

THE IMPACT OF ALTERNATIVE SCHOOLS ON
STUDENT OUTCOMES

by

ALISON CAMPBELL

A THESIS

Presented to the Department of Economics
and the Robert. D. Clark Honors College
in partial fulfillment of the requirements for the degree of
Bachelor of Science

May 2024

An Abstract of the Thesis of

Alison Campbell for the degree of Bachelor of Science
in the Department of Economics to be taken June 2024

Title: The Impact of Alternative Schools on Student Outcomes

Approved: Michael Kuhn, Ph.D.
Primary Thesis Advisor

This thesis will evaluate the outcomes of students who attend behavioral alternative schools against those who attend traditional public schools within the United States. Behavioral alternative schools are schools that serve students who have been unsuccessful in traditional public school environments and may have a history of low academic achievement coupled with various behavioral challenges. This thesis will analyze graduation rates based on the type of school students attended by comparing two different demographic areas with different levels of behavioral alternative school participation rates and then tracking student outcomes in these two areas. This thesis will also discuss how school districts are more likely to refer certain demographic groups, specifically male students of color, to alternative schools and the potential negative impact this referral pattern may have on these groups. This analysis will seek to inform those interested in attending alternative schools on their impact on student outcomes and will also inform school administrators and lawmakers on whether they should promote or discourage alternative school attendance.

Acknowledgements:

I want to first thank my thesis committee. First, my primary thesis advisor, Dr. Michael Kuhn, who helped me immensely through the data collection and analysis throughout this project and helped me work through the many obstacles I faced while cleaning and finalizing the data and regressions I needed for this paper. I would also like to thank my CHC reader, Dr. Ellen Fitzpatrick, for helping me talk through what specifically I wanted to get out of this research process. I could not have completed this project without the support of my advisors as they helped to guide me throughout this process when I felt as though I would never be able to complete this project.

For the majority of this project, I was unsure of my ability to persevere and actually complete this paper, so I would also like to thank my family, friends, and coworkers for helping me through this process and encouraging me to keep going even when I felt as though I would never finish. Specifically, I would like to thank my mom and brother for their bluntness in telling me that I have to keep going, and my closest friends for their willingness to listen to me whenever I was stressed and felt like I was on the brink of giving up.

Table of Contents:

Chapter 1: Introduction	6
Chapter 2: Literature Review	9
Chapter 3: Data and Methodology	13
Data	13
Civil Rights Data Collection.....	13
Data Definitions.....	14
Methodology	14
Models	16
Chapter 4: Results and Analysis	17
Characteristics of School Districts with Alternative School.....	17
Impact of Alternative Education Schools on Students.....	18
Chapter 5: Discussion of Results	22
Implications	22
Limitations	23
Future Research.....	24
Chapter 6: Conclusion.....	25
Bibliography:	26

List of Tables:

Table 1: Data Definitions

Table 2: Models 1, 2, 3, 4, and 5

Table 3: Models 6 and 7

Table 4: Models 8 and 9

Table 5: Models 10 and 11

Chapter 1: Introduction

There are few problems as relevant or important within the United States than access to education. Education is associated with improving various aspects of human life because it is a gateway to potential social mobility. Social mobility is the concept that a person's relative economic status is not completely dependent upon conditions such as the income of their parents or their family's background (Gailani et. al., 2008), meaning that a person could improve their socioeconomic status. The ability to improve one's quality of life is imperative, and one of the most common channels thought to increase a person's odds to transcend economic classes is through education (Brock, 2010). As a person's income and wealth increases, they are also likely to have better health outcomes (Lleras-Muney, 2005) and an overall higher quality of life given access to a greater amount and variety of resources.

Over the past thirty years there has been a general trend throughout the United States of economic inequality increasing while social mobility has been decreasing. Figure 1 illustrates

