Preparing Professionals for K-12 Education
Impact Report

Berkeley
UNIVERSITY OF CALIFORNIA
The preparation of education professionals constitutes a central component of the Graduate School of Education’s mission at the University of California, Berkeley. Our programs, and those sponsored by other units on campus with whom we collaborate, demonstrate our commitment to the preparation of education professionals for California schools, districts and organizations and represent a significant contribution of our faculty and staff to the quality of K-12 education.

The GSE is home to programs that prepare elementary and secondary school teachers, school and system-level leaders, and school psychologists. The School also works closely with the School of Social Welfare, which prepares school social workers, with the undergraduate CalTeach program in STEM education, and with University Extension, which offers a teacher preparation program in Career Technical Education.

Our programs actively recruit prospective educators who are academically well prepared, who will view education as a career and not merely a stepping stone to other pursuits, and who will be committed to work in high-need urban schools, school systems and communities. Our cohort model, and the relatively small size of our programs, afford the opportunity to cultivate a sense of community and habits of mutual support. The cohort model has helped our programs to establish an extensive and close-knit network of school and system leaders throughout the region and the state.

Berkeley sits amid an extensive array of urban communities and schools, reaching from Richmond to Oakland, San Francisco and Hayward. Our programs are committed to preparing educators for work in these urban communities and schools, combining foundational knowledge and professional skill with a strong orientation toward social justice and equity. The programs embrace the aspirations reflected in the Common Core State Standards and Next Generation Science Standards, but also understand that a robust educational experience requires still more – an integration of the arts, a well-honed social and historical sensibility, a relentless focus on equity, and the pursuit of the social, emotional and physical well-being of both children and adults.

This report highlights some of the contributions our professional programs are making in the Bay Area and across the state. We have included an overview of alumni employment data, portraits of some of our remarkable graduates, and descriptions of some of the current research-practice partnerships led by our highly regarded research faculty.
Our Programs

**Teacher Education**

**Developmental Teacher Education Program (DTE)** is dedicated to improving the quality of classroom learning by educating elementary teachers to create equitable classrooms for linguistically and culturally diverse learners in urban settings.

**Masters and Credential in Science and Mathematics Education (MACSME)** is designed for talented individuals with solid preparation in mathematics or science who are dedicated to the improvement of mathematics and science education at the secondary level.

**Multicultural Urban Secondary English (MUSE)** develops middle high English school teachers who are able to effectively respond to the complex context of urban schools.

**Cal Teach*** is a program for undergraduate science, math, and engineering majors interested in exploring a career in education. Cal Teach offers the minor in Science and Math Education, as well as a unique opportunity for students to complete both a degree and a California teaching credential as an undergraduate.

**Career Technical Education*** opens classroom doors in a wide range of career technical education (formerly vocational education) subject areas by enabling professionals to teach what they know best.

**Student, Family, and Community Support Professionals**

**School Psychology** is a Ph.D. program within the Area of Cognition and Development, which prepares students for employment in public schools, universities, mental health clinics, and a variety of work settings.

**School Social Work†** offers a school social work program option designed to educate Master’s-level social workers to assist public schools in achieving their educational and developmental missions.

**Leadership Preparation**

**Principal Leadership Institute (PLI)** is a 14-month program that prepares educators for leadership in a K-12 setting. Participants examine real-world challenges and use research to inform practice, enabling school leaders to identify assets in their communities in order to make high-quality learning accessible to all students.

**Leadership Support Program (LSP)** is a Professional Preparation Program for the Administrative Services Credential - Clear (Tier II) and Induction program designed to build on the work that candidates complete in the Principal Leadership Institute (PLI).

**Leadership for Educational Equity Program (LEEP)** prepares education professionals for leadership roles in school districts and other organizations committed to the success of students in urban environments.

*located in the College of Letters and Science

**located in University Extension

† located in the School of Social Welfare
Each year, candidates in our professional programs spend thousands of hours in local educational settings learning and practicing their craft. These fieldwork experiences are not only essential for our candidates, they provide additional support to children, teachers, school leaders and other education professionals in our partner districts, schools and non-profit agencies.

