

SCHOOL VOUCHERS – THE EFFECTIVENESS  
ON STUDENT ACHIEVEMENT OUTCOMES

by

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A Policy Analysis  
Presented to the  
Faculty of the Department of Public Policy and Administration  
School of Business and Public Administration

CALIFORNIA STATE UNIVERSITY, BAKERSFIELD

In Partial Fulfillment of the  
Requirements for the Degree of

MASTER OF PUBLIC ADMINISTRATION

May 2011

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## **Acknowledgements**

I would like to thank my husband, Steve Moorhead, for having so much patience with me throughout my years of working on my education, which required ignoring him many nights. He encouraged me during my hours of research, classes at night, and enormous stacks of research papers surrounding my corner of the living room.

I would also like to thank my two daughters, Stephanie Major and Susan Gallagher who encouraged me to go back to school in the first place. Had it not been for them I would not have taken that first step into the classroom. You two are the best daughters a mother could ask for.

Thank you all so much for encouraging me and never allowing me to quit.

## **Executive Summary**

School vouchers promise to improve parental choice in offering a higher quality education for their child. The primary effect of school vouchers or school choice is its tendency to increase the educational gap between the middle and upper-income and the low-income students. This policy analysis describes how the voucher system was intended to work and what is known about their actual effects on students, parents, and public schools in various areas.

Research of literature regarding various implemented voucher programs in the United States and two other nations was conducted. The main purpose of this analysis was to determine if students who utilized school vouchers showed improved student achievement outcomes. The research also covers how data from the voucher programs was analyzed along with controversial analysis on the original findings.

To conduct the analysis for this paper, I accessed third party information from scholarly journal articles after receiving approval from California State University, Bakersfield Instructional Review Board (IRB). The information gathered was from research articles on various voucher programs and analysis of those programs.

The literature I studied revealed small but inconsistent effects of school vouchers. The programs varied by ethnicity, program structure and incentives. The research did not produce evidence that students' achievements increased over a long-term.

Recommendations developed from the analysis include: 1) changing the curriculum of the public schools or developing new academic programs; 2) getting back to basics; 3) lower the student-teacher ratio; and 4) target more resources toward states with a higher proportion of minority and disadvantaged students.

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## Chapter 1

### **School Vouchers – The Effectiveness on Student Achievement Outcomes**

#### Introduction

For more than a decade, California has been trying to pass a proposition that would amend the State's Constitution making major changes in public funding for K-12 education. Proposition 38, which did not pass in 2000, would have required the state to offer a school voucher, or an annual scholarship, to every school-aged child in California (School, 2000). In 2008-09, the public school system had approximately 6.25 million students attending 9,900 public schools. The private schools had approximately 536 thousand students in 3369 private schools (Education, 2000).

The state does not normally provide funding for students attending private schools, with the exception of a small number of children with physical, mental or learning disabilities, who are placed in special private schools (School, 2000). The proposed voucher was to be in the amount of \$4,000 or one-half of the national spending average per pupil in public schools (whichever was the greater). In 2000, the national spending average per pupil was \$8,000; in 2008-09, the national spending average was \$8594 (Ed-Data, 2010). The voucher could only be used if the parent chose to send their child to a private school. The state would make the check to the parent but send it to the private school that the child was to attend (School, 2000).

In 1988, the voters, establishing a minimum funding level for public schools and community colleges, approved Proposition 98. Each year the minimum funding level changes depending on the attendance in public schools and the growth of the state's economy. Public education also receives funds from other sources such as federal funds

and lottery funds. Proposition 38 (school vouchers) would have created an alternative minimum funding level for California's public schools, replacing Proposition 98.

Proposition 38's national average funding guarantee did not include funds for community colleges, adult education, or most childcare programs, which were funded under Proposition 98 (School, 2000).

Private schools agreeing to accept school vouchers from the state would have had to agree not to discriminate because of race, ethnicity, color, or national origin.

However, Proposition 38 did not restrict the private schools from restricting admission based on sex, religion, test scores, or disability. The proposition would also impose new restrictions on the ability of government to adopt new laws and regulations affecting private schools. It would require a three-fourths vote of the Legislature. Two-thirds vote by the local governing board would be required for local government to impose new health, safety, or land use regulations on private schools (School, 2000).

Public schools are required to administer standardized test for measuring academic achievement. Any private school that agreed to accept vouchers would have been required to administer the standardized tests. The results (by grade level) would have been made available to the public. Test results of individual students would have only been released to the parent (School, 2000).

#### Problem with School Vouchers

School vouchers, had they been passed, could have had a devastating effect on the public school system. School vouchers give parents the choice to pull their child out of the public school system and send them to a private school of their choice. It does this by offering parents an annual scholarship of \$4,000, which is deducted from the public

school's funding, to pay for tuition for the private school. However, the private school does not have to accept all students who apply to the school. The private schools have the right to discriminate based on gender, ability, and even disability (School, 2000). Public schools must accept all students without exception. Students who have already been attending private schools will also be eligible for the \$4,000 school voucher. In 2008-09 over 536,000 students attended private schools in California. In 2000, when Proposition 38 was on the ballot, the cost to taxpayers would have been \$2-\$3 billion dollars per year (School, 2000).

Proposition 38 stated the \$4,000 school voucher would be paid directly to the private school on behalf of the student. If tuition were less than \$4,000, then the leftover money would be put in a trust for the student and follow the student throughout his or her education. If any money remained in the trust at the time the student was ready to go to college that money would help pay for college tuition (School, 2000).

Proponents for schools vouchers believe that the public education system is deteriorating. Many believe that if public schools have to compete with private schools for students and funding, the public school's performance levels will become more effective (Ladd, 2002). Many of California's children are attending school's that are low-achieving, and perhaps with school vouchers to help pay for tuition at a private school they would be able to get a better quality education (Ladd, 2002).

Private schools can be selective in their admission criteria accepting only high-achieving students, leaving the low-achievers at the public schools. Private schools do not normally accept students who have learning disabilities, leaving them at the public school

system, making the gap between private and public school achievement scores even wider (School, 2000).

#### Methods and Procedures for Analyzing School Vouchers

To determine the effects of school vouchers on the public school system, I will conduct a review of literature regarding school voucher programs. The analysis will cover various implemented programs in the United States, as well as two other countries. I will review how students' were selected, the eligibility requirements and the outcome of student achievement scores after leaving a public school to attend a private school. The review will also look at the student achievement outcomes at the public schools that were affected by the school vouchers. This study will help determine whether California should move forward with another attempt at school vouchers or finding a way to improve performance levels at the public school systems.

