

# Best of Both Worlds: Voucher Schools Have Little Effect on Public School Test Scores

## Executive Summary

It is a common claim of school choice opponents that expansion of choice will harm public schools by “creaming” the best students. This is no less common in Wisconsin, despite being home to the nation’s oldest urban school choice program in Milwaukee. A decade ago, the School Choice Demonstration Project examined this question in Milwaukee, and found evidence that the voucher program actually worked to improve public school student outcomes. But no research on this topic has been conducted in Wisconsin since the expansion of voucher programs statewide in the 2013-14 school year. In this paper, we take a new look at the evidence using extensive data from DPI on choice enrollment, public school proficiency outcomes, and a host of demographic and district control variables.

### Initial analysis without control variables shows little change in district performance as choice enrollment grows.

The WPCP and RPCP have enjoyed significant annual growth since the programs were created, but public school proficiency remained relatively flat, only declining in the COVID-affected school years.

**Statistical analysis finds a positive effect of choice enrollment growth in Reading.** As the percentage of choice students in a district increases, public school ELA proficiency was found to increase as well.

**Statistical analysis finds no effect of choice enrollment growth in math.** As the percentage of choice students in a district increases, public school math proficiency was not affected to a statistically significant degree.

**School choice expansion unlikely to hurt public schools.** The evidence here suggests that growth in choice programs should have a positive or null effect on academic outcomes for students who remain in public schools.

## Introduction

Since the creation of the Milwaukee Parental Choice Program (MPCP) in 1990, opponents of education reform have made the claim that school choice programs will have a negative effect on public schools. Wisconsin legislators opposed to school choice have been no exception. Representative LaKeisha Myers has claimed that programs “decimate” public schools. In another example, Representative Sony Pope has argued that the “trend in tax dollars going away from public schools towards unreliable voucher programs shows the decline to our education system at the expense of our taxpayers.”

There are a number of reasons this is argued to be the case. In addition to the argument that spending resources will be

diverted, perhaps the most common notion is that choice schools will “skim” the best kids, leaving public schools with a group of students that is more challenging to educate. This argument does not hold water.

A number of studies have investigated the truth of this argument over the years. Most of these—discussed in more detail in the following section—found a positive effect of school choice on public school outcomes. However, few analyses have been conducted in recent years since the creation of additional school choice programs in Wisconsin that serve students beyond the Milwaukee area, i.e., Racine Parental Choice Program (RPCP) and Wisconsin Parental Choice Program (WPCP). In this paper, WILL and School Choice Wisconsin partnered to bring together the most recent available data and examine the question of the impact on public schools regarding the increasing student population taking advantage of one of the three choice programs.

## Existing Evidence: Choice Effect on Public Schools

Because data from public school students is often more readily available than for students using a voucher (not the case in Wisconsin), there have been a substantial number of studies of the effects of choice programs on those students who remain in public schools. A 2016 study from EdChoice<sup>iii</sup> highlighted 33 studies that have examined this question. Of these, 31 found at least some positive effect on public school students. One study of the Scholarship program in Washington, D.C. found no effect, and a 2014 study in Florida found some negative effects. Despite these two exceptions, the overwhelming majority of the evidence is supportive of the notion that competition can motivate public schools to improve. A chart from the aforementioned EdChoice study detailing all of the studies is reproduced below.

**Table 1. Effects of Choice on Public Schools (EdChoice 2016)**

LOCATION	AUTHOR	YEAR	RESULTS		
			ANY POSITIVE EFFECT	NO VISIBLE EFFECT	ANY NEGATIVE EFFECT
Louisiana	Egalite	2016	X		
Louisiana	Egalite	2014	X		
Indiana	Egalite	2014	X		
Florida	Figlio & Hart	2014	X		
Florida	Bowen & Trivitt	2014			X
San Antonio	Gray et. al.	2014	X		
Florida	Rouse et. al.	2013	X		
Florida	Chakrabarti	2013	X		
Florida	Figlio & Hart	2011	X		
Florida	Winters & Greene	2011	X		
Ohio	Carr	2011	X		
Milwaukee	Mader	2010	X		
Milwaukee	Greene & Marsh	2009	X		
San Antonio	Merrifield & Gray	2009	X		
Ohio	Forster	2008	X		
Florida	Forster	2008	X		
Milwaukee	Chakrabarti	2008	X		
Florida	Chakrabarti	2008	X		
Milwaukee	Chakrabarti	2008	X		
Florida	Rouse et. al.	2007	X		
Milwaukee	Camoy et. al.	2007	X		
San Antonio	Diamond	2007	X		
D.C.	Greene & Winters	2007		X	
Florida	Figlio & Rouse	2006	X		
Florida	West & Peterson	2006	X		
Florida	Greene & Winters	2004	X		
Florida	Chakrabarti	2004	X		
Milwaukee	Greene & Forster	2002	X		
San Antonio	Greene & Forster	2002	X		
Maine	Hammons	2002	X		
Vermont	Hammons	2002	X		
Milwaukee	Hoxby	2001	X		
Florida	Greene	2001	X		

Note: This table shows all empirical studies using all methods.

