

PACE

POLICY ANALYSIS FOR CALIFORNIA EDUCATION

Summary of the Research
on School Choice in the United States

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Introduction

The purpose of this paper is to provide a synthesis of the research and analysis that exists in the literature about school choice. The primary focus of the paper is on research which has implications for the development and evaluation of public policy regarding school choice. This paper neither promotes nor discourages the provision of school choice, but rather provides information designed to assist policymakers, parents, educators, and interested members of the public with an objective source of information. The paper concludes with a summary of research questions about school choice which are either unaddressed or unresolved in the existing literature.

The paper is divided into six sections:

1. Types of School Choice Programs
2. Efficacy of Choice Programs
3. Economic Theories of School Choice
4. Private Schools and Choice
5. Public Opinion about School Choice
6. Unknowns about School Choice

Section One: Defining School Choice

The purpose of this section is to define what is meant by school choice, place it in a historical context, and outline the types of programs which are usually encompassed under the term. This serves as background information for understanding the context of the existing research.

What is meant by school choice?

For some people, school choice entails giving parents the means to send their children to any school they choose, regardless of whether the school is public or private. For others, school choice means that there are supplementary programs within the existing public school system that give students more educational options. There is general consensus that, at the very least, school choice means that parents are allowed greater decision-making discretion regarding the selection of an educational program for their child.

Is there a history of school choice in the United States?

School choice is not a new phenomenon in education. There is a long tradition of private schools in the United States, many of which existed prior to the establishment of public schools. In 1926, the United States Supreme Court ruled that private schools fulfilled state compulsory school attendance laws (*Pierce v. Society of Sisters*). The decision marked the legal acceptance of private schooling as an education alternative.

A well-publicized campaign for a voucher system which included both public and private schools was advocated by economist Milton Friedman in the early 1960's. The policy debate at the time centered on whether public funds should be used to finance private education. In 1972, the United States Office of Economic Opportunity awarded a grant to the Alum Rock School District in California to conduct a voucher demonstration project in six of the district's schools. During the 1970's, the United States Congress debated five different legislative proposals to offer tuition tax credits for parents who send their children to private schools. During the wave of education reform activity in the 1980's, choice within the public schools was a prominent issue,

and choice plans were adopted by several school districts. The emphasis on choice has continued into the 1990's and now includes private schools. Choice is a prominent topic in education policy circles, in corporate boardrooms, and in political campaigns.

What forms of school choice exist in today's schools?

A variety of programs are often referred to as school choice. Some choice programs are designed for increased choice within the public school system and other choice alternatives include private schools. Several school choice programs have been developed to meet the special needs of a targeted group of students, such as alternative schools or post-secondary options for school drop-outs or magnet schools emphasizing special areas of concentration such as art or science.

Described below are some of the commonly occurring types of school choice programs. The first part of this description outlines types of school choice programs within the public sector. Next, choice designs which include private schools are described.

Choice Programs Within the Public Sector

Open Enrollment

Intradistrict open enrollment

Under this option, parents can elect to send their child to any school within the boundaries of the school district in which they reside. Students are enrolled on a space available basis. Some intradistrict choice programs are intended to improve racial integration. Such plans are frequently referred to as "controlled choice" plans, since families' choices are subject to other considerations, such as integration targets. Magnet schools may be adopted in conjunction with an open enrollment plan. Intradistrict open enrollment plans have been implemented in several school districts around the country. (See Appendix for a summary of choice programs throughout the U.S).

Interdistrict open enrollment

This type of open enrollment option allows parents to select from public schools outside the boundaries of their district. Under some interdistrict programs, parents must show that they either work or have child care arrangements in the district where they want to enroll their child. A growing number of states has adopted interdistrict open enrollment options. (See Appendix).

Magnet Schools

Magnet schools emphasize particular areas of focus and are designed to attract students whose interests match the theme of the school. Magnet schools are often employed to achieve racial integration goals. Examples of magnet focal areas include the performing arts, technology, mathematics, and foreign language. In most programs, the school district provides transportation to the magnet school if the school is located outside the student's neighborhood. Most states have magnet schools in some of their districts. (See Appendix).

Schools-within-Schools

This alternative is usually available in schools with large student enrollments. In schools-within-schools, several distinct schools are located on the same school campus. Often the schools are organized around themes, as in magnet schools. Each school has

its separate faculty and administration, but at times may share some of the campus facilities.