Review of the literature and analysis of the outcomes from the various programs where school vouchers were used will help determine the most effective processes that should be initiated to improve the performance levels of the public education system. This will be helpful to the California State Department of Education, which monitors the public school's performance levels.

#### Practical Value of the Study

A study of states and other countries that have tried school voucher programs will help show whether voucher programs has made an improvement in student achievement outcomes and had a difference in the effectiveness of public school's performance. The Department of Education, the public school system, and parents are responsible for making sure students are receiving a quality education. Reforms for the K-12 education

system are necessary to ensure public schools are operating more effectively and students are getting the best possible education. Offering parents school vouchers to remove their child from the public school system to enroll in a private school does not necessarily guarantee a better quality education. Goals and objectives of school vouchers, as well as the effectiveness will need to be measured.

School vouchers take money from the public school system to help pay tuition for students to attend private schools. If a large number of students chose to use school vouchers to attend a private school, are there enough private schools to accommodate all the students? New private schools could pop up, but what guarantees they would be able to provide a quality education or whether they are just in it for the money.

## Chapter 2

### **Review of Literature**

Choice-based reform has been a controversial issue for years. School vouchers have been debated since 1952. School vouchers gave parents and students public and private schooling options. They raised issues about educational markets, government regulation, and public accountability. They also had to consider the parent's ability to make informed decisions regarding their child's education (Howell, Wolf, Campbell, Peterson, 2002).

#### Student Sorting

Epple and Romano (1998) noted that student achievement can depend on the student's own ability and on peers' ability. They discussed student sorting that goes on in private schools. High-ability, low-income students might receive tuition discounts, while low-ability, high-income students would pay premium tuition. The vouchers would increase the size of the private sector, benefiting high-ability students relative to low-ability students.

The educational process is made up of two key elements according to Epple and Romano (1998). The first is the students' difference in abilities. Students with higher ability have a higher educational achievement. Lower-ability students benefit by attending school with those students. The second key element is the difference in household incomes. A higher household income is associated with higher educational achievements. The student body determines the quality of the school.

School vouchers would change the quality of public schools. Higher-ability students have a better chance to make use of a school voucher. Private schools can be

select in their admission process. Lower-ability students might not meet the private school's admission criteria, leaving them at public schools. Lower-ability students would no longer have as many higher-ability students as peers. The balance of high- and low-ability students would be uneven (Epple and Romano, 1998).

### Neighborhood Schools

Students normally attend the public school associated with their neighborhood. Public schools do not have a choice on which students to accept. All students, high and low achievers, living within the school boundaries, attend the same school. Parents can choose a particular school by living within that school's boundaries. Families with middle- and high-incomes sometimes move to well-to-do suburbs. Schools in those areas are able to provide advantages for students due to higher property taxes. In comparison, students whose families have a lower income or are racially isolated end up in schools with insufficient resources. These schools usually have lower average achievement, disadvantaged students, and high dropout rates (Ladd, 2002).

### Main Goals of School Vouchers

According to Ladd (2002) proponents for school vouchers state that a carefully designed school voucher program could help provide a better choice for the low-income families. Another benefit mentioned by Ladd is families having greater access to private schools by means of vouchers would be less likely to change their residence. People in favor of school vouchers believe the quality of education has been deteriorating for years. Competing with the private sectors for students would force the public schools to improve performance levels (Ladd, 2002).

In 2002, Levin's analysis gave four main goals of school vouchers, freedom of choice, productive efficiency, equity, and social cohesion.

*Freedom of choice:* Vouchers will increase parental choice of school for their child. Parents will be able to choose a school based on their own values and educational viewpoint. Parents can also choose a private religious school matching their beliefs. Keeping their child at a public school is also an option. The choice will be the parents. Educational productivity at public schools needs to improve.

*Productive efficiency:* School vouchers will create a market competition among schools. Schools will have to compete for students, creating strong incentives to improve efficiency. The quality and productivity of education has to improve. School vouchers, according to Levin's analysis, will force schools to compete in meeting the needs of the students also.

*Equity:* Students will be able to have an equal opportunity to have access to a quality education. School vouchers will not discriminate because of family income, ethnicity, or neighborhood of a student. Opponents think the voucher system will create a greater inequity. Private schools can be select on the students they admit. They can discriminate because of gender, ability to pay, or academic and physical ability.

*Social cohesion:* Proponents believe school vouchers will promote schools to teach on a more common ground. Social values, goals, language, and curriculum are common elements of schooling in a democratic society. These values are necessary for civic and economic participation.

In California the public school system's curriculum are regulated by the California Department of Education. Private schools will most likely have some regulations on the curriculum if they choose to implement school voucher programs (School, 2000).

### Quality Education for All Students

Schools that are privately managed are supposedly more effective and more efficient. Students enrolled in private schools have higher percentage of students graduating. Private schools can supposedly offer a better quality education to low-income students. Proponents for school vouchers say students at private school achieve higher test scores than students at public schools. They also say private schools can offer outputs that public schools cannot. Private schools can offer a religious education, guarantee admission to a university, or a job at a particular company (Carnoy, 1997).

Vouchers, according to Carnoy (1997), can be of more benefit to poor families than to the wealthier. It will equalize the chance for a quality education and outcomes. It also draws attention to the quality level of education low-income area schools are producing. Unfortunately, most low-income students still cannot take advantage of the voucher program. The families cannot afford the additional costs, or they do not meet the admission criteria of the private school of their choice (Carnoy, 1997).

Privatization should help provide an opportunity for a quality education for all students. However, privatization would create greater inequality. Voucher or choice plans have a tendency to widen the gap between high- and low-income students. Lower-income students are left behind at the public schools (Carnoy, 1997).

Voucher programs are aimed at helping low-income students have a chance at getting a better quality education. The literature I reviewed covered the eligibility requirements, how the applicants were selected, and verification. Once the parents completed the required processes and their child was enrolled at a private school, the student's achievement outcomes were monitored. These outcomes were compared to their public school peers. Additional research on the various voucher programs created controversy regarding the reported outcomes of the initial findings (Huerta, Ruenzel, Fuller, 2000).

P.J. McEwan (2000) writes that school voucher programs can be measured by tracking the number of students who accept vouchers and enroll in private schools. Private schools can be divided by the type of private school, such as religious-based. Schools accepting vouchers would be required to administer the same standardized tests required by public schools. These tests would help measure academic achievement. The test results for each grade level would be measured and made public. The individual scores would be made available to the parents only. The grade level scores would be compared to those at the public schools. McEwan suggests another measure of effectiveness, how many of the voucher students complete high school, graduate, and attend college (McEwan, 2000).