Total Family Wealth, by Wealth Group

Trillions of 2019 Dollars

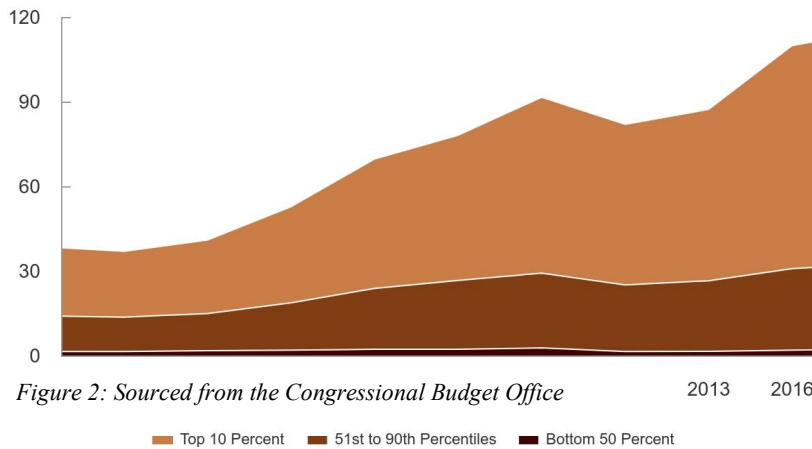


Figure 2: Sourced from the Congressional Budget Office

Figure 1: Sourced from the Congressional Budget Office

how, since 1992, the proportion of wealth held by the top 10% has been increasing, except for following the Great Recession, while the proportion of wealth held by the bottom 50th percentile and the 51st-90th percentile have stagnated and thus continue to be much less than of those at the top of the income distribution.

There are many factors that are contributing to the growing rates of income inequality, but one the major contributors to this divide is the increasing wage differentials for college-educated works since 1980 (Autor et. al., 2020).

While higher education is thought to be the gateway to higher wages and thus social mobility, students from lower-income backgrounds are much less likely to attend college as students from higher income families. Additionally, there is a difference between the types of

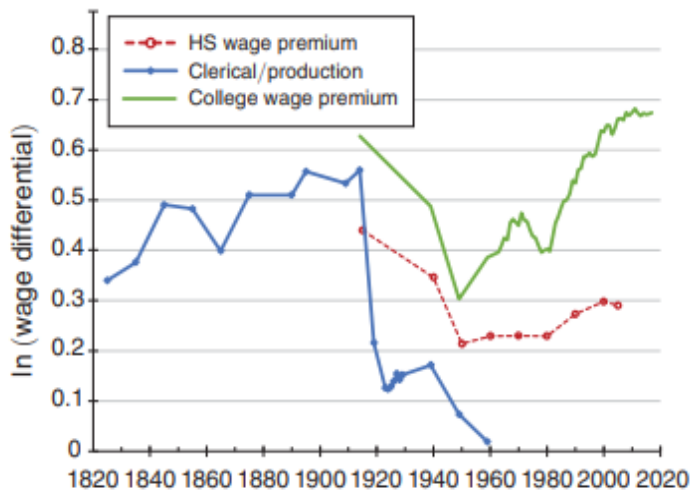


Figure 2: Sourced from Autor

colleges usually attended by students who fall on different sides of the wealth distribution curve, meaning that students from higher-income backgrounds tend to go to more prestigious universities (Chetty et. al., 2020). Although there are significant wage premiums for

getting a college degree, there are also significant wage differentials for completing high school, and high school completion is a prerequisite to gaining a college education. As shown in figure 2, there are significant wage premiums paid to people who graduate from high school, and there is an even greater wage premium for those who graduate from college. It is a prerequisite to complete high school before completing a college degree, so the incentives of graduating high school are both to achieve the wage premiums experienced by having a high school degree but also the opportunity to achieve higher education. The high school completion rate within the United States is 87% (National Center of Education Statistics, 2023), so that means that 13% of the population would benefit from programs that promote high school graduate rates. Solutions

to this problem thus could be to support students from lower-income backgrounds or who face other obstacles in attaining college degrees or even graduating from high school.

One strategy some school districts use to increase the proportion of students who graduate from high school is to create behavioral alternative schools. There has been some research into the effectiveness of these types of institutions, but there are nearly no research papers in economic journals regarding the impact of alternative schools. Analyzing any possible changes in student outcomes due to the creation of alternative schools through an economic lens is vital to more completely understanding the actual impact of alternative education schools on the lives of students across the country. This paper will serve as an initial body of research in evaluating the effects of alternative education on students. To answer this question, I will first research the types of school districts that typically have alternative education schools. Then, I will evaluate the effectiveness of alternative education on increasing graduation rates throughout a district.

This paper will provide evidence that the creation of alternative education schools within a district is associated with a decline in graduation rates, meaning that alternative schools do not seem to significantly improve student outcomes. Alternative educational pathways are vital for many students who do not thrive in traditional public school settings, so further research is necessary to help all students succeed.

