

EDUCATION POLICY ANALYSIS ARCHIVES

A peer-reviewed scholarly
journal
Editor: Gene V Glass
College of Education
Arizona State University

[home](#) [abstracts](#) [complete](#) [editors](#) [submit](#) [comment](#) [notices](#) [search](#)

Copyright is retained by the first or sole author, who grants right of first publication to the **EDUCATION POLICY ANALYSIS ARCHIVES**. EPAA is a project of the [Education Policy Studies Laboratory](#).

Articles appearing in **EPAA** are abstracted in the *Current Index to Journals in Education* by the [ERIC Clearinghouse on Assessment and Evaluation](#) and are permanently archived in *Resources in Education*.

PDF file of this article available: 

This article has been retrieved **2** times since October 18, 2003

Volume 11 Number 39

October 18, 2003

ISSN 1068-2341

Baselines for Assessment of Choice Programs

Paul T. Hill
University of Washington

Kacey Guin
University of Washington

Citation: Halverson, R., (2003, October 18). Systems of practice: How leaders use artifacts to create professional community in schools. *Education Policy Analysis Archives*, 11(37). Retrieved [Date] from <http://epaa.asu.edu/epaa/v11n37/>.

Abstract

Critics of choice argue that it will allow alert and aggressive parents to get the best of everything for their children, leaving poor and minority children concentrated in the worst schools. (Note 1) But choice is not the only mechanism whereby this occurs. Alert and aggressive parents work the bureaucracy to get the best for their children. Thus, choice programs should be compared against the real performance of the current public education system, not its idealized aspirations.

The purpose of this article is to establish an appropriate baseline against which choice programs can be assessed. How far does the current system of bureaucratic allocation diverge from its aspirations for equal opportunity for all? Under the current system how much are students sorted by race and class, and how unevenly allocated are the best and worst educational experiences? The answers to these questions are important for two reasons:

First, they establish defensible baselines against which choice programs can be compared. If the current ways of allocating educational opportunities leads to inequality by race, class, or income, then choice programs should not be assessed against the ideal. Instead, their results should be compared to the actual performance of the existing system.

Second, they establish criteria for the design of choice programs. Regardless of whether choice programs are on average better or worse than other ways of allocating educational programs, there are still ethical reasons for trying to design choice schemes to equalize access to the best schools and teachers.

Bureaucratic modes of decision-making do not eliminate self-seeking – they only make it covert. When the supply of desirable schools, programs, or teachers is limited the most aggressive get the best and by implication deprive others. In bureaucracies, the advantage goes to people who have contacts, understand how the game is played, can talk the language of key administrators, can write letters and threaten appeals, and have the time and determination to persist. These attributes have a strong class bias. As a result, bureaucratic decision-making can create segregation of students and uneven distribution of benefits. These, of course, are the very outcomes that people fear choice will produce.

Choice is another mechanism by which people seek the best for themselves and their children. The most knowledgeable are first to identify the best opportunities, and the most aggressive are the ones most likely to sign up early, know how to get the most advantageous place in a lottery, and be able to impress people (e.g. admissions officers) who can pick from among many applicants.

Self-seeking would not matter if all schools, teachers, or courses were equally good. But that is not the case. To the contrary, some schools are much better than others, even when quality is measured fairly on the basis of what they add to their students' knowledge. (Note 2) There is also reason to believe that some teachers are much better than others (Note 3) and also that some courses of study are much more likely to prepare students for jobs and higher education than others. (Note 4) Because some students thrive in schools that would not be good for other students, there is more than way to rank quality. But however quality is defined, the "best" schools and teachers are usually in short supply. That is why the most respected private schools have long waiting lists and why parents camp out in parking lots to register their children in public magnet

schools.

Some public school districts try to provide a quality school for every student, but they are thwarted by scarcity. There are only so many experienced teachers, only so many principals who can create a positive school climate, and only so many people who both understand science and mathematics and want to teach those subjects. Schools are like any other enterprise that depends on people. Only so many children can take chemistry from the fabled teacher whose students regularly end up in medical school. Someone will get the burned out old teacher in his last year, or the brand new teacher whose command of subject matter and classroom management skills is shaky. Some schools or districts might maximize the average quality of their staffs, encourage the burned-out to retire earlier, or do a better job of mentoring inexperienced teachers. But there will always be differences in quality, both real and perceived.

Scarcity begets competition. Though some parents will knowingly accept less than the best for their children, many will not. Among those who try to get the best (or to spare their children contact with the worst), some will fare better than others. Those who do not try to compete will probably do worse than even the least successful competitors. (Note 5)

How people compete for schools and teachers depends on the way opportunities are allocated. When parents are free to apply to any public school, the most competitive study the options, apply early, and try to make sure they apply to some desirable schools where the probability of admission is high. When parents are assigned to schools, the most competitive learn who are the best and worst teachers and programs and campaign to get these for their children. (Note 6) , (Note 7)

The rules of competition inevitably allocate advantages and disadvantages. When the rules allow exceptions to mandatory school assignment, families eager to get the best for their children learn how decisions are made and frame their transfer appeals in then appropriate terms. They also figure out who makes the final decision on transfer requests, and seek ways to get consideration. Thus, choice is only one way of allocating educational opportunities. Self-seeking and competition are universal. Only the means differ.

The advantage of choice is that advantage seeking is transparent, its effects can be readily observed, and it can be designed out (e.g. via admissions lotteries). Self-seeking in bureaucracies is covert and is therefore harder to observe and remedy.

Whether choice or bureaucratic decision-making lead to a “fairer” allocation of opportunities is an empirical question. Under both systems, the advantaged are likely to get a disproportionate share of the best and the disadvantaged are likely to get the worst. Thus the question for public debate is not whether choice leads to inequalities but whether it leads to any greater inequalities than does non-choice.

Perhaps a better way to formulate this question is whether overt choice leads to the same or lesser inequities than does covert choice. As David Menefee-Libey of Pomona College has suggested, someone always exercises choices, even in bureaucratic systems. What matters is whether everyone or just some people have choices, and whether choices are made openly or in secret. Overt school choice occurs when everyone can choose and everyone who picks a particular school has an equal chance of getting in. Covert choice occurs when there are no structured mechanisms for expressing choices and allocating opportunities, so that families who want particular options are forced to campaign for them. Because families must go out of their way to express choices, and must work the bureaucracy to get what they want, covert choice strongly favors the sophisticated and well placed.

Critics of overt education choice proposals assert that they make matters worse for the disadvantaged and promote development of privileged enclaves for the advantaged. The implication of these statements is that choice makes things worse than they are now. But the evidence provided is often quite different. It shows that overt choice leads to some unequal outcomes, but it does not show that choice leads to more unequal outcomes than the covert choice system that now prevails.

Establishing a Baseline

Critics claim that choice will worsen segregation and other forms of inequity. This article asks, compared to what? The proper baseline against which to assess the effects of choice is the current system's performance, not some idealized situation in which no differences exist. As Stephen Gorard and his colleagues observe about universal choice in Britain, "The stratifying effect of market forces in schools depends, to large extent, on the *status ante*. What we have shown is not that choice is SES-free but that it is certainly no worse, and probably a great deal better, than simply assigning children to their nearest school to be educated with similar children living in similar housing conditions." (Note 8)

Using the current system's performance as a baseline for comparison does not imply satisfaction with things as they are. Programs that rely on choice should be designed to produce less segregation and more equitable distributions of resources and opportunity than now exist. This article, however, focuses narrowly on whether defenders of the current system are justified in opposing choice on grounds that it inevitably worsens segregation and inequitable distribution of resources. Our narrow question is this: if public funds were used to create many options for families, and families were free to choose among those options, would segregation and inequity be worse than it is now?

We provide a baseline of evidence by which the consequences of choice can be compared with the results of the current public school system. Some critics of choice would like to compare it against an idealized form of the current system: Gary Orfield, among others, asserts that the current system can be perfected to eliminate any form of segregation, even those based on residential choices. He

argues for “deny[ing privileged families] the possibility of finding nearby all-white schools,” (Note 9) via creation of metropolitan-wide school districts, and massive busing to ensure racial mixing in all schools regardless of residential segregation. It is beyond the scope of this paper to assess the political, legal, and financial costs of such a scheme, or its implications for the health and education of children.

