

---

## Issues in Economic Policy

---

### Impact of School Vouchers on Education

Ayesha Chaudry

Department of Economics  
Fairfield University  
Fairfield, CT 06824

Volume 1, Number 1  
Spring 2003

## ABSTRACT

Impact of School Vouchers on Education

Ayesha Chaudry, [s\\_achaudry@campus.fairfield.edu](mailto:s_achaudry@campus.fairfield.edu)

Fairfield University, Fairfield CT 06824

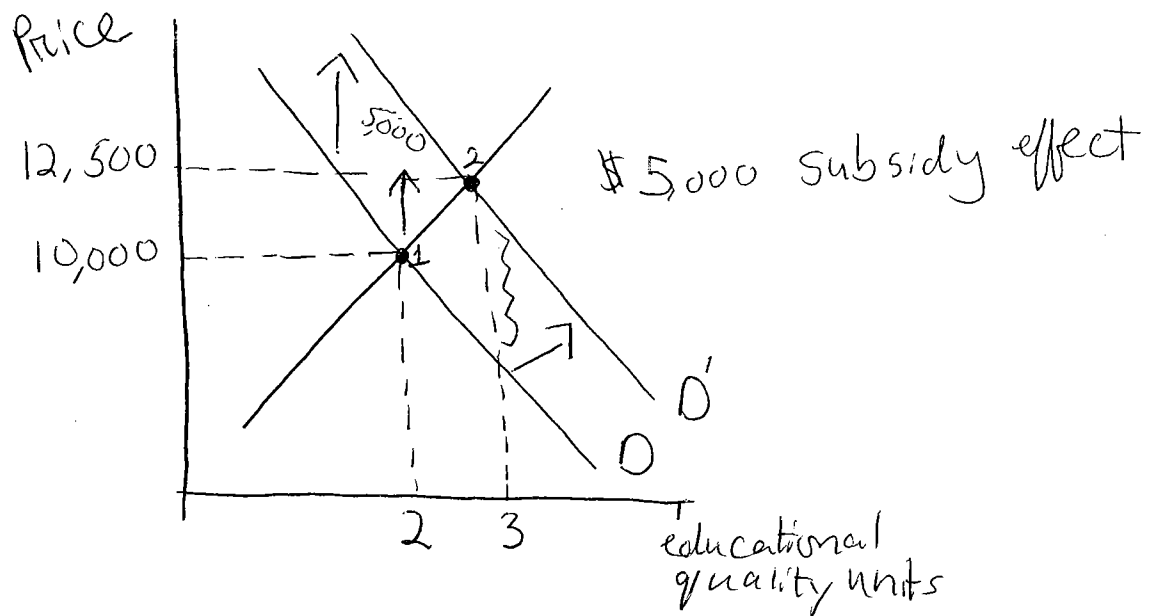
The government spends large sums of dollars on education every year. How the funds are used and how beneficial they are to the society as whole will depend on the policy preferences of the government. One policy option available to the government is voucher programs that subsidize education for low income families. In economics today, there are various debates about whether the government should subsidize education via voucher programs. To estimate the likely impact of vouchers on education, voucher programs from various states are analyzed. Although, there are many controversies surrounding voucher programs, the results from a study done by Howell and Peterson (which is discussed further in the paper) were consistent that low income African American students benefit the most from voucher programs. However, one study does not provide us enough evidence to judge whether vouchers are beneficial and if the government should adopt voucher program on a larger level. Vouchers are not likely to be very effective in the short run. However, in the long run it is likely that vouchers will increase the level of achievement in school for low income students. Furthermore, vouchers will be most effective when targeted specifically towards low income families.

## Introduction

The majority of children in the United States attend schools, but the quality of education and schooling differs greatly among students. For example, “as late as 1996...approximately 70 percent of blacks remained in predominately minority schools” (Howell and Peterson, 3). One of the reasons why the education quality gap is so wide is the difference in school budgets. “The most disturbing gaps concern student achievement. Children of educated and well-to-do parents consistently outperform those from less advantaged backgrounds” (Howell and Peterson 2000). Today, in the United States, whites earn more than blacks or other less advantaged ethnic groups, which is partly due to the lower quality of education that they receive. Economically speaking, one of the keys to reducing income inequalities is to decrease the gap in education quality.

