Evaluating Voucher Programs: the Milwaukee Parental Choice Program

Professor John F. Witte

U.S. Senate Homeland Security Committee Hearing: The Milwaukee Parental Choice Program

Milwaukee WI, July 20, 2015

My name is John F. Witte a Professor Emeritus in Political Science and Public Affairs from the University of Wisconsin-Madison. I come before you today because I was twice the official evaluator of the Milwaukee Parental Choice Program (MPCP). The first evaluation, Study I in what follows was from the inception of the program in 1990 until 1995; the second, Study II, was from 2006 to 2011. In the first study I was named official state evaluator by then State Superintendent of Schools, Bert Grover. Bert was, by his own declaration, an unremitting opponent of vouchers.¹ The second study was written into legislative Act 125 in 2005 that specified an evaluation and assigned it to the then Georgetown University School Choice Demonstration Project (SCDP). That project was funded by a range of foundations from liberal to conservative. I was co-principal investigator of that project at the request of the other principal investigator, Professor Patrick Wolf of Georgetown and later a chaired Professor at the University of Arkansas where he moved the SCDP. In both cases I was part of a large team that worked on those studies. This paper will first discuss school voucher evaluations in general terms, including what we study in a broad context, and how these studies are carried out. Second, I will outline the types of studies completed in Study I and Study II and the results of

¹ He was, however, not happy when the *Wall Street Journal* ran an editorial, with portrait drawing of Grover, mad an analogy of Grover's opposition to that of George Wallace "standing in the school house door."

those studies. I will use non-technical language, but reference scholarly books and published articles and reports which of course contain technical details.

Types of School Voucher Studies and How They Are Accomplished? <u>Student Effects</u>.

Standardized Achievement Tests. Despite the popularity of political attacks on standardized achievement tests, especially when mandated by the federal government, the first and clearly most often required and reported results in voucher studies are the differences between standardized test results for private-school voucher students and those attending public schools without a voucher. Two comparisons can be made; 1) those who just receive a voucher but do not use it (called the intent to treat condition - ITT); and, 2) those who receive a voucher and attend a private school with it (treatment condition). For most the latter is most important.

There are any number of types of comparisons that can be done with test scores. The simplest is simply to compare the averages of test scores in each comparison group. The reliability of these results depend completely on the method of selection of the two groups. If, for example they were assigned in a truly random fashion, as in say a drug study in which a full set of procedural standards are required, the averages between groups in the ITT and Treatment conditions would provide reliable estimates of the effects. Statistical measures of how likely the results would occur by chance could be accurately computed for the differences in averages. However, those procedural standards are very difficult to meet in most social science settings. They include: 1) identification of the full sample to which the study (and drug) apply; 2) a method of random selection into the treatment and non-treatment groups that is independent of anyone involved in the study; 3) double-blind conditions in which neither the person administering the drug or a suitable placebo or the subject knows which they are receiving; 4)

full accounting for subjects who leave the study before the specified end-date; and, 5) adequate quantitative outcome measures of the effects of the drug and any side effects that might occur.

Obviously many of these conditions cannot be met in education studies. For example, students and teachers know what type of school they are in so the double-blind condition is never met. Almost always, because we cannot coerce students to attend private schools, the samples of those in treatments are those who apply for vouchers (or other experimental treatments). And, depending on the program, a number of students will not end up in the type of school assigned by the randomization process.² This does not mean that random assignment studies are not of immense value and a major research step forward. Many of these problems can be attenuated by statistical and other procedures, for example, by following strict protocols in the random assignment research designs are not the only way forward, and often they are simply impossible to implement in situations on which we need as much reliable information as possible. That was the situation in Milwaukee in both *Study I* and *Study II*.

In non-random studies, simple cross-sectional comparisons of voucher and non-voucher students are of little value. The reason is that, without some controls or completely different approaches, the two groups may have very different background characteristics that may affect test score results. For example, we know from many studies that, all else being equal, private school families, without a voucher program, are of considerably higher socio-economic status than non-private school users (See Witte and Thorn, 1996 for Milwaukee comparisons). There are a number of ways to mitigate the effects of these differences as long as the differences are

² This can occur for both conditions: voucher-receiving students may have to be accepted in private schools, but may not, or they may not get into the ones they want; and non-voucher receiving students may attend private schools on their own accord (i.e. paying tuition).

observed and can be measured. For example, statistical controls can be used that account for the effects of say parental education or family income if we can reliably measure those variables.

In addition, a very popular approach, in all types of education studies is to look not at the simple cross-section averages, but rather the individual student changes in those scores from a base-year score to subsequent years. These models come in many forms that fall under the heading *value-added* measures. If this is done without controls, the assumption being made is that the effects of family background affect base scores, but not the potential growth scores from the base year. Or put another way, the learning slopes can be expected to be the same for students who begin at different levels of achievement. Subsequent differences are attributable to the (value-added) differences that schools and teachers make. Because this assumption may not always hold, often value-added models also include controls on background variables that may continue to affect learning growth after the beginning (base line) of the study.

Short of randomization there are also methods of selecting samples that may offset anticipated differences in voucher applicants and non-voucher students. For example, most voucher programs to date in the United States have used family income differences, either to be eligible for a voucher or to determine the amount of money the voucher-recipient receives. For example, during the time frame in the Milwaukee studies, most of the time only students with family incomes below 175% of the poverty line (\$20,000 for a family of three 1n 1990) were eligible for vouchers. Therefore in *Study I*, we studied all students who received vouchers as the treatment group, but picked the comparison groups from Milwaukee Public School (MPS) students who were eligible for free or reduced free lunch (which was 185% of the poverty line), and then we picked a second group as a random sample of all MPS students. The low-income

group gave us somewhat of a better match, which we later verified through surveys of parents in each group.³

More sophisticated matching techniques are more common in recent years and are sometimes combined with randomization. The reason for this is that researchers are constantly worrying about factors that are unobserved or unmeasured between groups that may bias outcome estimates. For example, let us assume it is difficult to measure motivation or discipline, especially in small children. If these factors affect learning, not a heroic assumption, and they exist more in the one group than the other, the differences we observe in outcomes will, at least in part, be attributed to these factors. However, these factors are not observed and thus cannot be easily controlled for statistically. Random assignment, if done with rigor, should also randomize these unmeasured factors so if the sample is large enough they will occur equally in each group. That is the true value of randomized studies.

In Milwaukee *Study II*, from 2006 to 2011, we used a sampling procedure for the public school control group that advances the comparison group validity considerably over prior research. We first selected a random sample of students in private schools with vouchers based on their numbers in each grade. For the ninth-grade we included all students because we wanted to also study high school graduation rates. We then focused on the base 2006 standardized test score in reading and math of the selected voucher students. For each student we located the set of public students in the same grade that simultaneously lived in the same *neighborhood* and had very close 2006 test scores. Why the same neighborhood? The reason is that research by

³ There were some interesting results of these, and other comparisons between the samples of families in *Study I*. Actually the voucher families were considerably poorer than the public school sample and they were more likely to be single-parent (almost always women-headed) families. However, the voucher parents were more educated and education of their children meant more to them than other values. They were also more likely to practice some form of religion. See Witte, 2000.

demographers indicate that people who live together in neighborhoods share attitudes, behaviors, and situations, such as exposure to crime. These types of commonalities are indirect measures of those unobserved factors that concern us in setting up comparison groups. Given that list of public school students how did we ranked them as matches using what are called "propensity scores." These scores take into consideration other variables such as race, ethnicity, gender, and income to come up with a score measuring the goodness of the match to the individual voucher student. We then selected the top candidate to be in the comparison group.

