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Overburdened and Underfunded: California Public Schools Amidst the Great Recession

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Date of publication: June 15th, 2012

To cite this article: Freelon, R., Bertrand, M. & Rogers, J. (2012).
Overburdened and Underfunded: California Public Schools Amidst the Great
Recession. *Multidisciplinary Journal of Educational Research*, 2(2), 152-176.
doi: 10.4471/remie.2012.08

To link this article: <http://dx.doi.org/10.4471/remie.2012.08>

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Overburdened & Underfunded: California Public Schools Amidst the Great Recession

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Abstract

Since 2008, many nations, including the United States, have struggled with the effects of a global recession. The state of California has been particularly impacted by the Great Recession. Unemployment rates in California are among the highest in the United States, and a weak fiscal environment has forced deep cutbacks to a variety of state services. This study uses California as a case to explore the effects of economic crisis on public schools and the students they serve. The study draws on survey and interview data with a representative sample of public high school principals across California. The data show that, during the Great Recession, students have experienced growing social welfare needs that often shape their well-being and their performance in schools. We also find that the capacity of public schools to meet these needs and provide quality education has been eroded by budget cuts. This study finds that schools primarily serving low-income families have been hardest hit during the recession, in part because they cannot raise private dollars to fill the gap left by public sector cuts. The Great Recession thus has undermined educational quality while producing widening educational inequality in California.

Keywords: Public schools, Inequality, School finance, Economic recession.

"In the last two years, because of the fiscal crisis and budget cuts, I am down eight teachers.... I'm down six counselors. I'm down 10 clerks. I've lost all my security. And I almost lost my nurse and my school psychologist..."

This was the desperate commentary of Martin Baker, a high school principal in a low-income community in California who was facing unprecedented teacher layoffs and cuts to essential school services. Unfortunately, this principal's story is not unique. As the impacts of the current global economic recession have yet to abate, schools and students have suffered across the United States.

This crisis in United States' public schools has occurred within the context of myriad hardships caused by the economic slump that have taken a significant toll on the well-being of Americans. Throughout the recession, which began near the end of 2007, many Americans have experienced job loss, long bouts of unemployment, and record numbers of home foreclosures. As recent as December 2011, the average duration of unemployment reached about 40 weeks (39.7), suggesting a painfully slow economic recovery (Bureau of Labor Statistics, 2012). An increasing need for social supports has placed a strain on the administration of social services, which have experienced budget uncertainty in recent years.

Concurrent with this decline in the economic standing of the average American household, there have been calls for improving public education to maintain America's global competitiveness (U.S. Department of Education, 2010). Also, there have been growing concerns about the educational progress of students from low socioeconomic backgrounds and immigrant families. This focus on educational improvement generally and addressing the so-called "achievement gap" emerged before the Great Recession. However, the pressure to reform public education has grown in the last few years, even as education budgets have been slashed across the country (Dillon, 2011). Amidst calls for improvement, teacher positions have been cut, after-school programs narrowed, and text book purchases put on hold (Ceasar & Watanabe, 2011; Dillon, 2011; Mehta, 2009).

While these problems plague schools throughout America, California provides an interesting case study to demonstrate how students most in need of increased educational investments are receiving less opportunity in their schools because of cuts to public K-12 education and social support services. Education has been a target for cost savings in recent years as California legislators desperately seek to address budget shortfalls created by declining tax revenues (Shambaugh, Kitmitto, Parrish, Arellanas & Nakishama, 2011). Even prior to the recession, California had consistently spent less per pupil than the national average. Cost-adjusted per-pupil expenditures from 2008 show California ranked 43rd out of the 50 states in the nation, spending \$2,371 less for each student than the national average (Education Week, 2011). The long-term underinvestment in public schools, combined with California's more recent fiscal problems, heightens the challenges facing students and school staff in public schools.