### Major Stakeholders

In reviewing the literature, the one constant was the private schools would benefit financially making them major stakeholders. The state issues a check directly to the chosen private school on behalf of the student who receives a school voucher. Accepting state funds would require private school to make adjustments. Private schools would be

accountable to the state for student performance reports (School, 2000). Admission criteria would be less restrictive but they could still discriminate because of ability or disability.

The National Education Association's literature on schools vouchers reviews the role taxpayers have in the voucher program. Taxpayers end up paying for two systems, public and private. Students who leave the public school for a private school take the student funding with them (NEA, n.d).

States fund schools based on enrollment. Some states have enacted open enrollment. Parents are allowed to enroll their child at any school within the state other than their neighborhood school. Wherever the student enrolls the funding allocation follows the student. This method was tried in Massachusetts. Most families that participated were white. They left racially integrated school and enrolled in better-off, more racially homogenous schools. Approximately 7000 students made the move from the lower-income school district and move to the more affluent district, taking the funding with them (Huerta et al., 2000). School districts were unable to reduce fixed costs such as salaries and benefits, even though their funding had been reduced. Another area that affects taxpayers is fraud, waste, and abuse that have plagued voucher programs.

#### Summary

Private schools can be selective in which students are allowed to attend by setting rigid admission criteria creating student sorting. As a result only the high achievers would be able to get into the top private schools. This would leave the lower achieving students at the public schools.

Public school's facing competition from private schools due to vouchers were expected to show improvement in educational performance. Vouchers give parents the opportunity to decide what is best for their child's educational needs, public or private. All students should have an equal opportunity at a quality education, regardless of the family's income or the child's academic or physical abilities. However, due to student sorting, vouchers could widen the gap between high and low-income students.

Students who accepted a voucher and transferred to a private school were to have their achievement outcomes monitored. Their achievement outcomes were measured using various methods. The outcomes were compared to students who remained at the public schools. These outcomes were to be made public and noted whether any improvements were made by those students that moved to the private schools.

The next chapter will discuss various voucher programs that were selected based on their differences. Several were privately funded while others were funded by the government. Most of the programs' eligibility criteria were based on low-income families, however, one state based their program on how well the school performed. Programs from different cities and countries will be compared for eligibility and implementation. The policy analysis will look at how data on student achievement outcome from the various programs were reported to determine if there were significant improvements. The analysis will also review controversial reports on data regarding student achievement outcome findings.

## Chapter 3

### **Examining Various Voucher Programs**

This chapter will review research material on various voucher programs. Voucher programs vary widely in how they were developed. I reviewed voucher programs in five cities (New York, Dayton, Washington, D.C., Cleveland, and Milwaukee) and one state, (Florida) within the United States. I also reviewed two countries, Chile and Colombia. The analysis will review the achievement outcomes to determine if students who were awarded vouchers to attend private schools showed improvement in student achievement. It will also review the application process and eligibility criteria.

#### Background and Eligibility of the Various Voucher Programs

New York, Dayton, and Washington, D.C. were all privately funded voucher programs. To be eligible, the students in these cities had to come from families whose income was at or below the poverty level. The amount awarded to these students ranged from fifty to seventy-five percent of the private school tuition (Howell, Wolf, Peterson, & Campbell, 2001). Of these three programs, one city only allowed students who currently attended a public school to apply for a voucher; whereas, the other two cities allowed students attending either a public or private school to apply (Howell, 2004).

Milwaukee and Cleveland were both government funded voucher programs. In the Milwaukee voucher program, only low-income students whose family's incomes were 175 percent below the poverty level were eligible. Milwaukee began their voucher experiment in 1990 and it was called the "voucher shock" program. It was also the longest running voucher program in U.S. history (Chakrabarti, 2008). Cleveland began its voucher program in 1996-97 school year. Unlike Milwaukee, Cleveland families had to

come up with additional money to add to the voucher to attend private schools. Vouchers in Cleveland could also be offered to students who already attended a private school, and vouchers could be used at a religious school (Carnoy, 2001).

Florida's program, government funded, started in 1999 and was called the "threat of voucher". Schools that received an "F" grade for the first time received a threat of vouchers. If the school received a second "F" within the following 3 years, school vouchers were offered to all students. "F" indicated the schools failed to meet the government designated cutoff quality level (Chakrabarti, 2008).

Chile began their nationwide school voucher program in 1981. The purpose was for parents to be able to freely choose which school their child would attend. Chile believed that choice would improve the quality of education as it would create competitiveness between schools. Chile's purpose was very similar as to those of many wanting to implement school voucher programs in the United States. Also, private schools supposedly provided a better quality education than public schools. A parent, when given a choice, tends to select a school that can provide "good" peer groups for their child (Hsieh & Urquiola, 2002).

Colombia is a developing country where education is more dependent on the private sector for secondary education because of inadequate public school capacity, especially in poor, remote areas. Educational policies in many developing countries are typically made by the central government. Colombia launched a national voucher program in ten of its largest cities in 1991. The first students were admitted to private schools via a voucher in 1992. The voucher students made up eight percent of all the

students attending private schools. Only the poor can qualify for the voucher program (King, Orazem, Wohlgemuth, 1999).

#### School Voucher Application Process

In New York, Dayton, and Washington, D.C., more families applied for vouchers than were available, vouchers were awarded on a lottery system in all three cities. The voucher recipient's income level, household size, and the tuition at the selected private school determined the value of the voucher (Campbell, West, & Peterson, 2005). The cities all targeted students who were from low-income families. Families having an income equaling two-and-a-half times the poverty line or higher were ineligible. This is similar to Milwaukee, students eligibility was determined by a family's income being 175 percent the poverty level (Chakrabarti, 2008). Students had to come from families whose income qualified them for the U.S. government's free lunch program (Howell, 2004).

Cleveland offered vouchers to low-income students and they had the choice of attending a religious private school if they chose. Cleveland also had a voucher office created by the State Education Agency. The office was staffed by state civil servants and contractors, which advertised the program, helped to gather parent applications, and recruited schools willing to accept voucher students. The voucher office then conducted a lottery selection and notified those selected. The staff had to verify the incomes of the selected families to ensure their eligibility and then make arrangements for the parents to learn about their options (Hill, 2003).