Chapter 2: Literature Review

Alternative education describes a variety of different educational pathways that fall outside the realm of the traditional K-12 system in the United States, including GED programs, special education schools, charter schools, and alternative schools. The term ‘alternative school’ is defined by the U.S. Department of Education system as “a public elementary/secondary school that addresses needs of students that typically cannot be met in a regular school, provides nontraditional education, serves as an adjunct to a regular school, or falls outside the categories of regular, special education or vocational education” (U.S. Department of Education, 2002). In 2016, there were an estimated 5,477 alternative education schools in the United States (Kumm, 2020).

The purpose of these schools is to provide a space for students who are at risk of dropping out of school and providing them with a pathway to success (Lange & Setten, 2002). Alternative schools differ from traditional public schools through typically smaller class sizes and more flexible teaching methods, and they often serve to help students gain back additional credits that they may need to graduate. Alternative schools are also different from charter schools. First, charter schools operate independently from local school districts, and so they can be selective about the students who they allow to attend these types of schools. So, while charter schools are often highly selective institutions that tend to serve a more privileged demographic, alternative schools tend to be geared to students who are underachieving and need more support to accomplish their educational goals.

In 1965, the Elementary and Secondary Education Act first authorized funding for alternative education settings to support students at risk of experiencing academic failure and whose needs were within traditional schools (Kumm, 2020). Alternative education settings

became a place for students who had been removed from the educational system, and thus evolved into the alternative schools that now exist today. Although the first alternative schools were created in the 1970s, they became more prominent because of the popularization of zero-tolerance policies in the 1990s (Reynolds, 2008). Zero-tolerance policies were originally developed to decrease drug use (Skiba & Rausch, 2006), these policies mandated certain predetermined consequences that would be applied to situations regardless of context. These policies caused an increase in the number of students who were expelled and thus increased the number of students shunned away from the traditional school system. Zero tolerance policies are associated with the “school-to-prison pipeline,” which describes the link between suspensions, expulsions, and school arrests with youth entering the justice system (Phillippi, 2022).

Students who attend alternative education schools tend to be those who have in some way fallen off the track to graduate through traditional means. Although many students who attend these schools are referred for engaging in disruptive or even dangerous behaviors, especially in the case of alternative education schools that operate within the scope of the juvenile detention system, there are a multitude of other reasons why certain students are referred to or opt into alternative education schools. For some students, alternative schools are meant to serve as a temporary solution for students who have fallen behind but could reasonably return to traditional school settings (Aron, 2006). Other groups that typically attend alternative schools include students who have become parents and students who have fallen behind academically and have been deemed unfit for traditional school. Those in favor of alternative schools argue that traditional public schools cannot handle the types of students who typically attend these types of school. Arguments against alternative education argue that these programs set up already struggling students for certain failure (Aron, 2006). Certain demographic groups are much more

likely to be referred to alternative schools than others, specifically black and Hispanic youth and adolescents in the child welfare system are much more likely to attend alternative school (Aron, 2006).

Students of color are disproportionately more likely to attend behavioral alternative schools than white students. In 2015, black students made up 15% of public-school enrollment nationwide but accounted for about 40% of the population of students experiencing out-of-school suspensions and 30% of those experiencing expulsions (U.S. Department of Education, 2018). Of these students receiving suspensions or expulsions, 31% were referred to law enforcement or arrested in school (U.S. Department of Education, 2018), which puts them at an elevated risk of incarceration in adulthood in accordance with the school-to-prison pipeline (Barnes & Motz, 2018). In addition to black children being more likely to receive harsher disciplinary responses, the majority of public schools in the United States are structured around tracking, which is the process of placing students, often early in their education journeys, into groups based on their ability to learn (Oakes, 1985). Black and low-income students are more likely to be placed in lower tracks or special education programs than white or high-income students with similar aptitudes, and they are also underrepresented in the highest tracks (Burriss & Welner, 2005). The tracking process is a major contributor to the overrepresentation of black students in school disciplinary responses and thus to the school-to-prison pipeline that primarily impacts students of color (Justice Policy Institute, 2011).

Due to the structural racism present in public schools that tends to marginalize students of color, as well as low-income students, the population of alternative schools tend to be disproportionately made up of black students. Given that alternative schools are disproportionately black and low-income students, research regarding the impact of these schools

on their students are especially important because they could either be a key pathway to supporting marginalized communities or these schools could be reinforcing disparities in the education system (Farrelly & Daniels, 2014).