Bay Area Writing Project

The Bay Area Writing Project is a teacher professional development network that was established in 1974 in the Graduate School of Education on the Berkeley campus. Each year over 2000 teachers participate in BAWP summer and school-year programs. BAWP remains a resource for many teachers throughout their teaching careers. BAWP’s commitment to the professional growth of teachers is key to the high level of interest by classroom teachers and their enduring support.

Academic Talent Development Program

The Graduate School of Education also serves a diverse group of more than 2,000 students every summer though the Academic Talent Development Program (ATDP). Each year, ATDP provides more than $70,000 in financial aid so that students who qualify for the program can attend, whatever their socioeconomic circumstances. In 2015, ATDP’s Elementary Division served more than 900 students from 49 school districts, the Secondary Division served over 900 students from 62 school districts, and the International Division served almost 200 students from five countries.

Annual Contributions in Fieldwork Hours

Each year, our candidates contribute thousands of hours in local educational settings to local schools and agencies. Here are the contributions from Fall 2014 to Spring 2015:

62,546

Fieldwork hours contributed to local schools and agencies by our candidates (Fall 2014 – Spring 2015)
Teacher Education: Teaching for Robust Understanding

What makes for powerful classrooms? How can we develop students into knowledgeable thinkers and problem solvers? Building on nearly 40 years of theoretical and practical research, Professor Alan Schoenfeld has found some solutions to these questions with the Teaching for Robust Understanding (TRU) framework (see Fig. 1). Teachers who implement the five dimensions in Figure 1 have found that their students are stronger mathematical thinkers.

The Five Dimensions of Powerful Classrooms

<table>
<thead>
<tr>
<th>The Subject Matter</th>
<th>Cognitive Demand</th>
<th>Equitable Access to Content</th>
<th>Agency, Authority, and Identity</th>
<th>Formative Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what degree does the content represent our best current disciplinary understandings (as described in the Common Core, Next Generation Science Standards, etc.)? Students should have opportunities to learn important content and practices, and to develop productive disciplinary habits of mind.</td>
<td>To what degree are students challenged to think and learn, in a way that allows them to do sense making? The idea is “productive struggle”. If students are spoon-fed, there’s no real learning. Students need to be challenged, but also supported so that they can make progress by thinking things through.</td>
<td>To what degree do classroom activities invite and support all students that enable them to engage with the core content being addressed by the class? No matter how rich the content being discussed, a classroom in which a small number of students get most of the “air time” is not equitable.</td>
<td>To what degree do students have opportunities to “walk the walk and talk the talk,” building on each other’s ideas, in ways that contribute to their development of agency (the capacity and willingness to engage) and authority (recognition for being a good thinker), with the result that they build positive identities as thinkers and learners?</td>
<td>To what degree is student thinking the focus of instruction? Does the teacher find out what students know and understand, and adjust the lesson accordingly? Powerful instruction “meets students where they are” and gives them opportunities to move forward.</td>
</tr>
</tbody>
</table>

Many of the ideas behind the TRU framework were developed in Berkeley, Oakland, and San Francisco classrooms, as Schoenfeld and his students implemented and observed a range of instructional materials and strategies. TRU is used by California CORE districts and the Mathematics in Common districts, which serve more than a million California students and families. Additionally, a grant from the National Science Foundation will fund professional development in the Oakland Unified School district; and Schoenfeld along with colleagues Harold Asturias, Phil Daro, and David Foster have begun professional development sessions with administrators and teachers from 13 California districts.

Supporting data and resources are available at the Mathematics Assessment Project (TRU Math tab), map.mathshell.org, and the Algebra Teaching Study ats.berkeley.edu.
Phoebe Gilpin-Wright

DTE ‘12
6th English/history and 7th-8th journalism

Brett Harte Middle School, Oakland Unified School District

Phoebe Gilpin-Wright ‘12 approaches her teaching with a healthy mindset, one that she learned in the Developmental Teacher Education (DTE) program through UC Berkeley’s Graduate School of Education.

“What I really gained from Cal is a perspective of how the deficit model is destroying kids’ education, and teachers’ lives,” Gilpin-Wright said. Instead, she works from an abundance model, in which students’ strengths can be bolstered while areas of growth are addressed.

DTE’s structured support network helped her prepare for the common struggles of new teachers in urban classrooms. “I entered the classroom confident and prepared,” she said.