Charter Schools

The focus of charter schools is to encourage experimentation in publicly-supported schools by allowing the creation of alternative schools which are designed primarily by teachers. Typically, charter schools are granted waivers from restrictive state laws and regulations in order to allow for greater experimentation in school design. Charter school must achieve selected educational outcomes agreed on by the school and the sponsoring board. Charter schools were first enacted in Minnesota in 1991. (See Appendix).

Postsecondary Enrollment Options

This choice option enables high school juniors and seniors to attend classes and programs at postsecondary institutions and receive either high school or college credit, depending on student need. These options are designed to expand opportunities for students whose needs may not be best met within a traditional high school campus or course of study. (See Appendix).

Second Chance Programs

Second Chance programs are designed for students who are high school dropouts or are at risk of becoming drop-outs. The options under Second Chance programs include enrollment in courses offered by other school districts, alternative school settings, community service programs, and individual learning centers and tutorial programs.

Home Schooling

Some parents choose to teach their children at home. This option is available to parents who file applications with the responsible education agency (often the county office of education) and meet minimum established requirements. Home schooling is sometimes an option for parents who live in remote areas, but often home schooling allows parents to provide alternative education programs that are more consistent with the parents' religious or social beliefs.

Choice Programs Which Include Private Schools

Many of the above described choice programs are already in place in public school systems throughout the nation. These programs are not typically associated with great controversy or debate, as they represent choices which are available within public school systems. Many of the heated and unresolved controversies surrounding school choice plans center on the inclusion of private schools in publicly financed choice plans. There are two main types of choice programs which include private schools: vouchers and tuition tax credits.

Vouchers

Under a voucher system, a specified amount of public education money is allotted to each student in the form of a voucher, which is then paid to the school of the parent's choice, public or private. Voucher plans vary in their specific design, especially regarding the size of the voucher, the types of schools included as "voucher redeeming," regulation and accountability standards, dissemination of information about schools,

and provisions for students' special needs and for transportation costs. An experimental school voucher system was conducted in Alum Rock, California, in the 1970's. Presently, Milwaukee operates a voucher program for some of the district's poorest students. (See Appendix).

Tuition Tax Credits

Tuition tax credit programs allow parents who send their children to private schools to deduct some of the expense from their state or federal income taxes. Although often discussed, this option has never been implemented. Tax deductions for educational expenses allow parents to deduct certain educational expenses from their taxable income. This option provides less of a financial advantage for the parent than the tuition tax credit. A tax deduction program has been implemented in the state of Minnesota.

Several of the above-listed types of school choice programs have been the subject of research regarding their efficacy. These studies are summarized in the next section of this report.

Section Two: Efficacy of Choice Programs

What research exists regarding the efficacy of school choice programs?

Only a small body of literature exists on the efficacy of school choice programs. The best known efficacy literature about vouchers is the studies of the Alum Rock Voucher Demonstration Project. There are also some initial evaluation findings from the Milwaukee Parental Choice Program. While intradistrict open enrollment programs are more widespread, few formal evaluations have been conducted. A small amount of research also exists about the effectiveness of the Minnesota tuition tax credit program, and about magnet school programs. Research results from these programs are briefly described below.

Vouchers

The Alum Rock Voucher Demonstration Project was funded in 1972 by the U.S. Office of Economic Opportunity for a three year period. The Alum Rock School District, located near San Jose, California, was the only Voucher Demonstration Site in the nation. As a federal demonstration program, the school district received financial and technical assistance to plan the program and to provide staff development and parent education. The project was evaluated by the Rand Corporation each year for three years. The basic conclusion reached by the evaluators after three years of implementation was that the primary changes envisioned by the voucher program had not occurred (Levinson, 1976). Parents did not participate in exercising choice anywhere near to the extent that had been anticipated. Only 15 percent of parents chose to send their children to schools outside their regular neighborhood. One private school participated in the program, but only after a long delay, resulting in a decrease in parent interest. A 35 percent transiency rate in the district contributed to difficulties in providing parents with information about school options. Another conclusion was that since vouchers had been essentially untried, the mechanisms necessary to implement the complex changes required by the project had to be developed. A benefit of the project was that a large number of specialty programs and "mini-schools" were created within the public school district, and several experiments in the organization of schools were implemented. These changes, however, were not associated with improved student achievement.

The results from the Alum Rock Demonstration Program should be considered with caution. Due to a number of fiscal and organizational constraints, the project offered only limited choice and was in place for a relatively short period of time. From this project, long term effects of choice programs cannot be determined.