This paper draws upon the insights of public high school principals in the state of California to explore the impacts of the budget cuts on schools and students. Below we discuss survey and interview data from hundreds of principals across the state. Principals are particularly well-positioned to illuminate these issues because they deal with school budgets and have direct contact with teachers and students. Principals are often the public face that represents the school to the community as well as district and state officials. Given their roles as administrative, instructional, and community leaders, principals have a unique vantage point from which to assess school and community conditions and student well-being. The principals' commentary provides a picture of how schools and students in California have fared in a recession that has reached across the globe. This context is of particular interest to an international audience because California is the eighth largest economy in the world (Legislative Analyst's Office, 2011), and due to a weak fiscal infrastructure and vulnerability to the mortgage crisis, one of the epicenters of the economic crisis in the United States (Bardham & Walker, 2010). The responses of California schools to global economic pressures can be instructive to education stakeholders worldwide.

California Context Before and During the Great Recession

California's context before the recession set the stage for the current weak infrastructure of California's public schools. From state tax initiatives and their impact on education funding, to growing economic inequality, and California's relative importance in the overall national economic collapse, funding for education and social services has been particularly challenging. In this section, we outline how each of these factors converged to create limited educational opportunities.

Proposition 13 and California Education Spending

As stated previously, California's most recent per-pupil education spending lags behind the nation and the majority of other states. Policy analysts argue that California has struggled to keep pace with national spending on education since the passage of Proposition 13 (McComb & Carroll, 2005). Proposition 13 was passed in 1978 by California voters as a backlash against taxation. The measure limited property tax rates to 1% of the assessed value of residential and commercial property. This proposition had several unintended consequences, including shifting the primary source of education revenues from local districts to the state of California. While most other states dramatically increased education funding in the 1980s and 1990s, California failed to keep pace, falling farther and farther behind the national average in per pupil expenditures (McComb & Carroll, 2005). By 2008, California spent \$2,371 less for each student than the national average, when cost of living differences are taken into account (Education Week, 2011). Initial indications suggest that the gap between California and the rest of the United States has grown in subsequent years, although data that would allow for definitive comparison is not yet available (California Budget Project, 2011a). With a growing population of immigrant families and low-income students who benefit greatly from additional educational supports, California is at a disadvantage in meeting the needs of a large proportion of students due to these continued fiscal challenges (Shambaugh et al., 2010).

Growing Economic Inequality

California, like the nation, is also experiencing increasing income inequality with income gains accruing to those at the top of the income distribution. Data from the [California Budget Project \(2011a\)](#) show that the average income of most Californians declined as those of the wealthiest increased substantially from the early 1970s to 2009. Additionally, during the recession, income for the lowest 10% of the income distribution fell by more than 21% compared to a 5% decline for those in the 90th percentile ([Bohn & Schiff, 2011](#)). This growing inequality, coupled with decreasing financial investments in public education, intensifies the challenges facing low-income families.

California as an Epicenter of the Great Recession's Impact

California has the largest economy in the United States and is among the top 10 economies in the world ([Bardhan & Walker 2010](#)). The state's economy accounts for 13% of the nation's Gross Domestic Product ([Bureau of Economic Analysis, 2011](#)). Yet, during the recession, California consistently has experienced one of the highest unemployment rates of any state in the nation. According to [Bardhan and Walker \(2010\)](#), because California has relied on construction and housing as key sectors for economic growth, the mortgage crisis left the state particularly vulnerable to the economic downturn. This, along with the state's longstanding budget shortfalls, placed California in worse shape than most other states in the nation during the height of the recession ([Bardhan & Walker, 2010](#)).

