

Educational Inequality in Early Primary Education in Lower Income Communities in the Bay
Area: The Teacher's Perspective

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I. Research Title

According to teachers working in low income regions in the Bay Area, income inequality is detrimental to the success of students between kindergarten and second grade.

II. Abstract

As a result of the growth of the tech industry, the Bay Area has become far more affluent. This affluence is not evenly distributed, and some communities are far less wealthy than others. The Bay Area is in a unique situation because lower income communities still have average incomes that are somewhat comparable to the national average. As a result, the effect of income inequality on early primary education in East Palo Alto was studied. Interviews were conducted with teachers from East Palo Alto who teach grades K-2 and they answered 14 questions (listed in appendix). Interview transcripts were coded to determine patterns in the responses of teachers. Ultimately, teachers unanimously agreed that income inequality negatively impacted their students' education. The problems that students faced that teachers most commonly mentioned as harming their students' education was trauma from a difficult home life. In addition, the high cost of housing and language barrier were commonly mentioned as causing extra difficulty for students. Underfunding in schools and a lack of preschool education were also mentioned as being significant challenges. Despite the relatively high income of East Palo Alto residents compared to other low income communities, it is clear that East Palo Alto students still suffer as a result of income inequality.

III. Introduction

Just 9% of US students whose families are in the bottom quartile of income achieve a bachelor's degree by the age of 24. Over 77% of US students in the top quartile of income achieve a bachelor's degree at the same time (Statista, 2019). There is a clear discrepancy in the educational attainment of those with a lower income and those with higher income. Income inequality all across the world has been shown to cause difficulties in educational attainment at an early age, often causing further educational difficulties that result in lower achievement of bachelor's degrees. (Fram 2007; Lauchner, 2017). This income inequality is also present in the Bay Area, but is caused by the explosive growth of the tech sector and the uneven distribution of that wealth in higher and lower income communities (Haveman 2015). There is currently a lack of research on this topic in the Bay Area, raising the question, how does income inequality during kindergarten through second grade affect reading comprehension within low income communities in the Bay Area?

According to a study published by Craig Lauchner, "despite high spending and considerable improvements in the realm of education, greater inequalities ... are more persistent in Latin America than in any other part of the world" (Lauchner, 2017). The income inequality of South America was largely not addressed by increases in government spending, as resources were focused more into tertiary education rather than primary education. Indeed, a paper studying the factors influencing income inequality in Argentina found that education was the primary factor that influenced the income of Argentinians (Santos, 2008). While this study, and studying South American countries to compare to the US in general is valuable in the discussion of inequality in the Bay Area, it does not directly translate. The average income of Argentina and its surrounding

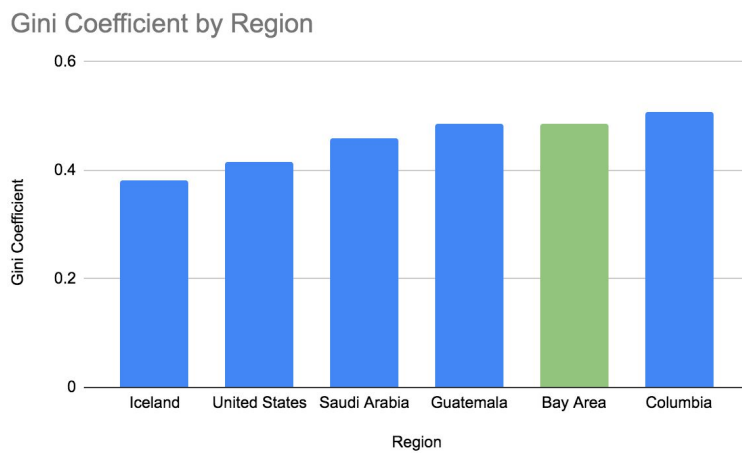
countries are far lower than that of the US, and the general economies of these countries are far less diverse than that of the US, so differences in income are often less pronounced and the income inequality can sometimes even be lower than that of the US. To put it more simply, Argentina is a poorer country than the US overall, so people who are poor are not “unequal” to those around them. In addition to having a vastly different economy to the US, Argentina is quite homogenous in terms of its racial diversity. Nearly the entire population is of a mix of indigenous and European ancestry, and because of this, differences in income that may arise in the US due to racial differences are not present in Argentina. Because of all of this, the effects of education on income may be more pronounced in South America, and research that covers areas more culturally similar to the Bay Area are needed to identify education as the key factor in income inequality.

