The Milwaukee Parental Choice Program's Effect on School Integration

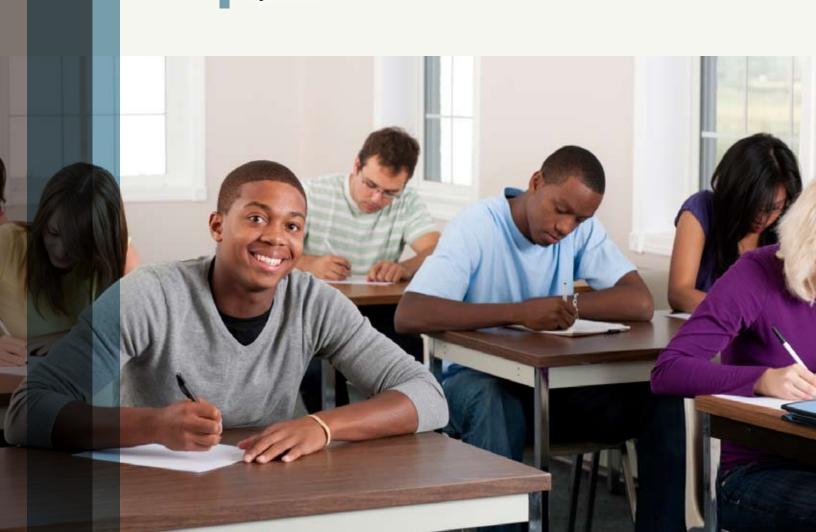
Jay P. Greene University of Arkansas

Jonathan N. Mills University of Arkansas

Stuart Buck University of Arkansas

SCDP Milwaukee Evaluation

Report #20 April 2010





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School Choice Demonstration Project
Department of Education Reform
University of Arkansas
201 Graduate Education Building
Fayetteville, AR 72701

479-575-6345

http://www.uark.edu/ua/der/SCDP/Milwaukee_Research.html



Introduction

In this paper, we estimate the effect of the Milwaukee Parental Choice Program (MPCP, or the Milwaukee voucher program) on integration in public and private schools.

Our first question is straightforward: Do the student bodies at private schools participating in MPCP have a racial composition that more closely or less closely resembles the racial composition of school-age children in the Milwaukee metropolitan area than do Milwaukee Public Schools (MPS)? The general answer is that MPCP and MPS schools are about equally representative of the racial composition of the broader community in which they are located; however, both sectors have racial compositions that deviate significantly from the Milwaukee metro area.

Our second question comes in two parts: When a student in Milwaukee Public Schools transfers to a different school (either within MPS or into the private sector with a voucher), how does that transfer affect the racial integration at (a) the student's originating public school and (b) the school receiving the student? As to both of these sub-questions, we measure integration by proximity to the racial demographics of the overall metropolitan area. In general, we find that students who switch schools in Milwaukee overwhelmingly tend to (a) improve racial integration at their originating school and (b) worsen integration at their receiving school, whether that receiving school is within MPS or part of the voucher program. Furthermore, the differences between MPS-to-MPS and MPS-to-MPCP switches are negligible.

Finally, our third question considers if the two sectors differ in the degree to which their student bodies are racially homogeneous. To answer this question, we compare the percentage of schools that are racially homogeneous between the two sectors. We find that, while racially homogeneous schools make up a sizeable portion of schools in both sectors, the two sectors are not significantly different in the degree to which they have racially homogeneous schools.

Overall, our results show that the Milwaukee voucher program is currently neutral in its effect on racial integration. This result is different from previous integration research on the Milwaukee voucher program that found positive impacts. The reason, we suspect, is that Milwaukee has already allowed residents to choose any public school regardless of geographic districting, which in turn means that over time public schooling has become less tied to patterns of residential segregation than in most metropolitan areas.

The remainder of this paper proceeds as follows: first, we present a review of the relevant literature on the effects of school voucher programs on integration. Next, we provide a brief description of our data and present the results of our analyses intended to answer the three questions outlined above. Finally, we conclude with a discussion of our findings.

Background and Literature Review

Voucher programs have often been criticized for allegedly contributing to racial segregation. As the scholarly literature to date shows, that accusation has little support.