Impact of the Recession on Education and Social Welfare in California

The recession has taken a considerable toll on Californians as growing joblessness has pushed many families into tenuous financial positions. California lost more than 950,000 jobs between 2007 and 2009, placing many Californians out of work ([California Budget Project, 2009](#)). Further, the number of underemployed workers (who are unable to secure sufficient hours of regular work) more than doubled to approximately 1.4 million during this same time frame ([California](#)

Budget Project, 2009). These employment realities undoubtedly led to the higher levels of poverty many families in California are currently experiencing. The overall poverty rate in California increased to 16% by 2010, up from a low of 12% in 2006, the lowest rate since the mid-1980s (Bohn, 2011a). However, children and single-female households suffered the most, with a significant percentage slipping into poverty. According to Bohn (2011b), there has been considerable growth in child poverty since the beginning of the Great Recession. By 2010, 23% - almost one in four of California's children were living in poverty (Bohn, 2011b). In 2010, the poverty rate for single-mother households was 35.4%, compared to 10.6% for married-couple families (California Budget Project, 2012).

The confluence of California's budget deficit, growing economic inequality, and the Great Recession have been detrimental to the state's fiscal support for K-12 education, higher education, and social services. As a consequence, the proposed state budget for 2012-13 reflects cuts to the state's health insurance program for low-income families, Medi-Cal, as well as the Healthy Families insurance program, resulting in increased premiums for families. Additionally, the state's welfare assistance, CalWorks, is expected to see cuts to programs resulting in a disproportionate amount of stress and strain on women and children. Hence, the state is shrinking social services during a period of growing need. Between 2007 and 2009, the number of Californians receiving assistance from food stamps, CalWorks grants, Medi-Cal or the Healthy Families program all increased (California Budget Project, 2011).

The state of education funding in California is quite precarious. Over the last three years, funding for K-12 public education has fallen by almost 10% (Taylor, 2011). Further cuts will be made if California voters fail to pass a referendum on new taxes in November 2012. Meanwhile, fee increases in California's public higher education systems are making post-secondary education less affordable for students and families (Gandara & Orfield, 2011).

In subsequent sections of this article, we turn to the interview and survey results from California's public school principals as they provide detailed accounts of how the economic downturn has affected students, their families, and teaching and learning at their school sites.

Methods

In this article, we report the findings of a study conducted during the summer of 2010 by a cadre of researchers from the University of California, Los Angeles, Institute for Democracy, Education, and Access (UCLA IDEA). We interviewed and surveyed principals of schools from across the state of California, asking about the effects of the economic crisis on families and the impact of the budget cuts on schools. We surveyed 277 high school principals and interviewed 78 of those surveyed. These data illuminate not only the breadth of the impacts of the budget cuts and economic crisis on California high schools, but also the day-to-day struggles of students, families, and school personnel.

In recruiting participants for the study, we strived to create a sample that represented the demographic diversity of high schools within California. Our survey sample included roughly the same percentage of schools with low, medium, and high proportions of African American, Latino, and American Indian students (who are underrepresented in California's public universities) as the state as a whole. Our subsample for follow-up interviews slightly overrepresented schools with low and high proportions of these students.

We also sought to create a sample that reflected the income diversity in the state, as measured by the percentage of students receiving free or reduced price school meals (Children from families with incomes at or below 130 percent of the federal poverty level qualify for free meals. Children from families with incomes between 130 and 185 percent of the poverty line can be charged no more than 30 cents per meal.) The schools in our survey sample and interview subsample closely matched schools statewide in terms of free and reduced price meal rates. We analyzed differences among schools by free and reduced price meal rates, designating a school as low, medium, or high poverty or income depending on whether it landed in the bottom, middle, or top third of free and reduced price meal rates in the state as a whole.

In spring 2010, we created an online survey of 54 questions intended for California high school principals. The questions asked principals to assess the impacts of budget cuts at their schools and gauge the well-being of their students in relation to the economic crisis. Most questions were multiple choice, such as this example: "To what extent have bud-

get cuts for technology and technology maintenance impacted student access to computers and online resources at your school?" Possible answers for this question ranged from "No negative impact" to "Significant negative impact."