Andrea Negrete

Cal Teach ‘13, MA, GSE ‘13
9th and 10th grade mathematics

Oakland International High School, Oakland Unified School District

Andrea Negrete ‘13 can’t wait until the last day of school. It’s not because this high school math teacher is looking forward to summer; quite the contrary.

“I find the most rewarding experience to happen at the end of the school year when I see and experience the transformative growth students have made through the progression of the year. It is both satisfying and incredible to feel the power that being a teacher has on student lives,” said Negrete.

After earning her bachelor’s degree in mathematics, she pursued her teaching credential through Cal Teach and conducted her Master’s research with GSE Professor Dor Abrahamson’s Embodied Design Research Laboratory.

“The research team pushed me to design activities that were student-centered, and the team worked hard to emphasize that students need to come their own understanding and lead their learning in order to be true problem solvers in mathematics,” she said.
The Leadership for Educational Equity Program (LEEP) prepares professionals of great promise for leadership roles in school districts and other organizations committed to the success of students in urban environments. LEEP’s signature pedagogy is design development, which is embedded in the coursework and which students utilize for their dissertation studies. Throughout their time in LEEP, students develop their ability to increase organizational effectiveness, to ensure that all adult members of their organization value students equally, and to facilitate complex learning, so that all students are exposed to opportunities that treat them as intellectually and morally capable persons. Graduates earn a Doctor of Education (Ed.D.) from UC Berkeley.

LEEP students and alumni engage in co-design partnerships with UC Berkeley that foster intellectual knowledge, innovative problem-solving, and design-based thinking. Several types of partnership are possible, depending on local conditions (see diagram). Currently, LEEP’s most robust partnership involves supporting instructional leadership at the school and central office levels. In this integrated model, the district formed a co-design team around a focal design challenge: how to enable teachers to participate in professional learning with a focus on students’ academic engagement. A critical number of district co-designers, including, but not limited to LEEP students and alumni, are being trained in design-based thinking.

When the district forms a design partnership with researchers around a focal problem of practice, the trained designers play a constitutive role in the co-design team. The work can be distributed among many knowledgeable actors who act locally, but are well connected to the university design network. A sizable group of people in the partnership speak the same language and have a common reference in design-based thinking. This relationship brings substantial expertise to the district, offers rich opportunities for researchers to participate in practical work, and provides real-time feedback on LEEP’s design development approach, supporting ongoing improvement of LEEP’s program.

The Research-Practice Connection

Doctoral Leadership Preparation: The Signature Pedagogy of Design Development

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Matt Wayne
LEEP ‘11
Assistant Superintendent, Educational Services
Hayward Unified School District

Matt Wayne ’11 isn’t the only one who has benefitted from Berkeley’s Leadership for Educational Equity Program (LEEP). The entire Hayward Unified School District is gaining something, too.

As a LEEP graduate and Assistant Superintendent of Educational Services in Hayward, Wayne established a research-practice partnership with LEEP that is helping the district design a process for professional learning to improve instruction.

“LEEP’s focus on design development has greatly informed our educational improvement efforts,” Wayne said, adding that the knowledge and skills he gained from LEEP are apropos, especially during Common Core implementation.

On an individual level, Wayne’s problem-solving approach was complemented by his experience in LEEP.

“The program helped me understand how important it is to take into consideration the context of the district in which I work, and then develop a plan that addresses the challenges faced by those at our schools.”

And that is critical in a district such as Hayward, one of the largest in Alameda County, and for Wayne, who oversees all academic programs from Pre-K to Adult School.

“I love working with principals, instructional coaches, teacher leaders, and classroom teachers to help improve teaching and learning,” he said.

“I appreciate how we’ve had a chance to plan out our approach and then visit schools or hear from Hayward educators how it is going - the successes and challenges.”
School psychologists work within the educational system to help children with behavioral, emotional, social, and academic issues. The UC Berkeley School Psychology program trains pre-service school psychologists to be scientist-practitioners who can integrate and apply psychological theory to educational practice. The program prepares students to provide macro- and micro-level psycho-educational services in the five major areas of school psychology practice: (1) consultation, (2) prevention, (3) evaluation, (4) intervention [and Response to Intervention or RtI], and (5) research and planning. They are also trained to provide other services (e.g., crisis intervention, teachers) as required. In sum, school psychology students are trained to conduct psycho-educational and mental health evaluations of students, consult with and support school personnel, parents and students, and provide direct services (e.g., assessment, psycho-educational interventions) to children, youth, and families.
Natasha Dagys Limones

School Psychology program ‘13
Bilingual School Psychologist
San Francisco Unified School District

It’s not uncommon for Natasha Dagys Limones ’13 to find herself working on school-wide issues, developing student intervention plans, providing counseling, and conducting special education assessments—all in a single day.