Because the application for school vouchers greatly exceeded the available slots, a lottery system was also set up in New York, Dayton, and Washington, D.C. This was to give families an equal chance of winning a voucher. Each family that was drawn in the

lottery had to attend a verification meeting to determine their eligibility (Howell et al., 2001). After a family is notified they have been drawn for a voucher, it is the parent's responsibility to choose a private school. The parents are also required to come up with the difference between what the voucher pays and the actual tuition and other costs associated with attending a private school. Some of the additional provisions parents might have to pay for include cost for uniforms, textbooks, supplies, school activities, as well as provide transportation to and from school (Howell et al., 2001).

Florida was significantly different since it was based on how well the school performed. Students did not have to apply and it did not matter about the parent's income. If a student attended one of the school's that rated "F" two times within three consecutive years they were automatically eligible for a voucher (Chakrabarti, 2008). Cleveland's application process goes to a random selection if, the student applications to attend a participating private school exceeds enrollment limits (Hill, 2003).

In Colombia, only the poor can qualify for a voucher. The families were able to apply for a voucher each year as long as the student advanced to the next level. The vouchers were only available to those students in grade six through eleven (King et al., 1999). Chile allowed any child to be eligible to apply for a voucher. Their voucher program was nationwide. The purpose of their voucher was to allow the parents to freely choose which school their child attended. Chile believed that choice would improve the quality of education as it would create competitiveness between schools (Hsieh & Urquiola, 2002).

## Student Achievement Outcomes

Debates have been ongoing since voucher programs were first introduced. The debate regards whether public schools would improve their performance when forced to compete against school vouchers. A closer look at the “voucher shock” and the “threat of vouchers” programs was to determine if design matters as far as public school performance matters (Chakrabarti, 2008).

Florida, Cleveland, and Milwaukee fell under “voucher shock” and “threat of vouchers” category (Chakrabarti, 2008). Chile’s voucher program was similar to that of some of the other voucher programs in the United States. They believed the voucher program created competitiveness between the public schools and the private schools. Chile’s program was designed to offer parents the freedom to choose which school their child attended. They believed private schools offered a better quality education (Hsieh & Urquiola, 2002). Colombia’s voucher program was completely different; its main goal was aimed at providing a means for the poorest students a chance at receiving a secondary education (King et al, 1999).

Table 1 summarizes the voucher programs in six areas in the United States, as well as Chile and Colombia. The table gives the qualifying population for the voucher programs reviewed in this paper. The last column of the table gives the monetary value of each voucher program per pupil. All are government subsidized voucher programs except New York, Dayton, and Washington, D.C., which are privately funded programs (West, 1997).

Table 1: Education Vouchers: A Survey of Primary and Secondary Schooling

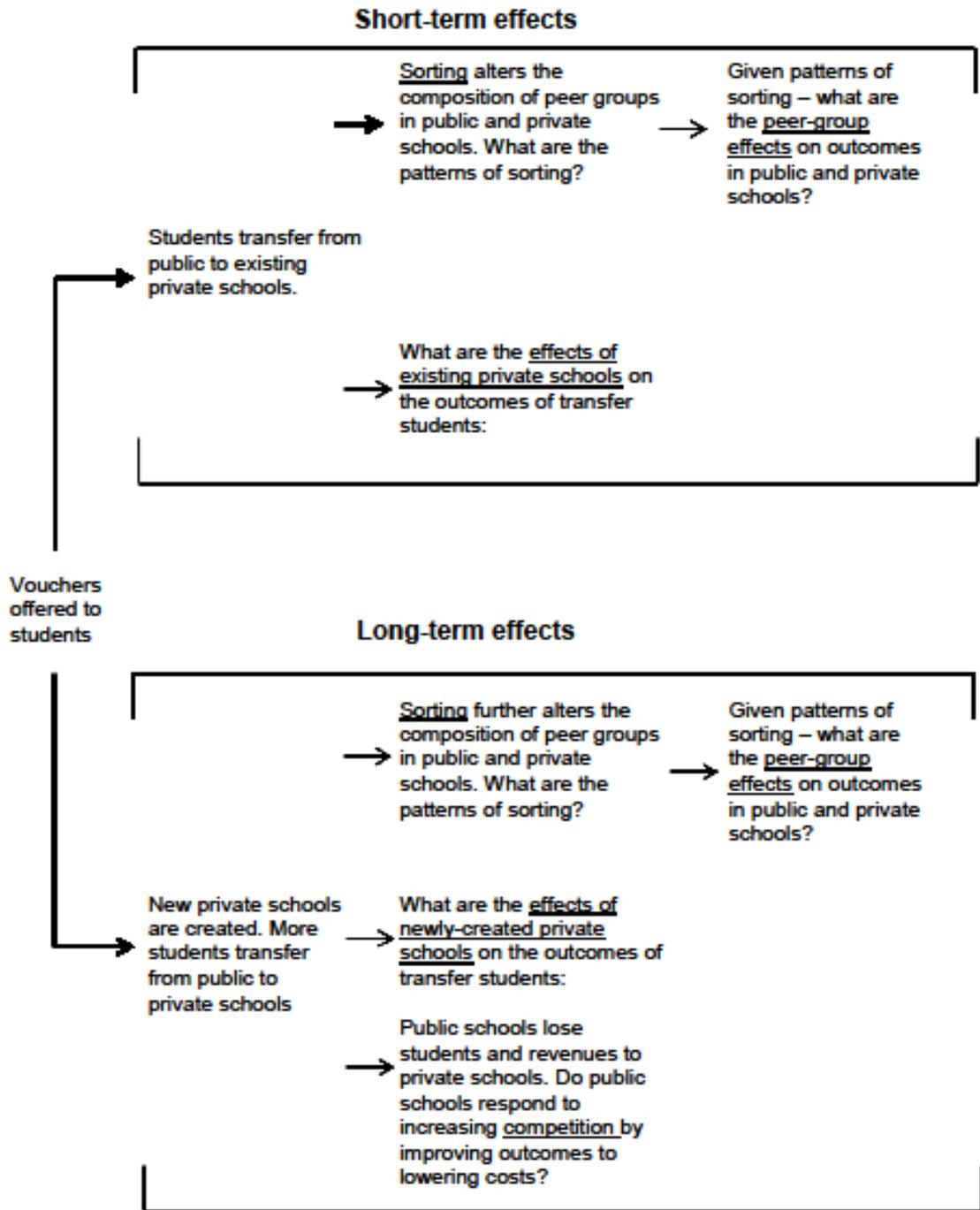
Country	Qualifying Population	Coverage	Regulations and Practices	Monetary value of voucher per student
Chile	Low-income elementary and secondary school attendees	More than one-third of total enrollments	Receiving schools can also charge fees	Average value in 1991: 4,359 pesos
Colombia	Low-income students	Operational in 216 municipalities; vouchers usable in private schools	Program participation renewable if student performance satisfactory	\$143 a year
United States	Low-income students in Cleveland City School District (K to 3 <sup>rd</sup> grade), 11,864 student in current pilot scheme	Public and private school from K-34d grade up through 8 <sup>th</sup> grade; religious schools are included	Vouchers in the form of checks payable to the parents of “scholarship” students	Based on tuition charged by private schools of choice; normally around \$3000 a student
United States	Low-income students in Milwaukee; “shock of voucher” program	Private schools	Participating schools must limit voucher students to 65 percent of the student body	\$2,900 a year (1994) – increased after 1998 when private sectarian schools allowed
United States	Low-income students in New York, Dayton, and Washington, D.C.	Private schools	Vouchers payable to chosen private school (vouchers privately funded)	Families required to pay partial funding
United States	Florida - All students attending a school that receiving an “F” grade 3 years in a row; “threat of a voucher” program	Private schools		Equal to the state aid per pupil