Our research team used the 2010 California Public School Directory to collect all the email addresses of public high school principals in the state. Then each principal was emailed a link to the online survey. Throughout July and August, after an initial wave of principals had responded, researchers sent second and third emails to principals who had not yet completed the survey. We also placed recruitment phone calls to targeted groups of non-responders in order to ensure that we collected a representative sample. The 277 principals who completed the survey represented 22% of all high school principals in California.

From the pool of 277 principals who completed the survey, our research team recruited principals to participate in follow-up interviews. This recruitment process began with the survey itself, which asked principals to indicate days and times when an interview would be convenient. Many interviews were scheduled in this way. As the interview pool grew, we analyzed the characteristics of the schools connected to the principals, noting whether schools serving certain demographics were over- or underrepresented. In particular, we examined racial breakdowns of the schools, free and reduced price meal rates, and geographic location. These on-going analyses guided us to focus additional recruitment efforts on principals of schools that were underrepresented in our pool.

Graduate students in UCLA's Principal Leadership Institute conducted half of the principal interviews, while the UCLA IDEA research team interviewed the other half. These interviews were audio-recorded and conducted over the phone, lasting about 30 minutes. Interview questions asked principals to elaborate on their survey responses. For example, if a principal had reported that budget cuts had negatively impacted professional development, we asked her or him to describe the impact and its consequences. Documents indicating which interview questions to ask a given principal were electronically generated and given to each interviewer.

We analyzed the survey data using a series of frequency tables and cross-tabulations by several categories of schools. We examined the

differences in survey responses by free and reduced meal concentrations, whether a school was in a high-revenue school district (with local revenue greater than \$1,000 per pupil), and whether the school was located in a low or high unemployment neighborhood. We looked for different patterns across these categories of schools to examine principal responses to questions about how budget cuts were disparately impacting schools.

We transcribed the audio recordings of each interview, resulting in 78 transcripts, which we then loaded into an online qualitative research program. In the program, each interview transcript was linked with demographic information about the high school of a given principal, including the proportion of racially underrepresented students and students receiving free and reduced price meals, geographic location, school size, and whether the school was in a high-revenue district. We coded these transcripts with more than 100 codes. Some of the overarching categories of the codes included: money matters, the principal's role, school conditions, stressors on students from the economy, and impacts on students. The coding scheme also included a floating codes category to capture compelling quotes, impacts on special populations, equity matters, and mentions of the economic crisis. We ensured that each researcher applied the codes in a consistent manner by coding several common transcripts and discussing our results. Once we had achieved inter-rater reliability, we coded the 78 transcripts, with two team members coding each one. After we had coded all the transcripts, we used functions within the research program to analyze code co-occurrence, or instances where two or more codes were applied to the same passage. We also used the software to investigate trends related to certain demographic or geographic types of schools. Finally, the research program helped us collect similar types of quotes, which we then analyzed by hand.

Growing Social Welfare Needs

As the economic downturn lingers, students' social welfare needs continue to grow. Throughout 2010, statewide unemployment exceeded 12% and underemployment was estimated at more than 20%, leaving many California families without secure housing, food, and clothing (U.S. Bureau of Labor Statistics, 2010). The principals in our study indicated how the failure of the economy has impacted the students at their schools.

In our study, 75% of high school principals reported that homelessness had increased among their students. Homelessness rose even in schools within affluent neighborhoods. A principal of one such school commented:

We've just seen more kids who have needed more support, either with transitional housing or that are living in hotels, being evicted. It used to be, I mean, we're in a pretty good area socio-economically, and I think it's been shocking over the last couple of years to see how many more of our kids are either evicted or [forced to move] because families lose their home.

In addition to homelessness, 82% of principals reported higher rates of residential mobility amongst their students. When jobs are lost, homes foreclosed, or eviction notices served, students end up moving.

Principals indicated that residential mobility hampered students' academics. As Principal Sue Booth explained, "The stability alone affects how our students are growing and having the ability to do homework or not do homework. A home plays a very important part of students' lives and their ability to be successful at school." Another principal pointed out that this mobility impacted standardized testing, a major focus of education policy in California and the United States generally.