Initial research has been conducted on the Milwaukee Parental Choice Program (Witte, 1991; Witte, 1992). The program began in fall 1990. Under the provisions of the program, eligibility is limited to no more than 1,000 poor students who must be from the Milwaukee public school attendance area. Families receive a \$2,500 voucher, which can be applied at public and private, non-religious schools. Participating private schools cannot charge tuition in excess of the voucher amount and must maintain a majority of their enrollment with students who are not participants in the choice plan.

In the first year of the program, 550 students applied, but due to a shortage of available space in the participating schools, only 341 of the applicants actually were enrolled. 521 students enrolled for the second year, and 613 students were enrolled at the beginning of the third year of the program. More than half of the participating families were receiving welfare and approximately three-quarters of the students came from single-parent households. Parents who participated in the program were found to be generally better educated, more actively involved with their child's education, and more dissatisfied with their child's public school education than the average Milwaukee parent in the same income level.

Demand for the program exceeded supply in each of the first three years of the program. In the second year of the program, 133 applicants were turned away due to lack of available space in participating private schools. Applications exceeded available slots by 143 in the second year and by 343 in the third year. This finding raises questions regarding the supply side of the choice question. No new private schools joined the program in the second year; in fact, the number of schools decreased by one, since the Juanita Virgil Academy went out of business. In the third year, five new private schools entered the program.

In both years, no "creaming" of students, that is, selecting only the best prepared students for admission, was noted. In fact, most of the participating students were scoring below the average of children enrolled in Milwaukee public schools before joining the program. So far, achievement test results have been ambiguous, with no significant differences in test scores, but the research did show higher levels of parental satisfaction from participating parents who remained with the program as compared to Milwaukee parents who did not participate. An attrition rate of 35 percent existed between the first and second year of the program, and between the second and third years of the program. This was very close to the attrition rate of low-income students in the public schools. About half of the students who left participating schools enrolled in the Milwaukee public schools.

Intradistrict Open Enrollment

Several public school districts have adopted intradistrict open enrollment. There have been few formal assessments of these programs to date, but several districts have received national attention.

East Harlem

East Harlem School District in New York City has operated an open enrollment plan for over a decade. The district introduced three alternative programs in its junior high schools in 1974. It subsequently expanded the programs until all of the district's junior high schools had alternative programs organized around academic themes. The alternative schools were combined with an interdistrict enrollment plan in 1982.

The school has been relatively successful at matching students with their schools of choice; 60 percent of parents get their first choice, 30 percent get their second, and 5 percent get their third. (Domanico, 1989). Schools may design their own admissions criteria, raising concerns that students from other districts are admitted to the selected schools instead of Harlem students. Schools are not supposed to admit more than 20 percent of their students from outside the district.

Student achievement has improved dramatically in the first years following the inception of the program. Previously, East Harlem had performed at the bottom of the 32 districts in the city. By 1989, it had risen to 16th in the city. Student math scores have been unchanged, but student reading scores have increased. In 1974, 15 percent of district students were reading at grade level. In 1988, 62 percent were at grade level. Since 1988, scores have declined, however. In 1991-92, 38 percent of students were at grade level. It is difficult to separate the effects of the school choice plan from other factors, such as higher spending and curricular reform. East Harlem received \$1.5 million in federal magnet school grants from 1984-1988. The district also received private funds.

Cambridge

The Cambridge public schools in Cambridge, Massachusetts, established a controlled choice plan in 1981 in order to integrate its elementary schools. There are 30 programs offered in 14 elementary schools. Each school has as many as four programs. Parents must choose which program they would like their child to attend. School assignments are made subject to racial balance, sibling assignments, and space availability.

Achievement test scores have climbed considerably since the inception of the program. However, it is difficult to ascribe the improvement solely to the choice plan, since district spending rose steadily at the same time. Cambridge spends twice the state average on a per pupil basis. Additionally, the student population may have changed over time, as children in private schools returned to the public schools. From 1978 to 1987, the public school attendance rate rose from 80 to 85 percent among students in the district.

Montclair

The Montclair school district in Montclair, New Jersey, created two magnet schools in 1977 as part of a voluntary desegregation plan. In 1985, the plan was expanded to include all of the district's elementary and middle schools. All parents are required to choose from the district's elementary schools. None of the schools have academic admissions criteria. The primary criteria for school assignments are racial balance and space availability. Approximately 85-90% of students are assigned to their first choice school.