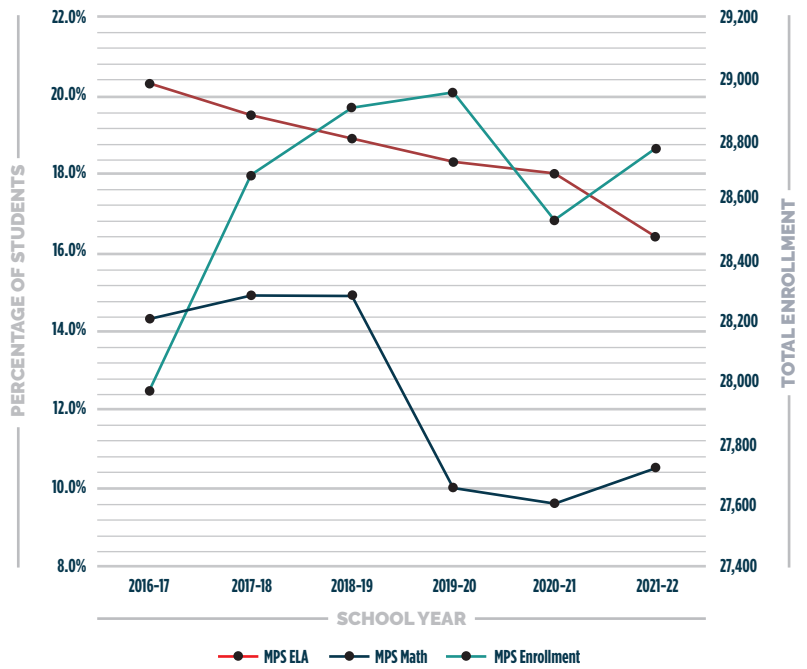
A number of these studies focused on the MPCR. The most recent, a 2010 dissertation from a graduate student at UW-Madison<sup>iv</sup>, found positive "competition effects for math and reading that are statistically significant, but small." Another study from 2009 by scholars from the University of Arkansas's School Choice Demonstration Project also examined the relationship to public school test scores. They found that an increase in private school options resulted in increased test scores for public school students, though they note that this change is "positive if not a transforming force in the Milwaukee public school system."

In recent years, research into this topic has been a bit more limited, perhaps because it has become somewhat of a settled question among academics. However, there are two main reasons it is worth taking another look at the data. First, as noted in the introductory section, claims that choice programs hurt public school students are still prevalent among opponents of the programs. Second, the absence of this topic in Wisconsin since the creation of the RPCP (2011) and WPCP (2015) since the research in the state means it is important to examine whether these programs have similar effect on Wisconsin students outside of Milwaukee.

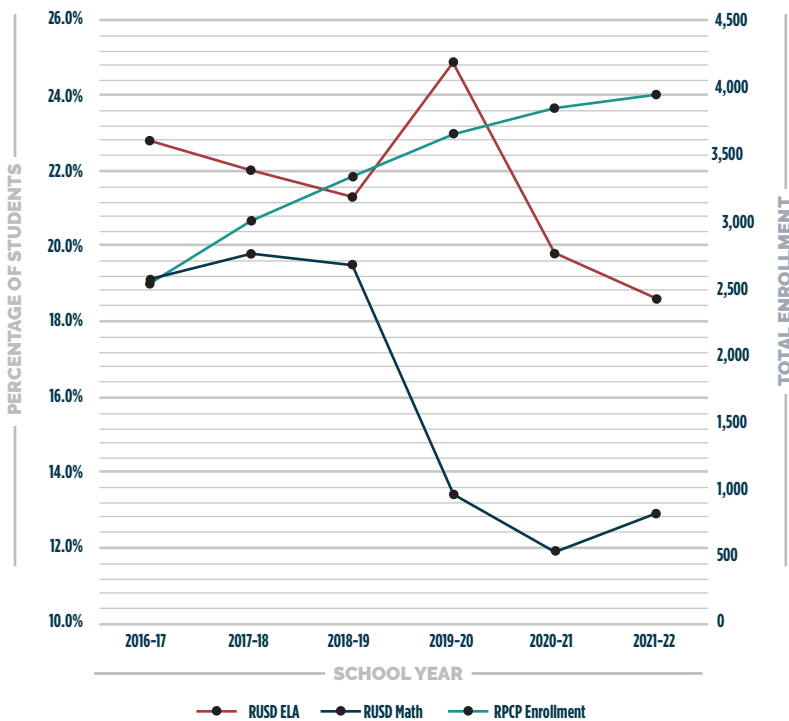
## Milwaukee Parental Choice Program Enrollment & Public Schools

