

Pepperdine Policy Review

Volume 14 Issue 2 Article 4

12-9-2022

Utilizing the Private Sector to Address California's Shortage of **Qualified Public School Teachers**

Christopher J. LaCreta Pepperdine University, lacreta.cj@gmail.com

Follow this and additional works at: https://digitalcommons.pepperdine.edu/ppr



Part of the Education Commons, and the Public Affairs, Public Policy and Public Administration

Commons

Recommended Citation

LaCreta, Christopher J. (2022) "Utilizing the Private Sector to Address California's Shortage of Qualified Public School Teachers," Pepperdine Policy Review: Vol. 14, Issue 2, Article 4. Available at: https://digitalcommons.pepperdine.edu/ppr/vol14/iss2/4

This Article is brought to you for free and open access by the School of Public Policy at Pepperdine Digital Commons. It has been accepted for inclusion in Pepperdine Policy Review by an authorized editor of Pepperdine Digital Commons. For more information, please contact bailey.berry@pepperdine.edu.

<u>Utilizing the Private Sector to Address California's Shortage of Qualified</u> Public School Teachers

Executive Summary

The process of recruiting teachers to serve in public schools across the United States is a complex issue. Despite public school teachers receiving some of the lowest median salaries of all professions, teachers are often required to endure harsh conditions in schools. Teachers continue to work despite few financial incentives and extensive requirements. Therefore, there must be deeper issues beyond these preliminary inefficiencies as to why California faces a shortage of well-qualified teachers in public schools. In this case, the term well-qualified is essential for understanding the issue, because even though teacher positions are technically filled, this does not mean that these teachers are well-prepared to serve in classrooms. This analysis and recommendation for addressing the California public school teacher shortage are directed toward the California Department of Education. The public education system has been so fiscally tied to the state of California's economy that it is a vicious cycle of teachers being laid off, the education system coming to a breaking point, then the state government finding money somewhere to stimulate the education budget and rehire teachers that are once again hastily qualified to teach.

Meanwhile, much of this cycle exists in a vacuum with little to no intervention from taxpayers or the private sector. This system of inefficiency cannot persist and this article's recommendation to the California Department of Education will be to mobilize the private sector by lowering the corporate tax for companies that aid in supporting teachers and providing grants to non-profit organizations so that they can offer alternative solutions to this problem. This activation of the private sector not only eases the financial burden of the state but also allows for innovative, competitive solutions for retaining teachers that the state could not otherwise achieve on its own.

Introduction and Brief History

Over the past decade, California has been dealing with a major teacher shortage that primarily originated from laws that were put in place even earlier than that. For most states in the United States, much of the general education budget is collected from local property taxes. This system, though often criticized, allows districts to essentially buy into their public education system. In most cases, the

¹ Murphy, P., & Paluch, J. (2018). Financing California's Public Schools. *Public Policy Institute of California*.

https://www.ppic.org/wp-content/uploads/jtf-financing-californias-public-schools.pdf

higher the property values in a given area, the more taxes can be levied, and a greater investment in education is in that district. This causes a direct correlation between income in a given area and funds invested into education in that area. California is unique from most states in that it does not collect much of its funding for schools from local property taxes. Proposition 13, which was passed in 1978, "lowered property taxes to a uniform 1% of assessed value...[and] the tax-relevant assessed value of a home is allowed to grow at only 2% per year unless sold." This Proposition, though helpful for homeowners and favorable among voters at the time, drastically constrained the local education budget. School districts were no longer able to turn to local taxpayers to have their financial needs met but instead resorted to getting most of their funding from the state budget.

This transition put a major burden on the State Government of California to make up for the lost funding. Immediate repercussions of the loss of funding included schools failing to meet pupil needs and cutting teacher salaries and school budgets. In 1988, there was a call by local school leadership under Proposition 98 to remedy the crumbling public education system with an influx of funding to make up for some of the losses that were incurred under Proposition 13. Proposition 98³ was an effort by concerned voters using the public education system to hold the California State Government more responsible for allocating existing funds to the public education system. This measure required "a set share of the state's General Fund (about 40%) OR at least the same amount as the previous year, adjusted for growth in student population and changes in personal income" to be allocated each year. 4 The measure did bolster funding to the public education system and it has also solidified a designated amount of funds that the state is required to put into the education budget. However, this has constrained the state budget dramatically and because of the heavy reliance on the state, the K-12 public education system is at the mercy of the financial state of the government and its ability to collect taxes.

Being at the mercy of the state became a serious issue during the 2008 financial crisis as the state spending budget was drastically cut and in turn, the

² 8.4 prop 13 and Prop 98: Then and now. (2021). Retrieved November 20, 2021, from https://ed100.org/lessons/prop13

³ **Proposition 13.** Provides three important functions in property tax assessments in California. Under Prop 13, all real property has established base year values (from the time it was purchased), a restricted rate of increase on assessments of no greater than 2% each year, and a limit on property taxes to 1% of the assessed value.

Proposition 98. Amended the state constitution to require a minimum percentage (around 40%) of the state general budget to be spent on K-14 education, which is referred to as the minimum guarantee.

⁴ 8.4 prop 13 and Prop 98: Then and now. (2021). Retrieved November 20, 2021, from https://ed100.org/lessons/prop13

allocation to education was also cut. This had a domino effect that ultimately resulted in the lay-offs of more than 30,000 educators as state programs were reduced.⁵ This was a harsh blow to the K-12 education system. Even though the federal government eventually intervened by subsidizing state budgets, these layoffs resulted in a lasting loss for qualified teachers in every state for several years. Qualified teachers felt slighted, and many teachers retired, cut their hours, or left the teaching profession altogether. There have been efforts to increase tax revenue and even during the financial crisis, some districts fared better "either because of a change in enrollment or because they were able to pass a real estate parcel tax". A parcel tax simply means that the local property owners were temporarily willing to supplement the school funds through their property taxes. However, this is not a sustainable solution, and tax revenues from the state are too unreliable and do not incentivize teachers to stay in California schools. The California State government will need to do a better job at concentrating its funding and resources into effective programs that help qualify teachers and keep them in the California K-12 system.

When considering potential policy solutions to this shortage of qualified teachers, it is important to understand not only the political actors involved but also the circumstances that may restrict the proper implementation of the given recommendation. One major actor whose needs must be met is the California Teachers Association (CTA), or any other teacher's union that seeks to protect California's teachers. These unions are responsible for negotiating salaries and other benefits for teachers through collective bargaining. Therefore, they must sign on to whatever new funding sources and training programs are implemented through the state or otherwise. The CTA and its subsidiary unions are often aggressive in attempting to get the state to comply with providing proper funding to teachers. These unions are especially useful in lobbying during great economic downturns such as the Great Recession and most recently, the COVID-19 pandemic. For instance, during the height of the pandemic "United Teachers Los Angeles...held a massive walkout ... as part of a national wave of teachers strikes...[and began] circulating a petition to gauge commitment from members

-

⁵ Plachta, A. (2020). Union to California's teachers: Brace for cuts steeper than the Great Recession. *Mercury News*. Retrieved November 20, 2021, from <a href="https://www.mercurynews.com/2020/06/22/union-to-teachers-brace-for-cuts-steeper-than-the-great-recession/#:~:text=A%20California%20Teachers%20Association%20bargaining.slashes%20to%20services%20and%20programs.

⁶ Jacobson, L. (2008). Thousands of California Teachers Await Layoff Fate. *Education Week*. Retrieved November 20, 2021, from https://www.edweek.org/teaching-learning/thousands-of-california-teachers-await-layoff-fate/2008/05

on battling potential [budget] cuts."⁷ It is these revolts by unions that would make any source of funding by outside sources other than the government quite difficult to engage in the issue.