Average test scores in Montclair rose for white and minority students at all grade levels between 1984 and 1988. The improvement may be due in part to higher spending; the

district estimates that its magnet schools cost 8 percent more than traditional schools would cost.

Tuition Tax Deductions

Some research has been conducted on the effects of a tax deduction for educational expenses on parents' school choices in the state of Minnesota (Darling-Hammond, et al, 1985). The authors collected and analyzed data from a telephone survey of 478 parents conducted in 1984. Survey results indicated that the existence of a tax deduction did not significantly affect parents' decisions to place their children in private schools. There were no significant numbers of parents whose children were enrolled in public school prior to the initiation of the tax deduction switching to private schools once the deduction was in place. Private school parents also overwhelmingly reported that their choice would remain unchanged in the absence of the tax deduction.

Magnet Schools

Magnet school programs have been a popular form of school choice within the public sector since the 1970s. Approximately 20 percent of students in large urban settings attend magnet schools. However, the most prevalent reason for the development of many magnet school programs has not been to increase school choice but rather to respond to the need to accomplish racial desegregation objectives. Some research has been conducted regarding the effectiveness of magnet school programs. An early study of magnet schools (Blank, 1983) showed that students enrolled in magnet programs scored above the average score of the school district as a whole in mathematics and reading. However, many researchers believe that this type of investigation is biased by a possible selection factor (Blank, 1990). That is, it is difficult to determine from the existing research whether achievement differences exist because higher-performing students attend magnet schools or because the magnet programs themselves are responsible for the better student achievement. A review of studies of four urban school districts with magnet schools measured improvement in outcomes at the individual student level, controlling for student background and prior achievement. These comparisons of equivalent students found that magnet schools had positive effects on student outcomes. These effects were observed primarily in specific grades and subject areas.

Do choice programs bring about better student achievement?

There is no consistent, empirical evidence that relates school choice to improved student achievement (Elmore, 1987; Sosniak and Ethington, 1992). A significant amount of research addresses the question of whether students enrolled in private schools outperform students enrolled in public schools. However, this body of research is strongly contested. Much of the research relies on national datasets, such as the National Educational Longitudinal Study of 1988. Some researchers have challenged the appropriateness of these datasets for studying the effectiveness of choice, citing the difficulty of identify whether a school is a choice school and the inability to make local comparisons (Schiller, Plank, and Schneider, 1993). An outline of the research on private versus public school performance is included in Section Four of this paper.

Why is there so little research about the efficacy of choice programs?

It is reasonable to wonder why so little efficacy research exists regarding school choice plans. Some of the factors which make efficacy research in this area difficult include small sample size, lack of existing mechanisms to operate choice programs, lack of comparability among programs, and absence of agreement regarding criteria for measuring program effectiveness. Very few experiments exist which contain a wide range of school choice options. Therefore, research on the subject remains limited by the number of states, school districts, or individual school sites which are currently implementing choice programs. Since several of the choice programs currently being proposed or initiated have not been implemented in the past, a significant amount of time must be spent in planning and initial implementation. Research on implementation of educational innovations suggests that full implementation of new programs takes between three to five years, before which it is difficult to draw conclusions about the programs. This has not yet transpired for many of the newer choice programs. Choice programs exist for a number of different reasons and consequently vary greatly in structure, incentives, requirements, and target population. This makes comparisons among choice programs highly problematic for researchers. Finally, there is no universal agreement on criteria against which the effectiveness of choice programs should be judged. For example, is an increase in parental satisfaction without change in student achievement ample evidence of a successful program? This type of policy and evaluation question remains open for debate, thereby increasing the difficulty of efficacy research on school choice.

The existing efficacy research suggests some promising results from some of the choice programs, but the conclusions are more ambiguous in most cases. It is frequently difficult to separate the effects of choice from the influence of increased spending or curricular reform. In other instances, the limited scope and the brief duration of choice experiments make it difficult to draw efficacy conclusions.

Section Three: Economic Theories of Choice Programs

Much of the literature regarding economic theories of school choice is derived from the microeconomic theory of the market. Advocates of voucher programs frequently cite market theory as the underlying rationale. Consequently, it is important to address this theory and its underlying assumptions.

How does market theory apply to school choice?

Market theory assumes that the most efficient way to provide education is to allow for open competition among schools, both public and private, and to let consumers, in this case parents, select what they determine to be the best choice for their children.