The rigorous training in the School Psychology program that combines field experience, research, and theory applies to much of what Limones does on a daily basis.

“When you’re in the middle of the program, you’re asking, ‘Why is it so hard? Why do they structure it like this?’ But at the end, it makes sense,” she said. “We end up being a lot more prepared for work than we thought. We are trained to think as scientists-practitioners in a way that allows us to not just do the day-to-day work but also think in terms of big-picture issues such as program development, promoting best practices, and creating functional school systems.”

In San Francisco, Limones works with students in preschool through high school. Although her role at her school sites is the bulk of her work, her experience at Berkeley has allowed her to broaden her role to include facilitating professional development workshops for colleagues on assessment practices and be involved in program development activities.

“One of my favorite parts of what I do is helping school staff and families truly understand their students through assessments and using assessment results to explain to teachers why they are seeing certain things in the classroom in terms of a student’s behavior and academic performance,” she said.

Berkeley also prepared Limones to understand prevention and intervention strategies as she helps unpack the multiple variables influencing a student’s success: cognition, social/emotional functioning, cultural/linguistic factors, and family dynamics, to name a few. Her training in culturally and linguistically appropriate practices has been particularly relevant to her role as a bilingual school psychologist, given that many of the students she works with are English learners and may be in dual-immersion programs.

“Having the solid research and clinical experience, knowing the science and applying it as a practitioner, all of that preparation supports the collaboration, skills, and understanding needed to help students and promote research-based best practices in our schools,” she said.
The Principal Leadership Institute: Our California Impact

West Contra Costa Unified
43 PLI Alumni Leaders

Berkeley Unified
29 PLI Alumni Leaders

Oakland Unified
53 PLI Alumni Leaders

San Francisco Unified
93 PLI Alumni Leaders

Other California Schools
260 PLI Alumni Leaders

32 Schools Served
18,304 Students

15 Schools Served
7,822 Students

34 Schools Served
18,040 Students

64 Schools Served
31,708 Students

230 Schools Served
82,473 Students

478 PLI Leaders
375 Schools
158,347 Students Served
John Nepomuceno
*MUSE ’09, CTE ’13, PLI ’15*

English Teacher

Oakland Unified School District

When John Nepomuceno ’15 challenges his high school students to push themselves just a little bit harder, he can certainly empathize. He knows that struggle equals growth.

“I feel that the GSE’s programs make no excuses for the level of rigor that it places on its students,” Nepomuceno said. “The depth and breadth of my education at the GSE has been extraordinarily challenging, but the struggle has been well worth it.”

He speaks from experience when he challenges his students at the Mandela Law & Public Service Academy of Fremont High School in the Oakland Unified School District, where Nepomuceno teaches English and is the co-director of the small school while also attending GSE classes at night, on the weekends and in the summer.

“When it comes to seeing students who you have struggled to work with all year long, grow into young adults, ready for the world, and knowing that you had a hand in that development, that change,” Nepomuceno said, “I love my job as a teacher.”

Nepomuceno earned his master’s degree and credential from the GSE’s Multicultural Urban Secondary English program and is a graduate of the GSE’s Principal Leadership Institute.

What feeds his passion for teaching is helping students realize their ability to be change agents for themselves, their families, their community, and beyond. What prepared him for teaching is his GSE experience.

“I have been pushed to great limits, when it comes to reflecting both on my practice as a teacher, as well as a budding leader,” he said. “I think it takes a significant level of bravery to go into the Education profession, and the GSE can help future educators harness their own strengths and abilities as well as refining themselves as equity-minded, social justice educators and leaders, in order to serve the youth in as effective a means as possible.

“To which, I say, ‘Fortune Favors the Brave.’”

*John recently accepted a position as Assistant Principal at Balboa High School, SFUSD.*
Maria Carriedo
PLI ‘09
Principal, Early Childhood Education program
Berkeley Unified School District

Maria Carriedo ‘09 oversees the Berkeley Unified School District’s Early Childhood Education program, comprised of three pre-schools and 400-plus students.