The analysis of student test scores in *Study I* and *Study II* were both value-added studies that estimated changes in test scores in reading and math from a base test year. They both controlled for different sets of family and student background variables.⁴ The analysis in *Study II* was more sophisticated because statistical methods and computer programming had advanced considerably. However, the basic analytic techniques were similar enough that the results presented below are comparable.

The one exception to differences in *Study I* and *II* also introduces the last important methodological problem – how to treat those that leave the study? Subjects leaving a study is called *attrition*. Attrition creates problems of many sorts, but mostly it comes down to biased attrition from the treatment or control groups. If, for whatever reason, one set of subjects is more likely to leave than another, outcome estimates can be very biased. The attrition problem reaches

⁴ One issue in most education studies is that some variables are present for all students in terms of "administrative data" that districts must collect and thus are available for all students. These are usually: gender, age, race, eligible for free lunch, and disability status. Some have family below poverty line as a measure of income. Other variables used in our models come from parent surveys. These include parent education, better income measures, and a large set of attitude and other behavioral measures. The problem is that not all parents respond to surveys so the samples including just administrative variables differ from those that also include survey data. The latter reduce the sample sizes (N) and may introduce bias due to which families respond to the survey. In *Study I* survey response were high for urban surveys (in the 20% rates); but for *Study II* they were over 50% because we had the resources to pay respondents.

back into research designs. For example, some programs that award vouchers in a careful random process, such as the private voucher programs in New York, Washington, and Dayton, private schools had to accept students with vouchers and many did not. The bias occurs if those denied were, for example, the poorest students or students with prior behavioral problems. That makes the accepted students a non-random subset of the randomly selected voucher students. In programs where private schools have rights to accept and dismiss students those who come and leave are critical to studies. I highlight this because in studies of inner-city education, attrition rates are always high. Poor families move and family situations change. That means that students change homes and schools.

Another attrition issue is how the research accounts for those who leave? Do you drop them from the study? If they switch groups and you can follow them, what is their status? Do they stay where they began, or do you switch them from one group to the other? If they spend one year in a private school and 3 in a public school to whom do you attribute their educational achievement after four years?

I am not certain there is a definitive answer to these questions for social and specifically educational research. In the formal world of random assignment, in say the medical field, there is a specific answer, which we followed in *Study II*. The answer is that initial status is the only status: if one receives the treatment initially (say a drug), the subject is in the treatment group to the end of the study regardless of whether they continue to follow the drug regime or not. The reason is that in the real world people stop taking prescribed drugs and switch to other drugs or stop all drugs. Thus to get an accurate population estimate of effects, the study must include these population behaviors.

But, is this comparable to kids switching schools and attributing all subsequent learning to the initial school, when the study is comparing treatments (i.e private and public schools) Is this different from studies determining if a single treatment is effective? In Milwaukee Study I we decided to drop students from the study when they left the program even if they switched to the other sector and we had test scores for them. That meant all learning was attributed to the sector where they began, but ended if they switched. In Study II we ascribed to the classical formulation of leaving students in their initial sector, although we also did other analyses using weighted results and other models. Results usually did not change when we altered the methods. We also carefully evaluated attrition of students who left the system for whom we lost outcome data. We found little bias in terms of test scores, and other variables for those who left in the respective treatment or control groups.

Student Attainment (Graduation). Graduation from high school leads to many good things; dropping out does not. The evidence on this simple difference is overwhelming. Graduates earn much more; create stable families; have more successful children; and are happier throughout their lives. Dropouts earn much less; have more out of wedlock births; have higher rates of incarceration; and express lower levels of happiness. If I had one measure of educational success in America it would be the high school graduation rate. Other than *Study II* no voucher studies in the United States have estimated graduation effects. Our study has and it is a critical finding of our research.

Attitudes and Behaviors of Students and Parents. Test scores and hopefully attainment are appropriate outcome measures of voucher evaluations and dominate reporting, but other results are also important and we tried to measure them as well. Student attitudes and behaviors toward their schools, teachers, and learning are important ingredients in education. The same

holds for parents, with perhaps an added importance of their participation in the education of their child both at school and at home. In general, studies have focused on which parents know about choice options and how they learned about them? They also study why parents apply for choice options, or why not. And, for both students and parents, measures of satisfaction levels with various aspects of the school experience are reported.

In *Study I*, these were generally measured using surveys (Witte, 2000, Chapters 4 and 5). Because the program was studied from the very beginning and most students transferred from public schools, we were able to ask students and parents to assess traits of prior public schools, such as various items of satisfaction, and compare them to their current private schools. We did the same for public school students if they had recently moved from another public school.⁵ These comparisons to prior schools were not as relevant in *Study II* because most students had been in their respective schools for much longer. However, in that study, additional information was gathered through a series of focus groups with parents from both sectors, often meeting together (See Stewart, *et al*, 2010).

Institutional and Systemic Effects.

School-Level Effects. Although less attention has been paid to the effects of vouchers on schools – both private and public – the issues involved are critical for the general well being of education in a choice environment. At the school-level, there is a great deal of speculation when voucher programs are being considered about the consequences for public schools which may lose students and/or face competition from new or existing private schools. Indeed the original

⁵ One of the things that caught us off-guard after the first year were the number of students who switched public schools during or after that year when the student had not reached the terminal grade in the school. This made a difference in analyzing test scores and other outcomes but also posed a unanticipated policy problem that we then analyzed. We found that approximately 35% of students in grades 3 to 5 switched schools unnecessarily each year. At the same time a group of researchers in Chicago discovered the comparable figure in Chicago public schools was over 40%.

argument for vouchers by Milton Friedman was premised on the assumption that with a full voucher system for all schools, demand for better schools would lead to their survival and growth, and the lack of demand for poor schools would lead to their shrinking and going out of business (Friedman, 1962).

Although these are important issues discussed below under systemic effects, less attention has been paid to internal effects on schools. How does choice affect staff morale, hiring, and retention? Are there curricular responses to introducing vouchers? Is pedagogy affected? Are there leadership changes? And these questions apply to both public and private schools.

Studies that include school effects also usually involve surveys, possibly focus groups, but almost always case studies of schools that may incorporate the former. In both *Study I* and *Study II* these case studies were done by research teams from two to four people and involved between one and three days in a school. The variance depended on the size of the school and the research team. The surveys were always in the form of face-to-face semi-structured interviews with teachers and administrators. Case studies always involved extensive classroom observation and usually discussions with students. Anonymity was given to both individuals and to the schools.