Beyond the teachers' unions, perhaps the most precarious group to satisfy is the California taxpayer, specifically the taxpayer that does not have any connection to the public education K-12 system. The protections of Proposition 13 are considered crucial for modern taxpayers who would otherwise face significant tax hikes, and this law has remained largely intact. Other than parcel taxes, which serve as temporary fixes with limited funding, California taxpayers are unwilling to adjust Proposition 13 in any substantial way that would provide sustained funding for schools. Therefore, there must be an alternative solution that finds balance between engaging these political actors without requiring substantial adjustments from them.

Purpose

The purpose of this analysis is to address some of the state's inefficiencies that lead to an increasing gap between the high demand for teachers in California and the low supply of qualified teachers to meet this demand. The California public school system is the largest in the country as it serves nearly 6.2 million students. It is also one of the most diverse public education systems in the country as 1 in 4 students are English learners. This means that not only does California require an abundance of qualified teachers with a preference for those that are bilingual, but it also means that it cannot afford to disincentivize teachers from working in the public education system. However, ever since the Great Recession, nearly a decade of a tight job market, and a lack of reliable tax funds to hire teachers, the state of California has consistently run a shortage of teachers.

Despite a decade to recover from job losses and an influx of funding from state taxes to public schools under Proposition 30¹⁰, schools consistently report

_

⁷ Plachta, A. (2020). Union to California's teachers: Brace for cuts steeper than the Great Recession. *Mercury News*. Retrieved November 20, 2021, from <a href="https://www.mercurynews.com/2020/06/22/union-to-teachers-brace-for-cuts-steeper-than-the-great-recession/#:~:text=A%20California%20Teachers%20Association%20bargaining.slashes%20to%20services%20and%20programs.

McCarty, T. A., Sexton, T. A., Sheffrin, S. M., & Shelby, S. D. (2001). Allocating Property Tax Revenue in California: Living with Proposition 13. Proceedings. Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association, 94, 72. http://www.jstor.org/stable/41954705

⁹ Jimenez-Silva, M., Ruiz, N., & Smith, S. (2021). Lessons learned from exploring the potential of California's mini-corps tutors as future bilingual teachers. *International Journal of Bilingual Education & Bilingualism*, p. 1.

¹⁰ **Proposition 30.** A 2012 California ballot measure that was passed which temporarily increased taxes to avoid a \$6 billion education budget cut.

shortages in teachers. Proposition 30 was made in 2012 to alleviate a crumbling education system, but despite the influx of funding to provide for infrastructure and school repairment measures, it did not make up for the years of teachers avoiding the profession during the recession. The issue is so widespread, that "in fall 2017, a survey of California's largest districts, plus a sampling of rural districts—representing one-quarter of the state's enrollment—found that teacher shortages had grown worse yet again [with] fully 80% of district respondents [reporting] a shortage of qualified teachers for the 2017–18 school year."¹¹ The drain of certified teachers is a significant issue for the California Department of Education and it is an issue that needs to be addressed on all fronts.

Policy initiatives have been proposed to attempt to remedy this issue and get certified teachers attracted to job openings in California, but these solutions are often government-centered approaches. These solutions only contribute further to the issue, failing as the government is part of the reason for the current failures. While they must logistically have a hand in incentivizing teachers, a market-based solution would be more valuable in remedying this issue. This detraction can be observed not only through teachers leaving the profession or not starting in it but also through the consistent under-enrollment in teacher preparation programs. The recent data shows that "consistent with declines in enrollments, the number of program completers declined by 25% [from 2013 to 2018]". The gap between the demand for teachers and the supply of qualified teachers is a considerable issue. This inefficiency and the overwhelming shortage will be addressed more fully in the next section.

Policy Problem: Too Few Qualified Teachers

The problem facing the California public education system is that there is a significant shortage of qualified schoolteachers. It is important to specify qualified teachers because although there are teachers in classrooms, they are considered substandard¹³ teachers that only meet the bare minimum requirements. Normally, the credentials for California teachers are equivalent to most states or even higher. For instance, "unlike most states, California requires a fifth year of college and often a master's degree to obtain a teaching credential." ¹⁴ The decline

¹¹ Darling-Hammond, L., Sutcher, L., Carver-Thomas D. (2018). Teacher Shortages in California: Status, Sources, and Potential Solutions. p. 1.

¹² Darling-Hammond, L., Sutcher, L., Carver-Thomas D. (2018). Teacher Shortages in California: Status, Sources, and Potential Solutions. p. 4.

¹³ **Substandard Teacher:** An individual who has not completed a teacher preparation program nor demonstrated subject-matter competence and is serving as a teacher with emergency 1-year credentials.

¹⁴ McKinney, N. (2017). SB 933: The California Teacher Corps Act of 2016, Educating Educators. University of the Pacific Law Review, 48(3), 600.

in qualified teachers is largely due to the inability of prospective teachers to pay for schooling costs among other expenses to meet these qualifications. ¹⁵ With the emergent need for teachers, public schools are forced to hire substandard teachers, which further undermines the need for proper credentials and in turn causes students to suffer. This has become such a problem that in 2017, "districts reported hiring teachers on Provisional Intern Permits (PIPs), Short-Term Staff Permits (STSPs), and waivers, and half of those districts hired a greater proportion of teachers on emergency-style permits." ¹⁶ A breakdown of district credentials of teachers in Figure 2 of Appendix A, displays the magnitude of this disparity. The priority must be to patch the holes within the system and get the existing teachers certified and ready to do their jobs. The California Department of Education must direct its efforts into strengthening teacher preparation programs and incentivizing prospective teachers early on to pursue the position and stay in it. The final goal to consider at this level of political analysis is to create a program that retains teachers and provides for their basic needs.

An additional issue to consider that is unique to the shortage of California teachers is that teachers are often not only required to be teachers, but also translators for many of their students. Despite the slight uptick in hiring of teachers "nearly a third of schools looking for bilingual Spanish teachers and half of those seeking bilingual Chinese teachers said they were having 'substantial challenges." The teachers that have started the past several school years are simply not qualified beyond the bare minimum and those who are qualified are leaving the schools in droves each year. One of the main contributors to this prolonged teacher shortage is a high attrition rate of teachers, for even if the state goes through the process of qualifying teachers, there is no guarantee that teachers will stay in their positions. Since the Great Recession, "nearly nine of 10 hires each year are needed to replace teachers who left" and this is not simply from retirement as "most attrition is caused by teachers changing districts or leaving the

_

¹⁵ De Wit, D. (2018). AB 45: Addressing California's Teacher Shortage with Affordable Housing. *University of the Pacific Law Review*, 49(2), 403.

Darling-Hammond, L., Sutcher, L., Carver-Thomas D. (2018). Teacher Shortages in California: Status, Sources, and Potential Solutions. Getting Down to Facts II: Stanford University, 10

¹⁷ Darling-Hammond, L., Goldhaber, D., Strunk, K., Sutcher, L. (2018). Teacher Supply Falls Short of Demand in High-Need Fields, Locations. *Getting Down to Facts II: Stanford University*, 8.
https://www.gettingdowntofacts.com/sites/default/files/2018-09/GDTFII_Brief_TeacherSupply.pdf

¹⁸ Darling-Hammond, L., Goldhaber, D., Strunk, K., Sutcher, L. (2018). Teacher Supply Falls Short of Demand in High-Need Fields, Locations. *Getting Down to Facts II: Stanford University*, 3.

profession."¹⁹ This pairing of less-than-qualified teachers in the public education system along with the propensity for teachers to leave shortly into their tenure makes for a challenging environment that the California State Government must face.