Source: West, E.G., 1997, pp 88-90

Figure 1 outlines how student sorting could affect the short term and long term of student achievement. If private schools are more effective than public schools, then those students transferring in may have a different outcome. Students, when exposed to new peer groups will perform differently, whether in public or private schools (McEwan, 2000). New private schools might find vouchers attractive and enter the market, while existing private schools close their doors to vouchers. The long-term effects of vouchers could depend on the effectiveness of the newly-created private schools, and the evolving student sorting patterns (McEwan, 2000).

New private schools wanting to get in on the voucher program could include for-profit, non-profit, religious, or non-religious. A full assessment of the short- and long term impact of the voucher plans should analyze several areas. It should analyze the relative efficiency of both public and private schools involved, whether existing or newly-created. The assessment should determine whether the public schools' efficiency began to improve with the onset of competition by private schools. Finally, an analysis should examine student sorting that was brought on by vouchers and if it had an effect on student outcomes because of peer-groups (McEwan, 2000).

Figure 1: Schematic of the potential impact of vouchers.



Source: McEwan, 2000, p 108

## Effectiveness of Voucher Programs

An ongoing argument has been that giving parents vouchers to send their child to a private school will provide the student with a better quality education and stimulate competition among the public schools. The voucher programs have mainly been evaluated by researchers who openly and actively support vouchers. President Bush pushed for school vouchers during his presidency. As a result, there is a need for a balanced perspective on whether school vouchers actually improve student performance.

According to Carnoy (2001), the evidence found the vouchers' effects on student achievement were almost certainly smaller than claimed by pro-voucher researchers. He states that one of the common problems with the implementation was the validity might have been compromised, producing misleading results. He also stated that the results were often marked by inconsistencies across grades, academic subjects, and racial groups.

In this report, New York, Dayton, and Washington, D.C. voucher programs were the only ones that showed significant improvements in test scores for students switching from public to private schools, but these improvements are not without controversy. The test scores for the voucher programs offered in New York, Dayton, and Washington, D.C. showed that no significant differences were found for non-African Americans switching from public to private school. However, African Americans who switched from public to private schools did show improvements in test scores. After one year, they scored 3.3 NPR points higher on the combined math and reading tests. After two years they scored 6.3 NPR points higher (Howell et al, 2001). Most of the increase in year one was with the younger students. The older students actually did poorly the first year they switched from

public to private school. The researchers felt the low achievement levels may be the older students' discontent with the changes. When the data from the test scores were compared nationwide, after the second year, about one-third of the differences were erased. The test-performance gap between African-American students and those of students of other ethnic groups become much less after the second year (Howell et al., 2001).

Controversy to Voucher Program Findings in New York, Dayton, and Washington, D.C.

Mathematica Policy Research, Inc. (MPR) is a private, employee-owned company that conducts policy research and analysis. MPR aided in the research and analysis conducted in the three voucher programs in New York, Dayton, and Washington, D.C. MPR reports closer review on the evaluation was needed regarding the voucher programs offered in New York. MPR and the research group Howell, et al., (2001) both agree to the following prerequisites for the voucher programs in the three cities. Students, who were drawn during the lottery and offered a voucher, had to attend an eligibility verification session. During the initial session students were given the Iowa Test of Basic Skills (ITBS) to collect baseline data. However, kindergartners were exempted from this requirement. There was no significant difference in the baseline test scores between those students who used a voucher and those who did not (Molnar, 2001).

After reviewing the evaluations, the conclusions were called into question by the MPR team. The Howell research team presented the results from the three cities that had been averaged across grade levels. They had combined the averaged results from all three cities. According to MPR, averaged results can conceal inconsistent findings. They might also make the achievement impact report appear more generalized than it actually was (Molnar, 2001).

It is important to note that only a small fraction of New York City's low-income students were offered scholarships. That small fraction made up an even smaller fraction of students attending New York's private schools. A much larger program could have had a different program outcome (Myers, Peterson, Mayer, Chou, Howell, 2001).

Results from the evaluation show that after two years students who were offered a voucher had about the same test scores as students in the control group. Positive results were found for African Americans but not for Hispanics in Dayton and Washington, D.C. when results were looked at separately. When the test scores were evaluated by grade level there were no significant increases in the composite scores. (Myers et al., 2001).

Overall results of attending a private school after two years showed no significant improvement in test scores for Hispanics or other students, except African Americans. The results for African Americans showed improvements for those students in grade six, but remained unchanged for students in grades one through five (Myers et al., 2001). Mathematica, after reviewing the averaged data, issued a separate report stating students offered a voucher in New York City performed at about the same level as students in the control group (Molnar, 2001).

#### Effectiveness of Florida, Milwaukee, and Cleveland Voucher Programs

Unlike the New York, Dayton, and Washington, D.C. voucher programs that were privately funded, Florida, Milwaukee, and Cleveland programs were funded by public funds. These three programs were designed based on "voucher shock" and "threat of vouchers" which could in itself have an effect on the performance of the public schools. A concern about Florida's schools, with the "threat of vouchers" program, was whether

the improved performance was a response to the program or to avoid the stigma of being labeled an “F” school (Chakrabarti, 2008).

The Milwaukee voucher program changed dramatically after allowing religious schools to accept vouchers. The number of students accepting vouchers grew from one percent to fifteen percent. The public school’s quality was affected because of changes in student composition and peer quality brought about by sorting. Evaluations on the Cleveland voucher program brought about disagreements. Evaluations were conducted on different sets of students by different groups of researchers almost immediately after the program got started (Carnoy, 2001).