In establishing a baseline we will focus on the sorting effects of several bureaucratic processes endemic to conventional public school systems. (Note 10) These include student assignment and resource allocation processes that lead to disadvantaged children to experience:

- Racially isolated schools;
- Less money per pupil and less capable teachers;
- Restricted access to instructional programs that enhance life opportunities;
- Enhanced access to instructional programs that limit life opportunities.

The article has two main sections. The first main section immediately below analyzes the ways that each of the harms listed above can occur in conventional public school systems, and summaries of the available evidence about how often and how severely these harms actually occur.

The second main section identifies the ways in which these same harms can occur under choice programs, and summarizes available evidence about the performance of choice programs. This section is inevitably weakly-evidenced and tentative, since existing choice programs are small and often designed to serve the poor and ensure integration. Universal choice programs (in which every family chooses and every school is a school of choice) might work differently than the exemplars available for study today.

The Harms of the Existing System

Racially Isolated Schools

Eliminating segregation by race has been a dominant concern of public school systems since the *Brown* decision in 1954. Every large school system has had a desegregation plan, whether court-ordered or voluntary, and the U.S. Department of Education has monitored racial isolation in every school district large and small. No school district has an overt segregation policy, and most have made significant efforts to create racially mixed student bodies. However, as we will discuss immediately below, most districts remain segregated to some degree, and segregation has recently increased. (Note 11)

How does this happen? In part it happens because of processes that school systems do not control: housing economics, demographic change, and geography. Low-income families, including the majority of Hispanic and African American households, cluster in neighborhoods with low-cost housing. Wealthier families, most of which are white, avoid living in these neighborhoods. Lower-income minority families also have more children than higher-income

white families. This leads to concentrations of minority children in certain neighborhoods. (Note 12) In many cities (e.g. Seattle) transportation between white and minority neighborhoods is complicated by bridges and choked freeways, making it very difficult to move children from one neighborhood to another.

Public school systems can exacerbate these problems by maintaining attendance boundaries that divide neighboring minority and white areas. They can respond to growing minority enrollments by enlarging schools deep in minority areas rather than by developing new schools in areas accessible to people of all races. They can also create admissions processes for attractive magnet schools that give the advantage to aggressive, articulate, and well-connected middle class parents. Finally, they can limit the supply of schools that students from all neighborhoods want to attend, e.g. by maintaining a fixed set of schools rather than expanding or duplicating magnet schools that have long waiting lists. Taken together these actions can lead to significant segregation by race and ethnicity.

The Baseline Level of Racially Isolated Schooling

Reports from the Harvard Project on Civil Rights provide data on segregation nationwide. One simple measure is the proportion of white students in schools attended by students of different races. In 1999, the school attended by a typical white student was 81.2% white, 8.6% African-American, 6.6% Latino, 2.8% Asian, and 0.8% American Indian. In contrast, the school, attended by a typical African American student was 32.6% white and 54.5% black. Latinos were even more segregated: the typical Latino student attended a school that was only 29.9% white. (Note 13)

Though school segregation has decreased markedly since 1960, separation of white and minority students has increased since 1988. In the South, as Orfield reports, the proportion of black students enrolled in majority white students declined from 43.5% in 1988 to 32.7% in 1998. (Note 14)

Much of the recent growth in segregation has been caused by a decline in the numbers of white students in the schools (from 34.7 million in 1988 to 28.9 million in 1998) and growth in the numbers of minority students (from 8.3 million to 14.8 million in the same period). (Note 15) Changes have been most dramatic in the west, where whites went from 63.3% of public school enrollment to 51.9% in the 11-year period between 1987-1998. Many big cities have also become minority enclaves. In 1998, white students made up less than 20% of the public school population in 18 of the 25 largest cities. Schools in Chicago Detroit, Dallas, New Orleans, DC and Atlanta are no more than 10% white. (Note 16) Thus, in some localities there is no way to avoid having some overwhelmingly minority schools.

Segregation is pronounced even in states with few minority students. For example, in 1998, the typical black student in a state in which only 1 in 16 students was black is likely to attend a school in which more than 1 in 2

students was black. (Note 17) Nationwide, black students, who made up only 18% of the school population in 1998, had a 37% chance of going to schools where blacks made up more than 90% of the student body. (Note 18)

Though data on individual school districts can be hard to find, racial isolation is common. In Louisville, for example, black students make up 27.4 % of the high school population, but 6 of 20 high schools have student bodies less than 20% black and 6 have student bodies more than 40% black. (Note 19) In Charlotte-Mecklenburg, like Louisville a city in which white students are in the majority (54%), 27% of white students and 18% of blacks were in racially isolated schools. Under Charlotte's court-ordered definition, a white student is in a racially isolated school if its population is more than 69% white. The corresponding number for black students is 56% black). (Note 20) In Charlotte, more than 35% of public schools are racially isolated under the local definition. In a much more racially unbalanced city, the District of Columbia, whites are less than 4.3% of the school population. However, the average white student attends a school where the combined black and Latino population is less than 50%. (Note 21)

Individual school districts will vary, but these underlying facts reflect a common pattern. They set a baseline against which the segregation effects of choice can be measured. Choice programs might lead to worse segregation than we now have – to a situation where, for example, where blacks nationwide have a greater than 50% chance of attending schools that are more than 90% black, or where the average white student goes to a school in which even less than 20% of students are black. However, as these data show, the existing system does not live up to its rhetorical commitment to complete racial mixing. Choice programs should surely be compared against the system's real performance, not its aspirations.

Dollar and Human Resource Inequities

Public school districts receive funds from many sources – local property taxes, their state's basic school funding formula, various state programs that provide money for defined purposes and various federal funding sources – and the districts use these funds in similarly complex ways. Laypersons might expect that money is allocated to schools on a per-pupil basis, but that is not the case. Districts buy things like teachers, books, equipment, expert advice, buses, school construction, and maintenance, and those things are allocated to schools via political and bureaucratic processes. The result can be that some schools get the benefit of much higher spending, and receive much more valuable resources, than others.

The most valuable resources allocated in this way are teachers. In virtually all school districts, teachers allocate themselves to schools, and the most senior and highest-paid teachers get first choice. The majority of senior teachers choose schools in the "nicer" neighborhoods. The result is that the teachers who work in schools with the most advantaged students are, on average, much higher-paid than teachers who work in the poorer ends of town. The poorer

students are not compensated for this difference in average teacher salaries. Instead, the district's public accounts average out the salaries of all teachers so it does not look like the schools with many expensive senior teachers have any more money than the schools with many cheap new teachers. On a real-dollar basis, per pupil expenditures are much higher in the schools chosen by senior teachers.

Though staff salaries constitute as much as 80% of school-level expenditure, districts allocate other resources to schools. Poor schools get disproportionate shares of the 10% of funds that come from federal and state programs intended for low-income students. This does only a little to compensate for the expenditure differences associated with teacher allocation.

Funds for the education of children with disabilities are allocated on the basis of diagnoses of children's needs. Parent initiative is a major factor in children's diagnoses: more sophisticated parents demand and get expensive individualized placements for their children with disabilities, while less sophisticated parents are less likely to take the initiative. Low-income and minority children identified with disabilities are therefore much more likely to be assigned to self-contained special education classrooms for mental retardation or emotionally disturbance than to be "mainstreamed" in general education classrooms and receive related services. (Note 22)

Districts also control other resources, from computers and science lab equipment to maintenance work, and these are allocated on a "squeaky wheel" basis. Schools with respected principals and teachers, and with active and well-connected parents, can capture disproportionate shares of these resources.

Though district accounting makes it extremely difficult to compute real-dollar per-pupil expenditures, within-district resource allocation consistently favors the more aggressive and influential families and neighborhoods.

The Baseline Level of Resource Inequity.