The MPCP has had a 0.6% average yearly increase in enrollment over the 2016-17 through 2021-22 school years. Proficiency in both math and English Language Arts (ELA) undoubtedly remains dreadfully low in Milwaukee Public Schools (MPS). Neither subject approached 20% proficiency during the time frame of our analysis. But nonetheless, proficiency has remained in the same range—or even increased slightly—during years of private school choice enrollment growth. Indeed, in the years for which enrollment in the MPCP declined, we also see a decline in proficiency in public schools.

### MPS ELA & Math Results with MPCP Enrollment



### RUSD & Math Results with RPCP Enrollment



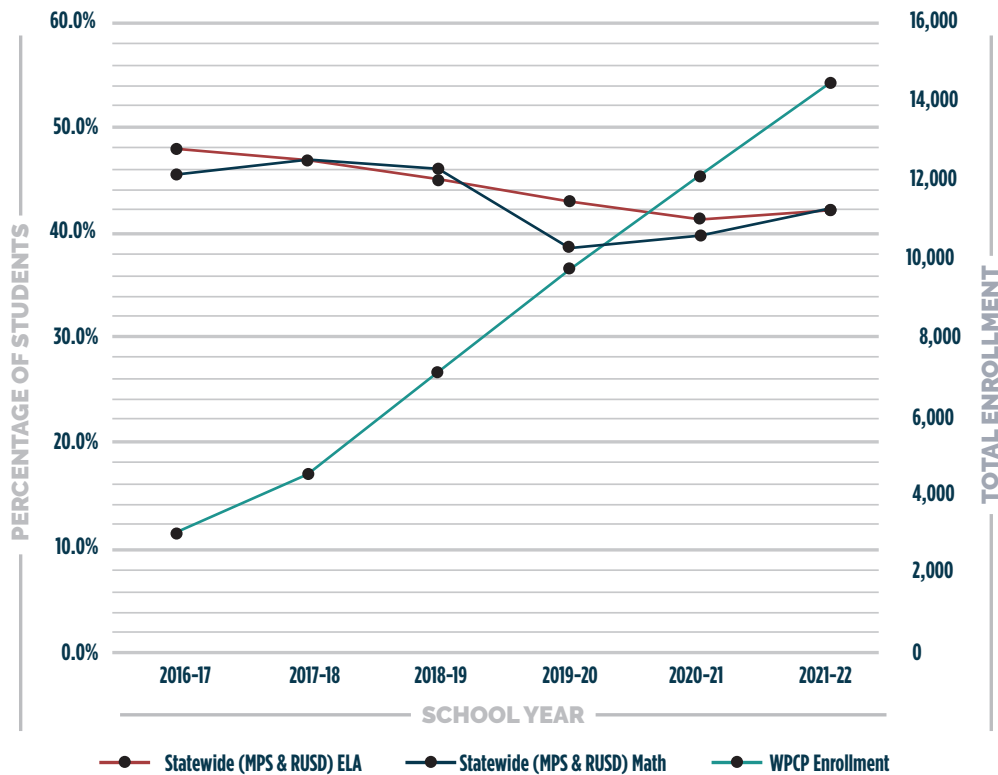
## Racine Parental Choice Program & Public Schools

The RPCP has had a 9.4% average yearly increase in enrollment over the 2016-17 through 2021-22 school years. Unlike the MPCP, this has been a relatively steady increase over the past five school years. At the same time, proficiency has been on a generally downward trend in the Racine Unified School District (RUSD), particularly in math where rates plummeted to under 12% in 2020-21. But we do see a slight rebound in 2021, making the overall relationship between choice and public school proficiency a bit ambiguous from our surface-level analysis.

## Wisconsin Parental Choice Program & Public Schools

The WPCP has by far the most rapid growth of the three programs under study in this paper. It has had a 37.1% average yearly increase in enrollment over the 2016-17 through 2021-22 school years. But even as enrollment has shot up rather dramatically, we see limited evidence of a downward trend in statewide proficiency. The trend is slightly down since COVID-19, but if choice was truly "creaming" the brightest kids, we would expect to see a far more dramatic decline than what we saw in the RUSD and MPS. Such a trend did not materialize here.