In Cleveland, Greene (1999) looked at 1996 data on public and voucher schools and compared their racial demographics to the metropolitan area. He found that the area's public schools were highly segregated — fully 60.7 percent of public students attended schools that were virtually all—white or all-black. To be sure, about 50 percent of voucher students also attended such schools, but only "5.2 % of public school students in the metropolitan area attend schools that have a racial composition that is within 10 % of the average racial composition," compared to 19 percent of voucher students (Greene, 1999, pp. 6-8). He concluded that "despite court orders and political pressure to improve integration in the public schools, the Cleveland Scholarship Program offers families a better opportunity for a racially integrated school experience" (Greene, 1999, p. 9).

Forster (2006a) obtained enrollment data for the 2003-04 year for all Cleveland public and private schools from the National Center for Education Statistics and then created a "segregation index" for each school that consisted of that school's difference in percent white from the overall Cleveland metropolitan area. He ran a linear regression model that compared segregation indexes in public vs. private schools in Cleveland. He found that "private schools participating in Cleveland's voucher program were 18 points less segregated, on average, than Cleveland public schools on the segregation index, which compares the racial composition of schools to the racial composition of school-age children in the greater metropolitan area" (Forster, 2006a, p. 6).

In D.C., Greene and Winters (2006) evaluated results after the first year of the D.C. Opportunity Scholarship Program, a federally-funded voucher program for low-income D.C. residents. Using data from the Common Core of Data and from the Washington Scholarship Program, they found that the disparity between schools and the metropolitan area was "39.5% for public schools in Washington, D.C., and 33.8% among voucher-participating private schools," leading them to conclude that "neither sector is wonderfully integrated, but the voucher schools were somewhat less segregated" (Greene & Winters, p. 8). The disparity was much more striking when they considered how many schools were racially homogeneous: "a weighted average 85.4% of the District's public schools have student populations that are at least 90% racially homogeneous, and 84.4% of them have student populations that are at least 95% homogeneous. Among private schools participating in D.C.'s voucher program, however, a weighted average of about 47.3% have student populations that are at least 90% racially homogeneous, and about 42.8% are 95% or more racially homogeneous" (Greene & Winters, p. 8).

Finally, in Milwaukee, Fuller and Mitchell (1999) compared racial demographics in Milwaukee private schools between 1994-95 and 1998-99 as the Milwaukee voucher was being expanded. They found that the voucher program "contributed to a noticeable increase in racial and ethnic balance in private schools," while having "no major impact on overall racial and ethnic balance in the Milwaukee Public Schools." They found that between 1994-95 and 1998-99, the private school percent minority rose from 27.4 percent to 35.7 percent, while the percent white dropped from 72.6 percent to 64.3 percent (Fuller & Mitchell, p. 3). They then estimated that without the expansion of the voucher program, private schools would have had more whites and fewer minorities (based on the assumption that all of the voucher recipients would have remained in public schools absent the voucher program) (Fuller & Mitchell, p. 4). Fuller and Mitchell additionally noted that a higher proportion of minority students in Milwaukee Public Schools (54.4%) were in racially isolated schools (compared to 38 % of Catholic school students and 49.8 % of all private school students) (Fuller & Mitchell, pp. 5-6).

Fuller and Mitchell followed up with a 2000 study that included Milwaukee data from the 1999-00 school year. They were able to gather data from 86 of 91 participating private schools as well as every public school. The

analysis reached similar conclusions: 42.9 percent of voucher students were in racially isolated schools, compared to 50.3 percent of public school students. The number of students in religious schools that were racially isolated was even lower: 30.1 percent. Fuller and Greiveldinger (2002) similarly found that 49.8 percent of voucher students were at racially isolated schools, compared to 54.4 percent of public school students.

Forster (2006b) conducted a Milwaukee analysis that was virtually identical to his Cleveland study (i.e., comparing private schools to public schools on how well they mirrored the racial proportion of the metropolitan area as a whole). He found that "private schools participating in Milwaukee's voucher program were less segregated than Milwaukee public schools, with the difference equal to about 13 points on the segregation index" (Forster, 2006b, p. 16).

The problem with some pre-existing research on racial integration is that it relies on unwarranted definitions of "segregation." For instance, some scholars look at how closely a school resembles the district in which it is located, or at how evenly a district's racial groups are spread among schools. But by these standards, schools in a 98 percent white district and schools in a neighboring 98 percent black district could all be found to be "racially integrated" as long as each school within the district was 98 percent white or 98 percent black.