The students participating in the Milwaukee and Cleveland voucher programs showed no or little evidence of improvement (Carnoy, 2001). No evidence of any negative effects was discovered from the two voucher programs either (Chakrabarti, 2008). In Cleveland, those students attending the for-profit private schools did significantly worse than non-voucher students in one study. Many of the poorest choice students in voucher programs returned to the public schools at the end of the second year (Carnoy, 2001).

Florida schools that received an “F” and were threatened with a voucher showed signs of positive improvement in each of the years after the program. However, the improvements may not necessarily reflect the threat of vouchers, but instead may be as a result of the stigma effect. According to Martin Carnoy’s “School Vouchers: Examining the Evidence” (2001), he agrees that the improvements could have been brought about by the grading system. He stated that Texas and North Carolina had gains similar to those of

Florida. Both of those states had a school grading system but were not threatened with a voucher program.

In Florida the number of “critically low” schools decreased from 158 to 71 in 1995-96 and down to 30 schools in 1996-97. By 1999-2000 the number of schools that were offered a school voucher due to the grading system and recently introduced “threat of voucher” was down to two schools. In 2000-2001 no school in Florida was eligible for the voucher program (Carnoy, 2001).

According to Chakrabarti (2008), the programs when compared, showed that the design of the voucher program can make a difference on how public schools perform. The Florida program with the “threat of vouchers” showed signs of improvement, whether from actual threat of vouchers or from stigma, got them to improve their performance. Another possible reason for Florida’s improved performance was schools may have started “teaching to the test (Carnoy, 2001). The Milwaukee public schools, who were faced with “voucher shock” and all low income students were eligible, did not show any significant improvements in their performance levels (Carnoy, 2001).

#### Chile and Colombia Voucher Effectiveness

Chile offered vouchers to parents as a way of providing a choice for a better quality education for their child. Many of the new private schools that opened were for-profit private schools and had a large impact on the more densely populated and wealthier population. Families from the lower socioeconomic background were left behind to attend the public schools (Hsieh & Urquiola, 2002).

A nationwide test was introduced at the beginning to measure the impact of the competitiveness caused by the voucher. No evidence was found that the average

education outcomes were improved. Chile participated in Trends International Mathematics and Science Study (TIMSS), a testing program for math and science, in 1970 and 1999. According to the results, Chile's ranking from 1970 tests compared to the 1999 results worsened. Chile's voucher program did conclude that the middle-to-upper class families took advantage of the vouchers and left the public schools to enroll their children in the private sectors. The research also showed that the shift did not seem to have resulted in any achievement gains (Hsieh & Urquiola, 2002).

Colombia's voucher program was aimed at the poorest students so that they might receive a secondary level education. The voucher paid for students from sixth through eleventh grade. The participating private schools had higher student-teacher ratio and offered non-academic tracks such as vocational or technical. The quality of the participating private schools was closer to the public schools than to the non-participating private schools. On the nation-wide school-leaving exam administered to eleventh grades, the participating private schools test scores on the average were lower (Hsieh & Urquiola, 2002).

### Summary

Research for voucher programs was reviewed for different cities and states within the United States as well as Chile and Colombia. New York, Dayton, and Washington, D.C. first reported African American students who switched from a public school to a private school showed improved test scores after two years. After further investigation, the original researcher's partners reported that the scores of all three cities had been combined and averaged across grade levels. When separated, it was the African American sixth graders who had actually showed the improved test scores. The African

American students in other grades showed no significant improvements, nor did any other students from other ethnic backgrounds.

Florida, Milwaukee, and Cleveland voucher programs indicate that the design of the program can have an effect on the outcome. A school that was given a grade, such as Florida's schools, might have improved without the threat of vouchers, because of the stigma effect. Texas and North Carolina's schools were graded and without the threat of vouchers improved their outcomes.

The research shows us that when data was grouped together results can be skewed giving a false evaluation. Common problems, (inconsistencies across grades, academic subjects, and racial groups) during implementation of some of the voucher programs could have compromised the validity and produced misleading results. Because of the controversy on reporting procedures of the various voucher programs, no concrete conclusions can be drawn on the positive effects of students switching from a public school to a private school.

## Chapter 4

### **Summary, Recommendations, and Conclusion**

#### Summary

School vouchers have been a significant part of the education policy. Proponents continually push for school vouchers as a means of promoting a choice for parents to obtain a quality education for their children. Proponents for vouchers have conducted various research projects that show that some students who received a voucher and transferred to a private school improved their test scores. Further study on those same research shows that the test scores for students who accepted vouchers may not have been as improved as originally reported. The results may have been skewed as a result of how data was collected and analyzed, such as averaging test scores across the grades (Carnoy, 2001).

After reviewing literature for various voucher programs, I concluded that vouchers cannot help the vast majority of students. Regardless of the number of vouchers offered, most students will remain in the public school system. The focus must be on increased resources and find ways of improving the current public education curriculum (LaCour, 2002).

In California the voucher program continues to get defeated by wide margins. However, there have been several states that have experimented with voucher programs. The results from the research created a great deal of controversy. It is possible to have different researchers examining the outcomes of a program and interpret the same results differently (Gokcekus, E., Phillips, J, & Tower, E., 2004). Research shows the effects of

competition on education outcomes appear to be modest. Between one-third and two-thirds of the estimates lacked statistical significance (Belfield, Levin, 2002).

Researchers of voucher programs also need to consider how public and private schools differ in their education settings. The private schools are more likely to have smaller class sizes, fewer enrolled students overall, and the teachers staffed at the private schools were considered more stable, or liked what they were doing (Huerta et al., 2000). Proponents of voucher programs believe that competition between private schools and public schools will challenge public schools to reform and find ways to improve performance. The prospect of the public school system losing funds and students as a result of vouchers will promote systemic improvements in the public school systems (Bohte, 2004).

Opponents of the voucher programs argue that public schools will lose a large portion of their funding. Funding for public school systems are based on enrollment. When students leave the public school and go to a private school, the public school system loses the funding for the students. Voucher programs can lead to a large number of students leaving a school system leading to a large amount of funding leaving the school system also. Loss of funding often leads to cutbacks in teaching staff and valuable resources for the students (Bohte, 2004).

### Recommendations

Every child is entitled to a free, quality, public education. It is important that public schools find a way to offer all students a quality education regardless of his/her ability, income, or home environment. Students deserve the chance to grow, learn, and reach their potential. Proponents of school vouchers believe the answer to failing public

schools is to encourage parents, by offering financial aid, to remove their child from public schools and enroll at a private school. After researching various school voucher programs and their outcomes, recommendations are listed below.