Policy Rationale

California has consistently run a deficit of qualified teachers, around 10,000-15,000 each year over the past decade, and the response of the state has simply been to inject more money into the problem without considering another mechanism to incentivize teachers. The purpose of this section is to outline how the State government has failed to encourage new teachers into the field due to its inability to adapt. The State government cannot compete with private market competitors that offer potential teachers greater benefits. Therefore, it should not compete but instead, collaborate with private companies to offer more adaptive and beneficial certification programs.

a. Type of Market Failure

The state-run monopoly over the public good of K-12 education in the United States is a considerable market inefficiency that can only be addressed by external intervention from private market powers. California specifically funds education through its vast array of tax programs and therefore it restricts the private sector from intervening to incentivize teachers beyond minimal corporate philanthropy. Multiple government efforts have been made to boost educational funding including propositions that injected massive capital into this failing system. The problem with this funding is that even though it gets potential teachers in the market with preparation programs and bonuses to salaries, it's not a sustainable measure. Eventually, the money is not enough, and worse than that, this implies that teachers solely care about the financial benefits when working in schools, which is often not the case.

The problem with the California Department of Education and other state Education Departments, in general, is that they often act as if they exist outside of the market functions. Even though these organizations monopolize the public system and specifically the profession of teachers, this is not the only problem. A greater issue exists in that they unknowingly provide market regulations on

¹⁹ Darling-Hammond, L., Goldhaber, D., Strunk, K., Sutcher, L. (2018). Teacher Supply Falls Short of Demand in High-Need Fields, Locations. *Getting Down to Facts II: Stanford University*, 10.

²⁰ Burns, D., Carver-Thomas, D., Kini, T. (2020). Sharpening the Divide How California's Teacher Shortages Expand Inequality. *Learning Policy Institute*, 3.

teachers, like extensive and expensive certification processes, yet they question why the labor supply is not able to meet the demand of the schools. With that being said, the California Department of Education has attempted to lessen the requirements needed to teach. However, this protocol is set up more as an emergency option and they indicate shortages as they are considered "substandard'…teaching authorizations issued to candidates who have not completed the testing, coursework, and student teaching requirements that are required [by] the California Commission on Teacher Credentialing (CTC)."²¹ This substandard is merely patching the many holes that exist in this system and rather than desperately certifying minimally qualified teachers, it would be more sustainable to encourage them to teacher preparation programs and to help them bear the financial burdens that come with this certification.

The California State government falls short in that it has disregarded the power of the private sector. With a public good so deeply seated in government bureaucracy like the United States K-12 education system, it is difficult to contemplate how the private sector could have any meaningful intervention. However, history has shown that the most effective solutions to government inefficacies are market solutions, specifically through corporate philanthropy. Corporate philanthropy does not necessarily just mean altruistic behavior from firms in a sporadic manner, but more explicitly it can mean the provision of real change and consistent partnerships with private firms and non-governmental organizations, on the condition of deregulation of the market and incentivizing government grants. This philanthropic approach to the existing market failure will be discussed in greater detail in the next section.

b. The Role of the State

One way that the state can get involved in encouraging corporate social responsibility is through tax incentives. Corporations, especially in California, pay numerous taxes and other remunerations to the state every year. This money is directed into the general tax fund that the state funnels a portion of into the public education system. However, this process can become much more direct as the state offers tax breaks to corporations that are willing to give a portion of their profits and resources to schools. The state must be willing to allow for tax breaks that incentivize companies to support teachers, and this policy option takes little effort from the state to succeed and instead channels resources from corporations into schools as they create competitive programs to solve school inefficiencies. This method demonstrates that corporations do not only have to have altruistic

²¹ Darling-Hammond, L., Sutcher, L., Carver-Thomas D. (2018). Teacher Shortages in California: Status, Sources, and Potential Solutions. *Getting Down to Facts II: Stanford University*, p. 5.

intentions to help schools, but they can also use corporate social responsibility to build their reputations.²²

The California public education system being as large as it is requires more than state operation and resources to make it function. Not allowing the private sector to be involved in more than minimal donations is a serious loss. The State of California is the main source of funding for public education and it outweighs many states in direct state funding because it collects little from property tax. For instance, in the 2018-2019 year alone "California public schools received a total of \$97.2 billion in funding from three sources: the state (58%), property taxes and other local sources (32%), and the federal government (9%)."23 It is important to note in Figure 1 in Appendix A, that not only is the bulk of K-12 funding through the state or taxes in general but there is only a small portion dedicated from local sources (10%). These local sources -though undefined in the graph - are most likely sourced from corporations through philanthropic donations. These would be local businesses providing grants, or non-profit organizations covering some of the extraneous costs based on their altruism. Therefore, one could only imagine the untapped potential of these sources in providing more funding and resources. It is unlikely that states will ever turn their public education into a completely private enterprise, but even raising another 20% of overall school funding from corporate sources could significantly ease the burden on the state. The state should pursue a much more conservative approach to its funding of the K-12 system, and these options will need to be explored in greater detail when considering potential solutions to the shortage of California teachers.

c. The Role of the Private Sector

At the current rate with local sources like corporations and nonprofits only providing 10% of overall funding and resources, the California State government must do something to incentivize the private sector. If the state government wants to get corporations and the private sector involved they must be willing to make education more appealing to donors. Their proposals must be framed so that corporations and other outside resources are invested in future voters and create programs that allow them to have free advertising in schools. This is not to say that children should be used as advertising ploys simply to get corporations to

²² Powell, D. (2019). The "will to give": corporations, philanthropy and schools. *Journal of Education Policy*, 34(2), 197. https://doi-org.lib.pepperdine.edu/10.1080/02680939.2018.1424940

²³ Murphy, P., & Paluch, J. (2018). Financing California's Public Schools. *Public Policy Institute of California*.

https://www.ppic.org/wp-content/uploads/itf-financing-californias-public-schools.pdf

profit, but it is an added benefit that corporations can bring their product and put their name on schools when they act in a level of sponsorship.

The best way to get the private sector involved is through a measure of tax breaks that are only allotted to companies that put a high level of social responsibility into schools. With such high taxes in California especially on corporate tax, any alleviation could make an incentive for companies to get involved. This is a common strategy in Europe, which has high taxes like California. Studies show that "[any] provision by the state tax of other incentives to the companies for an activation in problem areas and sections, would temper the increase in social and employment problems and would significantly reduce unemployment."²⁴ In other words, one of the major benefits of corporate social responsibility is that it reduces unemployment because the market can find solutions to teacher problems that could not be solved by the state. Although corporations are often involved in schools to some degree by providing physical infrastructure, they could provide programs like sponsoring a teacher. These programs could benefit the public education system because there would be less strain on the state to provide all the benefits to teachers like healthcare, housing, and scholarships for future education.

One small example of how the state could work with corporations is through the establishment of affordable housing for teachers. As is well known, teachers do not make high salaries, and in fact, the California teacher's median income is around \$67,000.²⁵ This salary is hardly livable in California, and if one does not have a supporting income either through joint income with a partner or another job, it is extremely difficult for teachers to find decent housing. With the average rental price of a one-bedroom apartment in San Francisco being \$3,387. over 12 months, this would take over half of that salary in housing alone. ²⁶ The income level can be higher, reaching nearly \$83,000 depending on location, but only teachers that have certain higher qualifications can achieve this level of income. However, since California faces a major shortage of qualified teachers and instead has to emergency certify underqualified teachers it is unlikely that these teachers will reach this level of income. The state has attempted to provide some affordable housing, but these are often taken by residents who are in much more dire circumstances and make even less than teachers. Therefore, a market solution would be for companies to sponsor teachers and their housing through

²⁴ Georgaraki, D. (2011). Tax incentives in corporate social responsibility. *Global Conference on Innovations in Management*, 157.

²⁵ Soika, B. (2020, September 8). Factors that affect California teacher salary: USC rossier. USC Rossier School of Education. Retrieved October 8, 2021, from https://rossier.usc.edu/eight-factors-that-affect-vour-california-teacher-salary/.