There is research that points to both negative and positive impacts of behavioral alternative schools. Early research on the impacts of alternative schools found that students from these types of schools are usually less academically prepared and tend to have worse overall outcomes than students from traditional settings, but these early studies failed to determine if the alternative schools themselves were the cause of the difference (Wilkenson, 2016). Students referred to alternative schools tend to have past behavioral or academic trouble, so comparing raw student outcomes does not answer the question of whether alternative schools are beneficial for the students who attend.

Observational research indicates that students enrolled in behavioral alternative schools tend to earn fewer credits per semester and have lower attendance than students from similar backgrounds who remain in traditional school environments (Wilkenson, 2016). On the positive side, students who attend alternative schools tend to receive fewer office referrals while in school than their peers in traditional school (Wilkenson, 2016). These findings on the effectiveness of alternative schools may indicate that they may be a solution to assuaging the problem of the school-to-prison pipeline (Phillippi, 2022).

Chapter 3: Data and Methodology

Data

Civil Rights Data Collection

To identify the number of behavioral alternative schools in each district within the United States I used data from the Civil Rights Data Collection (CRDC). The CRDC is collected by the Office for Civil Rights that operates within the US Department of Education and it is a mandatory biennial collection of data at both the district and school level. The purpose of the CRDC is for the Office of Civil Rights to enforce regulations that prohibit the discrimination based upon race, nationality, sex, and disability. The data is collected from public schools in all fifty states as well as both Washington D.C. and Puerto Rico. The CRDC has data for every other school year starting from 2009-2010, but instead of the 2019-2020 school year the dataset contains the 2020-2021 school year instead.

American Community Survey

I will use the American Community Survey (ACS) to find demographic and socioeconomic data throughout the United States. I specifically used the Public Use Microdata Sample (PUMS) files for my research to gather data at the school district level. The ACS PUMS files are a culmination of anonymous records from individuals as well as housing units. The Census Bureau produces both 1-year and 5-year PUMS files. This paper only uses the 1-year estimates, which means that although there will be data specific to each year from 2007-2021, with the exclusion of 2020. The drawback of using the 1-year estimates, however, is that there is only available data from geographic areas with at least 65,000 people prior to 2014 and areas with at least 20,000 people after 2014.

Data Definitions

For the regressions used in the analysis section of this paper, the following variables and their explanations are shown in table 1.

Table 1	
Variable Name	Explanation
Alternative Percent	Percent of schools in a school district that are alternative (CRDC)
Mean Alternative Percent	The mean percent of alternative schools in a school district averaged from the year 2009 to 2021 (CRDC)
Median Income	The log of median household income for each year from 2009-2021 (ACS)
Mean Median Income	The log of the median household income averaged from 2009-2021 (ACS)
Graduation Rate	The mean percent of people ages 18-24 who have graduated from high school for each year 2010-2021 (ACS)
Mean Graduation Rate	The mean percent of people ages 18-24 who have graduated from high school averaged between 2010-2021 (ACS)
Per-Pupil Spending	The log of per-pupil spending for school districts each year 2012-2021 (Public Sector)
Mean Per-Pupil Spending	The mean of the log of per-pupil spending for school districts averaged from 2012-2021 (Public Sector)
Percent Non-White	Percent of people living within the bounds of a school district who do not identify as white from 2012-2021 (ACS)
Mean Percent Non-White	The mean percent of people living with the bounds of a school district who do not identify as white averaged between 2012-2021 (ACS)

Methodology

Before the formation of regressions, I combined the datasets from the CRDC and the ACS. This process required the normalizing of variables indicators throughout the datasets and a

general cleaning of the data. Specifically, I first combined the datasets from the CRDC to create one dataset with the available school years present. Then, I formed a dataset with the variables derived from the ACS for each year the data was available. Finally, I merged those two datasets together on the indicators “GEOID” and “YEAR”. The “GEOID” indicator is a unique code held by each school district within the United States and the “YEAR” indicator is the year that the data represent.