### **Back to Basics**

California's public education systems need to have resources devoted to gaining new technologies, new intervention models, and prevention programs for our students. They should get back to the basics in education. The public schools should reform the curricula or develop new academic programs such as the expansion of accelerated learning programs or adding a program for gifted students. This will involve making a commitment to quality and new public resources to empower teachers and principals to stretch and improve their performance (Fuller, B., Burr, E., Huerta, L., Puryear, S., Wexler, E., 1999).

### **Innovative Approaches**

Another approach to reforming the education system is innovative approaches to educating students. Research has shown that students in smaller class sizes have shown improvement in test scores. When a student is placed in a smaller class size, they have a more personal connection with the teacher. With fewer students in the classroom, there is less competition for the teacher's attention. Research on smaller class sizes also show that the behavior of the teacher and students change. The students in the smaller class setting are expected to participate more in the learning activities. They are not as able to hide in the back of the room as in a larger class size. The students become more involved. The attention toward learning increases while disruptive behavior decreases (AERA, 2003).

When parents of voucher students were asked what they attributed their child's improved test scores, many answered smaller classroom sizes. Several years ago California implemented a mandated twenty student-teacher ratio in the primary grades. Unfortunately this only lasted for several years due to the economic hard times and class sizes had to be enlarged. California needs to find a way to implement the smaller class size again. California also implemented a new high school exit exam, clearer curricula standards, and evolving statewide testing programs in hopes of improving student achievement (Huerta, D., Ruenzel, D., & Fuller, B., 2000).

### **Create an Effective Learning Environment**

To improve student learning, California public schools should implement an effective learning environment. Researchers have found that having a strong, positive leadership is the first step in changing the learning environment. The school as a whole should expect high expectation of student and teacher achievements. The students, teachers, and administrators should all be expected to have a respectful relationship of one another. As in the first recommendation the school must get back to emphasizing getting back to academic basics. Along with the academic basics the students must have a balance of activities that include physical, emotional, and social development. Finally the school should find a way to get the parents and the community involved, as well as their support (Hinz, 1993).

### **Parent and Teacher Accountability**

Today, too many parents are disengaged from their child's education. It is time for the parent to accept some of the responsibility and be held accountable. Public schools hold Back-to-School in the fall and Open House in the Spring with only a

handful of parents attending. Schools should start to require parents to sign a contract and partner with teachers to become more involved in their child's education progress.

America, as well as California, needs to do a better job of preparing children to take on the challenges of tomorrow (Silverberg, 2010).

The way society views and values the teaching profession needs to change. The teaching profession is crucial to development of the each individual child. Educational programs that are training and educating future teachers should seek out the best and brightest. They should challenge them with innovative curricula aimed toward changing times (Hinz, 1993).

Teachers should step up and take responsibility for teaching a quality curriculum to all the students in their classroom. Teachers should be given an opportunity to receive training, support, and clear expectations. The school district should develop an evaluation system for each school and each classroom. The evaluation should be fundamental to the success of children and ensure the quality of the teacher, as well as the administrator (Silverberg, 2010).

### Conclusion

The California public school systems have to keep up the emphasis on high standards and accountability. Our public schools have to reform to benefit our children and provide them with a better quality of education. California, as well as other states, must make a commitment to reform and provide a quality education. They need to commit to providing new public resources to empower teachers and principals to stretch and improve their performance. No amount of voucher programs is going to be able to provide for all the students in the public education system. The California public

education system is here to stay, so let us make it a top quality education system for the benefit of the students. Vouchers are a political and economic scheme that will create a market system of schools that will result in separate and unequal school systems.

Voucher programs are not the answer.

## References

- AERA, (2003). Class size: counting students can count. Essential Information for Education Policy. *American Education Research Association 1(2)*.
- Belfield, C.R., Levin, H.M. (2002). The effects of competition between schools on educational outcomes: A review for the United States. *Review of Educational Research, 72(2)*, 279-341.
- Bohte, John, (2004). Examining the impact of charter schools on performance in traditional public schools. *The Policy Studies Journal, 32(4)*, 501-520.
- Campbell, D.E., West, M.R., Peterson, P.E. (2005). Participation in a national means-tested school voucher program. *Journal of Policy Analysis and Management, 24(3)*, 523-541.
- Carnoy, M. (1997). Is privatization through education vouchers really the answer? A comment on West. *The World Bank Research Observer, 12*, 105-116. Retrieved from <http://www.jstor.org/stable/3986361>
- Carnoy, M., (2001). School vouchers: Examining the evidence. *Economic Policy Institute*. Retrieved from <http://www.eric.ed.gov/PDFS/ED460175.pdf>
- Chakrabarti, R., (2008). Impact of voucher design on public school performance: Evidence from Florida and Milwaukee voucher programs. Federal Reserve Bank of New York Staff Reports. Retrieved from [http://www.newyorkfed.org/research/staff\\_reports/sr315.pdf](http://www.newyorkfed.org/research/staff_reports/sr315.pdf)
- Education Data Partnership. *Fiscal, demographic, and performance data on California's K-12 schools* (Data file). Retrieved from <http://www.ed-data.k12.ca.us/welcome.asp>

- Epple, D. and Romano, R.E. (1998). Competition between private and public schools, vouchers, and peer-group effects. *The American Economic Review*, 88, 33-62. Retrieved from <http://www.jstor.org/stable/116817>
- Fuller, B., Burr, E., Huerta, L., Puryear, S., and Wexler, E., (1999). School choice: Abundant hopes, scarce evidence of results. *Policy Analysis for California Education, Berkeley, CA*. Retrieved from [http://pace.berkele.edu/schoolchoice\\_exsum.pdf](http://pace.berkele.edu/schoolchoice_exsum.pdf)
- Gokcekus, E., Phillips, J.J., & Tower, E., (2004). School choice: Money, race, and congressional voting on vouchers. *Public Choice*, 119, 241-254. Kluwer Academic Publishers.
- Grissmer, D.W., Flanagan, A., Treisman, P.U., Fuller, E.J., and Meyer, R.H. (2001). Searching for indirect evidence for the effects of statewide reforms. *Brookings Paper on Education Policy*, 4(2001), 181-229. Retrieved from: <http://www.jstor.org/stable/20067234>
- Hill, P.T. (2003). Administrative costs of education voucher programs. Center on Reinventing Public Education. Retrieved from: [http://www.crpe.org/cs/crpe/download/csr\\_files/pub\\_crpe\\_adcosts\\_sep03.pdf](http://www.crpe.org/cs/crpe/download/csr_files/pub_crpe_adcosts_sep03.pdf)
- Hinz, L., (1993). Size, cost and quality in public schools and school districts. Positive Directions for Schools and Communities. Retrieved from <http://www.extension.umn.edu/distribution/resourcesandtourism/components/DB6178-3.html>
- Howell, W.G., (2004). Dynamic selection effects in means-tested, urban school voucher programs. *Journal of Policy Analysis*, 23(2), 225-250. doi: 10.1002/pam.20002