The more fundamental reality is that most racial segregation is due to the fact that districts themselves tend to be highly segregated (Clotfelter, 1999). And if a metropolitan area is racially segregated, such that one school district is 90 percent black while a neighboring suburb is 90 percent white, we should not let schools – which often drive patterns of residence – off the hook by merely asking whether they mirror their own racially segregated districts. Instead, the standard by which we should measure the integration of schools is the broader community from which they can reasonably draw students, considering the constraint of distance but ignoring the politically-created constraint of school district and attendance zone boundaries. The metropolitan area in which a school is located is a reasonable proxy for that broader community from which a school could draw students if distance were the only constraint. A school that more closely resembled the racial composition of the metropolitan area in which it is located should be thought of as better integrated.

As Greene (1999, p. 5) points out, "If a system were well integrated it would have virtually all of its students attending schools whose racial composition resembled the racial composition of the broader community in which those schools were located. A poorly integrated or segregated school system would have the vast majority of its students in schools that were almost entirely composed of one racial group."

Some definitions are even more baseless. Sociologist Roslyn Mickelson, for example, has claimed that "racial segregation is also evident in voucher programs," because voucher recipients in several locations are more likely to be black than the population (as well as the fact that voucher recipients in Cleveland at one time were less likely to be black). (Mickelson, Bottia, & Southworth, 2008, p. 10). But the racial composition of voucher recipients has nothing whatever to do with "segregation" however defined. A program that sends black participants to white schools would be integrative, not segregative, and this would be the case precisely because of the high level of black participation. (We are not aware of anyone who offers such a definition of "segregation" as this to any other public welfare program.)

Data and Results

Our analysis relies on both individual- and school-level data collected between the 2006-07 and 2008-09 school years. The students in our sample attended between 213 and 218 MPS schools and 90 to 95 MPCP participating schools. Demographic and enrollment data for MPS schools were obtained from the Wisconsin Department of Public Instruction (DPI). We have compiled similar data for MPCP schools using surveys administered to MPCP participating school principals.²

To examine the differential impact of transfers on integration, we have matched these school-level data with a random sample of 3,669 MPCP students drawn from the larger population of nearly 21,000 voucher students.³ This voucher panel is paired with a sample of 3,669 MPS students, who were matched with the voucher students along several dimensions (race, income, etc.). Both samples are then followed longitudinally.

Question 1: Do MPCP Schools More Closely Approximate the Percentage White of the Metro Area than do MPS Schools?

Our first analysis attempts to discover which sector best approximates the percentage white found in the Milwaukee metro area (MMA): the student bodies at MPCP schools or MPS schools. In order to make this comparison, we are required first to construct a measure to judge the degree to which a school appears integrated. We use as our measure of integration the absolute value of the difference between a school's percentage white and that of the MMA:

Difference from MMA =
$$||\%_White_{School} - \%_White_{MMA}||$$

This measure is intuitively appealing as it captures how far away a particular school is from the MMA. In particular, by our measure both schools that are heavily white and schools that are heavily non-white will be identified as less well-integrated.

To see how our integration measure works, first note that Table 1 presents demographic data about children between the ages of five and nineteen for the Milwaukee metro area.

We verified the principal-reported demographic data with information from the 2007-08 Private School Universe Survey administered by the National Center for Education Sciences. The Private School Survey was also used to supplement missing private school data in all three years. In the continued absence of school level data, we used available data from the other years in our sample to substitute for missing data. At the end of this process, we are left with only one missing case remaining in 2007-08 and eleven missing cases in 2008-09.

The MPCP data consist of a baseline group of 2,727 students in 2006-07 ranging across grades three through nine. These data were updated in 2007-08 and 2008-09 with third grade enrollment consisting of 446 students and 496 students respectively.

Table 1:
Milwaukee Metro Area Population: Ages Five through Nineteer

Danasta d Educiaita	School Year				
Reported Ethnicity –	2006-07	2007-08	2008-09		
Asian	9,841	9,881	9,407		
Black	72,954	73,413	68,095		
Hispanic	34,336	36,635	38,487		
Native American	1,434	1,993	2,124		
White, non-Hispanic	193,716	194,626	192,660		
Other	21,121	20,329	9,865		
Computed Total†	333,402	336,877	320,638		
Pct. White	58.1	57.8	60.1		

Source: U.S. Census Bureau American Community Survey, 2006-2008: http://www.census.gov/acs/www/index.html.