²⁶ Kaneshina, K., & Warnock, R. (2022). "Average Rent in San Francisco & Rent Price Trends". Apartment List. https://www.apartmentlist.com/renter-life/average-rent-in-san-francisco.

social corporate philanthropy. Alternative market-based programs will be explored more deeply in the policy alternatives section.

Involving Outside Actors

The education sector does not exist in a vacuum and there are many players involved, and with any policy that affects students and teachers, there needs to be significant buy-in from the public for it to be politically feasible. The California public K-12 school system like all state-run school systems is established as a largely top-down organization that is not conducive to outside involvement from private entities. Multiple layers will require convincing including voters, local politicians, and unions. These factors must be considered to achieve the desired outcome of private sector involvement to remedy qualified teacher shortages.

a. Considering Public Choice and Political Feasibility

Much like any policy sector that requires state funding, the California public school system is subject to the will of political actors who often would much rather invest funding and resources into recipients that will benefit them politically. This phenomenon is defined by the economist James Buchanan as Public Choice Theory. This theory explores the idea that "government [behaves] as a unit seeking to maximize its welfare and having an agenda quite separate and different from that of society."²⁷ In other words, the politicians in charge of making the state budget through legislation will seek to offer resources in a mutually beneficial relationship, and will often avoid schools that do not provide voters in the election or campaign funding resources. These politicians would rather provide support to sources that will benefit them and frame legislation that often overtly disregards schools. However, what politicians often fail to see is the significant potential in these schools and the entire market they are not utilizing.

This quid-pro-quo relationship between elected offices and public resources is common in politics in all countries. Therefore, one could argue that the solution to managing deficiencies in the public education system is not to resist this political game but to play with a competitive edge. The education sector is often disregarded by political interest groups because it does not necessarily produce measurable profits and likely drains the state budget in the short run. Interest groups are not just corporations seeking to gain profits, but also California residents who pay property taxes and expect a quality education system

²⁷ Gallagher, M. (1993). A Public Choice Theory of Budgets: Implications for Education in Less Developed Countries. *Comparative Education Review*, 37(2), 94. http://www.istor.org/stable/1188679

with a sufficient number of teachers in return.²⁸ These residents are voters contributing votes and money to campaigns and private companies and it is important they remain satisfied. Therefore, to increase the political feasibility of engaging the private sector in a public good like education, the California State Government must be willing to use programs that entice private enterprises into funding educational initiatives with the frame of mind that these two entities of public schools and private firms can work together with a mutually beneficial goal of improving social welfare.

b. Policy Type of Best Remedy

The capitalist system in the United States allows for not only government intervention in addressing social issues, but it also offers great contributions from major corporations. Because of this, "wealthy corporations and industries [assume] 'socio-moral duties that were heretofore assigned to civil organizations, governmental entities, and state agencies." Therefore, it would be wrong to believe that these corporations could not also intervene in the failing good of public education. Regarding the overarching policy type that is decided by the California Department of Education, whatever approach they choose to remedy this issue must be more conservative in its method than previous approaches. In other words, the state must be willing to either fully step back and let the market intervene, or at the very least work to collaborate with market partners in a mixed approach.

There are several ways that the issue of the supply of teachers not meeting the demand could be resolved with market strategies. Ultimately, they all require market-funded resources. One potential solution is for the market to intervene, as it often does now, and fund physical school resources. By physical resources, one could look at companies paying for usable, school-wide technology like Verizon's provision of tablets, or other materials like Disney's donation of 23.1 million books between 2012-2016.³⁰ Additionally, it is also important to consider the indirect social effect that large corporations have on schools by funneling money through non-profit organizations that support education. This is the method for some large corporations like Facebook that fund organizations centered on

²⁸ Murphy, P., & Paluch, J. (2018). Financing California's Public Schools. *Public Policy Institute of California*.

https://www.ppic.org/wp-content/uploads/jtf-financing-californias-public-schools.pdf ²⁹ Powell, D. (2019). The "will to give": corporations, philanthropy and schools. *Journal of Education Policy*, 34(2), 196.

https://doi-org.lib.pepperdine.edu/10.1080/02680939.2018.1424940

³⁰ McFadden, J. (2016, December 28). 7 Big Companies Giving Back to Schools in Big Ways. We Are Teachers.

https://www.weareteachers.com/7-big-companies-giving-back-schools-big-ways/

improving public education, but it can also be a realistic approach for individual donors. Individual donors may not have means beyond financial funding, but they can significantly raise their impact on solving social issues by partnering with a non-profit organization.

Along with corporations providing philanthropic resources through their funding and assets, it is important not to forget non-profit organizations that also fall within the realm of the partially private sector. Non-profit organizations have already been in the public school system for years including organizations like Teach-for-America, City Year, Jumpstart, and other AmeriCorps programs. Although these are all funded partially by the government, they are run primarily as private agencies, and because of this, they have more of an ability to create strategic plans for improving problems without government direction. One way non-profits have intervened in better preparing teachers is by providing residency programs to credential teachers at the university level.³¹ This approach appears to be state-centered as non-profits would require funding from the California Department of Education, but it is still a more conservative approach as the state is not limited to its own prescription of solutions. Non-profits provide numerous ideas for solutions to social problems and in a way, they compete similarly to how firms do in a competitive market. Therefore, it would be wise for the California government to invest in these non-profits with grants and additional state resources, so that they can provide more alternative solutions to the teacher shortage.

Assessing Criteria

Any policy alternative that the California Department of Education chooses to pursue should be assessed prior under several goals that meet the criteria. The alternative policies are considered in terms of five policy goals: (1) equity of funding and initiatives to all California school districts; (2) efficiency of mechanisms; (3) favorable fiscal impact to the state; (4) political feasibility and ability to enact legislation; and (5) level of corporate or outside involvement.

a. Impact on Equity

The ideal policy must be able to cover the vastness of the Californian public education system, and no teacher can be left behind on their path to qualification. It is clear that the "highly qualified teacher shortage disproportionately affects

³¹ McKinney, N. (2017). SB 933: The California Teacher Corps Act of 2016, Educating Educators. *University of the Pacific Law Review*, 48(3), 602.

school districts with economically disadvantaged student populations."³² There are several reasons why this is the case, but one major contributor is that school districts with lower incomes do not have the property taxes that supplement the infrastructure both physically and strategically that wealthier districts possess.³³ Teachers are unlikely to want to pursue employment in these districts for fear that they will work twice as hard without being paid extra for this added disadvantage. Therefore, it must be the priority of policymakers to understand the issues plaguing these lower-income districts, while also not assuming that fiscally sound districts do not also need qualified teachers.

b. Impact on Efficiency

The ideal policy should maximize the efficiency of certifying teachers promptly and support them after they get their qualifications. A major issue in the California public education system and the K-12 system, in general, is the attrition of teachers after their first year or even shortly after they are qualified. Independent researchers for the California Education Department report that the "percentages of attrition vary between 30 percent and 50 percent, with many qualified teachers never entering a classroom or leaving the job after a short period of teaching experience". This mass exodus of teachers shows how the current mechanisms that exist only seek to support teachers in the short run and not the long run by raising salaries, providing loan forgiveness, and lowering qualifications. This does not support the teacher as a whole and no real sustainable programs exist to support teachers in the long run in a sponsorship-type model. Therefore, any policy chosen by the Department of Education must be able to manage this issue and incentivize teachers into the profession by cutting costs and contributing to their benefits.

c. Favorable Fiscal Impact

The ideal policy must consider the fact that the California State Government has already contributed significant funding to this issue, and funding at the very least should remain constant and preferably minimized concerning state sources. The

³² De Wit, D. (2018). AB 45: Addressing California's Teacher Shortage with Affordable Housing. *University of the Pacific Law Review*, 49(2), 404.