A recent and highly controversial book on the subject of school choice, *Politics, Markets, and America's Schools* (Chubb and Moe, 1990) provides a detailed description of open market theory applied to school choice. The authors analyze data from the High School and Beyond Study of the 1980s and divide the sample of schools included in that data set into high and low performing schools. From their data analysis the authors derive a definition of an effective school, and then offer the open market as the strategy to create better schools. Chubb and Moe cite centralized bureaucracy and the democratic governance of education as the primary sources of today's failures in education and view a market system as the way to promote individual school autonomy. The authors recommend a complete commitment to an unregulated market system of choice as the

solution to improving the existing public education system. They express confidence in the power of the market to provide educational services which meet the needs of the client while also being cost efficient.

Market theory rests on a number of assumptions about producers and consumers. One major assumption of market theory is that there is equal information and equal access available to consumers. It is important to note that these assumptions are essentially untried in the case of market theory applied to school choice. Critics observe that parents may not have equal access to information (Boyer, 1992). Supporters of school choice plans (Nathan, 1989; Coons and Sugarman, 1992) often mention the need for a parent information system as a critical component of a choice plan. Advocates also often discuss the need for special provisions for transportation assistance as well as special assistance for low-income families in order for choice plans to be successful. These items significantly add to cost considerations for any choice plan.

Levin discussed many of these assumptions in a recent article (Levin, 1991). He observed that information about curriculum features, school orientation or sponsorship, and athletic programs could probably be provided, but that qualitative factors would be more difficult to characterize and disseminate to parents. He emphasizes the importance of an information system to provide equal access to information for all parents. Such a system is likely to have high costs, however, because of the need to serve different communities and language groups. Levin also discusses the importance of transportation for providing equal access, and he notes the difficulty of providing transportation when students choose among many options in a decentralized system.

What research exists regarding school choice and educational cost?

A recent article by Levin (1991) examined the theory and research regarding school choice and educational cost. This paper compares the open market approach to school choice to choice operated within the public school system. The author uses an economic framework to weigh the efficiency of each approach in meeting both the private and social benefits to education. He concludes that a market approach is superior in meeting private benefits and the public choice approach is superior in meeting the social purposes of education. In terms of overall efficiency, Levin finds a slight advantage for the market system in terms of student achievement. However, he also concludes that the overall costs of a market system, such as providing minimal social protections and disseminating parent information, appear to be prohibitively high relative to a public choice system.

Section Four: Private Schools and Choice

What is the extent to which schooling is currently provided through the private sector?

Approximately 26,800 private schools operate in the United States today. The enrollment of students in private schools is roughly one tenth of that in public schools. Traditionally, Catholic schools have comprised the majority (currently about 70%) of private school enrollment. In the last five years, this pattern has been changing as enrollments in Catholic schools are declining while enrollments in fundamentalist Christian schools are increasing. Private schools are more prevalent at the elementary grade levels than at secondary levels. White students attend private schools at twice the rate of blacks, and participation in private schooling is positively and highly dependent on family income.

What is known about differences in student achievement between public and private schools?

The literature on the subject of student performance in private versus public education settings is among some of the most controversial in education research. The main source of data is the High School and Beyond study, sponsored by the National Center for Education Statistics. This ongoing study includes more than 58,000 students in over 1,000 high schools, including more than 80 Catholic and 25 other private schools. Coleman, Kilgore, and Hoffer conducted a number of analyses of this data in 1981, 1982, and 1987. Their general finding consistently has been that students in Catholic high schools perform better on standardized tests than similar students in public schools. A number of researchers have challenged this conclusion (Cain and Goldberger, 1982; Alexander and Pallas, 1987; Meyer, 1989; Witte, 1992b). The arguments raised by critics of the Coleman findings can be grouped into two types. One type argues that there is a "selection bias" in the sample of students studied, thereby calling any specific conclusions into question. A second argument recognizes that the differences in test scores between Catholic and public high schools may be statistically significant, but, say the Coleman critics, the differences are not large enough to draw any conclusions about superiority. Levin (1990) re-examined the analyses and translated them into standardized national percentages. He concluded that, based on national averages, a student in the average private school would score in the equivalent of the 52nd percentile, while the average public school student would score in the 50th percentile. This type of analysis represents some of the debate about whether or not noted differences in test performance represent real differences in educational outcomes.

What research exists regarding the cost of private versus public education?