The existing system allocates the two most important resources in education – dollars and quality teachers – by bureaucratic means. The result is dramatic inequity within school districts. (Note 23)

Analyzing school funding in Seattle, Cincinnati, and Houston, Marguerite Roza found that some elementary schools in poverty neighborhoods received real-dollar resources worth as much as \$300,000 less than was claimed by the district's budget, and that similarly-sized schools in high-income neighborhoods got correspondingly more money than the district budget claimed. This was caused by a combination of placement privileges for senior teachers – which allow senior teachers to cluster in schools in higher-income neighborhoods – and average teacher costing, which charges schools the same amount for every teacher whatever that teacher's actual salary. Under such a scheme schools in nice neighborhoods get a more expensive teaching force than they could afford if they paid real prices for teachers, and schools in poorer neighborhoods get a

much cheaper teaching force. (Note 24)

When Houston school officials computed real-dollar spending in their high schools they were shocked to learn that one school in a predominantly white section of town had one million dollars more to spend each year than a school of the same size in a minority area. The difference, they learned, was entirely due to differences in teacher pay. Teachers in the higher spending white school were older and more experienced. (Note 25)

It is important to note that Seattle, Cincinnati, and Houston are not isolated incidents when it comes to inequalities in school funding. State-by-state data from The Education Trust indicate that schools with a high percentage of low-income students receive anywhere from \$32 to \$2700 less per student than schools with a low percentage of low-income students. (Note 26) A disparity in funding was found in 42 out of the 49 states studied. (Note 27)

Access to qualified teachers also produces inequalities between racial and socio-economic groups. In California, the number of economically disadvantaged students in a school is positively correlated with the number of teachers having the least amount of teaching experience and holding a bachelor's degree or less. (Note 28) This correlation is particularly strong in the elementary grades. In secondary education, national data indicate that 25% of classes in high poverty schools are taught by teachers lacking a major or minor in the field they teach, compared to 15% of classes in low poverty schools. (Note 29) This disparity is even greater for math, where only 25% of the teachers in high poverty schools were majors in math, compare to 40% of higher income schools. (Note 30)

Inequalities also exist based on schools' racial composition. In schools where the student population is over 90% white, 69% of teachers have BAs or higher in math versus 42% in schools where 90% or more of students are minority group members. (Note 31) National data show similar disparities, with 22% of teachers in high minority secondary schools lacking a major or minor in the field they teach, compared to 16% of teachers in low minority schools. (Note 32)

When examining the differences in human resources among schools, it is important to address the negative results of ineffective teachers. These results can be found at both the elementary and secondary levels. In Dallas, 5th grade students who had three consecutive ineffective teachers showed gains of only 29% in math scores, compared with an 83% gain for students with three years of effective teachers. In Boston, high school students had average gains of -0.6 in math and 0.3 in reading after one year with ineffective teachers, compared to students with effective teachers, who had average gains of 14.6 and 5.6 respectively.

Allocation of Opportunity-Limiting Programs

The fact that students come to school – any school – with different amounts of prior knowledge and different abilities presents problems for teachers, schools,

and districts. (Note 33) Teachers find it difficult to prepare lessons and oversee learning for students with very diverse prior experiences and ability. Parents of the more advanced students worry that teaching will be tailored to the needs of others, and that their children will consequently learn less than they might. Parents of the less advanced students are also forthright in demanding that their children get extra help and attention.

The response by public schools and school districts is to differentiate instruction and create homogeneous classroom groups. The federal and state governments also provide special funding for instruction for defined groups, especially low-achieving students, children in poverty, and the handicapped.

Some differentiation of instruction is inevitable and some might be desirable. But there are ways in which it can harm minority and disadvantaged students. Removing students from regular classrooms to get special drills and tutoring can mean that they never master the material that others learn while they are away. (Note 34) (Note 35) Reducing contact with advanced students can eliminate a potential learning opportunity. Creating programs that focus on low-level skills can discourage children who are excited about ideas and could be motivated by highly challenging instruction. Creating a low-status program might discourage both students and teachers and set off a downward spiral of expectations and performance.

There is a raging debate about the educational value and ethical acceptability of the combination of ability grouping and program differentiation. (Note 36) But there is little dispute about the fact that some students are assigned to such programs on the basis of color and family background, and that there can be significant overlaps in the ability of students assigned to less and more challenging programs. Nor is there any doubt that program assignment affects students' likelihood of completing high school. The current system, by the way it designs special instructional programs and assigns students to them, puts some students at a grave disadvantage.

The Baseline Allocation Of Opportunity-Limiting Programs

UCLA education researcher Jeannie Oakes is the most important source of data on the assignment of students to opportunity-limiting courses, called tracking. In her 1985 book *Keeping Track* (Note 37) she shows that schools with different instructional programs for students considered faster and slower consistently assign minority and low-income students to the slower tracks. Though track placement is meant to correlate with student performance on achievement tests and grades in previous classes, Oakes reports significant overlap in ability among children in different tracks. She cites a high school in Rockford IL in which the math scores of students in high-track courses ranged from the 26th to the 99th percentile on national achievement tests. In the same school, the scores of students assigned to lower tracks ranged between the 1st and 99th percentile. (Note 38) Oakes reports similar score patterns in various subjects throughout most of the middle and high schools in the Rockford and San Jose districts.

In many cases, race and class appear to be better predictors of track placement than any academic measure. For example, Oakes found that in San Jose, white students with average math on national tests scores were three times more likely to be placed in high-track math courses than Latino students with similar scores. The discrepancies for students with higher scores are even more striking: For students scoring between 90 and 99th percentile on national tests, only 56% of Latinos were placed in high-track courses, compared to 93% of whites and 97% of Asians. Similar patterns of discrimination were found at the senior and junior high levels in Rockford.

In a district in Southern California, 88% of white students who scored in the top quartile on the Comprehensive Test of Basic Skills were placed in algebra classes; but only 42% of Latino and 51% of African American students who scored in the top quartile were placed in algebra. For students who scored in the second quartile, 11% of Latino and 16% of African American students were placed in algebra, compared to 83% of Asian and 53% of white students. (Note 39) Mickelson found similar patterns in the Charlotte-Mecklenburg school district, where white students were far more likely than black students of equal tested ability to be assigned to higher mathematics, laboratory science, and advanced courses in English and history. These results held even when the researchers controlled for students' prior achievement, level of effort, and parents' education. (Note 40)

Oakes also found that the same student might be in one track or another depending on the district or school she attends. Students who might be allocated to a college preparatory track in one school district would, in probability, be assigned to dead-end general or vocational tracks in another (Note 41)

Placement in lower tracks virtually guarantees that students are taught more slowly, exposed to more rudimentary content, and given high grades for work that would, in other settings, be considered unacceptable. For example, Oakes found that students in low-track science and mathematics courses were given more worksheets, tests, and other rote forms of instruction than the average- and high-track students. (Note 42) She also reports that students in high-track classes at a disadvantaged school frequently have less qualified teachers than students in low-track courses at a more advantaged school. Mickelson found that students in lower tracks are more likely to have teachers who lack training in the field they are teaching. (Note 43)

Several authors have documented the consequences of track placement for students' academic success, high school graduation, completion of higher education, and lifelong income chances. Recently, Rose and Betts have shown how valuable exposure to rigorous college preparatory courses, especially advanced mathematics, can be for minority students. (Note 44)

Besides tracking, labeling students with disabilities is another way schools can separate students from higher-level courses. A state-by-state analysis by Parrish found that in 38 states, African American students were more than twice

as likely as white students to be identified as mentally retarded. (Note 45) In 29 states, African American students were more than twice as likely to be identified as emotionally disturbed. Nationally, while African American students account for 14.8 percent of the school age population, they comprise 34.3 percent of students identified with mental retardation and 26.4 percent of students identified as emotionally disturbed. (Note 46) Students labeled in these ways are usually separated from regular classes and taught in “resource rooms” in which teachers instruction focuses on low-level skills.

Oswald and colleagues found that the likelihood of a being labeled mentally retarded or emotionally disturbed varies from district to district. Districts with the lowest proportions African American students are the most likely to identify those students as emotionally disturbed. (Note 47) According to Ladner and Hammonds, (Note 48) in predominantly white districts in Texas, nearly 1 in 4 African American students is assigned to special education. (Note 49)

Even more than placement in lower academic tracks, assignment to special education marks students for academic failure. According to the National Longitudinal Transition Study of Special Education African Americans identified as emotionally and behaviorally disturbed had a 66% failure rate in school. The failure rate for whites so labeled was 38%. African American students with EBD were twice as likely to exit school by dropping out (58.2%) as by graduating (27.5%). (Note 50)

We do not claim that lower track placements and assignment to special education is always inappropriate. There must be students who do better in those programs than they would in regular or advanced classrooms. However, as these data show, conventional public education uses low-track placement and disability labels liberally, especially for disadvantaged students. The result is often a kind of segregation more complete, and more consequential from minority students, than segregation based openly on race.