Using the 2007-08 school year for our example, suppose you have three students: Student A attends a school that is 100 percent white, Student B attends a school that is 90 percent black, and Student C attends a school that is 35 percent white. The scores for these students' schools using our integration measure would be, respectively: 42.2, 57.8, and 22.8. Thus, according to our measure, Student C's school is the most integrated, Student A's school is the next most integrated, and Student B's school is the least integrated.

The results of our analysis are presented in Table 2. Our integration measure appears in the columns titled "Difference from MMA." The values represent weighted averages across schools in a given category of the integration measure.⁴



⁴ MPS schools are weighted by total enrollment and MPCP schools are weighted by the number of seats offered by the school to voucher participants when available.

[†] Computed total is the sum of the Asian, Black, Hispanic, Native American, White (non-Hispanic), and Other categories.

Table 2:
Question 1: Do MPCP Schools More Closely Approximate the Percentage White of the Metro Area than do MPS Schools?

	MPS Schools	MPCP Schools	Comparison		
School Year	Difference from MMA	Difference from MMA	Difference p-value		
2006-07†	43.2	39.5	3.7** 0.00		
2007-08	43.3	46.5	-3.1** 0.00		
2008-09	45.8	47.2	-1.4** 0.00		

^{** -} Significant at the 0.01 confidence level

Notes: (1) "Difference from MMA" is the average absolute difference in school percent white compared to Milwaukee percent white. (2) Valid N for MPS schools are 218, 213, and 215 per year respectively. Valid N for MPCP schools are 96, 90, and 90 per year respectively. (3) Thirty MPCP schools in 2007-08 and twenty seven in 2008-09 failed to report the number of MPCP seats available. These schools are not included in the analysis. (4) Valid weights for MPS schools are 89,912, 86,819, and 98,381 per year respectively. Valid weights for MPCP schools are 21,684, 15,368, and 15,989 per year respectively. (5) Tests for equality of variances between the MPS and MPCP school integration measure values rejected the null at the 0.01 confidence level in every year. (6) All differences were found to be statistically significant at the 0.01 confidence level using the Welch's t test.

A striking finding in Table 2 is that both MPS and MPCP participating schools are serving school populations that look quite different from the greater Milwaukee metro area. Recall that higher values of our integration measure are associated with less integrated environments. In almost every year, both school groups are on average over 40 percentage points away from the MMA percentage white. These results indicate that in general both MPS and MPCP schools are highly unrepresentative of the racial composition of the metropolitan area.

While these findings are interesting, they do not help to answer our question, "do MPCP schools more closely approximate the percentage white of the metro area than do MPS schools?" To answer to this question we perform t-tests for differences in the MPS and MPCP average "Difference from MMA" values. The results of this analysis are displayed in the column titled "Comparison." In 2007-08 and 2008-09, MPCP participant schools were significantly less integrated than MPS schools, but in 2006-07 the opposite was true. Furthermore, it is important to note that the magnitudes of these differences are actually quite small.

Before moving on, we should note that a key difference between our analysis and prior work is the use of weighted averages to find differences between traditional public schools and voucher programs as opposed to an analysis that treats all schools equally. While we believe using weights is the appropriate method because it correctly takes into account differences in enrollment across schools in each sector and better approximates student experiences, it is possible that an analysis based on unweighted averages could produce different results. Additionally, unweighted analyses have the advantage of using all of our available data, while the weighted analyses eliminate MPCP schools that did not provide enrollment information. To examine if our chosen method has a sizeable impact on our results, Table 3 presents a duplicate analysis free of weights.

[†] The number of MPCP seats offered by a school was unavailable in the 2006-07 school year; and as such, the 2006-07 MPCP average is weighted by total school enrollment rather than MPCP seats available.

	Difference in Mr3 and MrCr 3chool integration. No Weights Applied							
	MPS Schools	MPCP Schools	Comparison					
School Year	Difference from MMA	Difference from MMA	Difference p-value	e				
2006-07	44.2	43.0	1.2 0.57					

Table 3:
Difference in MPS and MPCP School Integration: No Weights Applied

45.0

46.6

-0.4

0.5

0.85

0.80

Notes: (1) Valid N for MPS schools are 218, 213, and 215 per year respectively. Valid N for MPCP schools are 96, 90, and 90 per year respectively. (2) Thirty MPCP schools in 2007-08 and twenty seven in 2008-09 failed to report the number of MPCP seats available. Table 3 includes these schools. (3) Tests for equality of variances between the MPS and MPCP school integration measure values rejected the null at the 0.10 confidence level in every year. (4) All differences were found to be statistically significant at the 0.01 confidence level using the Welch's t test.