This research uses econometric models to analyze both the types of school districts that typically have alternative education schools as well as the impact of these alternative schools on graduation rates. The two primary types of models I will use are the ordinary least squares (OLS) model and the fixed effects model. The OLS model will be used to primarily analyze the types of school districts that tend to have alternative education schools and will follow the form:

$$Y_i = \alpha + \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_n x_{ni} + \epsilon_i \quad (1)$$

where Y_i is the outcome variable, β_0 is the intercept variable, β_i represents the coefficients of various independent variables x_1 , and ϵ_i is the error term.

The other model that will be used is the fixed effects model, which will be primarily used to decipher the impact of alternative education schools on graduation rates in a district. The fixed effects model follows the form:

$$Y_{it} = \beta_1 x_{1it} + \beta_2 x_{2it} + \dots + \beta_n x_{nit} + \alpha_i + \epsilon_{it} \quad (2)$$

where Y_{it} represents the outcome variable, x_{nit} represents the time-variant regressor variables, β_i represents the coefficient of each regressor variable, α_i represents the unobserved time-invariant effects, and ϵ_i is the error term. The fixed effects model represents changes in one area over time, meaning that it can better control for exogenous variables that may bias OLS estimates.

Models

Model 1: Mean Alternative Percent = $\alpha + \beta_1$ Mean Median Income + ϵ_i

Model 2: Mean Alternative Percent = $\alpha + \beta_1$ Mean Graduation Rate + ϵ_i

Model 3: Mean Alternative Percent = $\alpha + \beta_1$ Mean Per-Pupil Spending + ϵ_i

Model 4: Mean Alternative Percent = $\alpha + \beta_1$ Mean Percent Non-White + ϵ_i

Model 5: Mean Alternative Percent = $\alpha + \beta_1$ Mean Median Income + β_2 Mean Graduation Rate + β_3 Mean Per-Pupil Spending + β_4 Mean Percent Non-White + ϵ_i

Model 6: Graduation Rate = $\alpha + \beta_1$ Alternative Percent + ϵ_i

Model 7: Graduation Rate = β_1 Alternative Percent_t + α_i + ϵ_i

Model 8: Graduation Rate = $\alpha + \beta_1$ Alternative Percent + β_2 Median Income + ϵ_i

Model 9: Graduation Rate = β_1 Alternative Percent_t + β_2 Median Income_t + α_i + ϵ_i

Model 10: Graduation Rate = $\alpha + \beta_1$ Alternative Percent + β_2 Median Income + β_3 Per-Pupil Spending + β_4 Percent Non-White + ϵ_i

Model 11: Graduation Rate = β_1 Alternative Percent_t + β_2 Median Income_t + β_3 Per-Pupil Spending_t + β_4 Percent Non-White_t + α_i + ϵ_i

Chapter 4: Results and Analysis

Characteristics of School Districts with Alternative School

Before analyzing how alternative education schools impact student outcomes via graduation rates, it is important to identify the characteristics of a district that would decide to utilize an alternative education school. The first regression, Model 1, looks at how median incomes are correlated with whether a school district will have an alternative school, and so the log median income will better represent the impact of diminishing marginal utility of income. Model 3 predicts how per pupil spending on the percent of schools in a district that are alternative and uses the log of per pupil spending due to concerns regarding diminishing marginal utility. Model 2 and Model 4 both use linear regressions to show how graduation rates and the percentage of people who are not white influence the percentage of alternative schools within a district, respectively. Table 2 shows the results of these models. Model 5 shows how all of the variables previously discussed come together to predict the percentage of school districts in a district that are likely to be alternative.

Table 2					
VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	0.133 *** (0.020)	0.004 (0.020)	0.285 *** (0.009)	0.042 *** (0.001)	0.313 *** (0.032)
Mean Median Income	-0.008 *** (0.002)				-0.008 *** (0.002)
Mean Graduation Rate		0.038 (0.021)			0.099 *** (0.025)
Mean Per-Pupil Spending			-0.027 *** (0.001)		-0.021 *** (0.002)
Mean Non-White				-0.003 (0.004)	0.005 (0.004)

N	4602	4602	38462	4186	3397
R2	0.005	0.001	0.019	0.000	0.025

*** p < 0.001; ** p < 0.01; * p < 0.05.

Table 2 establishes that, on average, school districts with alternative schools tend to have slightly lower median incomes, higher graduation rates, spend a bit less per student, and that there seems to be no clear correlation regarding race. One particularly interesting result from these regressions is that it appears that, all else constant, there appears to be a 0.099 percentage point increase in the percent of alternative schools in a district when there is a 1 percentage point increase in average graduation rates, which would point to districts with more alternative schools having a higher percentage of students graduate than districts without alternative schools.