Fifty-six percent of the principals we surveyed reported an increase in food insecurity amongst their students. Some principals reported an increase in applications for free and reduced price school lunches. Principal Kristin Hughes commented on the academic impact of hunger:

We see a lot more kids that are stressed out about it, They're worried about losing their homes, you know, Kids are hungrier, they're not making it to the end of the month with the salary that their parents have, and so we're seeing a lot more kids just in a state of struggle all the way around with their basic needs. You know, that's going to impact their academics because...learning math today is not immediate, whereas eating is.

Fifty-three percent of the principals indicated that they had seen a decrease in social welfare and health services provided to their students by government agencies or community groups.

Effects on Schooling Conditions

In addition to shaping the lives of young people outside of school, the Great Recession has impacted the quantity and quality of student learning. One of the main targets of budget cuts has been instructional time. Sixty-five percent of principals in our study reported cutting back or eliminating summer school. They expressed concerns about summer school cuts impacting students' ability to retake classes they had failed. Steven Chavez, a principal from Southern California, commented, "Students are going to not be able to make the credits up...and that's going to impact their eligibility to graduate." Another principal, Mike Mendez, argued that the loss of summer school also would have a "major impact" on college-going. His students would no longer be able to take "accelerated" classes in the summer that allowed "them to take a third or fourth year of science or a third or fourth year of foreign language" during the regular school year.

Schools have also cut after-school time and instructional days. Almost half (49%) of the principals from our study led schools that had reduced instructional days since 2008. Maria Sanchez, who took over a Los Angeles-area school that had fared poorly on standardized testing, commented, "Every day that students aren't in the classroom impacts their progress." Given her students' low scores in math and reading, she pointed to the "need to find time to have them in school longer." Thirty-two percent of the principals from our study reported reductions to after-school programs, including services for struggling students.

Many principals, such as Susan Louden, worried that struggling students would not catch up without tutoring and other support services.

In addition to cuts to instructional time, curricula have narrowed. Twenty-nine percent of principals reported that their schools offered fewer art or music classes. In addition, 34% of principals indicated that their schools cut back social studies electives. “Last year we were able to offer psychology, sociology...Latin American studies, and an international relations class,” explained Principal Rebecca Stevens. “But right now, in order to keep the class sizes from growing, we’ve had to pull our teachers to do the core classes.” Another principal reasoned that restricting course choices “negatively impacts motivation and engagement.”

Instructional materials have been impacted as well. The majority (57%) of principals in our study reported that their schools had cut instructional materials generally. Students at 63% of study high schools had less access to calculators, measuring instruments, and other key mathematical tools. Also, science laboratory equipment had been depleted, as principal Craig Galloway commented: “Kids are sharing microscopes, which gives them less time individually using them....Without the money to purchase equipment and supplies, instruction and learning suffers.” Another principal, Paula Diamond, described how her science teachers can no longer purchase a class set of frogs for dissection. Now there is just one set “for the class [which] the teacher shows on a document camera, and so that’s not really engaging learning.” Other principals reported that their schools have been unable to upgrade computers or purchase sufficient copy paper.

Principals also reported cuts to the schools’ essential infrastructure for teaching and learning—for example, custodians and community liaisons. Sixty-seven percent of principals revealed that budget cuts had impacted school cleanliness. Principal Mike Bianco noted that his smaller custodial staff had not been able to keep up with trash disposal, and this has led to “an increase in rodents, roaches, and other living things.” Glen Cohen in Santa Cruz County bemoaned the fact that despite the efforts of the depleted grounds staff, his “beautiful facility” is being “beat to a pulp.” Many principals noted that budget cuts had impacted their ability to foster a welcoming and empowering environ-

ment for parents. Forty-five percent of principals whose schools had community liaisons reported that these positions had been cut or reduced in hours. A similar proportion of principals noted reductions to parent workshops. Such programs, argued Principal Linda Garfield, play a key role in providing parents with the information “they need to know to help navigate their child through high school.” In addition, 34% of principals whose schools provided translation services said that these services had been cut. Ana Lopez, whose high school serves a primarily Spanish-speaking community, worried that reductions to translators would “create barriers” for parents to participate in school meetings.