Similar issues of income inequality are also plaguing regions that are culturally more similar to the US. A study published by Maryah Stella Fram studied socioeconomic and racial inequality in the American South, and its effect on differences in primary educational achievement. Based on her findings, socioeconomic differences played a significant role in the educational achievement of primary education students (Fram, 2007). One of the key differences between the socioeconomic inequality of South America and the American South is the issue of race. While South America is almost completely racially homogenous, the American south has several prominent racial groups, and a long history of racial inequality has plagued the south from the days of slavery up till today. Fram’s study confirms the existence of this racial inequality and found that income inequality was undoubtedly correlated with race (Fram, 2007) While race was certainly found to correlate with income inequality, when other factors were adjusted, it was

found that the correlation between race and income inequality was actually based on the fact that racial minorities in the south typically receive a lower quality education than others, and for the most part, inequality was a result of a poor quality education rather than race. The relationship between race and educational attainment is certainly present and will require further research, however it does not fall within the scope of this research.

Similar socioeconomic divides can be found in the San Francisco Bay Area. A research brief published by the Silicon Valley Institute for Regional Studies found, among many other things, that California, and specifically, the Bay Area, suffer from a greater level of income inequality compared to the entire United States, and even compared to the US South (Haveman, 2015). The Bay Area has been the center of a tech boom in the past 20 years, and as a result, tech companies flock to the Bay Area, employing hundreds of thousands of residents (Stumer, 2013) . These residents have spread throughout the entire Bay Area and come from all over the world to work in the tech sector. The high income of these tech jobs has pushed the average income up significantly and the average income of the Bay Area is the second highest of any major metropolitan area in the country, coming just behind Washington D.C. (2019). This high income has created a large number of affluent communities including Atherton and Palo Alto that, as a result, have increased tax revenue and increased ability for government spending (Borroughs, 2019). This increased spending allows for more luxurious communities and better funded and equipped schools. The massive increases in income have not been universal throughout the Bay Area (Haveman, 2015). The Bay Area has enormous amounts of income inequality between its cities, and although cities like Atherton are ranked among the most wealthy in the entire nation, that wealth is not found in many other places in the Bay Area. Income inequality, based on the

gini coefficient, a measurement used to gauge income inequality is worse in the Bay Area than



the US as a whole, and is approximately equal to the countries of Guatemala and Costa Rica (Misachi, 2017). This income inequality highlights a problem within the Bay Area that is not well known or normally acknowledged.

Fig 1: Inequality in Bay Area compared to several nations (higher number means more inequality)

IV. Research Methodologies

Although interviewing students directly may have provided a more specific and accurate assessment of the problems students face, such interviews would be wildly unethical and were completely off the table. Interviewing teachers allowed for much of that same insight; however teachers were able to speak broadly, accurately describing problems based on years of experience and dozens of students rather than specific ones. Although teachers were unable to speak on the conditions and difficulties their students face at home, the impacts of those problems were abundantly clear to teachers, and regardless, in depth research on that topic would warrant a separate study.

In order to gain a full understanding of the issues surrounding primary education in lower income communities, teachers who teach at schools in those lower income communities were

studied. Within that community, several teachers were contacted through the researcher mentor to participate in research. and 3 teachers, Mr. Akiyama, Ms. Berggren, and Ms. Linden, all from a nearby Aspire East Palo Alto Charter school, all agreed to participate. Additionally, Ms. Thomson, a former teacher, put the researcher in contact with Ms. Pronovost who works for the Ravenswood school district.

This research project used observational research since experimental research is not necessary in order to establish a connection between income inequality and educational difficulties in the Bay Area. Qualitative data was collected since no quantitative framework exists to determine if income inequality affects education, and additionally, qualitative answers allowed for a greater depth of answers that helped to identify specific issues that the researcher was not aware of, helping to steer the direction of future research. For that reason, face to face interviews were conducted with teachers. Those questions can be found in the appendix. The interview transcripts were then transcribed onto a computer and the coding process was started to help determine patterns in question responses.

The process of collecting and analyzing data started with the planning of specific times and places for interviews which were coordinated based on teacher schedules and availability. Teachers would be sent a copy of interview questions and a consent form before agreeing to participate. Interviews took place at schools directly after school in order to minimize any inconvenience for teachers and in order to allow the interviews to take place in a public setting. Interviews typically lasted around 20 minutes and took place around 3:45 or 4:15 depending on the day teachers were available. Once interviews were fully finished, recordings were processed with a transcribing application called Otter. After that, the data was coding and specific patterns

and keywords were analyzed.