- Howell, W.G., Wolf, P.J., Campbell, D.E., and Peterson, P.E., (2002). School vouchers and academic performance: Results from three randomized field trials. *Journal of Policy Analysis and Management*, 21, 191-217. Retrieved from <http://www.jstor.org/stable/3325631>
- Howell, W.G., Wolf, P.J., Peterson, P.E., and Campbell, D.E., (2001). Test-score effects of school vouchers in Dayton, Ohio, New York City, and Washington, D.C: Evidence from randomized field trials. Paper prepared for the American Political Science Association meeting, Washington, D.C. Retrieved from <http://data.fas.harvard.edu/pepg/>
- Hsieh, C. & Urquiola, M., (2002). When schools compete, how do they compete? An assessment of Chile's nationwide school voucher program. CEPS Working Paper No. 79. Retrieved from <http://www.princeton.edu/~ceps/workingpapers/79hsieh.pdf>
- [http://www.aera.net/uploadedFiles/Journals\\_and\\_Publications/Research\\_Points/RP\\_Fall03.pdf](http://www.aera.net/uploadedFiles/Journals_and_Publications/Research_Points/RP_Fall03.pdf)
- Huerta, L., Ruenzel, D., and Fuller, B., (2000). A costly gamble or serious reform? California school voucher initiative, Proposition 38. *National Education Policy Center*. Retrieved from <http://nepc.colorado.edu/publication/a-costly-gamble-or-serious-reform-californias-school-voucher-initiative-proposition-38>
- King, E.M., Orazem, P.F., & Wohlgemuth, D., (1999). Central mandates and local incentives: The Colombia education voucher program. Impact Evaluation of Education Reforms. *The World Bank Economic Review*, 13(3), 467-491. Retrieved from <http://www.jstor.org/stable/3990117>

- Krueger, A.B., Zhu P., (2004) Another look at the New York City voucher experiment. *American Behavioral Scientist*, 47(5), 658-698. Retrieved from <http://abs.sagepub.com/content/47/5/658>.
- LaCour, N., (2002). The real accomplishments of public education and the false promise of vouchers. *The Journal of Negro Education*, 71(1/2), 5-16. Retrieved from <http://www.jstor.org/stable/3211221>
- Ladd, H. F., (2002). School vouchers: A critical view. *Journal of Economic Perspectives*, 4, 3-24. Retrieved from <http://www.jstor.org/stable/3216912>
- Levin, H.M., (2002). A comprehensive framework for evaluating education vouchers. *Educational Evaluation and Policy Analysis*, 24, 159-174. DOI: 10.3102/016237024003159
- McEwan, P.J. (2000). The potential impact of large-scale voucher programs. *Review of Education Research Association*, 70, 103-149. Retrieved from <http://rer.sagepub.com/cgi/content/abstract/70/2/103>
- Molnar, A. (2001). School vouchers: The law, the research, and public policy implications. Milwaukee, WI: Center for Education Research, Analysis, and Innovation. University of Wisconsin-Milwaukee. Retrieved from <http://nepc.colorado.edu/files/cerai-01-17.pdf>
- Myers, D., Peterson, P., Mayer, D., Chou, J., and Howell, W.G. (2001). School choice in New York City after two years: An evaluation of the school choice scholarships program. doi:10.1.1.105.309

Myers, D.E. and Mayer, D.P., (2003). Comments on “Another look at the New York City voucher experiment.” *Mathematica Policy Research, Inc.*, Washington, D.C.

Retrieved from <http://www.eric.ed.gov/PDFS/ED480945.pdf>

National Education Association (n.d.) Case against vouchers. Retrieved from

<http://omega.nea.org/home/19133.htm>

School vouchers (nd). State-funded private and religious education. Public school funding. *Analysis by the legislative analyst*. Retrieved from

[http://vote2000.sos.ca.gov/VoterGuide/text/text\\_analysis\\_38.htm](http://vote2000.sos.ca.gov/VoterGuide/text/text_analysis_38.htm)

Silverberg, K., (2010). Improving the quality of instruction in public schools. *Herald Tribune*. Retrieved from

<http://www.heraldtribune.com/article/20100423/COLUMNIST/4231004?p=all&tc=pgall>

West, E.G., (1997). Education vouchers in principle and practice: A survey. *The World Bank Observer*, 12(1), 83-103. Retrieved from

<http://www.worldbank.org/research/journals/wbro/obsfeb97/pdf/artcle~6.pdf>

## **APPENDICES**

### **APPENDIX A**

#### **Institutional Review Board (IRB) Exemption Information**

## Appendix A



### Grants, Research, and Sponsored Programs California State University, Bakersfield

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### Institutional Review Board for Human Subjects Research

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**Steve Suter, Ph.D.**  
Department of Psychology  
Research Ethics Review Coordinator  
and IRB/HSR Secretary

**Date:** 24 May 2011  
**To:** Margaret Moorhead, PPA Student  
**cc:** Paul Newberry, IRB Chair  
Steve Daniels, Public Policy and Administration  
**From:** Steve Suter, Research Ethics Review Coordinator

### **Subject: Protocol 10-51: Not Human Subjects Research**

This letter updates your original IRB letter of 23 February 2010 to reflect the new title of your culminating project.

Thank you for bringing your protocol, "School Vouchers--The Effectiveness on Student Achievement Outcomes", to the attention of the IRB/HSR. On the form "*Is My Project Human Subjects Research?*" you indicated the following:

I want to interview, survey, systematically observe, or collect other data from human subjects, for example, students in the educational setting. **NO**

I want to access data about specific persons that have already been collected by others [such as test scores or demographic information]. Those data can be linked to specific persons [regardless of whether I will link data and persons in my research or reveal anyone's identities]. **NO**

Given this, your proposed project will not constitute human subjects research. Therefore, it does not fall within the purview of the CSUB IRB/HSR. Good luck with your project.

If you have any questions, or there are any changes that might bring these activities within the purview of the IRB/HSR, please notify me immediately at 654-2373. Thank you.

Steve Suter, University Research Ethics Review Coordinator