A recent analysis by Genetski (1992) provides an estimation model for comparing public and private schooling in Chicago. The conclusion of the author was that, in theory, Chicago private schools could operate at a cost which is one-third less than the cost of public education in Chicago. However, other research findings conflict with this conclusion. Levin (1991) examined the available research on cost efficiency between public and private schools and concluded that presently, the evidence is not adequate to make direct comparisons between the two sectors. In a recent econometric study regarding school choice, Manski (1992) reiterates Levin's position that there is insufficient evidence to draw any conclusions regarding whether private or public schools are more cost efficient. Manski focused his analysis on the projected effects of a voucher system on low-income youths, and concluded that there is sufficient reason to believe that although a voucher system may provide incentives for public schools to operate more efficiently, a voucher system would not come close to equalizing educational opportunity.

Section Five: Public Opinion about School Choice

The annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes Towards the Public Schools is the most consistent source of information on public opinion about educational issues. During the past two decades, this annual poll has included a number of questions about educational choice. Parents have said they would be less likely to keep their child in their existing public school than before, given a choice among public schools. In 1979, the great majority of parents (78 percent for parents whose eldest child was 12 years old or younger, 85 percent for parents whose eldest child was older than 12) said they would not choose to send their child to a public school different from the one their child attended. By 1991, this had eroded to 68 percent of public school parents. Public school parents express strong support for public school choice. In 1991, 62 percent

of public school parents said they would like the right to choose among public schools. Most recent additional polls which inquire about the issues of parental choice within the public sector confirm this result and consistently demonstrate that the majority of parents (at least 60 percent) prefer increased choice within the public school system.

Since 1971, the annual Gallup poll has also included questions regarding vouchers. The question was worded as follows: "In some nations, the government allots a certain amount of money for each child's education. The parents can then send the child to any public, parochial, or private school they choose. This is called the 'voucher system.' Would you like to see such an idea adopted in this country?" Those who favored vouchers ranged from 38 percent in 1971 to a high of 60 percent in 1989. In 1990, 50 percent favored vouchers. Support for vouchers is strongest among parents whose children attend nonpublic schools. In 1989, 68 percent of these parents favored vouchers, compared to 64 percent of public school parents and 58 percent of people who had no children in school. The Gallup question has been repeated in other polls, both national and state level, indicating roughly the same level of support. When the phrasing of the question changes, responses tend to vary.

In 1990 the voucher question was followed by another question asking whether or not respondents believed vouchers would help or hurt the public schools. Overall, 42 percent believed vouchers would hurt the public schools, and 36 percent said that vouchers would help. Of those who favored vouchers, 73 percent thought vouchers would help the public schools. Of those who opposed vouchers, 81 percent thought vouchers would hurt the public schools. In 1989, the Gallup poll inquired about the possible effects of school choice. A majority of those polled (51%) thought choice would improve some schools and hurt others. Forty-two percent believed choice would not make much difference in student achievement, while 40 percent believed choice would improve achievement.

While the Gallup poll series is the most consistent source of information over time, other organizations have also conducted public opinion polls regarding school choice. Many are sponsored by particular education organizations or special interest groups. These polls vary significantly in their structure and content. Some polls inquire only about vouchers while others only ask about choice within the public sector.

A September 1992 poll conducted by the Associated Press suggests that public opinion regarding vouchers may vary depending on how the question is worded. For example, when inquiring about the use of public dollars to support enrollment of students in private schools, the Associated Press found a significantly more favorable response when the word "scholarship" appeared in the question as the descriptor as compared to when the word "voucher" was used in the question.

To date, there has been no specific or comprehensive item analysis of this issue, so the extent to which the structure of the question affects the results of opinion about voucher programs and other school choice programs remains unknown.

Section Six: Unanswered Questions about School Choice

This section outlines some of the questions about school choice which are either unanswered or unaddressed by the current research.

Will choice programs result in a greater supply of schooling options?

In any market system, analysis of both demand and supply is critical in order to understand system efficiency. At this time, it is not known whether increased school choice programs would result in either a greater supply of schooling or in a greater diversity of options. Evidence to date of the few experiments available suggests that a new supply of schooling does not automatically occur when choice is implemented (Levinson, 1976; Witte, 1991). However, as noted earlier, there are no examples of comprehensive school choice programs currently being implemented which would allow for direct study of the question.