Effects on Teaching and Learning

One of the most common ways for schools and districts to cut budgets has been through teacher layoffs, resulting in class-size increases. Such measures may hinder the creation of personalized learning environments in which student-teacher interactions are fostered, according to research (Blatchford, Bassett, & Brown, 2005, 2011; Folmer-Annevelink, Doolaard, Mascareño, & Bosker, 2009) and the principals in our study. Seventy-four percent of principals reported class-size increases at their schools. And this increase often has been dramatic. “We were blessed with 20 to 1 in English and 24 to 1 in math in my first two years, at the 9th grade,” noted one principal. Now those classes are at 35 to 1. Many other principals reported class sizes of more than 40. Another principal remarked, “I think it’s very difficult for them to come and ask questions, come and ask for help when they know the teachers...just have so much to do.” Principal Craig Galloway said, “Sitting in a sea of 42 kids per class, they barely have room to get through the aisles, they get less teacher time, less interaction.” Galloway calculated that with each assignment, English teachers grade 210 papers across five classes. “I shudder to think what the long-term impact of 40 students per class is going to have.”

Academic counselors have also been laid off. Half of the principals reduced the academic counseling staff at their schools. “Having less counselors for the same number of kids” has consequences for college access, argued Principal Henry Gonzalez. “It impacts their ability to

sit one-on-one to talk to kids about what they want to do... [and to provide] the information and tools to go to college.” Principal Scott Townsend saw a 20% increase in college admissions at his school after hiring a full-time college counselor a few years ago, but recently had to cut this position. He said, “With him gone now, all that [has] been eliminated. You know, you’re going to have a significant and immediate detrimental impact on that link. It’s a vital link.”

Effects on Educational Improvement

Researchers and policy makers agree that professional collaboration and professional learning are key to improving high schools (Wilson et al., 2009). Both beginning teachers and seasoned professionals stand to benefit from quality professional development that draws on teachers’ expertise, exposes them to new strategies, and supports them to tailor these ideas to their students and the unique context of their classrooms (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010). Such professional development requires time for teachers to meet, access to outside experts and networks of reforming educators, and a collegial and supportive environment (Darling-Hammond & Richardson, 2009). Few California high schools provide these conditions today.

Eighty-eight percent of the principals reported that budget cuts had impacted reform and school improvement efforts at their schools. These impacts usually took the form of cuts to professional development. Indeed, 86% of principals indicated that opportunities for teachers’ professional growth and development had been impacted by budget cuts. Henry Gonzales’ school had been in the middle of introducing teachers into professional learning communities when the recession hit. “That all has been shot down,” he noted, “and now we’re scrambling around.” Principal Kim Rogers similarly recounted how reform in her school “just sort of came to a standstill” after “the district froze our budget and said...you can’t pay to release them to give them time to work together.” Faced with the loss of professional development days, many principals tried to find smaller blocks of time for teachers to meet within the existing schedule. But, as principal Maritza Sandoval noted, “To really do the work you can’t do it in 45 minutes a week.” She concluded, “Yeah, they’re not going to be able to work together to the

same degree that they did before.”

Teacher layoffs have also been a barrier to school improvement. Many principals echoed the sentiment of Denise Garrison, who acknowledged that she and her staff had become “just so very demoralized” by the spate of recent layoffs. The layoffs are particularly hard on high-poverty schools struggling to build a cohesive school culture in spite of their longstanding patterns of high teacher turnover. These patterns are largely due to unequal distribution of school resources (including highly qualified teachers) and other factors that negatively affect teachers’ work lives in poorer neighborhoods (Futernick, 2007).