Misallocation of Opportunity-expanding Programs

The fact that students must all be taught to read and do basic arithmetic defines most elementary schools, and limits the degree to which they can differ from one another. Among the public elementary schools in a given district, the most important differences are due to variations in staff quality, or to school culture difference resulting from habits of staff interaction. Beyond those differences some schools get programs that others do not. Not every school gets a special program for gifted and talented students. Many districts offer one or two schools designed on a distinctive model of instruction, like Montessori. Gifted programs and special schools based on brand-name instructional approaches are allocated on a squeaky wheel basis, either to neighborhoods with activist parents or to areas of town where parents are beginning to depart for private or suburban schools. Thus in most districts, such programs and districts are disproportionately available to middle class, usually white, children.

High schools have much more varied programs. Not every school has excellent

laboratories, an array of advanced placement courses, or enough qualified teachers of mathematics, science, or languages to allow every student to pursue an advanced college preparatory course. These opportunities are allocated in part by traditional course taking patterns in a school, an approach that sounds reasonable but can create a self-fulfilling prophecy: students in a school where few students formerly took advanced courses lose any opportunity to take such courses. These opportunities are also allocated in response to family and neighborhood pressure, which further favors schools serving middle class students.

This process is not always one way, however. Urban districts facing criticism about low-performing schools in poor neighborhoods sometimes assign reputedly “successful” schools from middle class neighborhoods to these schools. Families in the “nicer” schools often feel deprived in this way, and schools often face difficult adjustments when a principal is pulled out of a smoothly functioning school.

The Baseline Allocation of Opportunity-Expanding Programs

Nationally, both African American and Hispanic children are much less likely to be assigned to gifted programs than students from other groups. According to the Office of Civil Rights (OCR) in 1992 African American students were 57% as likely, and Hispanic students 58% as likely, as children from other groups to be considered gifted. (Note 51)

Economically disadvantaged students are also significantly underrepresented in gifted education. Only 9 percent of students in gifted and talented education programs were in the bottom quartile of family income, while 47 percent of program participants were from the top quartile in family income. (Note 52)

Another measure of minority students’ separation from opportunity-expanding programs is their low participation in advanced placement (AP) courses. These are often the most advanced courses offered by high schools, and students who attain high scores on national tests can gain college credit. Nationally, African American and Latino students are far less likely than white and Asian students to take AP courses. Statewide AP data for Texas also fit this pattern. In 1998-99, 10.9 percent of all high school students, but only 4.2% of African American and 7.1% of Hispanic students, took AP courses. However, African American and Hispanics are also less likely than others to score 3 or above on the tests: 31% and 48% compared to 58% of all AP-takers. (Note 53)

To some degree, however, these figures might reflect differences among school districts – especially since minority students cluster in districts that do not offer many or any AP courses for anyone. Within-district data are more telling about the consequences of bureaucratic processes. As Berhholc and colleagues have shown for one district (Wake County North Carolina) African American students make up 24% of the high school population but only 3.5% of students taking AP examinations. (Note 54) The corresponding percentages for Hispanic students are 2.3 and 1.8, and for whites 70 and 78. Of course, AP courses are meant

only for well-prepared students, and enrollment differences might reflect the numbers of different groups prepared for these courses. This might explain some of the exclusion of black students, since only 56% of those who took AP courses (compared to 78% of white students) got scores equal to or above 3, usually considered the threshold for college credit. This pattern is reversed, however, for Hispanic students: 87% of those who took AP courses made scores of 3 or above.

Oakes and colleagues had similar findings when comparing low- and high-income neighborhood schools in the Los Angeles Unified School District. Of 12 very large high schools in low-income neighborhoods, only 639 students took AP exams in math and science and only 18%, or 117 students, earned a score of 3 or above. Conversely, 5 high schools in the district's high-income neighborhoods had 890 students take the math and science AP exams, with 71% or 629 students receiving a pass score.

Table 1 summarizes what we have learned about the baseline against which choice programs should be compared. The next section summarizes what little we know about the effects of choice programs.

Table 1
Best Estimates on Incidence of Segregated Placements And Resource Inequities

	Current System Performance
Racially Isolated Schools	Schools often exceed district-wide average proportion black or white by 20% or more
Inequitable Allocation of Dollars and Teachers	Most experienced and expensive teachers cluster in "nicest" neighborhoods, per-pupil expenditures unequal
Inequitable Allocation of Opportunity-Expanding Programs	White and middle class children 3 times more likely to enroll in gifted and AP programs
Inequitable Allocation of Opportunity-Limiting Programs	Minority and lower income children 3 times more likely to be enrolled in lower tracks and out-of-class special education

What is Known About Choice Programs

Choice-based programs, whether based on vouchers or school chartering, must confront the same realities that limit the current system: economics, neighborhood segregation, fertility trends, and costs of transportation. Critics and supporters of choice differ on whether it is likely to increase or decrease segregation and inequities in the allocation of dollars, quality teachers, and opportunity-limiting or opportunity-expanding programs.

With respect to segregation, critics of choice fear that it can exacerbate the problem by allowing privileged families to take advantage of their superior access to information to select the best schools; by tolerating admissions processes that let privileged families monopolize access to the most attractive schools; and by allowing the most sought-after schools to hand-pick the easiest-to-educate students.

Defenders of choice programs would respond that these abuses could be eliminated by good program design. Choice programs can promote desegregation in ways conventional public school systems do not – by encouraging out-of-neighborhood school placement, allowing formation of new schools accessible to students in overcrowded schools, and by encouraging expansion or reproduction of oversubscribed schools.

With respect to dollar and human resource inequities, critics fear that choice will lead to heavier financing of schools preferred by privileged families, and concentration of the ablest teachers in schools with the most money and most rewarding students.

Defenders of choice point out that voucher and charter plans all start with transparent allocation of dollars to schools and equality of per-pupil spending. Supply-side choice also constrains schools to live within defined real-dollar budgets, so that no school can afford to hire all the highest-paid teachers. Choice supporters admit, however, that there is nothing to prevent schools with the best reputations hiring the very best teachers or using their funds much more efficiently than other schools.

With respect to opportunity-limiting programs, schools of choice could come under the same pressures as existing public schools, to avoid slowing down faster students by creating lower-track programs for the disadvantaged. Organizations that ran networks of several schools (e.g. like charter school networks or Catholic archdioceses) could also create specialty schools specially targeted to children of different ability levels. Some “special” schools and programs might become unchallenging and low status, and students might be assigned to them on the basis of race or social class.

Defenders of choice argue that competition makes these results unlikely: Schools that create highly differentiated programs will be inefficient and lose out to schools that offer a limited number of focused courses; (Note 55) and families will leave schools that put their children in dead-end courses. There is some

favorable evidence about existing schools of choice: charter schools and parochial schools offer more restricted sets of courses than public schools, and parochial schools make sure that disadvantaged students experience mainstream college prep courses. (Note 56) These facts, however, apply to a limited number of schools of choice, most operated by groups with strong commitments to social justice. No one can say for sure whether some schools in a much larger school choice sector might allocate minority-students to opportunity limiting programs.

With respect to opportunity-expanding programs, under any choice scheme, entrepreneurs (charter school operators, nonprofit organizations, for-profit contractors) could choose to locate their schools in areas more accessible to “easy to educate” children. Competition will naturally limit the number of schools that can succeed by this strategy, but poorer neighborhoods could still get more “bare bones” schools. This could happen for two reasons: school providers could decide there is insufficient demand for advanced courses of study in poorer neighborhoods; and organizations running more than one school could try to run lower-cost operations in poorer neighborhoods in order to subsidize the more excellent programs needed to compete in richer neighborhoods.

Defenders of choice argue that school providers have a strong incentive to demonstrate that they can serve the populations that public schools now serve badly. They point to evidence that organizations that manage many schools of choice serve a lower-income and more heavily minority clientele than their surrounding school districts. (Note 57)

Why Evidence on the Effects of Choice is Limited

Empirical evidence is thin on all sides of these arguments. Current voucher and charter school programs are small in scale and many are focused on serving poor and minority children. The results of those programs show that some independently run schools will serve the disadvantaged. But they do not prove that systems of universal choice would have the same benign results.