44.6

47.2

In general, the results displayed in Table 3 are similar to those presented in Table 2: both MPS and MPCP participating schools are found to be serving student populations that differ significantly from the metro area. Unlike in Table 2, all differences between the MPS and MPCP participating schools are found to be statistically insignificant. Thus, while there are minor differences between the weighted and un-weighted comparisons, the results in Table 3 generally corroborate the claim that MPS and MPCP schools are not substantially different.

A concern remains regarding our chosen integration measure. As the Milwaukee Metro Area is not 50 percent white and non-white, our measure is subject to an asymmetry that favors relatively white schools. To illustrate this, consider two schools in the 2007-08 school year: one that is 100 percent white and one that is 100 percent non-white. According to our integration measure, the 100 percent white school would have a value of 42.2 while the 100 percent non-white school would have a value of 57.8. Thus, to the extent that MPCP schools are relatively whiter than MPS schools, our measure will be biased in favor of MPCP schools.

In Table 4, we examine the extent to which this asymmetry impacts our analysis by relying on a dichotomous variable identifying if a school environment is integrated

or not. In particular, the values presented in the "Weighted Percentage" column represent the likelihood that a student will be in an integrated school environment; where a school environment is considered integrated if its percentage white falls within a specified range of the MMA's percentage white. We caution that this solution comes with a trade-off: by relying on a dichotomous variable over a continuous measure, we lose information on the degree to which the school environments differ. To offset this issue, we include in Table 4 estimates for three ranges: within 15, 20, and 25 percentage points of the MMA percentage white.

2007-08

2008-09



Table 4:
Likelihood that a Student's School Enviornment is Integrated

0.1.11	MPS Schools	MPCP Schools	Compar	rison
School Year	Weighted Percentage	Weighted Percentage	Difference	p-value
2006-07†				
Within 15 points	7.5	11.9	-4.4**	0.00
Within 20 points	10.4	25.2	-14.8**	0.00
Within 25 points	13.0	30.9	17.9**	0.00
2007-08				
Within 15 points	8.0	12.4	-4.4**	0.00
Within 20 points	10.5	14.9	-4.4**	0.00
Within 25 points	13.0	18.9	-5.9**	0.00
2008-09				
Within 15 points	6.8	15.3	-8.5**	0.00
Within 20 points	10.2	15.8	-5.6**	0.00
Within 25 points	11.2	17.5	-6.3**	0.00

^{** -} Significant at the 0.01 confidence level

Notes: (1) Valid N for MPS schools are 218, 213, and 215 per year respectively. Valid N for MPCP schools are 96, 90, and 90 per year respectively. (2) Thirty MPCP schools in 2007-08 and in 2008-09 failed to report the number of MPCP seats available. These schools are not included in the analysis. (3) Tests for equality of variances between the MPS and MPCP school integration measure values rejected the null at the 0.10 confidence level in every year. (4) All differences were found to be statistically significant at the 0.01 confidence level using the Welch's t test.

We first note that MPCP school environments are relatively more integrated in all years and across all integration range specifications. Furthermore, these differences are found to be significant at the 0.01 level in all cases.⁵

How could MPCP schools have a higher proportion of students within these bands approximating ideal integration (as shown in Table 4) but not on average more closely approximate the racial composition of the metro area (as shown in Table 2)? It appears that MPCP has a cluster of schools that are very well integrated but also a cluster that are racially homogenous (as will be shown below in Table 9). Thus, MPCP will look better

[†] The number of MPCP seats offered by a school was unavailable in the 2006-07 school year; and as such, the 2006-07 MPCP average is weighted by total school enrollment rather than MPCP seats available.

While MPCP school environments are found to be significantly more integrated in the 2006-07 school year when one considers the 20 and 25 percentile points, the MPCP schools have been weighted by total enrollment in this year due to missing data on MPCP seats offered.

integrated when we focus on schools close to the metro area's racial composition and will look more segregated when we focus on schools that are racially homogenous. And when we look at the differences between MPS and MPCP, on average, we observe no difference.

In summary, our analysis indicates that there is little difference in how closely MPS and participating MPCP schools resemble the racial composition of the metropolitan area. Furthermore, the general finding is that both MPS and MPCP participant schools serve student populations that are quite different from the overall Milwaukee metro area population.