As teachers are laid off and budgets tighten, remaining teachers are asked to do extra work. Mike Mendez said his “teachers feel like they’re being pounded and pounded” as they are asked to do “more and more and more with less, less, less.” The furloughs imposed by Linda Garfield’s school district left her with a deep sense of ambivalence about whether to request her teachers to take on important additional work. “So then when you say, we’re going to cut you, but yeah, we want you to do these five things for free now, are there people who would do it? Yes. But do I feel like we should ask them? No.... I mean, you can only squeeze the turnip so much.”

Growing inequality

As budget shortfalls continue and education quality suffers, existing inequalities have grown. Even prior to the recession, California schools inequitably distributed resources along racial lines. During the 2007-2008 school year, schools with 90-100% African American, Latino, and American Indian student populations were more likely to be overcrowded, lack qualified teachers, and offer inadequate college preparatory curriculum than schools serving fewer of these students and more white and Asian American students (Fanelli, Bertrand, Rogers, Medina, & Freelon, 2010). For example, 55.7% of the 90-100% high schools were overcrowded, compared to 16% of schools serving populations that were 0-49% African American, Latino, and American Indian (Fanelli et al., 2010). These inequalities also exist along social class and wealth lines. Here we examine growing school inequality by

social class only, but research (Darling-Hammond, 2010; Ferguson, 2007; Muller, Riegle-Crumb, Schiller, Wilkinson & Frank, 2009) suggests that these inequalities are present along race lines as well.

Our data indicate that schools serving wealthier communities have been better protected from the budget cuts described in this article. For example, high schools in districts that relied less on state funding because of their substantial local revenue base were better able to protect instructional days and counseling staff. We compared survey responses of principals in school districts with additional local revenues greater than \$1,000 per pupil to the responses of other principals in our sample. One quarter of principals from high-local-revenue districts reported cutting instructional days compared with more than half of principals from other districts. Similarly, whereas one quarter of principals from high-local-revenue districts reported reductions to counseling staff, more than half of principals in other districts reported such cuts.

Table 1. Percentage of principals reporting cuts by school district affluence

% Principals reporting cuts to...	Schools in high-wealth districts	Schools in all other districts
Instructional days	25%	51%
Counselors	25%	52%

The affluent schools are better able to protect educational quality by drawing upon the wealth of neighborhood residents. One method of raising funds has been through increases to property taxes. In the state of California, school districts can ask voters to approve “parcel taxes,” or additional levies on top of regular property taxes. Requiring approval by two-thirds of the voters, parcel taxes are based on a fixed amount of money per “lot,” and are not calculated according to the value of the land itself. In 2009, 29 districts in the state (out of more than 1,000) placed parcel tax votes before their communities. In the 20 districts that passed a parcel tax, the average percentage of students receiving free or reduced price meal was 15.3%. In the nine districts that placed the parcel tax on the ballot and lost, an average of 56% of students received

free or reduced priced meal. No district in the state enrolling more than 40% of students receiving free and reduced price meals passed a parcel tax (Rogers et al., 2010). Hence, while local revenue generation through parcel taxes may hold some hope for more affluent districts, it does not seem to be a strategy that can ease the burden of districts serving substantial numbers of low-income families.

Our research also found that high-poverty schools have less capacity to generate private donations than low-poverty schools. Of the schools represented in our study, high-poverty schools raised one dollar for every twenty raised by schools serving few poor students. Schools with few students from low-income families received an average of \$100,000 in donations compared to \$5,000 for schools with a high proportion of poor students.