In the recent years, various efforts have been made to improve the quality of education in the United States. The government plays a key role in the current United States education system. One justification for government intervention is the fact that education has benefit externalities. Without government intervention, the equilibrium quantity of education produced would be less than what is optimal for a society; the demand for education will be lower as people will want and pay only for the amount of education that they desire for themselves. Education has benefit externalities and this justifies the subsidy. Providing a subsidy results in an efficient allocation of resources for education. To clarify this point, I assume that the education market is allowed to work on its own and there is no government intervention (Please see the diagram below). We assume that in the market without government intervention the price for education is \$10,000 per year and *point 1* is the equilibrium level of supply and demand of education. Now, if we allow the government to intervene and the government provides a subsidy of \$5,000, the demand for education will shift up by \$5000 (the amount of the subsidy),

and this is the new equilibrium supply and demand ( see *point 2*). The subsidy of \$5000 causes the price of private schooling to increase by \$2500 and equilibrium quantity to increase from 2 units to 3 units. The students will receive \$2500 of the subsidy and schools will receive the other \$2500. The more inelastic the supply of education, the larger the proportion of the subsidy goes to the school. The more inelastic the demand, the more of the subsidy goes to the school. Government subsidy gives some parents more incentives to choose private school for their children. All in all, the government intervention is desirable, as government subsidies increases the demand for education. Government subsidies allow students to get better education and schools are better off as they are able to charge higher prices. Furthermore, the society as a whole will benefit from government subsidies more than individuals do.



Since government plays a significant role in the current U.S K-12 education, changing government policies to improve education, especially for people living in poor school districts, is one of the important topics in economics today. There are different ways in which government can subsidize education. Perhaps one option might be to subsidize education, whether it is

public or private, and let the students decide where they want to go. This could be done by adaptation of government voucher programs in the United States. Currently, vouchers play a very small role in the U.S education system, and only three states have adapted publicly funded voucher programs. However, "...in recent years, over 40 state legislatures have considered proposals to provide some type of voucher program or tuition tax credit for at least some families in a given state or school district..." (Neal, 25). Whether vouchers will be adapted on a larger scale in the future will depend on the likely impact of various voucher policies on the education system.

### **Arguments against the voucher programs**

Those against the voucher programs suggest that education systems will not improve from the government voucher policies, as one of the purposes of voucher programs to give parents the choice of school is already exercised by many people as they choose schools by choosing where to live. Furthermore, no significant change has been observed in achievements of students due to availability of vouchers. People against vouchers argue that there is neither higher overall achievement nor lower resource costs as a result of a shift from public to private schools. Few African Americans will benefit from vouchers. In addition, universal voucher policies will force the government to spend more public funds on education, and some of the voucher funds will go to families that would have paid for private schooling regardless of the vouchers (Ladd, 13).

People against the voucher programs also suggest that in practice voucher programs will not improve students' grades. Some researchers feel that learning is more closely related to child's genetic inheritance, family environment, and the influence of a child's peer group than to any instruction teachers provide no matter how adequate a school may be.

Another argument against voucher programs is that vouchers will reduce the worth of houses in good areas. Since the worth of houses depends on the schools of the area, when schools are open to voucher families the worth of houses in areas with good schools will go down (Neal, 38). When deciding where to purchase a house, one major factor that parents tend to consider is the schools of the area. People see the quality of school based on how much is spent on schools by each person in the community. One way of estimating that is to look at how much each resident of the area pays in property taxes, as some of the property tax goes to the schools of that area (Neal, 38). This is one reason why we tend to find that the property taxes are usually high in areas with good schools. People against the education vouchers argue that “wealthy families in the best public school district usually lose from the introduction of vouchers.” (Neal, 38). Introduction of the vouchers will cause a capital loss for people that own houses in good school districts. Although the residents of “good” school districts will still get the same quality of education, vouchers will create more good schools in the area. This increase in the supply of good schools will decrease the demand for houses in the good suburban school districts, as now people have less incentives to buy houses in expensive areas. In short, “unless voucher access is restricted to families who have lower income than the poorest families who currently reside in suburban districts with high-quality schools, housing prices in these districts should fall after the introduction of vouchers” (Neal, 38).

People against the voucher programs also argue that if vouchers are adopted on a large scale it will make conditions worse for students at the bottom of the distribution in the public school system (Ladd, 38). Vouchers will allow more able or motivated students to leave public schools for private schools. This will reduce the quality of public schools, and the students left

in the public schools will be worse off than they would have been without the voucher program (Ladd, 18).