Market-Competition Studies. Economists love markets and they love competition. Thus if they study educational choice they are solemnly obligated to study competition generated by the introduction of vouchers into a public school system. The standard study, of which I have also participated, tries to determine if the introduction voucher students have impacts on neighboring public schools from which students may leave with vouchers and attend private schools. These studies almost always analyze changes in test scores in the affected public

schools. They also may include distance measures between public and private schools and recently the "density" of private school options within a certain radius of public schools. They often now include charter and private school options. And, as a direct measure of competition they include, if data are available, the number of students transferring from a specific school to choice alternatives. The hypotheses are that the closer the alternatives, the higher their density, and the more students lost, will lead to greater competition and thus incentives for the public schools to increase their achievement levels. If the hypotheses prove correct, the happy result is that all students may learn more.

Financial Studies. The rhetoric surrounding the voucher debate may be the strongest, and have the least common ground for opponents and proponents of vouchers when the discussion turns to money. Opponents routinely claim that vouchers cost the public schools resources and can eventually bankrupt public schools. The proponents argue that system-wide voucher programs save money because students are on average being educated at a lower total cost. The reason for the latter is that private schools, and hence the price of the voucher, is much less than the per member cost of public education. On average the latter point is correct if all costs are included, but so is the fact that public schools do lose money when students leave. Public school proponents further argue that because the losses are marginal for any school they cannot make up the losses easily by reducing staff or programs. The studies are further complicated by having to make an assumption concerning what potential private school students would do in the absence of vouchers. In short, how many would go to public verses pay to go to private schools in the absence of vouchers? And the answer to that depends on voucher program design, specifically income eligibility limits, the size of the voucher, and whether private schools can require "addons."

The Effects on Family Choices. Perhaps the least studied of all the voucher issues is the one that for many voucher supporters, including myself, is the most compelling outcome. Education choices in America, at all education levels, are greatly affected by family income and well being. The initial argument for vouchers in Milwaukee was publicly stated as a way to allow poor, mostly black families, in the disaster that was the Milwaukee Public Schools (MPS), to have the same opportunity for alternatives that were available to the white middle classes. And those alternatives were to buy private education in Milwaukee or buy housing in the suburban districts where schools were considerably better. Thus the original constraints on the program: income limits; students had to reside in Milwaukee; and, excepting kindergarteners, students had to have been in MPS in the prior year. Over time all of those conditions have been changed, but at the same time, the program has grown from the original 341 students in 1990 to over 22,000 students in 2014-15. We turn now to those results and the results for the many issues raised above for each of the study periods involved.

The Results of Voucher Studies of the Milwaukee Parental Choice Program The results described below are listed separately for each of the study periods, *Study I* from 1990 to 1996 and *Study II* from 2006 to 2011. In each case I shall describe the results briefly and in non-technical terms. These results were reported in each study in extensive reports to funding and government agencies. They have also been published in refereed scholarly books and journals. The initial reports are available from the authors, with those from *Study II* also on a website: <u>http://www.uaedreform.org</u>. The results, when available, will favor refereed articles over reports.

Student Effects.

Standardized Achievement Tests. The general conclusions for both studies are that there were no consistent statistically significant differences using value-added measures of test results between the voucher-students and the public school comparative samples over the four years of each study. There were some controversies and nuances in the two studies however.

<u>Study I</u>. There were no statistically significant results in any year in either reading or math for our most robust model with the largest N. If survey data are included, which allowed for variables such as parental education, income, and involvement, but with a considerably reduced N, in year two the reading estimate was negative and significant favoring the public school students. However in the last two years the differences were very close to zero.

There was a significant controversy over four year math scores with a team of researchers from Harvard University headed by Professor Paul Peterson (Greene, J. P., *et al*, 1998). That group used a different comparison group – students who tried to get in the choice program in 1990 but were rejected. They find a very large effect when this very small group is used. We found no significant effect for math in year four using any of our models. However, when we reanalyzed their control we found definitive evidence that the rejects who could be followed (their comparison group), meaning they continued on in MPS and thus had test scores, were far from a random sample of rejects. Indeed, they had much lower prior test scores, were poorer and came from families with lesser educated parents. The ones who left probably moved out of MPS or went to private schools when they did not receive vouchers. Also it turned out that with their small comparison group, five students accounted for the significant negative results and had scores close to zero on the math test in year four (when they averaged the 33rd percentile in year three). These five students probably simply put their names on the tests and turned them in

without doing the tests. When they were excluded, the math result was not significant (Witte, 2000, Chapter 6).

Study II. In the second study, which had a number of technical advantages over the first study, the researchers ultimately concluded that there was no clear differences between the voucher sample and matched control group. The descriptive differences are presented in Figure 1. The methods we used to model these results were sophisticated but were almost all value-added results with extensive controls. Again there were some issues in the last year. The first three years after the 2006 base line test (2007 to 2009) produced mostly significant, negative value-added results in math, with the MPS comparison group doing better than the voucher sample. But this was not the case in the fourth year when the differences were not significant. However, in reading the opposite occurred with the voucher students doing better than the matched sample in years 2007 and 2008, but the differences were not significant. However, as with math, there was considerable improvement in reading in the fourth year and the difference with the control group was statistically significant at the .05 level.

The big issue is why the jump in the fourth year (2010) in both subjects? After long deliberations, we ended up arguing that the result was more the effect of high stakes tests than of advances in the voucher schools. The reason was that the legislature had passed a requirement that first took place in 2010 that all students receiving vouchers in the private schools had to be tested and the results published and entered on the state web site. Prior to that point we were responsible for testing only our sample, and we tested them whether they were still in private schools or if they were in MPS. As it happened, those who returned to MPS prior to 2010 did not experience the jump that those that were still in the private schools did. That suggested

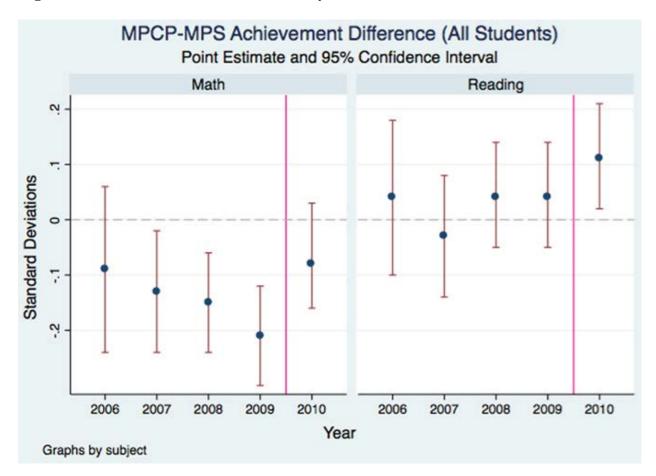


Figure 1. Achievement Test Results for Study II

that test pressure in the newly tested private schools probably produced the upward results after years of quite consistent lower results (Witte, *et al*, forthcoming). The conclusion that there were no positive test results favoring the voucher students is thus a bit controversial, but there were also several years of negative math tests to offset the positive final reading test even if it was a true, and not test-induced result.