Impact of Alternative Education Schools on Students

The following models and tables focus on if there is a correlation between the percentage of alternative schools within a district and graduation rates. To first look at how alternative education and graduation may correlate, models 8-11 utilize control variables that could affect both the percent of alternative schools within a school district as well as with graduation rates. Models 6, 8, and 10 use an OLS model whereas Models 7, 9, and 11 use a fixed effects model. I will use the fixed effects model because it will be able to control for certain unobservable variables beyond the control variables provided within the models that may affect both graduation rates and the percent of alternative education schools within an area.

Table 3		
VARIABLES	Model 6 (OLS)	Model 7 (Fixed Effects Model)
(Intercept)	0.930*** (0.001)	

Alternative Percent	-0.156*** (0.023)	-0.067*** (0.020)
N	4888	4888
R2	0.009	0.003

*** p < 0.001; ** p < 0.01; * p < 0.05

Models 6 and 7 both show regression models of the association between the percentage of schools in a district that are alternative on graduation, and both models predict that, on average, as the percentage of alternative schools in a district increase the graduation rate will decrease. Before drawing conclusions based on this information, the following tables use certain control variables to better understand how alternative schools may correlate with graduation rates.

Table 4		
VARIABLES	Model 8 (OLS)	Model 9 (Fixed Effects Model)
(Intercept)	1.287*** (0.036)	
Alternative Percent	0.132*** (0.023)	-0.064*** (0.020)
Median Income	-0.032*** (0.003)	0.027** (0.009)
N	4888	4888
R2	0.029	0.005

*** p < 0.001; ** p < 0.01; * p < 0.05

Models 8 and 9 show that there is a significant difference between the use of an OLS compared to a fixed effects model. Model 8 predicts graduation rates increase when the percentage of alternative schools increases, which is a different conclusion than Model 6 and 7.

Model 8, however, also includes the addition of median income on graduation rates, and as established in table 2, school districts with higher percentages of alternative schools tend to have lower median incomes on average. Model 9 illustrates a much more interesting picture of how alternative education schools correlate with graduation rates because it illustrates that, through time, as the percent of schools that are alternative in a district increase, graduation rates also decrease. Model 9 also shows a positive relationship between median income and graduation rates that was now shown Model 8, which may be due to several various unobservable variables impacting graduation rates, the percent of schools in a district that are alternative, and median income. Model 9, however, illustrates that as the median income of a district increases through time, so do their graduation rates on average.

Table 5		
VARIABLES	Model 10 (OLS)	Model 11 (Fixed Effects Model)
(Intercept)	1.533*** (0.056)	
Alternative Percent	0.085** (0.026)	-0.083*** (0.024)
Median Income	-0.022*** (0.004)	0.007** (0.012)
Per-Pupil Spending	-0.039*** (0.005)	0.036** (0.011)
Percent Non-White	-0.021** (0.007)	0.017 (0.013)
N	3959	3959
R2	0.044	0.008

*** p < 0.001; ** p < 0.01; * p < 0.05

Table 5 shows Models 10 and 11, both of which have more controls than the previous models used to depict the impact of alternative education schools on graduation rates. Similarly to the information shown in table 4, there seems to be counterintuitive with the OLS regression of Model 10 with it predicting that increases in median income and per-student spending are negatively correlated with graduation rates. The fixed effects models, though, illustrate that increases in median income and per student spending both positively correlate with graduation rates. Model 11 also predicts that when there is a 1 percentage point increase in the percent of school within a district are alternative, on average there would be a 0.083 percentage point decrease in graduation rates.

The conclusion that an increase in alternative schools within a district may lead to a decrease in graduation rates could be attributed to the idea that when a school district notices a decline in graduation rates, they are more inclined to create an alternative school. With the data available in table 2, however, it appears as though school districts that already have higher graduation rates tend to be those with higher percentages of alternative education schools.

Chapter 5: Discussion of Results

Implications

Based on the research done throughout this project, it appears as though alternative education schools do not effectively increase graduation rates. Given this information, the recommendation to school districts would be to invest in other forms of alternative and remedial education solutions for students rather than creating an alternative education school as its own entity. If the goal of alternative schools is to increase graduation rates, then the creation of an alternative school should coincide with an increase in graduation in the following years. This research, however, finds that when a district creates an alternative school, the graduation rates within that district are expected to decrease.