V. Results, Findings, Products

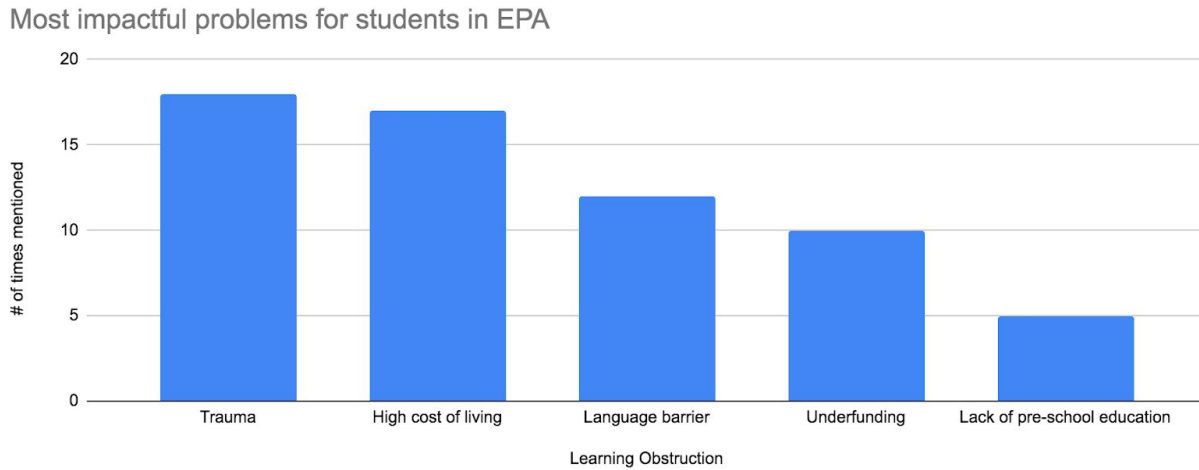


Figure 2: Number of times each problem affecting EPA students was mentioned by teachers during interviews.

VI. Discussion, Analysis and Evaluation

From 5 interviews with 107 minutes of transcripts, issues affecting students were mentioned 62 times. All teachers agreed that socioeconomic inequality has a negative effect on their students' education.

The most commonly mentioned issue for students was trauma at home. Some students have unstable home lives. Commonly mentioned causes are parents being emotionally unavailable or parents being incarcerated or otherwise out of a students life. Regardless of the issue, it results in students coming to school distressed and unable to focus. This causes problems

as students cannot learn material properly, and if this becomes a regular occurrence (which it is for some students) then they fall behind on their learning.

Another issue that teachers commonly mentioned was a high cost of living. This issue was two-fold, affecting both students and teachers. For students, a high cost of living led to additional problems at home. Many families are unable to afford the extreme housing costs that result from the gentrification of East Palo Alto. Some families are forced to share single family homes with multiple families and others find it difficult to afford any sort of rent at all. As a result, a disproportionately high number of students are classified as homeless. For these students, trying to do any sort of work at home is impossible. For families that share a single or only a couple of rooms, many of the stresses that people feel when too close to their family are magnified. These stresses are brought into the classroom and cause even more difficulty for students, resulting in them misbehaving or otherwise not paying attention.

For teachers, the high cost of housing also presents a challenge. East Palo Alto schools pay relatively little compared to other schools in the area (such as Palo Alto Unified School District), so teachers have less of an incentive to teach in East Palo Alto schools. In addition, the high cost of living discourages teachers from settling down in the area, so the turnover rate is exceptionally high. Because of this, teachers don't usually have a lot of experience teaching in east palo alto, making their job more difficult.

Less commonly mentioned as a problem for students was the language barrier between parents and teachers and some students. According to teachers, there are many parents who don't speak english, and this sometimes presents a challenge for teachers. Parent-teacher communication is extremely important to a child's education, and when teachers aren't able to

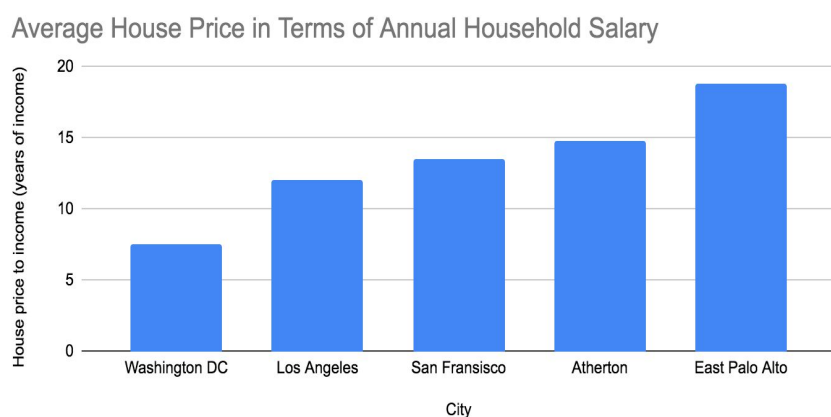
talk to parents, they sometimes aren't able to work out problems that students are having. This isn't as big an issue because some teachers are able to speak Spanish, so during face to face meetings, teachers are able to discuss problems with their students through a Spanish-speaking teacher. What can be problematic for students is the limited vocabulary that comes from not speaking English at home. Especially as students get into 3rd and 4th grade, they are exposed to more complicated topics and vocabulary. Words such as earthquake and forecast might seem relatively common, but if students only speak English at school, their vocabularies will be severely limited, and comprehension of more obscure words will suffer later on.