Thus, in summary our best estimates over ten years of study were that for achievement tests, there were no consistent differences from the base year between voucher students and comparison groups drawn from students in public schools. That is not the result for attainment.

Source: Witte, et al, forthcoming.

Student Attainment (Graduation). An attainment study was not possible for *Study I*. Because of this lapse, I was adamant that we include one in *Study II*. To that end we sampled all ninth graders in the base year of 2006 to maximize the sample we could follow beyond graduation in 2010 and into college.⁶ The results of that study are definitive, not involving controversy, and may be the most important finding in voucher studies to date. The latter is contingent on how much importance one places on graduating from high school and going on to four year colleges. Our research team has placed very high importance on that outcome. As we demonstrate in the article reporting those results (Cowen, *et al*, 2013) graduating from high school is positively correlated with a lot of very good things (higher immediate and lifetime income, solid family structures, access to higher education, etc.) and negatively correlated with a lot of bad things (jail, out of wedlock births, drug and alcohol dependency, etc.).

The results were quite simple. Compared to the control group, students receiving vouchers beginning in the 2006 cohort graduated from high school and attended four year colleges at between 4 percent and 7 percent higher rates than the comparison group of 2006 public school students. The colleges that they attended also appeared to be of higher status than the ones attended by public school students. And, for the 2006 freshmen cohort the voucher students had a high persistence rate into their sophomore year of college. Although 7 percent may not appear to be a high number to some, it is an extremely steep increase for large urban city school districts that have reached seeming limits in graduation success in the last several decades.

⁶ As it turned out, we should also have sampled all eighth graders because we were able to stretch our funds to another year and more to follow those students. To date we have tracked the ninth graders two years after high school and eighth graders one year.

Attitudes and Behaviors of Students and Parents. As I stressed above, there are many measures of educational outcomes beyond test scores and attainment but they are often overlooked. Some are considered "soft measures" by some researchers and some are very difficult to study due to data or policy issues. One of the latter, that is a critical issue for many educators and families, are disciplinary outcomes, especially suspensions and expulsions. Our studies in Milwaukee did not attempt to analyze these disciplinary measures because they vary in terms of definitions and more importantly implementations at the school level. Specifically, suspensions come in many forms and school principals have very different approaches to what is an action requiring suspension and what is not? Expulsions are actually rare events which mean rates are very inconsistent. These problems are exaggerated when trying to make comparisons between public and private schools and their distinctive cultures on disciplinary issues. Because of these issues our studies measured discipline and safety in schools through student and parent surveys. Certainly not the best measures, but we feel they are more valid than administrative data.

<u>Study I</u>. The overall theme from *Study I* was that parental satisfactions were much more positive for voucher families than families in the public school control group. This included both parental evaluations of current, private schools in contrast to parental evaluations of current schools by public school parents, as well vouch parents comparison between their current school and prior public schools. Because of limited resources, in the first year, 1991, both parents in the MPS control groups (MPS random; MPS random low-income) and applicants to the voucher program were twice sent mailed surveys. Subsequently only new voucher parent applicants were sent surveys through 1995. Thus comparisons between groups were based on 1991 MPS parent surveys and yearly surveys on voucher parents.

The first set of issues involved why parents sought vouchers? The answers were very consistent over the five years. MPCP parents listed education quality, teacher pedagogy and quality, and superior discipline and safety in private schools as the most important factors affecting their decisions (Witte, 2000, p. 63). A second issue was the difference between applicants and non-applicants in terms of dissatisfaction with their prior (public) schools. Those who applied for vouchers were extremely dissatisfied with their prior school experience compared with those who did not attempt to obtain a voucher (Witte, 2000, p. 65). Finally there were also some important demographic differences between the MPCP and MPS parents. MPCP parents were overwhelmingly black throughout the five years. Also MPCP families tended to have lower incomes than even the low-income sample of MPS parents, but they had higher education. They also were more religious in terms of beliefs and activities.

Other parental data also involve comparisons between responses about behavior and attitudes. The most striking results were that voucher-school parents expressed considerably higher satisfaction on almost all dimensions of schooling - the largest difference being in the areas of highest priority they listed for why they sought vouchers – educational and teacher quality and discipline in the school. The results also indicated considerably more participation of choice parents in all aspects of education – school activities, school organizations and involvement at home.

In summary, parent response to the voucher program, based on parent surveys, in the first study of the MPCP were consistently positive.

<u>Study II</u>. In the second study, from 2006 to 2011, much more surveying was done with a much higher response rate partly due to hiring professional pollsters who persisted in subject

contacts and offered money for complete surveys.⁷ Surveys included both parents and students from grades 4 to 9. The surveys in *Study II* were more extensive and included such questions as political activity and knowledge, and civic duties. These questions have produce further insights into program effects.

Some of the first issues, asked in both studies were: how families learned of choice options; why some families applied for vouchers and others did not; and the comparative characteristics of MPCP parents and their MPS control group counterparts. An article by David Fleming and co-authors (2013) addresses the first two of these issues. The leading mechanisms for learning about choice were identical to the results from *Study I* and the same for MPCP and MPS parents: friends and relatives and their child's school. The characteristics of choosing parents were somewhat different in *Study II* than in the first study. One important difference was that by the time of the second study, the program had become much more racially diverse than in the early years, in which MPCP students were almost all black. By 2006, 56.7% were black, 24.5% Hispanic, and 15.8% white. (Witte, et al, 2008, p.17). However, as with the first study, MPS parents had somewhat higher incomes, but somewhat lower levels of education (Fleming, et al, 2013; Witte, et al, 2008). However, the overall education of MPCP parents was considerably lower than the first time around.⁸ Also, as in *Study I*, religion was more important and MPCP families were more likely to engage in religious activities than their MPS counterparts.

⁷ The response rates for parents were 65.4% for MPCP parents and 51.6% for MPS. Student response rates were 84.5% for MPCP and 46.6% for MPS (Witte, *et al*, p. 16).

⁸ The average income of MPCP families was \$23, 371 compared to \$27,577 for MPS families. For education, in *Study I*, 46 percent of MPCP mothers had some college education, while in *Study II*, only 30 percent of MPCP parents and 26.3 percent of MPS parents in our sample are in the "some college education" category (Witte, *et al*, p.18-19.).

There was, however, a difference in reported parental involvement between the two sectors in *Study II*. As reported above, in the first study MCPC parents were more involved in all measures of parental involvement, in the school and at home. In *Study II*, While school activities remained higher for MPCP parents, home involvement was actually reportedly higher for MPS parents.