“The best part of my job is going into classrooms and hearing children laugh and seeing them have a great time while they’re learning. And really listening to teachers and having them express how happy they are being in the classroom,” she said.

The Principal Leadership Institute was instrumental in preparing Carriedo to handle a variety of situations. “Even though I’m at one program, I’m really at three sites, which can be very different from each other,” she said. “The PLI prepared me to be a courageous and well-informed principal leader.”

Some of that work includes creating systems, supporting different workplace cultures, and developing a mission and vision as a team.

“I learned how to include all parties and be very transparent, and to make sure that there’s a variety of folks that represent our schools involved in these efforts,” Carriedo said.

Another benefit of PLI: other PLI alumni. The Early Childhood Education program’s coordinator, Isabelle McDaniel, graduated PLI in 2013.

Isabelle McDaniel
PLI ‘13
Coordinator, Early Childhood Education program
Berkeley Unified School District

Isabelle McDaniel ‘13 has risen from classroom teacher to coordinator within just a few years, tackling the challenges every step of the way with aplomb.

She credits her success to the collaborative nature of the work at Berkeley, which prepared McDaniel for navigating both group and one-on-one meetings, and building relationships with people from diverse educational and ethnic backgrounds.

“Berkeley gave me a nice balance of theoretical underpinnings and why we make the decisions we do; the practical of what we do, budgeting analysis, class management; and what it is to be a leader, and build our own authentic selves as a leaders,” she said.
Learn More...
Each program in this report is committed to preparing 21st century educators who are dedicated to social justice and equity. Please contact us to learn more about the skills and dispositions our graduates contribute to the local educational landscape, and ask us any questions about the impact and quality of our programs.

Get Involved...
We invite you to partner with us in educating the next generation of education professionals. If you would like to suggest a collaboration that would benefit students and educators in your district or organization, please contact us.

Please contact:
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510-642-9908

Invest in future educators
Private support has a tremendous impact on the Graduate School of Education’s ability to develop a pipeline of educational leadership throughout California and the nation. Your gifts enhance our ability to recruit and prepare the very best education professionals, and pursue innovative research that informs practice and improves learning outcomes for all students.

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A NEW SUMMER ACADEMY

Designing for Equity: How Educational Leaders Create Research-Based Interventions

In Summer 2016, the GSE will launch an innovative Summer Academy in Design Development for Educational Leaders.

At Berkeley, we challenge leaders to think about problem solving through design and innovation. Educational settings are complex, and each local context is unique. Educational change depends on facilitating improvements in adult, and ultimately student learning. In the design mode, we turn our insights into prototypes, and we test and iterate our way toward solutions and create learning opportunities that truly benefit students and learning communities. Equity-relevant design development supports the values and ideals of visionary leaders with the evidence that their efforts and ideals have impact.

The Summer Academy will be led by Professor Rick Mintrop and a team of educators in Berkeley’s Leadership for Educational Equity Program, and is based on research from their new book Designing for Equity: How Educational Leaders Create Research-Based Interventions (Harvard Educational Press, 2016)

For more information, please contact:
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reba@berkeley.edu
510-643-4733

Pilot Collaboration Study

What conditions support collaboration among school professionals?

Recent educational policy and program initiatives call for high levels of collaboration between educators and student support service professionals to best serve the needs of the most vulnerable students in schools. Meaningful collaboration across school staff is also crucial to effective school functioning.

In Fall 2015, Professor Susan Stone from the School of Social Welfare and Dr. Jessica Charles, Director of Professional Programs in the Graduate School of Education, will conduct a pilot study in which they learn more about the conditions under which both practicing educators and pre-professionals collaborate to serve students. The purpose of this pilot is to extract a set of activities that show high potential for developing candidates’ collaborative skills. To learn more about this project, contact: gseprofprog@berkeley.edu.

Photos of program graduates and affiliates

Cover photo, L.- Esaúl Orozco R.- Summer Sigler
Jessica Nevins and DTE summer school student, pg. 3
Mark Ali, Heidi Avelina Smith, ATDP student, pg. 5
Teresa Barrera and students, pg. 10
Nicole Habeeb and DTE summer school students, pg. 15
Hazelle Fortich pg. 16

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