³³ Burns, D., Carver-Thomas, D., Kini, T. (2020). Sharpening the Divide How California's Teacher Shortages Expand Inequality. *Learning Policy Institute*, 31.
https://learningpolicyinstitute.org/sites/default/files/product-files/Sharp_Divide_California_Teacher_Shortages_REPORT.pdf

³⁴ Struyven, K., & Vanthournout, G. (2014). Teachers' exit decisions: An investigation into the reasons why newly qualified teachers fail to enter the teaching profession or why those who do enter do not continue teaching. *Teaching & Teacher Education*, 43, 37.

state has already enacted numerous pieces of legislation like Proposition 98 that solely injected funding into the problem without the accountability of management. Due to this shortsighted approach, the California public school system lags and bears much of the costs associated with the loss of teachers. If anything, the minimum 40% funding outlined in Proposition 98 should look somewhat like the maximum or base funding for the state, and funding from other resources must be encouraged to sustain a strong public education system. Therefore, any policy initiative set forth must seek to limit the costs of the state substantially.

d. Political Feasibility

Like any policy sector, education has many political actors seeking their interests and different parties associated with obtaining a certain benefit. The ideal policy would satisfy all or a majority of these actors so that it can be adopted and transform the public education system. It should be known that "politicians and bureaucrats are not presumed to seek to maximize the welfare of society, even if we could determine what it is society actually wants." So, it should be noted that corporations and the private sector are not the only actors seeking their private interests. Therefore, any policy that the state chooses to pursue must balance outside actor benevolence with the pursuit of personal gain. By leveraging public choice, the state can choose a politically feasible option that satisfies all affected parties.

e. Corporate Involvement

The state mechanisms for solving this issue of a shortage of qualified teachers have consistently proven to be insufficient in response. Therefore, any ideal policy must have a substantial amount of involvement from the private sector. This field is a wealth of untapped resources not only in the financial sense but also in mechanisms that can be much more efficient than the current system of certifying and supporting teachers throughout their tenure. The private sector is hardly involved in the monopolized public good of the K-12 system, and it is essential that whatever policy is pursued by the Department of Education stretches beyond state resources and seeks a mechanism from the private sector.

These various goals must be met in a significant way for a policy to be considered optimal to qualify and retain teachers in California. The current policy which

³⁵ Gallagher, M. (1993). A Public Choice Theory of Budgets: Implications for Education in Less Developed Countries. *Comparative Education Review*, 37(2), 94. http://www.jstor.org/stable/1188679 allows for emergency certification of substandard teachers does not meet any of these criteria and although it is politically feasible, substandard teachers filling the roles of qualified teachers is not a sustainable option. Therefore, considering these tradeoffs as outlined in the summary table, the recommendation to the Department of Education is to work with state legislators to get clearance to give tax credits and grants to the private sector to fix this market inefficiency.

Analysis of Policy Alternatives

A. Current Policy

Under current policy, the state is bearing the burdens of teacher shortages and despite being able to hire teachers with minimal experience, the Department of Education is managing this problem under emergency circumstances. There are people in teaching positions, but this does not imply that the teachers are qualified and they are not meeting many of the standards necessary for California public education. For instance, there is a significant shortage of bilingual teachers within the public school system and with 1 in every 4 students being an English Learner (EL) this shortage cannot persist.³⁶ Meanwhile, legislation continues to be passed that only extends the issue and gap of qualified teachers. Legislation like "Education Code Section 44325 extended the opportunity for qualified individuals to receive an intern teaching credential, which is a type of emergency teaching credential that allows them to manage a classroom while receiving their teaching certificate".³⁷ Although this seems like an effective strategy, it only puts a band-aid on the issue and furthers the gap between substandard and well-qualified teachers.

The current policy also seems to be causing a widened gap in funding as the state is providing funding, but also incurring greater costs. Qualified teachers that have been in their positions for years are retiring, and because of this the state is not only putting money into programs to recruit new teachers, but it is also taking on the costs of the older teachers with retirement benefits. School districts are incurring costs that are not being kept up by the state. "In 2013, school districts were required to pay 8% of their teacher payrolls for pensions, [but now in] 2020, that contribution [has risen] to 19%, requiring districts to pay about \$1

³⁶ Jimenez-Silva, M., Ruiz, N., & Smith, S. (2021). Lessons learned from exploring the potential of California's mini-corps tutors as future bilingual teachers. *International Journal of Bilingual Education & Bilingualism*, 1.
https://doi-org.lib.pepperdine.edu/10.1080/13670050.2021.1904820

³⁷ McKinney, N. (2017). SB 933: The California Teacher Corps Act of 2016, Educating Educators. *University of the Pacific Law Review*, 48(3), 595.

billion more over each of the next three years." These rising costs diminish any efforts to put money into programs that recruit and sustain teachers and because of this, there must be some financial alleviation for the state. The state continues to approach this problem with a financial influx, but there are simply too many holes to fill and the solution may not necessarily be a fiscal one at all. The state must be able to change the behavior of incoming teachers so that they first desire to pursue the industry but also plan to stay in it.

B. Raising Taxes to State-Funded Programs

This policy alternative argues the burden be levied on taxpayers through manipulation of California tax laws. It differs from the current policy because instead of portioning education funds from the general budget and existing tax base, it would increase property taxes for all residents based on their current property values. The taxpayers of California do offer less direct tax than many states as the property tax under Proposition 13 for California residents is limited to a 1% increase each year and is allocated under the authority of the state government.³⁹ The state could afford to amend the legislation of Proposition 13 so that districts with higher property values and more affluent communities could offer directed funds to schools and accept less general state funding. It could also incentivize teachers to get certified for the sake of those school districts, as the market becomes increasingly competitive. This framework is similar to most other states like New York and New Jersey which have some of the highest property taxes contributing to school funding.

This is a plausible way to alleviate state funding and would put more responsibility on the taxpayers, but it does run the risk of political infeasibility as Proposition 13 and the regulated low property tax are staples for California residents. It is unlikely that much could be changed in this regard and the state would have to levy more taxes in other sectors. Along with considering the political feasibility of raising taxes, this could disproportionately affect the school districts and though one district may thrive due to high property values, it does potentially widen the gap of inequality if not properly regulated. In this policy, it is important to consider the fact that the state may not necessarily need solely more funding, but also a better management system to incentivize teachers into

³⁸ Murphy, P., & Paluch, J. (2018). Financing California's Public Schools. *Public Policy Institute of California*.

https://www.ppic.org/wp-content/uploads/jtf-financing-californias-public-schools.pdf

39 McCarty, T. A., Sexton, T. A., Sheffrin, S. M., & Shelby, S. D. (2001). Allocating Property Tax
Revenue in California: Living with Proposition 13. Proceedings. Annual Conference on
Taxation and Minutes of the Annual Meeting of the National Tax Association, 94, 71–80.

http://www.jstor.org/stable/41954705

the job market. This will be considered in the next policy alternative which seeks to combine the private and public sectors more advantageously.

C. Utilize the Private Sector to Build Efficiency and Distribute Costs

The last policy alternative considers working with the market in a more efficient way by utilizing corporate social responsibility. Partnering with private corporations as well as non-profit organizations is a strong alternative to current policy, as it not only alleviates costs on the state but also involves different actors with alternative solutions. The market invites competition and diverse ideas and this is exactly what the state needs to incentivize teachers to join the industry. There are many examples of schools partnering with industries, specifically in the medical field and scientific fields as industries hire from training programs. Therefore, it should be no issue to translate this into the education field as private organizations recruit teachers and in turn sponsor them in the public school system. The goal of this policy would be to create a system of cost-sharing. Even in the private sector, "the sustainability of industry-school partnerships [is] threatened by economic fluctuations, which tend to impact financial contributions of industry partners". However, when these two sectors come together there is an extraordinary mechanism for dealing with inefficiencies.