The Southwest Regional Laboratory examined the question of supply in the context of a proposed ballot initiative in California. The study asked principals at existing private schools throughout California whether their school would participate in a voucher program that provided \$2,600 per child. Principals were also asked whether their schools were currently at capacity and whether they would expand to accommodate more voucher students. The study found that 75 percent of private schools were likely to participate overall, with over 80 percent of low tuition schools (those charging \$2,600 or less) likely to participate. However, 70 percent of the schools that said they were likely to participate are presently operating at 85 percent or more of their capacity. The study calculated that if schools did not expand their capacity, 38,700 slots would be provided by existing private schools in the early years of a voucher plan, creating space for .8 percent of California's public school students. The study did not include entrepreneurs or other people who might be likely to establish private schools under a voucher system, which has led some critics to conclude that it underestimates private school capacity. Another criticism of the study is that only 37 percent of the surveyed schools responded.

What are the factors parents use to select a school for their child?

This question addresses the demand side of the school choice issue. There is no precise understanding or agreement in the literature regarding how parents select a school for their child. One might suspect that the reasons may be highly variable, depending on the values, prior experience, religious beliefs, and socioeconomic circumstances of the family. This question also includes the issue of whether parents select a school for their child based on knowledge of their child's individual teacher.

What is the relationship between cost and school choice?

Currently, there is substantial disagreement even among supporters of school choice as to whether increased choice means additional cost or cost savings. The cost estimates are of course highly dependent on the type and extent of choice programs being offered, as well as the extent of participation, regulation, transportation, and information components of the choice program.

What is the relationship between school choice and student achievement?

So far no evidence exists which would allow one to conclude that choice by itself will result in improved student achievement. Choice programs currently operating or being proposed should be targeted by researchers for further study on this issue.

Which type or types of school choice programs are most favored by taxpayers? by parents?

Little is known about public opinion regarding the variety of school choice programs currently operating or being proposed. A systematic investigation of public opinion regarding the specific features of various types of choice plans would provide added information for policymakers to assist them in designing choice programs.

Would participation in choice programs vary by the income or the educational level of parents?

Initial research on this subject indicates that families with higher income and education levels also have a higher levels of participation in choice programs. However, this research is neither comprehensive nor conclusive. Additional information on this subject could enlighten the design of consumer information systems regarding choice programs.

Will choice programs increase or decrease disparities in educational outcomes for students?

Significant concern is raised in the debate about school choice regarding differential effects of various choice programs; specifically, whether or not choice programs would assist those students who have the greatest educational need.

What are reasons why public schools are perceived as failing? Will choice programs address the reasons for perceived public school failure?

For the past ten years, education policy discussions have often centered on the "crisis" in public education. Many recommendations have been made regarding the best way to "fix" the public schools with school choice being a prominent strategy in recent times. Factors such as poverty, unfamiliarity with the English language, lack of positive role models, sparsity of trained teachers, inadequate and unsafe facilities, and family mobility are all cited as possible reasons why public schools are not performing adequately. The question which remains unaddressed is whether or not choice programs can provide for reform in the areas in which public schools are most in need.

By what criteria should the success or failure of school choice programs be judged?

Criteria regarding program effectiveness should relate to the purposes and objectives of the program. At present, choice programs and choice proposals do not clearly state the anticipated outcomes of the programs, thereby making evaluation problematic. Additional research which could suggest appropriate evaluation frameworks, as well as appropriate duration of programs in order to achieve full implementation, would be useful in decision-making about school choice.

Appendix One

Choice in the States

Charter Schools

Charter schools have existed since 1991 in Minnesota and since 1992 in California. In 1993, Colorado, Massachusetts, New Mexico, and Georgia passed charter school legislation. Few charter schools are in operation yet, however. As of Fall, 1992, three Minnesota schools had been granted charters.

Several states have chosen to limit the number of schools that may become charter schools. In Minnesota, the plan is limited to 20 schools. In California, up to 100 schools may become charter schools. In Georgia, there is no limit on the number of charter schools.

Some state legislatures have limited the types of outcome measures that charter schools adopt as accountability standards. In California, charter schools must adopt performance-based student outcome measures.

Intradistrict Open Enrollment

Intradistrict open enrollment plans exist in at least 21 states. A limited number of districts in Alabama, Arizona, California, Connecticut, Indiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, Oregon, Texas, Utah and Wisconsin have intradistrict choice. Indiana and Illinois are developing intradistrict open enrollment plans in one or more districts. Intradistrict choice exists in many districts in Massachusetts, New Mexico, Oklahoma, Rhode Island, and Tennessee. Colorado, Ohio and Washington have adopted laws mandating that every district in the state adopt an intradistrict open enrollment plan.