The evidence is incomplete in another way: current voucher and charter programs do not have the kinds of supply-side effects that universal choice programs are likely to have. Groups that start new schools must now accept less money per pupil than public schools get, and they know that the charter or voucher program on which they rely could be canceled almost at any time. Starting a new school would be a much easier proposition if children came with the full public per-pupil expenditure and if choice programs were stable. Until such a program exists we cannot know how many new schools will arise, or what courses of instruction they will offer, or whom they will serve. (Note 58)

It is important to say why the evidence is so thin. Most choice-oriented policies, including charter school laws and voucher initiatives, are constructed politically. Groups like teachers unions and school administrators associations oppose such policies, but when it is obvious that some forms of choice will be permitted, they focus on limiting their size and scope. (Note 59) By these processes,

groups opposing the original voucher program in Alum Rock succeeded on constraining it so that few parents had choices and few new schooling options were created. (Note 60) Today, groups opposing voucher programs work to limit the numbers of families that may choose and the numbers of schools that can be chosen. Opponents also work to limit the amount of money that follows children to schools of choice, often ensuring that charter schools and private schools accepting vouchers receive less money per pupil than is spent in local public school districts. Moreover, teachers' unions and school boards often unite to cushion public schools from the financial impact of losing students. (Note 61)

Taken together, such constraints on choice programs limit what can be learned from them. Limits on who may choose schools can bias choice programs – in some cases toward serving disproportionate numbers of poor or minority children, and in some cases toward excluding poor families that cannot pay extra tuition or provide volunteer services that under-funded schools must require.

Table 2 illustrates the kinds of constraints that have been imposed on choice programs, on both the supply and demand sides. No wonder the evidence about how choice would work in the real world is so limited.

Table 2
Constraints that Reduce the Evidence Value of Choice Programs

Supply Side Constraints	Demand Side Constraints
Rules limiting the numbers of schools of choice that may be created [1, 6]	Limits on the numbers of students (or the percentage of students in a locality) who may choose schools [1, 2, 3, 6]
Rules preventing private groups from operating publicly-funded schools [1, 4]	Rules eliminating former private school students from receiving vouchers [2]
School board refusal to approve more than token numbers of charters [5]	Rules allowing only students with certain characteristics (e.g. poverty or racial minority status) to choose schools [2, 3]
Laws allowing only existing public schools to receive charters [4]	Limits on the neighborhoods from which a family may choose schools [1, 4]

Regulations controlling who may teach in schools, what methods they employ, and how they use time and money [1, 4]	“Legacy” arrangements that give families who live near a school first choice of whether to attend it [1]
Lower per pupil funding for vouchers or for charter schools (relative to district run schools [2, 3, 6]	Rules limiting family choice only to schools that will accept small vouchers (less than public per pupil expenditure) as full tuition [2, 3]

Legend:

1. Alum Rock voucher program (Note 62)
2. State-funded voucher programs in Milwaukee and Cleveland (Note 63)
3. Private voucher programs, e.g., those sponsored by CEO America
4. Weak charter school laws, e.g., Georgia’s (Note 64)
5. Charter school laws that do not establish criteria for school board approval of charters
6. Virtually all charter school laws

Conclusion

Until a serious choice experiment is tried – one large and long-lasting enough to gauge supply-side effects as well as families’ decisions – we cannot say for sure whether choice would provide worse outcomes than the current system, or how tightly choice must be regulated.

For the time being however, it appears that opponents of choice and defenders of the current public system have inappropriately assigned the burden of proof. Opponents condemn choice because it creates opportunities for alert and aggressive parents to gain the best of everything for their children. They argue that choice is risky and that the existing public education system is a safer and more just alternative. However, as this paper has shown, the existing public education system, which restricts choice by assigning children to schools and limiting the supply of available publicly-funded schools does not accomplish desegregation or give disadvantaged children equitable access to good schools. Public school systems are segregated, particularly in the big cities where poor and minority children are most concentrated. This is so despite decades of serious effort and unwavering declaratory policy in favor of desegregation and equity.

The existing public education system also creates inequities that might not occur under choice: it allows the best-paid teachers to cluster in middle class schools, causing serious within-district inequities in per-pupil spending. It allocates excellent learning opportunities, including advanced placement courses and programs for the gifted, disproportionately to schools serving

higher-income children of well-educated parents. It assigns poor and minority students disproportionately to low-track courses, and assigns minority children – particularly African American males – to forms of special education that separate them from regular classes and virtually guarantee that they will drop out before graduating from high school.

Not all these actions on the part of the existing public education system are unambiguously harmful: some children benefit from placements outside the college prep sequence and some children need treatment for emotional disturbance even if that means they miss class. Any system of publicly-funded education, whether based on universal choice or run by a public monopoly, would need some special programs for severely disruptive children or children who need unusual forms of instruction.

Choice programs must not be ruled out because they can lead to some inequities. Every system of allocating opportunities known to man creates some inequities. No matter how opportunities are allocated, parents will seek the best for their own children. Systems should be designed to minimize inequities, and programs should be compared according to the scope and seriousness of inequities they permit.

Choice programs must be carefully designed to prevent segregation, and any program that produced levels of segregation as great as those now prevailing in the public education system should be scrapped or redesigned. (Note 65) Designers of choice programs cannot be expected to eliminate discrimination entirely. But it is fair to demand that they prevent it more effectively than do the bureaucratic processes of conventional public school systems.

Acknowledgement

We are grateful to Jacob Adams for an especially demanding and constructive review of an earlier draft.

Notes

1. Throughout this article we use the term “critics of choice” to refer to scholars and analysts who fear that choice will harm the interests of the poor and disadvantaged. These critics include: Fuller, B. (1996). School Choice: Who Gains, Who Loses? *Issues in Science and Technology*. 12 (3) pp. 61-67; and Fuller, B. (1996). Is School Choice Working? *Educational Leadership*. 54(2) pp.37-40. Concludes that choice may worsen racial separation in schools.

Smith, K. B. & Meier, K. J. (1995). School Choice: Panacea or Pandora's box? *Phi Delta Kappan*. 77(4) pp. 312. Conclude that families choose schools in order to associate with others of the same religion and to avoid racial minorities.

Elmore, R. F. & Fuller, B. (1996). Empirical Research on Education

Choice: What are the Implication for Policy-Makers? In Fuller, B., Elmore, R. F., & Orfield, G. (Eds.) *Who Chooses Who Loses?* New York: Teachers College Press. "Increasing educational choice is likely to increase separation of students by race, social class, and cultural background" (p.189). Elmore *et. al.* argue that regardless of the choice program design, the differences in choosers and non-choosers are such that choice programs will contribute to social stratification, not greater equality.

Wells, A. S. (1998). Charter School Reform in California: Does it meet expectations? *Phi Delta Kappan*. 80(4) pp. 305-312. Argues that charter schools will worsen inequality.

Schneider, M., Marschall, M., Teske, P., & Roch, C. (1998). School Choice and Culture Wars in the Classroom: What Different Parents Seek form Education. *Social Science Quarterly*. 79(3) pp. 489-501. Argue that school choice will increase segregation because parents of different ethnicities and SES status have fundamental differences in their expectations of education for their children.

2. See Fred M. Newmann, Bets Ann Smith, Elaine Allensworth, and Anthony S. Bryk, (2000) *School Instructional Program Coherence: Benefits and Challenges* (Chicago: Consortium on Chicago School Research).
3. Haycock, Kati et. al., (2000) *Achievement in America 2000*, Washington D.C, The Education Trust/
4. See for example, Rose, Heather and Julian R. Betts, (2001) *Math Matters: The Links Between High School Curriculum, College Graduation and Earnings*, San Francisco, The Public Policy Institute of California/
5. Abby Goodnough, (2001) How to Get Your Child the Right Teacher Next Fall

New York Times Magazine, Sunday May 13.
6. Abby Goodnough, (2001), *op cit.*
7. See Kohn, Alfie,(1998) "Only for My Kid: How Privileged Parents Undermine School Reform", *Phi Delta Kappan*, April 1998, pp. 569-577.
8. Gorard, S., J. Fitz, and C. Taylor, (2001) School Choice Impacts: What Do we Know? *Educational Researcher*, 30, no. 7, October 2001, p. 22.
9. Gary Orfield, (2001) *Schools More Separate: Consequences of a Decade of Resegregation*, Cambridge MA, The Civil Rights project, Harvard University, p.10
10. Throughout this article we will focus on differences in opportunity *within*

school districts.