Major players that the California state government has yet to utilize are the many corporations and even small businesses that exist in California. Just recently it was reported that "in 2018, California ranked #1 in terms of the absolute number of public company headquarters located in the state, providing a home to 675 companies." With each of these companies being required to pay a nearly 9% state corporate tax, it is reasonable to believe that these tax revenues could be used more effectively elsewhere. The agency that collects this corporate tax is the California Franchise Tax Board (CFTB) and this agency is controlled by the state. Through legislation and independent orders, the agency is allowed to levy taxes on individuals, corporations, and even nonprofit organizations. ⁴² If the California Department of Education were to work with the California Franchise Tax Board to lower this tax based on companies completing socially responsible projects in schools, there is a greater likelihood that there could be more lasting change.

⁴⁰ Flynn, M., Pillay, H., & Watters, J. J. (2016). Sustaining Partnerships between Schools and Industry: A Minerals and Energy Case. *International Journal of Adult Vocational Education and Technology*, 7(4), 73.

⁴¹ Bishop, K. (2021). These Data Show That California Is Number Corporate Headquarters. *The National Law Review*, 11 (325).
https://www.natlawreview.com/article/these-data-show-california-number-1-losing-corporate-headquarters

⁴² Zarzycki, N. (2021). The Small Business Owner's Guide to California State Taxes. *Bench.co*. https://bench.co/blog/tax-tips/california-state-taxes/

Though nonprofit organizations are not required to pay the same taxes as corporations, the state could leverage a portion of the budget it already allocated to education to provide grants to nonprofits. These grants could help non-profits create programs that train teachers, support them financially, and even encourage donors to pay teacher loans. The private sector is extremely underutilized across most state education systems, and California could be one of the first to activate this indispensable resource.

The role of the private sector, in this case, is to introduce market solutions like incentivizing teachers through competitive programs and offering teachers financial benefits beyond what the state can offer. However, the public sector plays an entirely different role. In the case of incentivizing teachers to join the California job market, the state must do a fair amount of deregulation so that private firms and non-profit organizations are encouraged to join the effort. The state must be willing to be hands-off and incentivize private firms to come up with solutions and to do this they must offer tax cuts and other financial gains to private industry. The state also must be willing to eventually redevelop its certification programs so that they are concentrated and affordable. Teachers are discouraged to be certified in California because there are few guarantees from the system that they will be supported. However, if the private sector gets involved teachers are much more likely to pursue this path as they know they have the chance to be sponsored or receive other benefits from organizations that are competing to find the best solution to this growing struggle.

Assessment and Recommendation

A. Recommendation

Based on a full consideration of the potential policies as summarized in Figure 3 of Appendix A, it is recommended that the California Department of Education pursue a tax credit and grant allocation system for actors in the private sector. Private companies are designed to achieve a goal at the lowest possible cost, and one of their main functions is to create mechanisms that increase efficiency. In this case, the companies would not be creating a product, but they would be required to support a measurable output of qualified teachers to qualify for the tax credit. The most significant hurdle in this process of providing monetary incentives to the private sector is getting approval to lower the corporate tax for companies that provide a social benefit to qualifying teachers. However, once this goal is achieved it will become much easier for companies to enter the market of social responsibility, which involves private firms giving back to their community through the donation of time or resources. The state legislature may have to pass a bill that would allow the state government to provide tax credits to companies that

aid in the process of qualifying and supporting teachers, but it is best if this can be kept external from voter consensus. Oftentimes, corporations are considered to be enemies of the people that are only profit-seeking, but this can be a significant mistake that inhibits growth that could never even be imagined solely under the function of the state.

The K-12 public education system continues to be a monopolized public good. With California ranking low on all educational fronts, the nearly 70% state and federally-run system (See Figure 1) is simply not working. Substandard teachers are overworked and underqualified and "California's pupil-teacher ratios, [are] already ranked the highest in the country...[where] the national average is about 16:1, the California ratio reached a peak of 24:1 in 2011."⁴³ The state government has tried consistently to simply pour money into the issue by collecting and redistributing taxes, but the fact of the matter is that the funds are there but have been grossly mismanaged. The public good of K-12 education as it stands now meets only baseline goals. Rather than supplying schools with well-qualified teachers so that students can be competitive among other states, the goal is simply to get teachers to teach. However, if the private sector is utilized, then there is a much greater likelihood that schools will have a better opportunity to gain teachers that want to practice their craft and have the necessary credentials to do it.

B. On Adoption and Implementation of the Policy

Adopting a policy that engages the private sector will be most politically feasible if the program for providing tax credits and grants to the private sector is done at an administrative level without much involvement from ballot question initiatives. The more taxpayers get involved without understanding the different elements of the policy, the less likely the initiative will pass. Additionally, much of this work of providing incentives can be done at the state level without resident involvement. The California Department of Education with help of the Governor and the legislature can work with the California Franchise Tax Board (CFTB) to lower taxes on corporations that aid in the support of teachers. For instance, if a local company sponsors a teacher by paying for their loans or creates a program that covers living expenses for teachers, the company can submit this to the CFTB and deduct that from the taxes that they pay yearly. Though this does not seem like a lot, with corporations paying a nearly 9% corporate tax, any ability to direct

https://gettingdowntofacts.com/sites/default/files/2018-09/GDTFII_Report_Darling-Hammond.pdf

⁴³ Darling-Hammond, L., Sutcher, L., Carver-Thomas, D. (2018). Teacher Shortages in California: Status, Sources, and Potential Solutions. *Getting Down to Facts II: Stanford University*, 28.

that funding into something that will improve their reputation while also lowering their taxes is a smart business decision. The goal of adoption is to make it enticing for companies to buy in because "if a company (or manager) decided to invest in something which is not expected to bring in more money, and if this action makes 'bad attitude' of money, then it will be 'punished' by the market soon".⁴⁴ In other words, the government must be willing to deregulate the companies so that they can focus their full economic efficiency on solving the teacher shortage problem.

Likewise, this will be a similar approach to grant allocation to non-profits, as they must feel that the grant is directed in such a way to help teachers. The state government has already invested in programs meant to properly credential teachers and support them in their careers. For example, "the Mini-Corps project focuses on the development of a well prepared, ethnically diverse and culturally sensitive teacher force. This program could be a replicable model for traditional teacher preparation programs."45 Therefore, the state is no stranger to working with a more private sector-oriented business model to recruit more teachers. Regarding implementation, the state government should frame what it is looking for specifically. If the state is having trouble retaining teachers in a specific area due to high living costs, then it must write a grant for a nonprofit that is working to create a program that provides more affordable housing for teachers. As an example, "Ms. Cheeks was stuck—unable to afford a market-rate apartment but earning too much to qualify for the city's below-market rental lottery program. She was homeless. In May 2017, she resigned from her teaching position."⁴⁶ This real-life example is exactly what nonprofits and corporations will need to target when they are attempting to address many of the leading causes of teacher shortages.

Like any implementation process, the state cannot simply provide handouts and hope for the best as companies and nonprofits attempt to remedy these issues from the top down. For there to be sustainable solutions to this problem the state must be willing to work with the CTA and other teachers' unions, as well as survey districts to find out the problems at the ground level. When writing grants and providing tax credits, the state must have a better understanding of what is inhibiting qualified teachers from entering a given

⁴⁴ Georgaraki, D. (2011). Tax incentives in corporate social responsibility. Global Conference on Innovations in Management, 147.

⁴⁵ Jimenez-Silva, M., Ruiz, N., & Smith, S. (2021). Lessons learned from exploring the potential of California's mini-corps tutors as future bilingual teachers. *International Journal of Bilingual Education & Bilingualism*, 1–13. https://doi-org.lib.pepperdine.edu/10.1080/13670050.2021.1904820

⁴⁶ De Wit, D. (2018). AB 45: Addressing California's Teacher Shortage with Affordable Housing. *University of the Pacific Law Review*, 49(2), 401.
https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=130193929&site=ehost-live&scope=site

district. The state must be meticulous in who acquires these incentives as there must be lasting and measurable change. Figure 4 reveals that the shortages are disproportionately affecting lower-income and disadvantaged districts. Therefore, it may not be ideal for corporations and nonprofits alike to focus their efforts evenly and the state may want to target districts that it sees as requiring more qualified teachers and urge the private sector to aid in these areas. It is important that once these measures of incentivization are adopted, the state is considerate of who gets the incentives and how effective they are in the long run.