In terms of parental attitudes, there was also a shift from *Study I* in that the importance placed on education expectations, which were higher for MPCP families earlier, were the same between groups in the second study. On the other hand, the satisfaction of MPCP parents with most school characteristics were higher than MPS parents, although both sets of parents were reasonably well satisfied (Witte, *et al*, p. 26). One measure of school satisfaction that seemed to differ from *Study I* to *Study II* was the "grade" parents gave to their schools on an A to F, 0 to 4 point scale. In the first study, MPCP grades ranged over the years from an average of 2.0 in the first year (C) to 2.7 by the last year; while MPS schools ranged from 2.4 to 2.8. Overall there was no statistical difference between the samples. The MPCP grades reflected a very difficult first two years of the program (Witte, 2000. P.68). The second study resulted in average grades for MPCP of 3.4 while MPS averaged 3.0. Thus both were improved, but MPCP was statistically higher.

The same findings carried over to students. Overall voucher students expressed great satisfaction with most aspects of their schools. The difference on items such as when asked to agreement with statements such as, "My school promotes a drug-free environment," was that MPCP students tended to Strongly Agree, while MPS students used the Agree category more often. That was true of most student responses. On the behavioral side MPCP students reported

fewer disciplinary actions against them and fewer suspensions, but as noted above, these are notoriously hard to validate because of differing school-level policies.

Political and civic duty has also been studied as a result of the second Milwaukee voucher study. In a study by David Fleming, William Mitchell, and Michael McNally, differences in civic responsibilities between voucher parents and the MPS control group parents were explored. They summarize their findings as: "We find that voucher students demonstrate modestly higher levels of political tolerance, civic skills, future political participation, and volunteering when compared to public schools students. Further analyses indicate these results may be driven in part by those students attending Catholic and other religious schools." (Fleming, *et al*, 2014, p. 2). In a similar vein, Fleming, in exploring the political connections and activity of voucher and non-voucher parents, found voucher parents are more likely to connect government to education, to report learning about government from participation in the voucher program, and to be more politically active in general (Fleming, 2014).

In summary, many of the findings from the first and second wave of studies are similar. For the main, parental knowledge of and reasons for choosing vouchers or not are very similar. Comparisons were similar on parental income and education, with MPCP being poorer but more highly educated. Families differed, however, both in terms of a dramatic increase in racial diversity of the program, and in that MPS parents had more involvement at home with their children, and higher expectations for their children's future education in *Study II*. The results were similar in terms of overall satisfaction with their respective school, with MPCP parents and students expressing higher level of satisfaction on most measures in both studies.

Institutional and Systemic Effects.

School-Level Effects. It is impossible to fully summarize the widely varying contexts of the many schools we visited in the two study periods of the MPCP. This report will highlight some of the major conclusions and innovative practices we came across during our ongoing interactions with schools. During the first study the schools involved were, by statute, limited to secular schools. The statute was changed in 1995 to include religious schools, which dominated the second study. However, one unique aspect of the first wave of schools was that a number of the schools were former Catholic schools that had been abandoned by the Archdiocese in the late 1960s and 1970s as a result of reduced enrollments produced by white flight. In some of those schools women in orders (nuns) were allowed to remain and in several instances they were mainstays of the teaching and administrative staffs.

<u>Study I</u>. The MCPC began with the first students in 1990-91. There were 341 students in seven schools. One school closed in mid-year that made for a very bad first year. Over 70 students were affected by the closing. Because the program was being challenged in court, and because of the publicity surrounding the closing and bankruptcy of Juanita Virgil Academy there were only six schools and 521 students in the second year. Of those six schools, four had been Catholic schools at one time. All were kindergarten through at most eighth grade. By the end of the first study there were 12 schools enrolling 830 students (Witte, 2000, p.56). There were still no high schools in the program. In 1995 there were a number of legislative changes in the program, the most important being that religious schools were admitted, the cap on students was raised from the original 1500 to 15,000, and the state evaluation requirement was dropped, not to be reinstated until 2005 in Act 125.

There were a number of lessons from these early years. The first was that it was clear that private schools were not the silver bullet answer to the myriad of problems in inner-city American education. Juanita Virgil Academy was a terrible place, run for five months by an incompetent principal. Parents from the school, surveyed in the first year, made very disparaging comments about the school, and many quickly pulled their children out before the school went under. We argued at the time that over 80 children lost all or part of a full year of education because of that school. And several others were not much better, with one other principal leaving school following drug charges for events happening in the school. Another school, that later rallied and became a star school in Milwaukee, Bruce Guadalupe School, was in the first two years in chaos and it was housed in one of the worst school buildings we had ever seen.

For all the schools, staffing was a problem because wages were about half the public schools and benefits even worse. Staff turnover was high with average tenure of only 4.2 years in 1990-91, and 24 % of the teachers had no certification. However, both of these numbers improved by 1994-95 to 6.5 years tenure and 13% non-certified teachers (Witte, 2000, p. 94).

Finances were also very poor in the first years, but the voucher program stabilized some schools, and higher wages and benefits allowed for more discriminatory hiring of teachers. The limited financial resources had several effects that might be judged positively. Because of limited resources, the schools had to focus on what later became known as "academic press"– they could not afford non-academic courses or activities. But of course that also meant limited music and art in most schools.⁹

A number of the schools proved to be specialty schools such as Waldorf and Montessori, but there were also two African cultural schools and one Hispanic oriented school (Bruce

⁹ The exceptions to that were a Waldorf and two Montessori schools in which art, music, and non-academic activities such as growing and preparing food are standard parts of the curricula.

Guadalupe). However, even given these emphases, there were many similarities to traditional schools. As I wrote later from a case study: "…in one first grade class, a male black teacher on two successive days taught lessons using the books *The Little Engine that Could* and *The Red Hen*." (Witte, 2000, p.96). And from rigorous observational protocols comparative case studies with MPS and MPCP schools found that pedagogy and class organization were very similar and followed traditional practices.¹⁰

One clear difference was governance. All the private schools had governing boards with varying powers over principals and teachers. And in all schools, parental involvement was encouraged, high, and in some cases mandatory through parent contracts for time of service signed when their children were enrolled. Some of these practices have been taken over by public schools, but they were rare to non-existent in the 1990s.

Another obvious difference from earlier MPS school case studies, which was very consistent with the findings from parent surveys, was the emphasis on discipline, order, and respect in the private schools.¹¹ Several schools required uniforms, and inspected them. Students walked in pairs holding hands on the right side of the halls and stairs, and talking back to teachers or other adults was not tolerated. These behaviors were reinforced by two circumstances not available to public schools: small school and class sizes; and the ability to expel students. Thus in some ways the playing field was not level. In addition the private schools

¹⁰ Because of limited resources we could not do case studies of public schools in either study. However, we had done many case studies of public schools in both MPS and suburban districts as part of a prior two year study in 1984 and 1985. We used many of the same instruments in both *Study I and II* and this allowed comparative statistics on classroom practices, time on task, and teacher and administrator data and attitudes.

¹¹ In the first year, however, that was not the case in Juanita Virgil Academy in which we observed students throwing wet toilet paper rolls from second story windows or, at the time, in Bruce Guadalupe where parents self-organized to sit at the entrances to monitor activities. As I said above, over the years, after the school was taken over by the (Hispanic) United Community Center and moved into a brand new building, that all changed. The school now has a waiting list of hundreds.

were working with families who mostly chose to be there. The family differences described above obviously played out in the schools.