### **Arguments for Voucher programs**

Today, most Americans send their children to public schools assigned to them by their local government. Parents possess very little choice over the schools that their children attend. Which school a child attends depends greatly on the family's financial status and where the parents can afford to live. In general, vouchers probably will not have a great impact on parents that already exercise their school choice. However, for parents that can not afford to move to areas with strong public schools, vouchers may open up new, and a valuable option of private schools. Vouchers will allow less privileged parents to choose schools that best meet the needs of their children.

Moreover, "school voucher programs would be a rather indirect policy tool for reducing residential segregation"(Ladd 6). With school vouchers, low-income parents will have the option of sending their children to good schools, without having to move their residence to expensive areas. Supporters of voucher programs argue that large-scale voucher programs could affect student achievement through two basic mechanisms. First, vouchers will force students to shift from the public to the private sector (assuming that private sectors are more productive than the public schools). This shift will in turn increase the productivity of the education system. Public schools will be forced to compete with private schools; they will be forced to improve and become more effective if they want to stay in business. Schools that fail to improve will close down. Second, a voucher system would increase competition for students, making education and learning more challenging (Ladd, 8).

African Americans tend to have the least residential choice as they usually earn less than other groups. “ In 1998, black families with two children had a median annual household income of \$25,351, compared with \$28,330 for Hispanic households and \$40,912 for white households” (Howell and Peterson, 23). Because vouchers break the link between the place of residence and schooling options, it is expected that low income African American families living in poor areas, will benefit from vouchers the most (Howell and Peterson, 23). The findings of many studies are consistent with this expectation, as African Americans benefit the most from voucher programs. In short, for supporters, availability of vouchers is the introduction of autonomy, flexibility, and innovation into public education.

### **Empirical Analysis and Results**

Various studies have been done to analyze different voucher programs that exist in U.S today. One major study that shows that vouchers make public schools more productive is an empirical study done by Jay Greene (Ladd, 15). In his study Greene analyzed the effects of Florida’s voucher program on achievement in the public schools. In Florida, schools are given grades of A,B,C,D, or F (Ladd, 15). Based on these grades if any school gets a grade of an F twice within four years, the students of that school are eligible for vouchers to attend private schools (Ladd, 15). Greene’s study shows that after the first year of the program, the schools that had one F tried their best to improve the quality of the school (Ladd 15). They “Raised their achievement significantly, even more than schools that were not subject to a threat, and their quality increase” (Ladd, 15).

Another significant study done in the area of school vouchers was performed by Howell and Peterson. In their study, Howell and Peterson examined the voucher programs in Dayton, Ohio, New York City, and Washington D.C. “All four states programs gave students a full

choice of private schools, religious and secular.” (Howell and Peterson, 34). Vouchers were granted via lottery, and they were not tied to child’s academic performance (Howell and Peterson, 33). Even though, vouchers provided some support, in all four programs, parents were expected to supplement the vouchers with their own funds.

The study of voucher programs in New York City, Dayton, and Washington D.C was evaluated using randomized field trials (RFTs) method. Prior to the lottery “families in all three cities were asked to accompany their children to income-verification sessions”(Howell and Peterson, 43). In all three cities, first the baseline data before the lottery was collected (Howell and Peterson, 44). In subsequent years, follow up information was collected (Howell and Peterson, 44). Parents that won the lottery were required to participate in income verification sessions and testing sessions. Parents that did not win the lottery became the control group (Howell and Peterson, 44). After the verification sessions and vouchers were offered, follow up data was collected for two years after the baseline data collection to estimate the impact of attending a private school. In New York and Washington D.C the survey teams collected three years of data. To collect follow up data, students took math and reading tests, and parents were asked to complete surveys that asked a wide range of questions about the educational experiences of each child (Howell and Peterson, 45).

Based on the results of the studies, it appears that vouchers did not substantially increase the selectivity of the American educational system. However, they did increase the choices available to low income families. Most applicants were African American parents with children in segregated schools. Furthermore, school mobility rates were almost the same in public and private schools, and private school basically accepted all comers. However, “urban private

schools might become more selective as their excess capacity diminishes, even though, for now, they appear to be accepting all comers (Howell and Peterson, 82).