Question 2a: When an MPS Student Transfers to a Different School, how does that Transfer Affect the Racial Integration at the Student's Original School?

Given that the students in our database were followed longitudinally, we are able to track MPS switchers: students who began as Milwaukee Public School students in 2006-07, but then switched to another school in a subsequent year, whether another MPS or voucher school. We want to know if and how these transfers affect racial integration at the switchers' original schools.

An important clarification regarding our individual-level data is required before moving on to our transfer impacts analysis. Our MPS student records come from a sample of MPS students that have been matched to a random sample of MPCP participants. As participation in MPCP is subject to several restrictions, the most important of which is a family income ceiling, it is unlikely that our MPS sample is representative of the greater MPS student population. The results in Table 5 examine this difference by comparing our sample's demographics with averages of the MPS population across the 2006-07 through 2008-09 school years.

Table 5: Comparison of MPS and Matched MPS Sample Demographics

School Year	Three Year MPS	S Average	Matched MPS Sample		
	N	%	N	%	
Asian	3,930	4.5	128	3.5	
Black	50,069	57.3	2,465	67.2	
Hispanic	19,055	21.8	732	20.0	
White	13,595	15.6	297	8.1	
Total	87,371		3,669		

Notes: (1) MPS data was acquired from Wisconsin's Department of Public Instruction. (2) In addition to the categories listed, the totals include both Native American and Other categories.

While our MPS sample is similar to the general MPS student population, the results in Table 5 clearly indicate that black students are slightly overrepresented relative to the MPS population and whites are slightly underrepresented. We believe it highly likely that these differences result from the income restrictions of the MPCP and therefore caution that interpretations presented in this section should not be generalized to the greater MPS student body. Nevertheless, despite these differences, we note that our MPS sample is appropriate for our purposes as it is highly representative of children most likely to choose due to the matching process.

Table 6 presents a further break-down of our sample that includes information on switching behavior. As is to be expected, a majority of MPS students in our sample do not transfer. Out of 3,669 MPS students in the matched sample, 2,742 stayed put between 2006-07 and 2007-08, and 2,766 stayed put between 2007-08 and 2008-09. Still, as the descriptive statistics in Table 6 show, there are a large number of MPS switchers in our sample. Between 2006-07 and 2007-08, 856 MPS students transferred to another MPS school, while 71 transferred to a voucher school. Between 2007-08 and 2008-09, 781 MPS students switched to another MPS school, while 122 transferred to a voucher school. By far, most of the MPS students who transferred to a voucher school were black (69 percent and 80 percent in the respective years).

Table 6: Student Ethnicity by School Year

	2007-08						2008-09					
Ethnicity	No M	love	MPS-to	o-MPS		S-to- PCP	No M	love		S-to- PS		S-to- PCP
	N	%	N	%	N	%	N	%	N	%	N	%
White	241	10.6	52	6.1	4	5.6	233	9.6	60	8.4	4	3.3
Black	1,170	63.1	646	75.5	49	69.0	1,785	64.3	582	72.7	98	80.3
Asian	105	3.7	20	2.3	3	4.2	106	3.5	20	2.9	2	1.6
Hispanic	583	21.6	134	15.7	15	21.1	600	21.5	115	15.7	17	13.9
Total	2,742		856		71		2,766		781		122	

Table 7 then shows the effect of these MPS switchers on the racial integration at their original MPS school. By far, most MPS switchers actually improved racial integration by leaving their original school. That is, the departing student tended to be from the racial group that was over-represented in the school relative to the racial composition of the metropolitan area. By leaving, the student moved the school ever so slightly closer to



resembling the racial composition of the broader community. Specifically, 93.9 percent of MPS-to-MPS switchers in 2007-08 improved integration at their original school, compared to 92.1 percent of the MPS-to-MPCP switchers. Furthermore, while MPS-to-MPCP moves are found to be more integrating in the 2008-09 school year, the difference is found to be statistically insignificant.

Table 7:
Question 2a: When an MPS Student Transfers to a Different School, how does that
Transfer Affect the Racial Integration at the Student's Original School?