11. See Gary Orfield and John T. Yun, (1999) *Resegregation in American schools*. Cambridge MA, The Civil Rights project, Harvard University.
12. See, for example, Gary Orfield, (2001) *Schools More Separate: Consequences of a Decade of Resegregation*, Cambridge MA, The Civil Rights project, Harvard University, p. 28. Orfield does not try to estimate the growth in segregation due to differential fertility.
13. Orfield and Yun, p. 17.
14. Orfield 2001, p. 33
15. Orfield 2001, p. 20
16. Orfield 2001, p. 29
17. Orfield 2001 p. 47
18. Orfield 2001, p. 41
19. Michal Kurlaender and John T. Yun, (2000) *Is Diversity a Compelling Educational Interest? Evidence from Metropolitan Louisville*, Cambridge MA, The Civil Rights Project, Harvard University, p.8.
20. Data re-analyzed by the present authors from Stephen Samuel Smith and Roslyn Arlyn Mickelson, (2000) All that Glitters is not Gold: School Reform in Charlotte-Mecklenburg, *Educational Evaluation and Policy Analysis*, vol. 22, no 3, summer, p.101-128
21. Orfield 2001 p. P. 27
22. Parrish, T. (DRAFT 2002). *Disparities in the Identification, Funding, and Provision of Special Education*. Submitted to The Civil Rights Project for The Conference on Minority Issues in Special Education in Public Schools. <http://www.law.harvard.edu/civilrights/conferences/SpecEd/parrishpaper2.html>
23. Since the early 1970s there has been a research and litigation industry focused on differences in per pupil expenditure among the school districts in a state. Courts have repeatedly found that state policies leading to unequal per-pupil funding violate the equal protection clause of the 14th Amendment to the U.S. Constitution, This industry has largely ignored the dramatic differences in spending and resource allocation *within* school districts. Presumably, the same Constitutional principles could be applied to the inequities identified in this section.

24. Roza, Marguerite and Paul T. Hill, (forthcoming 2004) How Within-District Spending Inequalities Help Some Schools to Fail, in Ravitch, Diane (ed.) *Brookings Papers on Education Policy 2004*, Washington, Brookings Institution Press.
25. Source: Personal communication with Dr. Susan Sclafani, former Houston Deputy Superintendent
26. Education Watch Online: New State and National Achievement Gap Report. The Education Trust. www.edtrust.org
27. See the Education Watch Online website for individual state information.
28. Betts, J. R., Rueben, K. S., & Danenberg, A. (2000). *Equal Resources, Equal Outcomes? The Distribution of School Resources and Student Achievement in California*. Public Policy Institute of California
29. Education Watch Online website
30. Haycock, Kati et. al., (2000) *Achievement in America 2000*, Washington D.C, The Education Trust.
31. Oakes, J. (1990). *Multiplying Inequalities: The Effects of Race, Social Class, and Tracking on Opportunities to Learn Mathematics and Science*. Santa Monica, CA: Rand.
32. Educational Watch Online
33. In the preceding section on segregation we focused on how students are allocated among schools. This section focuses on how students are allocated to classes and programs within schools.
34. J, Kimbrough and P. T. Hill (1981) *The Aggregate Effects of Federal Education Programs*, Santa Monica CA, RAND.
35. See Bryk, Anthony S., Valerie Lee, and Patrick Holland (1993) *Catholic Schools and the Common Good*, Cambridge MA, Harvard University Press; See also Hill, P.T, G. Foster, and T. Gendler, (1990) *High Schools with Character*, Santa Monica CA, RAND.
36. See Loveless, T., (1999) *The Tracking Wars: State Reform Meets School Policy*, Washington D.C., Brookings.
37. Oakes, J. (1985). *Keeping Track: How Schools Structure Inequality*. New Haven: Yale University Press.
38. Oakes, J. (1995). Two Cities' Tracking and Within-school Segregation. *Teachers College Record*. 96(4) pp. 681-690.

39. The Achievement Council, Inc. Los Angeles, CA. Unpublished. 1991. As cited in Achievement in America 2000, The Education Trust, Inc.
<http://204.176.179.36/dc/edtrust/edstart.cfm>
40. Mickelson, R. A. (2001). Subverting Swann: First- and Second-Generation Segregation in the Charlotte-Mecklenburg Schools. *American Education Research Journal*. 38(2) pp.215-252.
41. Oakes, J. & Guiton, G. (1995). Matchmaking: The Dynamics of High School Tracking Decision. *American Educational Research Journal*. 32(1) pp. 3-33.
42. Oakes, J. (1990). *Multiplying Inequalities: The Effects of Race, Social Class, and Tracking on Opportunities to Learn Mathematics and Science*. Santa Monica, CA: Rand.
43. Mickelson (2001) p. 238
44. Rose, Heather, and Julian Betts (2001) *Math Matters: The Links Between High School Curriculum, College Graduation, and Earnings*, San Francisco, Public Policy Institute of California, 2001
45. Parrish, T. (DRAFT). Disparities in the Identification, Funding, and Provision of Special Education. Submitted to The Civil Rights Project for The Conference on Minority Issues in Special Education in Public Schools.
<http://www.law.harvard.edu/civilrights/conferences/SpecEd/parrishpaper2.html>
46. U. S. Department of Education, Office of Special Education Programs. (2000). *Twenty-second Annual Report to Congress on the Individuals with Disabilities Education Act*.
<http://www.ed.gov/offices/OSERS/OSEP/OSEP2000AnIRpt/>
47. Oswald, D. P., Coutinho, M. J., Best, A. M., & Singh, N. N. (1999). Ethnic Representation in Special Education: The Influence of School-Related Economic and Demographic Variables. *The Journal of Special Education*. 32(4) pp. 194-206.
48. In studies of district data from Texas and Florida, Lander and Hammons also found that race influences special education rates more than other predictor variable such as poverty, student-teacher ratio, spending per pupil, and teacher salaries. The effect of race is almost double the next highest variable (poverty) and is stronger than the combination of the other three variables in this study. They also present data suggesting that African American and Hispanic students' placement rate in special education is nearly 10% higher in predominately white districts than in predominately minority districts.
49. Ladner, M. & Hammons, C. (2001). Special but Unequal: Race and

- Special Education. In Finn, Rotherham, & Hokanson (Eds.) *Rethinking Special Education for a New Century*. Fordham Foundation and the Progressive Policy Institute.
50. Valdes, L.A., Williamson, C.L., & Wagner, M.M. (1990). *The National Longitudinal Study of Special Education Students, Statistical Almanac, Vol. 3: Youth Categorized as Emotionally Disturbed*. Menlo park, CA: SRI International. As cited in Osher, D., Woodruff, D., & Sims, A. (DRAFT). Exploring Relationships between Inappropriate and ineffective Special Education Services for African American Children and Youth and the Overrepresentation in the Juvenile Justice System.
www.law.harvard.edu/civilrights/conferences/SpecEd/osherpaper2.html
 51. Ford, D. Y. (1998). The Underrepresentation of Minority Students in Gifted Education: Problems and Promises in Recruitment and Retention. *The Journal of Special Education*. 32(1) pp. 4-14.
 52. National Education Longitudinal Study (NELS) of 1988 in National Center for Education Statistics, *Urban Schools: The Challenge of Locational Poverty* (Washington, D.C.: U.S. Department of Education, 1996).
 53. Texas Education Agency, Office of Policy Planning and Research (2000). *Advanced Placement and International Baccalaureate Examination Results in Texas, 1998-99*.
 54. Bernholc, A., Baenen, N., & Howell, R. (2000). *Measuring Up: 1998-99 Advanced Placement Exam Results*. Wake County Public Schools. Evaluation and Research Department.
 55. See Hill, P.T. (1999). The supply side of choice. In F. Kemmerer & S. Sugarman (Eds.), *School choice and social controversy*. Washington, D.C.: Brookings Institution Press.
 56. See Coleman, James S., and Thomas Hoffer, (1987) *Public and Private High Schools*, New York, Basic Books; See also Coleman, James, Thomas Hoffer, and Sally Kilgore, (1982) *High School Achievement: Public, Catholic, and Private Schools Compared*, New York, Basic Books.
 57. With respect to charter schools see U.S. Department of Education, *The State of Charter Schools 2000*, Washington, January 2000, Sec. C p. 2. Nationally, white students make up 48% of the charter school population compared to 58% of the population served by conventional public schools. Charter school student populations are disproportionately white in Arizona, California, Colorado, and Georgia, and disproportionately minority in Florida, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin.
 58. The British experience with choice shows that large-scale choice programs have much more equitable effects than do small-scale

programs, and that results become more equitable the longer a choice program is in place. See Gorard, S., J. Fitz, and C. Taylor, *School Choice Impacts: What Do We Know?*