C. Measuring Policy Efficacy

To properly measure if this policy is effective, it will be important to note some key factors and see how they change over time. In this case, it will likely take at least 5 years for corporations and nonprofits to implement programs that help to properly certify teachers and maintain a strong population of teachers. This is a reasonable timeframe for the adoption of this policy and the early stages of implementation and when considering the effects of this policy it will be essential to study a proper time frame. Considering that the state takes the lion's share of the financial responsibility for supporting the California K-12 system (Figure 1), it is reasonable to say that any improvement, even 10% of a financial shift to the other local sources sector, is a win for the state. If corporations and nonprofits are splitting the costs of maintaining qualified teachers and doing so in a more efficient way, then the state will have an opportunity to use this funding in other areas of the state budget. Of course, there are more detailed elements that could be measured like how many teachers are gained in the 5 years. Preferably, at least an additional 5,000 teachers ought to be credentialed in the first 5 years considering the need for prospective or substandard teachers to participate in teacher preparation programs takes some time. These are slightly arbitrary figures that will need to be addressed when pursuing this policy recommendation, but the hope is that this analysis provides a substantial and measurable framework for addressing the shortage of qualified teachers in the California K-12 public education system.

Another effective way to assess if the policy works would be to survey the teachers who are affected most by this policy alternative. Before any outside organization gets involved in a local school district it would be a good idea to get an endorsement from the audience it affects. When considering public choice, it is important to consider all affected parties; in this case, though it may make logical sense for the private sector to be involved for the benefit of society, the affected parties may seek some sort of recompense through their involvement. In other words, "interest groups have concerns about their own well-being, which may not

be at all related to the overall interest of society".⁴⁷ Teachers are going to want to see the plan works for them, and for the private sector to get involved and enter their space, the state must have the full endorsement of the teachers involved.

Along with measuring the satisfaction of teachers, it is important to assess the preferences of parents and taxpayers who are sending their students to public schools with private sector programs. The most efficient way to do this is to provide a concrete framework for corporations and nonprofits that seek to get involved in their local school districts. When providing grants to nonprofits like mentorship corps and other teacher preparation programs, these nonprofits must provide measurable goals that the state can evaluate to see if they are worthy of continued grants. For these nonprofit programs to be sustainable, there must be a clearly outlined path that can be quantified and shown to the state. For example, the California Mini-Corps which serves as a potential model for outside preparedness programs reports that "a typical mini-corps preservice teacher beginning as a freshman in a college program and working during the summer and school year programs receive between 3,000 to 4,000 hours of supervised classroom experiences and staff development". 48 This is in comparison to the shorter time of around 600 hours that is performed by the standard student teacher. These measures are what will drive the policy forward as the public must see that these programs provide an additional layer of training that would otherwise not be attainable by the state.

This framework follows for corporate involvement as well, for the Department of Education cannot simply assume good intent from corporations when getting involved with their local school districts, but instead they must generate actual change. This program will likely draw corporations and even small businesses from all over the state who wish to evade the full 9% corporate tax. Therefore, the state must be vigilant in who qualifies for this tax credit and once again provide a framework that will require companies to submit evidence that they have made a significant social impact on their local school district. Much of the groundwork is there for what could be funded in school, and it is evident that "[students] must have teachers who can help them learn about the world, from the world, and with the world". In other words, companies must consider the long run when implementing programs that qualify and support teachers, for if

⁴⁷ Gallagher, M. (1993). A Public Choice Theory of Budgets: Implications for Education in Less Developed Countries. *Comparative Education Review*, 37(2), 95. http://www.istor.org/stable/1188679

⁴⁸ Lomeli, J., Parks, J., Basurto, I., & Padilla, F. (2006). California Mini-Corps: Developing Quality Teachers for 40 Years. *Education*, 127(1), 103. https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=22826806&site=ehost-live&scope=site

⁴⁹ Devlin-Foltz, B. (2010). Teachers for the Global Age: A Call to Action for Funders. *Teaching Education*, 21(1),

they support teachers, they are also supporting students which can be an even greater return for them beyond the initial tax break.

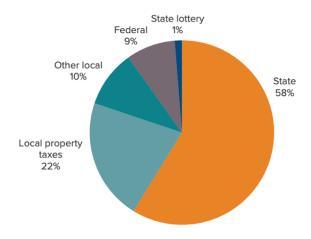
Conclusion

The policy of mobilizing the private sector to qualify substandard teachers and maintain the teacher population does seem to be a daunting task, but it is certainly an attainable goal. Further research may conclude that to be most effective, the State of California may want to create an evaluation board or perhaps a new agency that branches from the Department of Education to regulate the financial incentives that get the private sector involved. Because the public good of the California K-12 education system remains largely untouched by the private sector beyond sporadic corporate philanthropy, any involvement of the private sector would be a step towards efficiency and solving this significant government failure of a drastic shortage of well-qualified teachers in California.

Appendix A

Figure 1

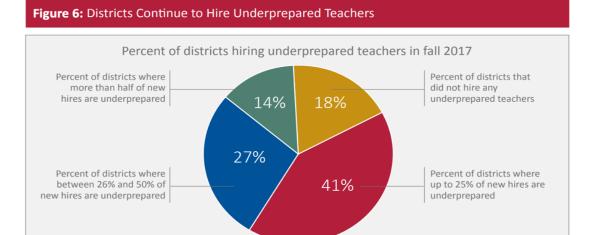
The state provides the majority of K-12 funding



Source: Legislative Analyst's Office K–12 Funding by source. July 2018 report.

Note: Figure excludes non–Proposition 98 state General Fund contributions—including funding for state-debt service payments for school facilities, state contributions to the State Teachers' Retirement System (CalSTRS), and California Department of Education operations.

Figure 2



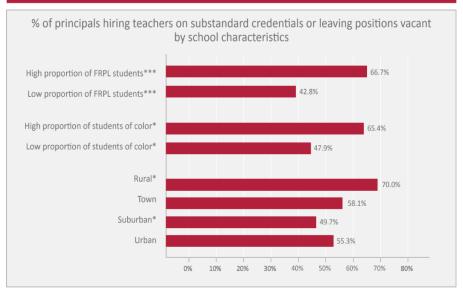
Data: Sutcher, L., Carver-Thomas, D., and Darling-Hammond, L. (2018). *Understaffed and Underprepared: California Districts Report Ongoing Teacher Shortages*. Palo Alto, CA: Learning Policy Institute.

Figure 3

rigure 3	Summary Comparison of Policy Alternatives for Addressing Qualified Teacher Shortage		
	Current Policy	Raising Taxes for State-Funded Programs	Lower Corporate Tax and Provide Grants to Utilize Private Sector
Equity	Ensures that all districts get the same amount of funding, not based on how wealthy a district is on a taxpayer basis.	Manipulating Prop 13 or providing parcel taxes may make the distribution of wealth inequitable, favoring districts with higher property values, while teachers abandon lower-income districts.	Opportunity for local businesses to get involved in school districts and nonprofits receiving grants could allow for a more equitable distribution of funding and provide community programs to support districts with high financial need
Efficiency	Inefficient: The attrition rate of teachers continues to rise and the state is not providing lasting effectiveness	Relatively inefficient: Though there would be an increase in funding alleviating some of the costs to the state, poorer districts would still require substantial state aid	Highly Efficient: Corporations and Nonprofits have a greater ability to create efficient mechanisms that could qualify, support, and retain teachers that the state simply cannot do
Favorable Fiscal Impact	The cost of raising incentives to maintain periods for even short periods will continue to rise with little gain.	With a better distribution of costs directly to the taxpayer rather than the State government, the local taxpayer will take more financial responsibility	Costs would be much more evenly distributed and the state would take on little additional burden while contracting out mechanisms to support teachers
Political Feasibility	High-This is the current policy and requires little direct input from the taxpayer	Low-Unlikely that taxpayers will be willing to adjust Proposition 13 even slightly in fear that their property taxes will rise significantly	Moderate-With taxpayers taking less of the brunt of financial responsibility and the incentives to the private sector this method is quite achievable
		Similar to the current	This policy would require high
Corporate Involvement	Limited to altruistic philanthropy, with little incentive for corporations to get involved	policy, little corporate involvement and perhaps even less, fear that corporations will be at the mercy of taxpayers.	corporate involvement and it places a strong bet on incentivized corporate social responsibility to create proper support.