Table 2. Median donations by concentration of poverty for schools

	All high schools in survey	Low-poverty high schools	Mid-level poverty high schools	High-poverty high schools
% Free and reduced priced meals	0-100%	0% - 33.9%	34% - 62.9%	63% - 100%
Median	\$20,000	\$100,000	\$20,000	\$5,000

In addition to soliciting donations, California's schools increasingly are calling upon families to pay for services that had previously been covered by the school. Our study data indicated that principals were most likely to ask families to pay for field trips and sports, but a sizeable number of principals reported requiring parents to contribute for instructional materials or arts and music. Again, the impact differs according to whether a school is high or low poverty. For every service, principals from low-poverty schools were much more likely to require family contributions than principals from high-poverty schools. Six times as many (54% to 9%) principals of low-poverty schools reported that they required family contributions for arts and music. These differences are not surprising: Principals in high-poverty schools know

that the families they serve cannot afford additional expenses.

Table 3. Percentage of principals reporting they require family contributions for school activities and materials

Activities & Materials	All high schools	Low-poverty high schools	High-poverty high schools
Field trips	43%	53%	26%
Arts & music	34%	53%	9%
Instructional materials	19%	32%	9%
Summer school	12%	20%	5%
Tutoring	10%	15%	4%
Clubs	12%	17%	9%
Sports	47%	57%	30%

As high schools shift costs to families, inequality between schools often grows. Low-poverty schools that charge fees are better positioned to maintain services than high-poverty schools that do not. Further, when parents in low-poverty schools cover costs that high-poverty schools must pay out of their school budget, the low-poverty schools end up with more funds to spend on other budget items. Requiring families to pay for services also exacerbates inequality within schools. “Low poverty” is not the same as “no poverty,” and hence the imposition of fees can disadvantage students from poor families whose classmates are primarily middle class or affluent. Principal Kristin Hughes reported that, since her school began requiring students to bring additional materials beyond the textbook, students “whose families are very poor... will come without pencils, they’ll come without paper, and we’re unable to help them with that as we have in the past.”

When the scope of public school services shrinks, families with financial means often seek additional support in the private sector. For example, upper middle class and affluent families often employ private college counselors (McDonough, 2005). One recent national survey of students who performed well on the SAT or ACT found that more than

one quarter hired a private educational consultant to help them with the college admissions process (van Der Water, Abrahamson, & Lyons, 2009). Data from the United States Bureau of Labor Statistics point to the advantages that more affluent parents provide to high school students. On average, families of 15-17-year-olds with earnings above \$98,000 spent more than seven times as much on education-related expenses as families earning less than \$57,000 (Lino, 2009). Students from low-income families have few options when public schools cut back on counseling and other college access programs. Principal Larry McLaughlin explained, “We’ve been able in the past to contract someone to help our students, particularly students of color and first-generation...going to college, help them with writing their essays to get into college and support. And those programs, we don’t have the money for that.”

Conclusion

California’s public schools have faced significant challenges as the economic recession placed great strain on their ability to provide a quality education for students. Principals consistently reported that cuts have been felt and educational quality is suffering, but the suffering is not distributed equally. Our research demonstrates that during these difficult economic times, schools have cut back on instructional time and narrowed the curriculum, which denies students a holistic educational experience. Further, school improvement efforts have been undermined as teachers and principals have less time and resources for professional development activities that help enhance instructional practices. This, coupled with teacher layoffs or threats of teacher layoffs, made school improvements especially difficult. Our results also show that the economic crisis was challenging for schools serving low-income families and helped to create growing inequality. Most schools represented in our survey and interview data experienced numerous cuts as a result of the crisis, but schools serving low-income students were less able to provide a buffer for these challenges through private fundraising from parents and the broader community. While economists suggest an economic recovery is on the horizon in California, to date, this rebound has been sluggish. However, once the full economic reco-

very gathers steam, important questions should be answered. Will future economic prosperity in California provide a restoration of funding for public schools that was lost before and during the Great Recession? Or will schools have to learn to make do with less in the future? Given the national rhetoric regarding the importance of education in today's global economy, public investment in education and social support services for students' families seems to be a key ingredient to ensuring a quality education for all.

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