educational Research Association
California Department of Education
California Governor's Office of Planning and Research
Eunice Kennedy Shriver National Institute of Child Health and Human Development
Institute of Education Sciences
National Academy of Education
National Institute for Occupational Safety & Health
National Institute of Mental Health
National Institute on Aging

National Institute on Deafness and Other
Communication Disorders
National Math & Science Initiative
National Science Foundation
Society for Research in Child Development
U.S. Department of Education

Donors \$1,000 to \$500,000+

Richard Arum and Joan Malczewski
Christine Baron
Glen Baron
Steven Berliner
Valerie Brewer '11
Brandon Brown '04
Cynthia Brown
James and Blake Bullock
Daniel Busby
Robin Casselman and Terry Pringle
Crissy and Bill Cheney
Jacki and Gilbert Cisneros, Jr.
Philip Collins
Joseph Connor
Crevier Family Foundation
Keith Curry '11
Brian Dang '07 '13 '14
Phyllis and William Draper
Dorothy and Greg Duncan
Jacquelynne Eccles
George Farkas and Judy Kaufman
Esther and Arnold '90 Gutierrez
Karina and Robert Hamilton
Rufie and Michael Harr
Roland Ho '05
Steve Hong '02
May and David Hsu
Sandi and Doug Jackson
Wenli Jen '03 '04
Jeneen '11 and Andreas Graham
Betty Isa
Kay Family Foundation
Richard Kwong '04 '11
Jennifer Lee

Marc Levin
Claudia and James Looney
Florence Martinez
Stephanie Martinez
Sandra and Nader Mikhail '05
Adriana '00 and Andrés Nava '00
Theresa and William O'Hare
Carol Olson and Todd Huck
Opus Foundation
Virginia and Jon Panish '95
Podlich Family
Virginia and Steven Pollack
Stephanie Reich and Seth Brindis
Lynn '17 and Kevin Reimer
Stephanie Reyes-Tuccio '97 '01
Marisa and Steve Robbins
Phyllis Rodeffer
Mary Roosevelt '75
Cheryll and Richard Ruszat
Samueli Foundation
Stephanie '76 '88 and Allan Schneider
Seema and Pawan Seth
Melanie and Gary Singer '74
Janice and Ted Smith
Jennifer '87 and Andrew Stameson
Sharon and Ron Stern
Laura and Bing Sun
Sun Family Foundation
Eva Thomas
Irene Thomas and Linwood Howard
David Tong '05 '08
Jason Tong '02
Stephanie and Kevin Tsao '10
Ueberroth Family Foundation
Deborah and Kerry Vandell
Victoria Vasques '81
Nhu Weinberg '05
Christopher Wilson '68
Fumie and Albert Wong '01
JYeh MD Foundation '04
Doron '02 '17 '18 and Joanne Zinger



University of California, Irvine
3200 Education
Irvine, CA 92697-5500

education.uci.edu