Finally, our studies clearly led to another conclusion that has not been characteristic of traditional public schools – independence for the schools and teachers. Although that is a characteristic often put forward for today's charter schools, charter schools were only beginning in the early 1990s in Wisconsin and elsewhere. Many of the administrators and teachers mentioned this independence in open-ended interviews as one the most positive aspects of the environment, and they listed it high on the list as to why they stayed. None were unionized and none were a part of a larger organization.

Given the above I want to stress that I ended a chapter on these schools with a "reality check" concerning what these schools and staff had to face every day. I quoted one of the original principals in the first MPCP schools:

"The hardest problem are to find a safe, stable environment at home and at school. If either are not safe or stable, they (children) are in trouble, at risk. Most of our kids come from dysfunctional families – alcohol, drugs, and physical and sexual abuse. Children can't follow academic pursuits when affected domains are in disarray." (Witte, 2000, p.111)

<u>Study II</u>. In many ways, despite many more research resources, the characteristics of schools in the second study are even harder to summarize than in the early study. The reasons are many more schools, of even more variation in type, focus, organization, and grade-level. For example, there were by 2006 a number of high schools of various sizes and catering to different student populations. Also, with religious oriented schools (approximately 85% in *Study II*) new dimensions opened up. For example, some remained wholly independent and others were linked to central organizations which varied in their efforts to control the schools. Also with more organizations, and much higher voucher levels, the cash nexus becomes an issue for some

proprietary schools. This led to more school closings. As indicated in Table 1, over the course of *Study II*, the numbers of total schools decreased, and the number of private school closings increased.¹²

		SCHOOLS			STUDENTS
Year	Continuing	New	Closed	Total	
2006-07	122			122	17,749
2007-08	114	+10	-8	116	19,069
2008-09	114	+13	-10	117	19,803
2009-10	113	+2	-14	101	20,899
2010-11	103	+4	-12	95	20,996

Table 1. Study II Voucher Schools and Students

Source: McShane, et al, pp. 4-5.

However, as in *Study I* there were some observations from our research teams that were not simply idiosyncratic and may prove useful in other contexts. These results are most effectively conveyed in a research report derived from eleven case studies done in 2011 by researchers under the direction of Thomas Stewart (Stewart, *et al*, 2012). That led the authors of that report to describe a series of lessons learned. I submit the executive summary of that report as the most succinct statement about schools in the second study.

¹² There are other ways of counting than in Table 1. Table 1 reports payments to private school organizations, some with multiple schools. An accounting of individual schools open for the entire year had: 06-07=122, 07-08=116, 08-09=112, 09-10=115, 10-11=107. But the drop is the same as in Table 1. One of the reasons for this drop was that choice supporters began to work closely with the Department of Public Instruction to better monitor the financial solidity and capability of voucher schools. In short they tightened up on a few schools that had considerable financial difficulty.

School Site Visits: What can we learn from choice schools in Milwaukee? Executive Summary

The School Site Visits study is part of the fifth series of annual reports produced by the School Choice Demonstration Project (SCDP). It describes some of the major challenges experienced and common practices demonstrated by thirteen (13) K-12 schools participating in the Milwaukee Parental Choice Program (MPCP). During the 2010-11 school year, there were 107 religious and secular schools participating in the MPCP. This report is based on visits to six of the high schools and seven K-8 schools that collectively reflect the wide range of characteristics associated with participating schools. This includes whether schools scored above or below average on the 2010-11 Wisconsin Knowledge and Concepts Examinations in math and reading. Teams of researchers from the SCDP conducted one-day visits to each school during the spring and fall of 2011. Using a variety of interview, survey and observation instruments, the research teams gathered information about school practices in six general areas: (1) school culture, (2) student academic success, (3) effective leadership, (4) teacher quality, (5) religious integration and accommodation, and (6) school facilities. We use the data collected during the visits to describe the most common challenges the schools face and the common practices and strategies they use to overcome these challenges. Overall, a number of general lessons were learned.

Lesson I: Academic Challenges Interviews with teachers, students and administrators at most of the high schools revealed that many choice students who arrive on their campuses are behind academically; in some cases by two or more grade levels in multiple subject areas. Interviews with teachers and administrators at the high school level indicate that while significant efforts are often made to accelerate student development, some students cannot close the gap in the four years they are with the schools. This affects whether schools can invest in college preparation versus career development. At both the high school and K-8 levels, mentoring systems are in place in many schools to help new students assimilate. This practice is particularly effective in schools with a diverse student body because it helps to build relationships and community between students of different achievement levels, ages, and ethnic backgrounds.

Lesson II: Postsecondary Preparation College attendance was emphasized in some of the K-8 and all of the high schools. At one K-8 school, for instance, this is reflected in the school motto: "Christ, College and Character." This school begins preparing students for college in Pre-K when they are addressed by the year they are expected to graduate from college. Likewise, one high school has an intense focus on preparing every freshman for college admission. Entering freshmen complete an interest inventory, followed by an occupational assessment, to help students begin to explore possible career options. During their freshman and sophomore years, guidance continues via use of the WISCareers website, which enables students to identify potential career opportunities and obtain information on all the colleges in the state that have related programs. A guidance counselor at this school emphasized the importance of talking to students from the moment they arrive in ninth grade about their life plans after graduation.

Lesson III: Teacher Quality Schools in the sample with a clear mission and a welldefined set of professional development practices tend to be very successful in recruiting and retaining teachers. These schools have formed strong partnerships with teacher preparation and degree granting programs across the city and state. In some cases, prospective teachers are specifically seeking positions in schools with the religious orientation or student development philosophy these schools embody. It appears that teachers seeking positions with these schools view the curriculum, professional development and other aspects of the school as consistent with their "career pathway." The schools that fall into these categories are often able to retain teachers for ten years or more and promote many of them to leadership positions. In contrast, teacher recruitment and retention ii February 2012 School Site Visits: What can we learn from choice schools in Milwaukee? is a particular challenge for many of the newer schools in our sample. The less successful schools in the area of teacher recruitment also experience greater teacher turnover, and they are more likely to rely on financial incentives to recruit and retain teachers.

Lesson IV: Effective Leadership A majority of respondents at each school cited school leadership as one of the most significant influences on student and school success. In general, shared responsibility for leadership was considered to be the most effective model. School leadership was frequently described as a very complex set of roles and responsibilities that cannot be adequately performed by a single individual. School size and financial resources appear to be the most significant influences on the type of leadership model that is adopted. The larger schools are more likely to use the team or shared leadership approach, which allows them to draw from a variety of talents, expertise and interests that exist among teachers and administrators. These schools seem to have an in-house pipeline of candidates who are being prepared to assume important leadership roles. In contrast, the smaller schools in our study, at both the K-8 and high school levels, face resource constraints that do not permit them to adopt a team model. As a consequence, they often rely on a single dynamic school leader capable of managing all aspects of instruction, operations and finance, with very modest administrative and other supports.