Figure 4

Figure 4: Shortages Disproportionately Affect Schools Serving Historically Disadvantaged Students



Data: Learning Policy Institute's analysis of the *Getting Down to Facts II* project's 2017-18 Principal Survey conducted by RAND.

Notes: FRPL stands for free and reduced-price lunch. Statistical differences denoted by: *** p<0.01, ** p<0.05, * p<0.1. Low proportion represents schools in the bottom quartile and high proportion represents schools in the top quartile.

References

- Bishop, K. (2021). These Data Show That California Is Number Corporate Headquarters. *The National Law Review*, 11 (325). https://www.natlawreview.com/article/these-data-show-california-number-1-losing-corporate-headquarters
- Bryner, L. (2021). The Teacher Shortage in the United States. *Education & Society*, 39(1), 69–80. https://doi-org.lib.pepperdine.edu/10.7459/es/39.1.05
- Burns, D., Carver-Thomas, D., Kini, T. (2020). Sharpening the Divide How California's Teacher Shortages Expand Inequality. *Learning Policy Institute*, 1-44.

 https://learningpolicyinstitute.org/sites/default/files/product-files/Sharp_Divide California Teacher Shortages REPORT.pdf
- Darling-Hammond, L., Sutcher, L., Carver-Thomas, D. (2018). Teacher Shortages in California: Status, Sources, and Potential Solutions. *Getting Down to Facts II: Stanford University*, 1-61.

 https://gettingdowntofacts.com/sites/default/files/2018-09/GDTFII_Report_Darling-Hammond.pdf
- Darling-Hammond, L., Goldhaber, D., Strunk, K., Sutcher, L. (2018). Teacher Supply Falls Short of Demand in High-Need Fields, Locations. *Getting Down to Facts II: Stanford University*, 1-13.

 https://www.gettingdowntofacts.com/sites/default/files/2018-09/GDTFII
 Brief TeacherSupply.pdf
- Devlin-Foltz, B. (2010). Teachers for the Global Age: A Call to Action for Funders. *Teaching Education*, 21(1), 113–117. https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ879894&site=ehost-live&scope=site
- Elfers, A. M., & Plecki, M. L. (2014). Results of a State Incentive Program on the Supply and Distribution of National Board Certified Teachers. *Leadership & Policy in Schools*, 13(2), 147–168. https://doi-org.lib.pepperdine.edu/10.1080/15700763.2014.901392
- Flynn, M., Pillay, H., & Watters, J. J. (2016). Sustaining Partnerships between Schools and Industry: A Minerals and Energy Case. *International Journal of Adult Vocational Education and Technology*, 7(4), 72–84.

- Gallagher, M. (1993). A Public Choice Theory of Budgets: Implications for Education in Less Developed Countries. *Comparative Education Review*, 37(2), 90–106. http://www.jstor.org/stable/1188679
- Georgaraki, D. (2011). Tax incentives in corporate social responsibility. *Global Conference on Innovations in Management*, 142-163.
- Jacobson, L. (2008). Thousands of California Teachers Await Layoff Fate. *Education Week*. Retrieved November 20, 2021, from https://www.edweek.org/teaching-learning/thousands-of-california-teacher-s-await-layoff-fate/2008/05
- Jimenez-Silva, M., Ruiz, N., & Smith, S. (2021). Lessons learned from exploring the potential of California's mini-corps tutors as future bilingual teachers. *International Journal of Bilingual Education & Bilingualism*, 1–13. https://doi-org.lib.pepperdine.edu/10.1080/13670050.2021.1904820
- Kaneshina, K., & Warnock, R. (2022). "Average Rent in San Francisco & Rent Price Trends". *Apartment List*. https://www.apartmentlist.com/renter-life/average-rent-in-san-francisco.
- Lomeli, J., Parks, J., Basurto, I., & Padilla, F. (2006). California Mini-Corps: Developing Quality Teachers for 40 Years. *Education*, 127(1), 100–108. https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=22826806&site=ehost-live&scope=site
- McFadden, J. (2016, December 28). 7 Big Companies Giving Back to Schools in Big Ways. *We Are Teachers*.

 https://www.weareteachers.com/7-big-companies-giving-back-schools-big-ways/
- McCarty, T. A., Sexton, T. A., Sheffrin, S. M., & Shelby, S. D. (2001). Allocating Property Tax Revenue in California: Living with Proposition 13.

 *Proceedings. Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association, 94, 71–80.

 *http://www.jstor.org/stable/41954705
- McKinney, N. (2017). SB 933: The California Teacher Corps Act of 2016, Educating Educators. *University of the Pacific Law Review*, 48(3), 593–607. https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=122644157&site=ehost-live&scope=site
- Müller, K., Alliata, R., & Benninghoff, F. (2009). Attracting and Retaining Teachers: A Question of Motivation. *Educational Management Administration & Leadership*, 37(5), 574–599. https://doi-org.lib.pepperdine.edu/10.1177/1741143209339651
- Murphy, P., & Paluch, J. (2018). Financing California's Public Schools. *Public Policy Institute of California*.

- https://www.ppic.org/wp-content/uploads/jtf-financing-californias-public-s chools.pdf
- Plachta, A. (2020). Union to California's teachers: Brace for cuts steeper than the Great Recession. *Mercury News*. Retrieved November 20, 2021, from <a href="https://www.mercurynews.com/2020/06/22/union-to-teachers-brace-for-cuts-steeper-than-the-great-recession/#:~:text=A%20California%20Teachers%20Association%20bargaining,slashes%20to%20services%20and%20programs.
- Powell, D. (2019). The "will to give": corporations, philanthropy, and schools. *Journal of Education Policy*, 34(2), 195–214.

 https://doi-org.lib.pepperdine.edu/10.1080/02680939.2018.1424940
- Soika, B. (2020, September 8). Factors that affect California teacher salary: USC rossier. USC Rossier School of Education. Retrieved October 8, 2021, from https://rossier.usc.edu/eight-factors-that-affect-your-california-teacher-sala
- Struyven, K., & Vanthournout, G. (2014). Teachers' exit decisions: An investigation into the reasons why newly qualified teachers fail to enter the teaching profession or why those who do enter do not continue teaching. *Teaching & Teacher Education*, 43, 37–45. https://doi-org.lib.pepperdine.edu/10.1016/j.tate.2014.06.002
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding Teacher Shortages: An Analysis of Teacher Supply and Demand in the United States. *Education Policy Analysis Archives*, 27(35). https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1213618&site=ehost-live&scope=site
- Weimer, D. L., & Vining, A. R. (2011). Policy analysis: Concepts and practice. Boston: Longman.
- Zarzycki, N. (2021). The Small Business Owner's Guide to California State Taxes. *Bench.co*. https://bench.co/blog/tax-tips/california-state-taxes/
- 8.4 prop 13 and Prop 98: Then and now. (2021). Retrieved November 20, 2021, from https://ed100.org/lessons/prop13.