59. See Bulman, R.C. & Kirp, D.L. (1999). *The Shifting Politics of School Choice*. pp.36-67. *In School Choice and Social Controversy: Politics, Policy, and Law*. Eds. Sugarman & Kremerer. Washington, D.C.
60. See Weiner, S.S. & Kellan, K. (1974). *The Politics and Administration of the Voucher Demonstration in Alum Rock, The First Years, 1972-1973*. Santa Monica, CA: RAND.
61. See National Governors' Association (1993). *Strategic Investment: Tough Choices for America's Future*. Washington, D.C.: Brookings Institution Press.
62. See, for example, Henig, J.R. (1994). *Rethinking School Choice: Limits of the Market Metaphor*. Princeton University Press: Princeton, N.J.
63. See Peterson, P.E., Greene, J., & Noyes, C. (1996). School Choice in Milwaukee. *Public Interest*. 125. pp.38-56.
64. Re. charter school laws, see Hill, P.T. and Lake, R.J., (2002) *Charter Schools and Accountability in Public Education*, Washington D.C., Brookings, ch. 4. See also Hassel, B. (1999). *The Charter School Challenge: Avoiding the Pitfalls, Fulfilling the Promise*. Brookings Institution Press: Washington, D.C. See also Center for Education Reform (2001). *Charter School Laws Across the States*. http://edreform.com/charter_schools/laws/
65. Among serious analysts even those most worried about choice admit that ensuring equity is a matter of thoughtful program design. From Cobb and Glass 2000: "The social consequences of choice in education are mediated by the policies under which choice operates. Depending on the degree of public oversight, choice can serve contradictory purposes. Consider two extreme scenarios. Under regulated conditions, choice can correct for severe levels of segregation and ensure the stable integration of schools (e.g., controlled open enrollment plans, magnet programs). Minneapolis, Minnesota and Cambridge, Massachusetts endorse such policies. Conversely, unregulated choice can intensify ethnic stratification by allowing parents to remove their children from integrated schools (e.g., White flight). Arizona's laissez-faire charter legislation appears to fall in this latter group."

References

Bernholc, A., Baenen, N., & Howell, R. (2000). *Measuring up: 1998-99 Advanced Placement Exam results*. Wake County Public Schools. Evaluation and Research Department.

Betts, J. R., Rueben, K. S., & Danenberg, A. (2000). Equal resources, equal outcomes? The distribution of school resources and student achievement in California. Public Policy Institute of California.

Bryk, A. S., Lee, V. & Holland, P. (1993). *Catholic schools and the common good*. Cambridge, MA: Harvard University Press.

Bulman, R.C. & Kirp, D.L. (1999). The shifting politics of school choice. In F. Kemmerer & S. Sugarman (Eds.), *School choice and social controversy*. Washington D.C.: Brookings Institution Press.

Center for Education Reform (2001). *Charter School Laws Across the States*. http://edreform.com/charter_schools/laws/

Cobb, C.D. & Glass, G.V. (1999). Ethnic segregation in Arizona charter schools. *Education Policy Analysis Archives*. 7(1). Retrieved October 1, 2003 from <http://epaa.asu.edu/epaa/v7n1/>

Coleman, J.S. & Hoffer, T. (1987). *Public and private high schools*. New York, NY: Basic Books.

Coleman, J., Hoffer, T. & Kilgore, S. (1982). *High school achievement: Public, Catholic, and private schools compared*. New York, NY: Basic Books.

Education Watch Online. *New State and National Achievement Gap Report*. The Education Trust. www.edtrust.org

Elmore, R. F. & Fuller, B. (1996). Empirical Research on Education Choice: What are the Implication fro Policy-Makers? In B. Fuller, R.F. Elmore, & G. Orfield, (Eds.) *Who chooses who loses?: Culture, institutions and the unequal effects of school choice*. New York, NY: Teachers College Press.

Ford, D. Y. (1998). The underrepresentation of minority students in gifted education: Problems and promises in recruitment and retention. *The Journal of Special Education*, 32(1), 4-14.

Fuller, B. (1996). School Choice: Who Gains, Who Loses? *Issues in Science and Technology*. 12(3), 61-67

Fuller, B. (1996). Is School Choice Working? *Educational Leadership*, 54(2), 37-40.

Goodnough, A. (2001, May 13). How to get your child the right teacher next fall, *New York Times Magazine*.

Gorard, S., Fitz, J. & Taylor, C. (2001). School choice impacts: What do we know? *Educational Researcher*. 30(7), 22.

Hassel, B. (1999). *The charter school challenge: Avoiding the pitfalls, fulfilling*

the promise. Washington, D.C.: Brookings Institution Press.

Haycock, K. (2000). *Achievement in America 2000*, Washington, D.C.: The Education Trust.

Henig, J.R. (1994). *Rethinking school choice: Limits of the market metaphor*. Princeton, N.J: Princeton University Press.

Hill, P.T. (1999). The supply side of choice. In F. Kemmerer & S. Sugarman (Eds.), *School choice and social controversy*. Washington, D.C.: Brookings Institution Press.

Hill, P.T, Foster, G, and Gendler, T. (1990) *High schools with character*. Santa Monica, CA: RAND.

Hill, P.T. & Lake, R.J., (2002) *Charter schools and accountability in public education*, Washington, D.C.: Brookings Institution Press.

Hoxby, C. (2000) Does competition among public schools benefit students and taxpayers? *American Economic Review*, 90(5), 1209-1238.

Kimbrough, J. & Hill, P.T. (1981). *The aggregate effects of federal education programs*, Santa Monica, CA: RAND.

Kohn, A. (1998) Only for my kid: How privileged parents undermine school reform. *Phi Delta Kappan*, 79(8), 569-577.

Kurlaender, M. & Yun, J.T. (2000). *Is diversity a compelling educational interest? Evidence from metropolitan Louisville*, Cambridge MA, The Civil Rights Project, Harvard University.

Ladner, M. & Hammons, C. (2001). Special but unequal: Race and special education. In C.E. Finn, A.J. Rotherham, & C.R. Hokanson (Eds.) *Rethinking Special Education for a New Century*. Fordham Foundation.

Loveless, T., (1999) *The tracking wars: State reform meets school policy*, Washington, D.C.: Brookings Institution Press.

Mickelson, R. A. (2001). Subverting Swann: First- and second-generation segregation in the Charlotte-Mecklenburg schools. *American Education Research Journal*, 38(2), 215-252.

National Governors' Association (1993). *Strategic investment: Tough choices for America's future*. Washington, D.C.

Newmann, F.M., Smith, B.A., Allensworth, E. & Bryk, A.S. (2000). *School instructional program coherenc: Benefits and challenges*. Chicago, IL: Consortium on Chicago School Research.

Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven: Yale University Press.

Oakes, J. (1990). *Multiplying inequalities: The effects of race, social class, and tracking on opportunities to learn mathematics and science*. Santa Monica, CA: Rand.

Oakes, J. (1995). Two cities' tracking and within-school segregation. *Teachers College Record*, 96(4), 681-690.

Oakes, J. & Guiton, G. (1995). Matchmaking: The dynamics of high school tracking decisions. *American Educational Research Journal*, 32(1), 3-33.

Orfield, G. (2001). *Schools more separate: Consequences of a decade of resegregation*, Cambridge, MA, The Civil Rights project, Harvard University.

Orfield, G. & Yun, J.T. (1999). *Resegregation in American schools*. Cambridge, MA, The Civil Rights project, Harvard University.

Oswald, D. P., Coutinho, M. J., Best, A. M., & Singh, N. N. (1999). Ethnic representation in special education: The influence of school-related economic and demographic variables. *The Journal of Special Education*, 32(4), 194-206.

Parrish, T. (DRAFT). *Disparities in the identification, funding, and provision of special education*. Submitted to The Civil Rights Project for The Conference on Minority Issues in Special Education in Public Schools.
http://www.law.harvard.edu/civilrights/conferences/SpecEd/parrishpa_per2.html

Peterson, P.E., Greene, J., & Noyes, C. (1996). School choice in Milwaukee. *Public Interest*, 125, 38-56.

Rose, H. & Betts, J. (2001). San Francisco, *Math matters: The links between high school curriculum, college graduation, and earnings*. San Francisco, CA: Public Policy Institute of California

Roza, Marguerite and Paul T. Hill (forthcoming 2004) How Within-District Spending Inequalities Help Some Schools to Fail, in Ravitch, Diane (ed.) *Brookings Papers on Education Policy 2004*, Washington, Brookings Press

Schneider, M., Marschall, M., Teske, P., & Roch, C. (1998). School Choice and Culture Wars in the Classroom: What Different Parents Seek from Education. *Social Science Quarterly*, 79(3), 489-501.