Lesson V: Religion and Integration During the school visits, we attempted to better understand how the choice program has influenced the religious orientation of the schools that emphasize specific practices and traditions as part of their school model. As several principals affiliated with schools that existed before MPCP noted during their interviews, participation in the program over time has changed the demographics of their student body. The change in the student body has brought challenges relating to the integration of families that appreciate the academic reputation but who do not participate in the religious traditions of their school. Additionally, this has raised concerns among some school stakeholders about whether enrolling students from other religious backgrounds may weaken the culture and community. Most teachers and administrators from the older schools, however, emphasized the importance of nurturing a community that is tolerant of everyone's beliefs and religious practices, and they appreciated how the choice program has helped to diversify their schools.

Lesson VI: Facilities and Infrastructure Each school we visited was well maintained and appeared to be very safe. However, the facilities and infrastructure varied greatly. There appears to be a close association between the length of time a school has existed and the overall quality of the facilities and infrastructure. Many of the schools that have been in existence for fifty years or more were mainly located in very traditional buildings or campuses, whereas most of the newer and specialty schools were located in unconventional or temporary facilities. A good range of amenities, such as libraries and other learning resources; large indoor and outdoor common spaces; computers and other technology, etc., were generally found in the older schools. These amenities were less common in the newer and specialty schools, in which there was a need to rely on more creative ways to maximize space and support learning.

I direct the reader to the full report for a wide range of descriptive facts about the schools and their programs and characteristics, including their performance on standardized tests, methods of dealing with identified problems, and the range of characteristics of the schools, broken down by high school or elementary/middle schools.

Market-Competition Studies. Economists and others have studied the competitive effects on school achievement for many years with many types of competitive pressures from open enrollment, magnet schools, charter schools and a few with vouchers. An old mega-analysis of 41 such studies by Clive Belfield and Henry Levin found competitive effects in most of these studies. What that meant was that when competitive pressure came from say a nearby charter school, non-charter schools responded with increased school-level achievement gains. The studies rely almost exclusively on standardized achievement tests as the outcome measures (Belfield and Levin, 2001).

The largest number of voucher studies have occurred in Florida and Milwaukee. And interestingly, in both places most of those studies, using different methods, have reported modest, but significant positive effects of competition. There have been four such studies in Milwaukee. Caroline Hoxby (2001) and Rajashri Chakrabarti (2007) both exploited the considerable gain in voucher students in the program following a Wisconsin Supreme Court ruling approving the program in 1998. They found that in schools with the largest numbers of free-lunch eligible students, who would be eligible for vouchers, achievement gains were modestly but significantly higher. Martin Carnoy and a number of other researchers, including myself, replicated those results, but did not find comparable differences when they modeled competitive pressures using distances from voucher schools as the central measure. In addition,

when the results of the 1998 surge were extended forward they found the gains in low-income schools did not persist (Carnoy, *et al*, 2007).

The most recent study completed as part of *Study II* was done by Jay Greene and Ryan Marsh (2009). The Greene and Marsh study made several advances and innovations over earlier studies in part because they had access to individual student records and, for voucher students, home and voucher-attended school addresses. The earlier Milwaukee studies only had access to school aggregate data on both school composition and school test scores. Greene and Marsh first used MPCP student distances to their school to get a measure of how far voucher students traveled to school. Using these data they then computed radii that measured ranges that the MPCP students traveled. So, for example the 90% (farthest range) was set at 5.6 miles (Greene and Marsh, 2009, p. 5).

For the MPS students, who were the object of the achievement study, they only had the addresses of the school they attended. For these students the key measure was the *number of voucher schools* within the various radii of travel that had been calculated for the MPCP students. This clever measure is unique for competition studies. It builds on the assumption that a higher number of close alternatives will produce more competition, and that will lead to higher achievement scores for public school students.

The results of their study were, as with most prior studies positive for competition and significant at the .01 level or higher. However, they were relatively modest in size. As expected the results per additional school also diminished with larger radii, but interestingly when they used as the radii, the entire MPS district, there still was a competitive effect.

The results of competition in education, from whatever source, seem to be related to higher student achievement in traditional public schools. For vouchers, that occurred in both

Florida and Milwaukee studies. The effect is important because, to a degree, it points to a positive result for choice that for many opponents could offset some of the perceived negative consequences.

Financial Studies. Financial studies are inherently difficult to do for a number of technical reasons, including accuracy and access to date, decisions on what to include in the analyses, and assumptions about where students would go to school if voucher programs were terminated. In general these studies fall into two categories: 1) comparisons of costs of private, public, and the amounts of vouchers; and 2) how these programs affect taxpayers? Each approach was tried for the Milwaukee Parental Choice Program, the first type during, but not part of *Study I*; and the second type as part of *Study II*.

Henry Levin, utilizing detailed financial data required of all schools in Wisconsin, did a study published in 1998 that tried to compare the voucher level with an appropriate comparison of costs in public schools. Public school costs had to be adjusted to private school expenses primarily by eliminating public school expenditures for disabled students, assuming private schools do not educate them, and transportation costs because private schools get reimbursed for them. To match the private schools during the first years, he only included K-8 MPS schools. What he found was the average per student adjusted cost in these public schools was \$3,469 while at that time the voucher level was \$4,373 (Levin, 1998, p.384). Although one can quibble about the adjustments, and there were other minor ones, the study did undercut the often floated assumption that private school costs are half that of public schools.

A study completed by Robert Costrell as part of *Study II* asked a much different question and the implications of his results are very different from those of Levin's 1998 study. Costrell asked the question, what would be the impact on taxes if the voucher program had not existed? A

secondary question was who would benefit or lose from any gains or losses if the program had not existed? A key assumption of such a study is what would the voucher-receiving students have done in the absence of a voucher? Or, more specifically, what percent would have gone to Milwaukee public schools? For the main results in the study Costrell assumes 90% would have returned to MPS in the absence of a voucher. This was derived by assessing where lottery-losers went when they did not win a lottery in studies of voucher and charter school lottery programs. A reasonable assumption.

The results of his study show a consistent and growing savings of the voucher program over time. This is because of the cost to taxpayers in terms of state and local aid to MPS if MPS had to educate 90% of the voucher receivers in each year. The overall savings grew from \$1.6 million in FY 1994 when there were 742 students in the program to \$31.9 million in FY 2008 when there were 17,149 students (Costrell, 2008. P.1).

In terms of who benefits from the program, there were dramatic results that showed that through the first six years, MPS gained because they were allowed to keep the state aid for voucher students. After that property tax payers outside of Milwaukee benefitted from the savings. Because of increasing local levies, throughout the entire period, Milwaukee taxpayers were negatively affected. Costrell explains: "Specifically, the MPCP funding mechanism continues to deduct state aid from MPS for 45% of the voucher expenses, even though the state aid formulas no longer allocate any funds to MPS for voucher students. MPS is allowed to recoup these funds by raising property taxes. The net result is an adverse effect on Milwaukee taxpayers due to this funding mechanism." (Costrell, 2008, p.3) There is an obvious disparity in this mechanism, but politically it may be very hard to change given the general animosity toward the program by school district personnel within and clearly outside of Milwaukee.