Models 7, 9, and 11 all use a fixed effects model while Models 6, 8, and 10 use a traditional OLS model. Tables 3, 4, and 5 show that these two types of regressions provide quite different results. The fixed-effects model may be a less biased representation of how alternative education schools correlate with graduation rates because it controls for exogenous variables that the OLS model cannot represent. The fixed effects model controls for exogeneity by mapping changes within one area throughout time, meaning that it can control for unobservable variables specific to a certain geographic location.

One possible explanation for this decrease may be that school districts decide to start funding an alternative school when they are already seeing a decline in their graduation rates. While this explains why the creation of alternative schools coincides with declining graduation rates, it may still mean that alternative schools are not enough to keep students within school and help them graduate – meaning that further research into other possible alternative education pathways is vital to help students on the margin of staying in school. If alternative schools are

not significantly accomplishing the goal of increasing graduation rates, it may be that they may not rehabilitate students struggling within the school system and instead simply divert them out of the traditional system where they may have access to more resources and stable peer networks.

When interpreting the results of the regressions, it is important to note that the intercept of the graduation rates exceeds one for Models 8 and 10, which is not a possible statistic for graduation rates as it would imply a graduation rate over 100%. The impossibility of the intercept is likely due to the unlikelihood that an area's median income would be zero, meaning that the intercepts within the models do not represent a school district that would exist.

Limitations

The primary limitation of this research is the limited time frame and scope of the data. Although school districts started creating in the 1960s and became more prominent in the 1990s, information regarding the number of schools in each district that are alternative only dates to the 2009-2010 school year. Additionally, due to the limited scope of time of the data from the CRDC, I used the 1-year estimates from ACS. The alternative to the 1-year estimates are the 5 year-estimates, but these estimates do not provide information for a specific year for which the data included were collected, meaning that it would not have provided the accuracy of data required given the already limited time frame of the data. The downside, however, of using the 1-year estimates is that it only has data for school districts whose bounds encapsulate a population greater than 65,000. The full scope of demographic information is also not easily accessible at the school district level through the ACS prior to 2012. Additionally, the datasets used included many errors on the part of the data collector, which could also cause some bias within the data.

One of the other limitations of this research was the time available to clean and analyze the datasets. Although a year is not a trivial amount of time to conduct research and write a paper, this research would have been more thorough and produced more thorough results if given more time. Specifically, this research would have been stronger if a case study were conducted to better understand the inner workings of alternative schools from the perspective of students, teachers, and administration.

Future Research

As discussed, there are some definite limitations to this research, and because of the importance of education, it is important that future research should be conducted to further analyze the impact of alternative schools on student outcomes. With a broader scope of data that could capture different possible student outcomes that could be traced at the school or school district level would strengthen this research. Information such as crime rates, college acceptance rates, and college graduation rates would all give needed insight into the effectiveness of alternative education schools on the lives of students.

A different type of research project, such as a case study, would also elicit vital insights into the impact of alternative education schools. A case study could specifically follow students from school districts that debated creating an alternative education school and then tracking students from school districts that decided to fund the school and students from the districts that did not open an alternative school. Another type of research project that would provide insight into alternative education schools would be to interview students and teachers about their experiences at alternative education schools.

Chapter 6: Conclusion

The purpose of this project was to answer the question: how do alternative education schools impact student outcomes? Through this research process, the preliminary answer to this question appears to be that alternative education schools may cause a decrease in graduation rates through time, which insinuates that these schools may have a neutral if not negative impact on students in terms of educational outcomes. Further research into different alternative pathways that could meaningfully help students on the margin of staying in school and dropping out would be significant in helping to close the growing income inequality gap.

With thousands of alternative schools already existing throughout the country, it may be important to reevaluate the effectiveness of these schools and their impact on students. If alternative schools are not significantly increasing graduation rates, then research into other graduation pathways is important for students on the margin of not completing school across the country. Even for students who do eventually attain a high school diploma, the education process should promote learning and exploration that serves the needs of students, meaning that beyond a high school diploma becoming a signal of completing the task of high school, it should symbolize the enhanced knowledge of going through the education system. For students that fall behind, there needs to be an avenue for them to continue their pursuit of education in a way that is meaningful to them.