Smith, K. B. & Meier, K. J. (1995). School choice: Panacea or Pandora's box? *Phi Delta Kappan*, 77(4), 312-316.

Smith, S.S. & Mickelson, R.A. (2000). All that glitters is not gold: School reform in Charlotte-Mecklenburg, *Educational Evaluation and Policy Analysis*, 22 (3).101-128.

Texas Education Agency, Office of Policy Planning and Research (2000). *Advanced Placement and International Baccalaureate examination results in Texas, 1998-99*.

The Achievement Council, Inc. Los Angeles, CA. Unpublished. 1991. As cited in *Achievement in America 2000*, The Education Trust, Inc. <http://204.176.179.36/dc/edtrust/edstart.cfm>

U.S. Department of Education (1996). *Urban Schools: The Challenge of Locational Poverty*. National Education Longitudinal Study (NELS) of 1988. National Center for Education Statistics.

U.S. Department of Education (2000). *The State of Charter Schools 2000*, Washington, D.C.

U. S. Department of Education, Office of Special Education Programs. (2000). Twenty-second annual report to congress on the Individuals with Disabilities Education Act. <http://www.ed.gov/offices/OSERS/OSEP/OSEP2000AnIRpt/>

Valdes, L.A., Williamson, C.L., & Wagner, M.M. (1990). The national longitudinal study of special education students. *Statistical Almanac, Vol. 3: Youth categorized as emotionally disturbed*. Menlo Park, CA: SRI International. As cited in Osher, D., Woodruff, D., & Sims, A. (DRAFT). Exploring relationships between inappropriate and ineffective special education services for African American children and youth and the overrepresentation in the juvenile justice system. www.law.harvard.edu/civilrights/conferences/SpecEd/osherpaper2.html

Weiner, S.S. & Kellan, K. (1974). *The politics and administration of the voucher demonstration in Alum Rock: The first years, 1972-1973*. Santa Monica, CA: RAND.

Wells, A. S. (1998). Charter school reform in California: Does it meet expectations? *Phi Delta Kappan*, 80(4), 305-312.

About the Authors

Paul T. Hill

Research Professor

Daniel J. Evans School of Public Affairs

Director, Center on Reinventing Public Education

University of Washington, Box 353055

Seattle, Washington 98195-3055

Tel.: 206-685-2214

Homepage: <http://www.crpe.org>

Paul Hill is director of the Center on Reinventing Public Education, which studies alternative governance systems for public elementary and secondary education. He is also a non-resident Senior Fellow of the Brookings Institution. For Brookings he is now leading a national working commission on choice in K-

12 education, which will issue its report in late 2003. Before joining the University of Washington faculty, Paul Hill worked for 17 years as a Senior Social Scientist in RAND's Washington Office where his research focused on the reform of elementary and secondary education. He contributed to studies of defense research, development and acquisition policy. While at RAND he served as Director of Washington Operations (1981-87) and Director of the Education and Human Resources program (1979-80). While a government employee he directed the National Institute of Education's Compensatory Education Study (a congressionally-mandated assessment of federal aid to elementary and secondary education) and conducted research on housing and education for O.E.O.

Kacey Guin

Research Assistant
Center on Reinventing Public Education
University of Washington, Box 353055
Seattle, Washington 98195-3055

Kacey Guin is a research coordinator for the Center on Reinventing Public Education, in the Daniel J. Evans School of Public Affairs at the University of Washington. She has co-authored book chapters on the achievement gap and the assessment of school choice programs. Most recently, she completed a study on the impact of high teacher turnover rates on the organizational functioning of schools.

The World Wide Web address for the *Education Policy Analysis Archives* is
epaa.asu.edu

Editor: Gene V Glass, Arizona State University

Production Assistant: Chris Murrell, Arizona State University

General questions about appropriateness of topics or particular articles may be addressed to the Editor, [Gene V Glass, glass@asu.edu](mailto:gene.glass@asu.edu) or reach him at College of Education, Arizona State University, Tempe, AZ 85287-2411. The Commentary Editor is Casey D. Cobb: casey.cobb@unh.edu.

EPAA Editorial Board

[Michael W. Apple](#)
University of Wisconsin

[Greg Camilli](#)
Rutgers University

[Sherman Dorn](#)
University of South Florida

[Gustavo E. Fischman](#)

[David C. Berliner](#)
Arizona State University

[Linda Darling-Hammond](#)
Stanford University

[Mark E. Fetler](#)
California Commission on Teacher Credentialing

[Richard Garlikov](#)

Arizona State University

[Thomas F. Green](#)
Syracuse University

[Craig B. Howley](#)
Appalachia Educational Laboratory

[Patricia Fey Jarvis](#)
Seattle, Washington

[Benjamin Levin](#)
University of Manitoba

[Les McLean](#)
University of Toronto

[Michele Moses](#)
Arizona State University

[Anthony G. Rud Jr.](#)
Purdue University

[Michael Scriven](#)
University of Auckland

[Robert E. Stake](#)
University of Illinois—UC

[Terrence G. Wiley](#)
Arizona State University

Birmingham, Alabama

[Aimee Howley](#)
Ohio University

[William Hunter](#)
University of Ontario Institute of
Technology

[Daniel Kallós](#)
Umeå University

[Thomas Mauhs-Pugh](#)
Green Mountain College

[Heinrich Mintrop](#)
University of California, Los Angeles

[Gary Orfield](#)
Harvard University

[Jay Paredes Scribner](#)
University of Missouri

[Lorrie A. Shepard](#)
University of Colorado, Boulder

[Kevin Welner](#)
University of Colorado, Boulder

[John Willinsky](#)
University of British Columbia

EPAA Spanish Language Editorial Board

Associate Editor for Spanish Language

Gustavo E. Fischman
Arizona State University
fischman@asu.edu

Associate Editor for Portuguese Language

Pabli Gentili
Laboratório de Políticas Públicas
Universidade do Estado do Rio de Janeiro
pablo@lpp-uerj.net

Founding Associate Editor for Spanish Language (1998-2003)

[Roberto Rodríguez Gómez](#)
[Universidad Nacional Autónoma de México](#)

[Adrián Acosta \(México\)](#)
Universidad de Guadalajara
adrianacosta@compuserve.com

[Teresa Bracho \(México\)](#)
Centro de Investigación y Docencia
Económica-CIDE
bracho_dis1.cide.mx

[Ursula Casanova \(U.S.A.\)](#)

[J. Félix Angulo Rasco \(Spain\)](#)
Universidad de Cádiz
felix.angulo@uca.es

[Alejandro Canales \(México\)](#)
Universidad Nacional Autónoma de
México
canalesa@servidor.unam.mx

[José Contreras Domingo](#)

Arizona State University
casanova@asu.edu

[Erwin Epstein \(U.S.A.\)](#)
Loyola University of Chicago
Eepstein@luc.edu

[Rollin Kent \(México\)](#)
Universidad Autónoma de Puebla
rkent@puebla.megared.net.mx

Javier Mendoza Rojas (México)
Universidad Nacional Autónoma de
México
javiermr@servidor.unam.mx

[Humberto Muñoz García \(México\)](#)
Universidad Nacional Autónoma de
México
humberto@servidor.unam.mx

[Daniel Schugurensky \(Argentina-
Canadá\)](#)
OISE/UT, Canada
dschugurensky@oise.utoronto.ca

[Jurjo Torres Santomé \(Spain\)](#)
Universidad de A Coruña
jurjo@udc.es

Universitat de Barcelona
Jose.Contreras@doe.d5.ub.es

[Josué González \(U.S.A.\)](#)
Arizona State University
josue@asu.edu

[María Beatriz Luce \(Brazil\)](#)
Universidad Federal de Rio Grande do
Sul-UFRGS
lucemb@orion.ufrgs.br

Marcela Mollis (Argentina)
Universidad de Buenos Aires
mmollis@filo.uba.ar

Angel Ignacio Pérez Gómez (Spain)
Universidad de Málaga
aiperez@uma.es

[Simon Schwartzman \(Brazil\)](#)
American Institutes for Resesarch–Brazil
(AIRBrasil)
simon@sman.com.br

[Carlos Alberto Torres \(U.S.A.\)](#)
University of California, Los Angeles
torres@gseisucla.edu

[home](#) [abstracts](#) [complete](#) [editors](#) [submit](#) [comment](#) [notices](#) [search](#)

EPAA is published by the Education Policy Studies
Laboratory, Arizona State University