The Effects on Family Choices. There is a normative power behind educational choice in whatever form it occurs (vouchers, charter schools, open enrollment). And that is because historically public schools had a monopoly on educational choices for parents who could not, or did not purchase private school education. For most – in the small towns, suburbs or rural areas – this did not create a problem. Students were assigned a school by their address, and the most important issue for parents may have been the teacher to which their student was assigned. But as our large city school systems began to deteriorate, and as the middle class abandoned them, the options for those remaining rapidly declined. And many of the poor, minority families left behind in the great exodus had no options. The private-school market or suburban districts were not feasible for financial and racial reasons. They and their children were trapped.

The MPCP initially provided a reasonable alternative that had been available to the middle class. And it certainly has provided that choice to now more than 20,000 students per year. And that alone may justify its existence and continuation. But if that program is really only a gateway to a fully universal voucher program, with no income or other limits, the choices for those poor, trapped families will obviously decline. Across America those who attend private schools in the absence of vouchers, do so primarily for religious reasons (over 80% of private schools have always been religious schools) and the families selecting private schools have incomes way above the mean (Witte and Thorn, 1996).

The question for the future is whether the slippery slope to universal vouchers, which I was warned about by liberal friends 25 years ago, is taking place in Wisconsin? There are many indications that the answer is yes. Income eligibility levels have been increased dramatically in Milwaukee to 300% of the poverty line (from an initial 175%). That translates into income for a family of four of \$70,047. A statewide program was created in 2013, initially capped and with

low-income limits of 175% of the poverty line. However, the recently passed budget will lift all of those limits over a ten year period creating a universal voucher program (assuming there is no further legislation to reverse those statutes).

For most voucher opponents their motives are simple: they hate vouchers and oppose the idea. Voucher supporters are more diverse. For some voucher supporters, such as founder Milton Freidman, there is an unflappable belief that market forces can improve education if it is allowed to be freed from the public school monopoly. Thus there would be no public/private distinction and no limits or regulations on schools. For other supporters there is simply an animosity toward public schools and their constraining unions and self-protective bureaucracy. A position that matches the main motivation of those who oppose vouchers. But for a small group there is the simple normative position that choices on an issue as important as education of one's children should not be determined by family situations, particularly economics. Small children have nothing to do with that situation. These various motivations clash and the fate of vouchers will depend on the power of the respective groups.

References

Belfield, C. and Levin, H. (2002). The Effects of competition between schools on educational outcomes: A review for the United States. *Review of Educational Research*, 72, pp. 279-341.

Carnoy, M., Adamson, F., Chudgar, A., Luschi, T., and Witte, J. (2007). *Vouchers and Public School Performance*. Washington D.C. Economic Policy Institute.

Chakrabarti, R. (2007) Can Increasing Private School Participation and Monetary Loss in a Voucher Program Affect Public School Performance? Evidence from Milwaukee. Federal Reserve Bank of New York.

Costrell, R.M. (2008). The Fiscal Impact of the Milwaukee Parental Choice Program in Milwaukee and Wisconsin, 1993-2008. http://www.uark.edu/ua/der/SCDP/Milwaukee_Eval/Report_2.pdf. For a shorter version, see

Robert M. Costrell (2009. Who Gains, Who Loses? *Education Next*, winter, pp. 62-69, http://media.hoover.org/documents/ ednext_20091_62.pdf.

Costrell, R.M. (2009). The Fiscal Impact of the Milwaukee Parental Choice Program in Milwaukee and Wisconsin: 2009 Update. http://www.uark.edu/ua/der/SCDP/Milwaukee_Eval/Report_7.pdf.

Cowen, J. M., Fleming, D. J., Witte, J. F., Wolf, P. J. & Kisida, B. (2013). School vouchers and student attainment: Evidence from a state-mandated study of the Milwaukee Parental Choice Program. *Policy Studies Journal*, *41*, 147–167.

Fleming, D. J., Cowen, J. M., Witte, J.F., and Wolf, P,J. (2013) Similar students, different choices: Who uses a voucher in similar populations of students? *Education and Urban Society*, Online version at: http://eus.sagepub.com/content/early/2013/12/17/0013124513511268.

Fleming, D.J. (2014). Learning from Schools: School Choice, Political Learning, and Policy Feedback. *The Policy Studies Journal*, 42, 55-78.

Friedman, M. (1962). Capitalism and Freedom. Chicago, Ill.: University of Chicago Press.

Greene, J. P., Peterson, P. E., & Du, J. (1998). Effectiveness of school choice: The Milwaukee voucher experiment. *Education and Urban Society*, *31*, 190–213.

Greene, J. P. and Marsh, R.H. (2009). The effect of the Milwaukee's Parental Choice Program on student achievement in Milwaukee public schools. Retrieved from: http://www.uark.edu/ua/der/SCDP/Research.html.

Hoxby, C.M. (2001). The Rising Tide. Education Next, Winter.

Levin, H. (1998). Educational vouchers: Effectiveness, choice and costs. *Journal of Policy Analysis and Management*, 17, pp. 373-92.

McShane, M. Q., Kisida, B., Jensen, L. I., & Wolf, P. J. (2012). *Milwaukee Parental Choice Program: Descriptive report on participating schools*. Fayetteville, AR: University of Arkansas Department of Education Reform. Retrieved from <u>http://www.uaedreform.org/milwaukee-</u> parentalchoice-program-descriptive-report-on-participating-schools-2010-11.

Stewart, T., Lucas-Mclean, Jensen, L.I., Fetzko, C., Ho, B, Segovia, S. (2010). *Family voices on parental school choice in Milwaukee: What can we learn from low-income families?* Retrieved from: http://www.uaedreform.org.

Stewart, T., Jacob, A.M., Jensen, L.I. (2012). *School Site Visits: What can we learn from choice schools in Milwaukee?* Fayetteville, AR: University of Arkansas Department of Education Reform. <u>http://www.uaedreform.org/downloads/2012/02/report-34-school-site-visits-what-can-we-learn-from-choice-schools-in-milwaukee.pdf</u>.

Witte, J.F., Thorn, C. (1996). "Who Chooses? Vouchers and Interdistrict Choice Programs in Milwaukee" (with Chris Thorn), *American Journal of Education* 104 (May): 186-217 (1996).

Witte, J. F. 2000. The Market Approach to Education. Princeton, NJ: Princeton University Press.

Witte, J.F., Wolf, P.J., Cowen, J.M., Fleming, D.J., and Lucas-McLean, J. 2008. *MPCP Longitudinal Educational Growth Study Baseline Report*. Fayetteville, AR: University of Arkansas, Department of Education Reform. Education Working Paper Archive. SCDP Milwaukee Evaluation Report 5.