Bibliography:

- Aron, L.Y. (2006). *An overview of alternative education*. Washington, DC: Urban Institute.
- Autor, David Claudia Goldin, and Lawrence F. Katz, "Extending the Race between Education and Technology," *American Economic Association: Papers and Proceedings* 110 (May 2020): 347–351
- Brock, T. (2010). Young Adults and Higher Education: Barriers and Breakthroughs to Success. *The Future of Children*, 20(1), 109–132. <http://www.jstor.org/stable/27795062>
- Dugger, J.M., & Dugger, C.W. (1998). An evaluation of a successful alternative high school. *The High School Journal*, 81(4), 218-228.
- Fuller, C. G., & Sabatino, D. A. (1996). Who Attends Alternative High Schools? *The High School Journal*, 79(4), 293–297. <http://www.jstor.org/stable/40364497>
- Galiani, Sebastian, Social Mobility: What is it and Why Does it Matter? (February 2008). <http://dx.doi.org/10.2139/ssrn.2225960>
- Government Accountability Office. (2019). *Certain Groups of Students Attend Alternative Schools in Greater Proportions Than They Do Other Schools*. (GAO Publication No. 19-373). Washington, D.C.: U.S. Government Printing Office.
- Kleiner, B., Porch, R., & Farris, E. (2002). *Public alternative schools and programs for students at risk of educational failure: 2000-01* (NCES 2002-004). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Kumm, S., Wilkinson, S., & McDaniel, S. (2020). Alternative Education Settings in the United States. *Intervention in School and Clinic*, 56(2), 123-126. <https://doi.org/10.1177/1053451220914895>
- Lange, C. M., & Sletten, S. J., (2002). *Alternative Education: A Brief History and Research Synthesis*. Alexandria, VA:National Association of State Directors of Special Education.
- Lehr, C. A., & Lange, C. M. (2003). Alternative Schools Serving Students With and Without Disabilities: What Are the Current Issues and Challenges?, *Preventing School Failure: Alternative Education for Children and Youth*, 47:2, 59-65, [10.1080/10459880309604431](https://doi.org/10.1080/10459880309604431)
- Lehr, C. A., Tan, C. S., & Ysseldyke, J. (2009). Alternative Schools: A Synthesis of State-Level Policy and Research. *Remedial and Special Education*, 30(1), 19-32. <https://doi.org/10.1177/0741932508315645>
- Lleras-Muney, A. (2005). The Relationship between Education and Adult Mortality in the United States. *The Review of Economic Studies*, 72(1), 189–221. <http://www.jstor.org/stable/3700689>

- National Center for Education Statistics. (2019). Adult Literacy in the United States. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. <https://nces.ed.gov/pubs2019/2019179/index.asp>
- National Center for Education Statistics. (2023). Public High School Graduation Rates. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. <https://nces.ed.gov/programs/coe/indicator/coi/high-school-graduation-rates>.
- Office for Civil Rights, *AN OVERVIEW OF EXCLUSIONARY DISCIPLINE PRACTICES IN PUBLIC SCHOOLS FOR THE 2017-18 SCHOOL YEAR*. Washington, D.C.: U.S. Government Printing Office.
- Ossa, P. (2005). "Hear My Voice:" Alternative High School Students' Perceptions and Implications for School Change. *American Secondary Education*, 34(1), 24–39. <http://www.jstor.org/stable/41064560>
- Phillippi, S., Thomas, C. L., Gastanaduy, M., & Sawyer, M. (2022). Reducing Disparities in Academic Outcomes Among Youth of Color: Evidence From an Alternative Education Program. *Remedial and Special Education*, 43(3), 172-182.
- Tobin, T. & Sprague, J. (1999, Summer). *Alternative education programs for at-risk youth: Issues, best practices, and recommendations*. Eugene OR: University of Oregon, Oregon School Study Council. <https://files.eric.ed.gov/fulltext/ED432805.pdf>
- Trends in the Distribution of Family Wealth, 1989 to 2019*. Congressional Budget Office. (2022). <https://www.cbo.gov/publication/57598>
- Wilkerson, K., Afacan, K., Perzigian, A., Justin, W., & Lequia, J. (2016). Behavior-Focused Alternative Schools: Impact on Student Outcomes. *Behavioral Disorders*, 41(2), 81–94. <https://www.jstor.org/stable/26780300>