Teachers also mentioned underfunding in schools as being a serious issue. As a result of the trauma that students face at home, they bring a host of challenges to the classroom that teachers may have a difficult time handling. As a result, students sometimes need extra attention and extra resources. Most teachers mentioned the need for more counselors to help students. Unfortunately, due to the low budget of schools in low income communities, extra counselors and help for students often isn't attainable. In addition, the problem of expensive housing would be significantly diminished for teachers if they were to be better compensated for their teaching, but based on school budgets, that often isn't possible.

Several teachers mentioned the lack of preschool education as being detrimental to students as they progressed through kindergarten and first grade. Preschool gives students a head start on certain concepts and skills, and, more importantly, teaches important social and emotional skills like sharing and vocalizing your unhappiness. For students who aren't able to learn these skills before entering elementary school, the first couple years of school can be more challenging, and often those students require extra help from teachers to get up to speed.

VII. Conclusion, Implications and Next Steps

Based on the response given by teachers, it is clear that income inequality has a significant effect on educational inequality in the Bay Area. Notably, despite the relatively high income of East Palo Alto residents compared to other low income communities, the extreme housing costs far outweigh any benefit an increased income could have. In fact, gentrification has become such a



problem in East Palo Alto that housing costs are higher, as a percentage of income, than San Francisco and even Atherton, a city known as one of the most expensive in the country.

Fig 3: The house price in various cities in terms of the average household income of cities

Although unintended, my findings have made it clear that extreme housing costs have had significant effects on the education that students receive in East Palo Alto. As a result, these findings are very important to further develop the need to slow or contain gentrification and help lower income families that are being pushed out of the city. In fact, one teacher mentioned the problem that high housing costs have had, saying that several students she knows have had to move to rural areas in central California because housing costs have simply been too excessive for their families. Although, according to teachers, gentrification has a severe impact on the

trauma that students feel, the language barrier and underfunding in schools are still very serious issues. Both of these issues can be more easily overcome if schools were to receive additional funding from the state or local government, but unless that is to happen, those problems may remain unresolved. My data does have one somewhat serious bias. East Palo Alto is home to several charter schools that offer a somewhat different approach to schooling. Charter schools are relatively popular and (according to one charter school teacher), there are over 1000 students in East Palo Alto enrolled in charter schools. Several teachers that were interviewed are a part of the Aspire Charter school, and that introduces a couple of biases. Aspire offers a preschool service, so those teachers had much fewer complaints about preschool education since most of their students received a preschool education. In addition, those teachers are given more leeway to help individual students and have specific times in which they help students who struggle to read or write properly. As far as this researcher is aware, more individualized teaching isn't available to public school teachers and so as a result, the difficulties that teachers perceive in terms of language may be different. Ultimately, it was valuable to meet and interview public and charter school teachers, to provide a more diverse perspective that reflects both schooling systems in place in East Palo Alto. Perhaps in the future, a comparative study could take place to see if any differences between teachers do emerge. Another point of interest to note is the general age of teachers at charter schools and public schools. Teachers in charter schools tended to be younger and less experienced. According to teachers, their charter school has a high teacher turnover rate and for many, it is their first or second school they ever teach. In public schools, teachers tend to be a little bit older and tend to have spent far longer in their position. In addition, the East Palo Alto public school (according to teachers) has more difficulty finding new teachers

to fill vacant positions, although charter schools also see trouble in this regard. Although not directly related to this research, the differences are certainly worth noting, and given more time, a more general comparative study between charter schools and public schools in the Bay Area could give more concrete answers to the conjecture that teachers in public and charter schools provided on this matter.

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IX. Appendix

Interview Questions

1. What's your name and where do you work?
2. What grades do you teach
3. What sort of things do you teach your students?
4. Do your students face difficulties with writing and reading english?
5. Do some of your students know languages other than english?
6. As far as you know, do they know those languages better than english?
7. Have you noticed any differences in the reading and writing abilities of kids who speak their languages better than english compared to those who speak only english?
8. Approximately what percent of your kids had a preschool education?
9. Do parents participate in school activities? ie: parent-teacher conferences, school events?
10. Have you taught at any other schools?
11. Where were they located?
12. Are there any differences in the way you would answer any of the previous questions for [other school] compared to how you answered them for [current school]?

13. Is there anything else you've noticed that negatively impacts the behavior of students in class?

14. What step do you think _____ can take to help alleviate some of the problems faced by your students?

- a. Nation or State government
- b. School district
- c. Teachers
- d. Parent