Transfer Result	MPS-to-MPS		MPS-to-MPCP		Comparison	
Transfer Result	N	%	N	%	Difference	p-value
2007-08						
Good						
Outcome	702	93.9	58	92.1	1.8	0.58
Bad Outcome	46	6.2	5	7.9	-1.8	0.58
2008-09						
Good						
Outcome	545	90.8	62	95.4	-4.6	0.12
Bad Outcome	55	9.2	3	4.6	4.6	0.12

Notes: (1) Tests for equality of variance in the outcome measures between MPS-to-MPS and MPS-to-MPCP switches failed to reject the null in 2007-08 and rejected the null at the 0.10 confidence level in 2008-09. (2) The differences between MPS-to-MPS and MPS-to-MPCP transfers were not found to be significant at the 0.10 confidence level in both years.

Thus we conclude based on these data that MPS switchers' impact on racial integration at their original school is approximately equal whether they switch to another MPS school or into the voucher program. The option to switch to a private school via MPCP does not produce any different effect on the racial integration of sending schools than is produced by the option to switch among public schools that currently exists and presumably would continue to exist in the absence of MPCP.

Question 2b: When an MPS Student Transfers to a Different School, how does that Transfer Affect the Racial Integration at the School Receiving the Student?

Our next question is how MPS switchers affect racial integration at their receiving school (which, again, may be either an MPS or a voucher school). If a school has an over-representation of a racial group relative to the metropolitan area, adding another student from that over-represented group would exacerbate segregation at that school while adding a student from an under-represented group would improve integration.

As can be seen in Table 8, between 91.2 percent and 94.2 percent of all MPS switchers negatively affect the racial integration of their receiving schools, whether those receiving schools are in the MPS system or are voucher schools. Furthermore, none of the differences between MPS-to-MPS and MPS-to-MPCP transfers are found to be significantly different. Thus, the results in Table 8 lead us to conclude that the MPCP program had a negligible impact on integration in receiving schools in both the 2007-08 and 2008-09 school years. Again, adding the option to switch to a private school with a voucher was no different in its effect on integration than the effects of non-voucher school switching.

Table 8:

Question 2b: When an MPS Student Transfers to a Different School, how does that Transfer Affect the Racial Integration at the School Receiving the Student?

Transfer Result	MPS-to-MPS		MPS-to-	MPS-to-MPCP		arison
Transfer Result	N	%	N	%	Difference	p-value
2007-08						
Good Outcome	34	6.5	6	8.8	-2.3	0.52
Bad Outcome	489	93.5	62	91.2	2.3	0.52
2008-09						
Good Outcome	42	8.0	6	5.8	2.2	0.39
Bad Outcome	483	92.0	98	94.2	-2.2	0.39

Notes: (1) Tests for equality of variance in the outcome measures between MPS-to-MPS and MPS-to-MPCP switches rejected the null at the 0.10 level in both years. (2) The differences between MPS-to-MPS and MPS-to-MPCP transfers were not found to be significant at the 0.10 level in both years.

Question 3: Are There Differences in the Percent of MPS and MPCP Schools that are Racially Homogeneous?

Given our general findings that MPS and MPCP schools do not serve substantively different student bodies and MPCP transfers are no more likely to result in better integration at sending or receiving schools than MPS transfers, an important remaining question is whether or not voucher schools differ from MPS schools in the degree to which they are racially homogeneous. Given our findings for Questions 1 and 2, we might expect to find that both sectors are dominated by racially homogeneous schools. To answer this question, we compare the difference between sectors in the percent of schools that are racially homogeneous; where a school is considered racially homogeneous if it is either less than 10 percent white or greater than 90 percent white. The results of this analysis are displayed in Table 9.

Table 9: Question 3: Are There Differences in the Percent of MPS and MPCP Schools that are Racially Homogeneous?

	MPS Schools	MPCP Schools	Comparison		
School Year	Percent Racially Homogeneous	Percent Racially Homogeneous	Difference	p-value	
2006-07	56.9	61.5	-4.6	0.45	
2007-08	60.1	66.7	-6.6	0.24	
2008-09	62.3	68.4	-6.1	0.27	

Notes: (1) Valid N for MPS schools are 218, 213, and 215 per year respectively. Valid N for MPCP schools are 96, 120, and 117 per year respectively. (2) Tests for equality of variances between the MPS and MPCP racial homogeneity measures failed to reject the null at the 0.10 level in all years. (3) The differences between MPS and MPCP in the percent of schools identified as racially homogenous were not found to be significant at the 0.10 level in every year.

As expected, the majority of MPS and MPCP participating schools are found to be racially homogeneous. Furthermore, although MPCP schools appear to be relatively more homogeneous in each year, none of these differences are statistically significant.