The results of Howell and Peterson's study can also be analyzed separately based on different ethnic groups (such as white, Hispanic and African-American students) and their responses to baseline questionnaires. The results finds little evidence whether private schooling helps or hurts white or Hispanic students, however, for African-American students the results are some what different. The results of Howell and Peterson's study show that African American benefited from vouchers the most and there were significant differences in test scores of African American students that switched to private schools from public schools (Howell and Peterson, 146). Looking at the impact of switching to a private school on test score performance we see that the average gain was 3.9 NPR (national percentile ranking) points for African American students, whereas this number of all other ethnic groups was -1.0 NPR (implying that other ethnic groups did not gain from switching to private schools in terms of test score performance) (Howell and Peterson, 146). It appears that on average African American students performed about 4.9 percentile points higher than other ethnic group students (Howell and Peterson, 146). Furthermore, we see that there was an increase in the test scores performance on average, in the second and third year for African American students. However, the test score on average performance in the second and third year decreased for all ethnic groups. For example, "African in all three cities gained, on average, roughly 3.9 NPR points after Year I, 6.3 points after Year II, and 6.6 points after Year III." However, for other ethnic groups these numbers were -1.0 in Year I, -1.4 in Year II and -3.5 in Year III (Howell and Peterson, 146).

Analyzing results based on grade levels in the three cities, we see that effects of private schools on African American students were somewhat different. For example "the estimated

three years gains range from 2.9 percentiles in fourth grade to 12.9 percentiles in fifth grade” (Neal 30). The results also differ significantly from city to city and time. For example, in Washington D.C, the estimated gains from private schooling among African American children for one, two, and three years were .09, 9.2, and 1.9 percentile respectively (Neal, 30). All in all, from the study we find that low income families of all ethnic groups report a better educational climate when they have a choice of school. But in other important respects, especially with regard to student achievement, we find that vouchers have the greatest impact on African American students.

## **Conclusion**

Beyond the various controversies surrounding voucher programs, most people agree that policy makers should design voucher programs that target minority students in large cities, since public schools in large cities often perform poorly in minority neighborhoods.

In my opinion, since voucher policies are relatively new, it is very difficult to judge whether vouchers are beneficial to the education, and if vouchers should be adapted at a larger scale. Since, education is a long, multiyear process, very are unlikely to see a dramatic change in test scores in the span of just one year or two year. However, in the long run vouchers can have a positive impact. Given the nature of education and test scores, it is very easy for policy makers to derive false conclusions about the effectiveness of educational interventions such as voucher programs. Voucher programs may have an impact on the U.S education system, but it’s a long and continuous process, and it is likely to take many more years for us to see any changes.

Although, government subsidy might provide some help, parents will be expected to cover the remaining costs of private schooling. Due to this situation, some parents still might not

be able to afford private school, and will be forced to keep their children in public schools. However, in the long run (and only in long run) not only will the students that switched to private schools benefit, those that stayed in the public schools will also benefit from voucher programs. Since the public schools will be forced to compete with private schools the standard of public schools will increase and the students in those schools will benefit.

To avoid the problem that some people who would be willing to pay for private education will also get vouchers, the government can structure voucher in some mean tested fashion. Before a voucher for a student can be approved the income of the parents will be verified. Using the means tested method for awarding vouchers will give choice only to parents that can not afford private education otherwise. At this point the parents have the option and they can decide if they are willing to send their children to private schools.

Vouchers will not only help the less advantaged parents, they will also help the public and private school systems. Private schools will benefit because now with subsidy they can accept more students and this will in turn increase their revenues. Public schools will benefit because now the vouchers that were unused by the parents, can be given to the schools and applied to schools instead of to a particular student. All in all, I feel that, since the voucher programs are not likely to harm our society in any major way, vouchers should be adapted to a larger scale and most likely vouchers will benefit low income families.

Although, from my point it seems that vouchers will help the education system, more research is needed in this area and at this point it is very difficult to predict the likely impact of vouchers on the education system, and whether the government will adapt vouchers to a larger scale.

## REFERENCES

Derek Neal. "How Vouchers Could Change Market for Education". Journal of Economic Perspectives Volume 16 (2002): 25-44

Helen, F. Ladd. "School Vouchers: A Critical View." Journal of Economic Perspectives Volume 16. (2002): 3-24

William, Howell G, and Paul, Peterson E. The Education Gap: Vouchers and Urban Schools. Washington, D.C. : Brookings Institution Press, c2002.