Traditional intradistrict choice plans assign students to their neighborhood school, then allows students to apply for transfers. Another form of intradistrict choice is controlled choice, in which neighborhood schools are eliminated. In a controlled choice system, parents must select the school they wish their child to attend. Parents must list their top school choices when they register for schools. If the parents do not make a selection, the child will be assigned to a school with enrollment space.

Several states provide transportation for all students who transfer schools. Transportation is commonly provided in controlled choice plans, since there are no neighborhood schools. Transportation costs doubled in Cambridge with the adoption of controlled choice, as the number of students bused increased from 16% to 64%. Other states, such as Alabama, Colorado, and Washington, do not require districts to provide transportation for transferring students.

Interdistrict Open Enrollment

Interdistrict open enrollment exists in 21 states, but in many states district participation is optional and few students attend school outside of their districts. Interdistrict transfers are allowed in California, Maine, and Hawaii on an individual "exception" basis. In California, students may transfer to the district in which their parents work. In New York and Missouri, interdistrict plans exist between two cities for integration purposes. Interdistrict enrollment plans are statewide in Alabama, Massachusetts,

Ohio, Oregon, Utah, Washington, Nebraska, Arkansas, Colorado, Minnesota, Montana, New Mexico, Arizona, Idaho, and West Virginia, but district participation is optional. In Iowa, all districts are required to participate.

While a relatively small percentage of students have transferred districts (less than 1 percent of Minnesota K-12 students and one-third of one percent of Iowa students in 1990-91), the transfer rate varies widely across districts. Some districts have much higher transfer rates. To protect districts from drastic enrollment losses, Iowa limits the number of students who may transfer from a district to 5 percent of enrollment. Ten percent of the transfer applications in Iowa were refused during the 1990-91 school year because they exceeded the 5 percent transfer limit.

Interdistrict enrollment plans vary considerably from state to state, but policymakers in each state face many of the same decisions: who is responsible for the transportation of a transferring student; who pays for the cost of a transferring student's education; how to resolve conflicts between racial balance goals and students' transfer requests, and whether student athletes who transfer shall be allowed to compete. In most states, the student's family is responsible for transportation costs to the boundary of the receiving district, then transportation is provided within district boundaries. Typically, the state portion of the student's educational cost follows the student to the recipient school, but states differ as to whether they require the sending district to send local aid to the recipient district. Integration goals usually take priority over open enrollment; most plans bar transfers that violate desegregation orders. Several states place a one year ban on competition for student athletes who transfer to provide a disincentive for coaches to use open enrollment to recruit athletes.

In states where there are large disparities in per pupil financing of schools, requiring the resident district to pay the full per pupil educational cost to the receiving district can place a large burden on poor districts. When Massachusetts passed such a plan, some districts were affected so severely that the Legislature provided supplemental funding to the affected districts. Thirteen percent of the transfers in the first year were from Brockton School District to its wealthier neighbor, Avon. As a result, \$933,600 in state aid was transferred from Brockton to Avon.

Magnet Schools

At least 17 states have magnet schools. Magnet schools exist in Alabama, California, Connecticut, Florida, Illinois, Maryland, Minnesota, New York, Louisiana, Colorado, Massachusetts, Texas, Virginia, New Jersey, Ohio, Pennsylvania, and Missouri. In some states, such as Massachusetts, magnet schools operate as part of an intradistrict choice plan.

Postsecondary Enrollment Options

Postsecondary enrollment options exist in Arizona, Arkansas, Colorado, Connecticut, Florida, Georgia, Indiana, Iowa, Kansas, Louisiana, Maine, Minnesota, Missouri, Nevada, New Jersey, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Virginia, Washington, and West Virginia. In Louisiana, the plan is limited to high-achieving students. Other states make postsecondary options available for all students; Maine prohibits districts from restricting participation to the gifted. Students may be limited in which type of institution they may attend. In Florida, eleventh- and twelfth-grade students may attend public universities for credit. In Colorado, students may attend community colleges.

States differ in the extent to which they encourage students' participation in postsecondary options. Some states, such as Nevada, require students to obtain permission from the state board of education in order to take a postsecondary course. Other states encourage student participation by allowing students to take college courses without paying tuition.

Vouchers

There are two voucher plans in existence presently that allow students to attend private schools. In Milwaukee, 1,000 of the district's poorest students receive vouchers to be redeemed at the public or participating, nonreligious private school of their choice. Indiana has a privately-operated voucher program. The Golden Rule Insurance Company provides poor Indianapolis children with \$600 vouchers which they can use to attend private schools.

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