These findings easily coincide with our findings for Questions 1 and 2. The high percentage of racially homogeneous schools in both sectors explains why both sectors were found to serve student bodies that differed so substantially from the Milwaukee metro area population; yet not from each other. Similarly, the finding that both MPS and MPCP transfers had a positive effect on integration in originating schools and a negative effect on receiving schools coincides with students leaving racially homogeneous schools for similarly homogeneous schools.

Conclusion

As noted above, our preliminary findings are that the MPCP program is currently neutral in its effects on racial integration within Milwaukee schools. Students who enter the voucher program end up in private schools that look similar to MPS schools in their levels of racial integration. Moreover, when MPS students who switch into the voucher program are compared to MPS students who switch schools within the MPS system these switches tend to have indistinguishable effects on racial integration both at their sending and receiving schools.

These results are somewhat different from previous research indicating that voucher programs (including the Milwaukee program) have a positive impact on racial integration. The general finding from past research was that detaching where students went to school from where they lived by offering vouchers reduced the replication of segregated housing patterns in schools. These current Milwaukee results may differ from past results because Milwaukee has long had large-scale programs that effectively detach schooling from housing. For example, Wisconsin's inter-district open enrollment policy, which has been in effect since the 1998-99 school year (Kava, 2007) allows any student in Wisconsin to transfer to a school district outside his or her district if there is sufficient room.⁶ In the 2008-09 school year, out of 82,444 students in Milwaukee, 4,367 took advantage of the open enrollment policy and transferred to other public school districts,⁷ an increase from 3,524 in 2005-06 (Kava, 2007, p. 15).

In addition, Milwaukee Public Schools have long had a policy under which all public schools are schools of choice rather than neighborhood assignment. With these inter-district and intra-district choice programs, MPCP may have no additional effect on integration because there is already widespread public school choice that effectively detaches schooling from housing as much as MPCP could.

While Milwaukee has effectively detached schooling from housing, its schools remain highly segregated. The political barriers to integration presented by school district and attendance zone boundaries are only one set of the obstacles to effective integration. Both public school choice and MPCP have reduced these political barriers; but social, economic, and other barriers remain. Further research could explore strategies for addressing those obstacles in Milwaukee.

⁶ Wisconsin's policy does not allow students to enroll in another school within the same district. See http://dpi.wi.gov/sms/doc/oeqa1005.doc.

⁷ See http://www.schoolchoicewi.org/k12/detail.cfm?id=8.

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The Milwaukee Parental Choice Program Description Report on Participating Schools

About the Authors



Jay P. Greene is endowed chair and head of the Department of Education Reform at the University of Arkansas. His research was cited four times in the Supreme Court's opinions in the landmark Zelman v. Simmons-Harris case on school vouchers. His articles have appeared in policy journals, such as The Public Interest, City Journal, and Education Next, in academic journals, such as Education Finance and Policy, Economics of Education Review, and the British Journal of Political Science, as well as in major newspapers, such as the Wall Street Journal and the Washington Post. Jay Greene is the author of Education Myths (Rowman & Littlefield, 2005). Greene has been a professor of government at the University of Texas at Austin and the University of Houston. He received his B.A. in history from Tufts University in 1988 and his Ph.D. from the Government Department at Harvard University in 1995.



Jonathan N. Mills is a Research Associate for the Department of Education Reform at the University of Arkansas. His current research projects include examinations of the impacts of charter schools and district consolidation on student achievement in Arkansas. Mills received his B.S. *summa cum laude* and M.A. in economics from the University of Missouri.



Stuart Buck is a Ph.D. candidate at the Department of Education Reform at the University of Arkansas. He is the author of the forthcoming Acting White: An Ironic Effect of Desegregation, from Yale University Press (2010). He has also authored numerous scholarly articles, in journals such as the Review of Public Personnel Administration, Harvard Law Review, Harvard Environmental Law Review, Stanford Technology Law Journal, Administrative Law Review, Federal Communications Law Journal, and the Case Western Law Review. Buck received a law degree with honors from Harvard Law School in 2000, where he was an editor of the Harvard Law Review; he thereafter clerked for Judge David Nelson of the Sixth Circuit Court of Appeals and Judge Stephen F. Williams of the D.C. Circuit Court of Appeals.



School Choice Demonstration Project
Department of Education Reform
University of Arkansas
201 Graduate Education Building
Fayetteville, AR 72701
479-575-6345

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