**Statewide (MPS & RUSD) ELA & Math Results with WPCP Enrollment**



## Statistical Analysis Methods

In order to determine whether the enrollment in school choice programs has an effect on the outcomes of students in public schools, there are a number of key variables that must be considered. First, we need a measure of the growth (or decline) in choice enrollment. Data on annual choice enrollment is readily available from DPI.<sup>vi</sup> Our key independent variable, then, is the change in choice enrollment over the past 4 years beginning in 2019 as a share of public school enrollment. For example, if choice enrollment in a district was 10 in 2019 and 20 in 2022 in a district with 100 students, the variable would be:

$$\frac{(20 - 10)}{100} = 0.1$$

Our dependent variable is the change in public school Forward Exam scores in each district over the same time period in both math and ELA. This data is also readily available from DPI on the state's report card.<sup>vii</sup> To control for other factors that are widely accepted to have a relationship to student outcomes, we control for the share of students in the district who are African American, Hispanic, with a disability, or are English Language learners. At the district level, we control for district enrollment, and include an indicator variable for districts that are elementary school-only districts. Because our hypothesis is directional, we use a one-tailed test of significance.

## Statistical Analysis

The results of our analysis for Wisconsin's choice programs are found in Table 1 below. As a robustness check, we first examine whether our control variables have their expected effects, and indeed they do. By far the most significant driver of reading proficiency in Wisconsin is economic status, and that variable has a strong, negative effect on proficiency in this paper. With all the other controls including, moving from a school with no low-income students to a school with 100% low-income students would be expected to reduce proficiency by about 5.7%.

**Table 1. Public School ELA Proficiency  
Change & Choice Enrollment**

<b>VARIABLES</b>	<b>(1) ΔELA</b>	
<b>%ΔChoice</b>	<b>0.369*</b>	(0.189)
<b>2019 ELA</b>	<b>-0.141***</b>	(0.0306)
<b>Enrollment (1000s)</b>	<b>0.000888</b>	(0.000654)
<b>African American</b>	<b>-0.0941</b>	(0.0574)
<b>Hispanic</b>	<b>-0.0567</b>	(0.0567)
<b>Disability</b>	<b>-0.132</b>	(0.0830)
<b>Economic Status</b>	<b>-0.0575***</b>	(0.0198)
<b>ELL</b>	<b>0.0783</b>	(0.0975)
<b>Elementary Only</b>	<b>0.0370***</b>	(0.00878)
<b>Constant</b>	<b>0.0654***</b>	(0.0231)
<b>Observations</b>	<b>418</b>	
<b>R-squared</b>	<b>0.093</b>	

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

But our key variable, Choice Enrollment, also appears to be a significant driver of proficiency. The coefficient here is a bit irrational—it represents what moving from a district with 0 students enrolled in choice to a district with 100% of students enrolled in choice would be on public schools. In that case, we would expect proficiency to rise 36%. Therefore, we examine what happens across the range of observed values—moving from 0% choice enrollment to 7.5% choice enrollment. In that case, the model predicts that reading proficiency would increase by about 2.8%.

Next, we examine the relationship to math proficiency using the control variables as the model in Table 1. In this analysis, we see the control variables working similarly in the predicted direction, though the negative coefficient on African American is significant in the case. On our variable of interest, however, we see no statistical significance—meaning that choice enrollment growth does not appear to have any correlation—positively or negatively—with public school student proficiency in math.

**Table 2. Public School Math Proficiency Change & Choice Enrollment**

<b>VARIABLES</b>	<b>(1)</b>	
	<b>ΔMath</b>	
<b>%ΔChoice</b>	<b>0.123</b>	(0.229)
<b>2019 Math</b>	<b>-0.142***</b>	(0.0335)
<b>Enrollment (1000s)</b>	<b>0.000926</b>	(0.0007935)
<b>African American</b>	<b>-0.193***</b>	(0.0696)
<b>Hispanic</b>	<b>-0.0857</b>	(0.0690)
<b>Disability</b>	<b>-0.251***</b>	(0.0999)
<b>Economic Status</b>	<b>-0.0586***</b>	(0.0241)
<b>ELL</b>	<b>0.116</b>	(0.1181)
<b>Elementary Only</b>	<b>0.0247***</b>	(0.0106)
<b>Constant</b>	<b>0.0893***</b>	(0.0267)
<b>Observations</b>	<b>418</b>	
<b>R-squared</b>	<b>0.0816</b>	

**Standard errors in parentheses**

**\*\*\* p<0.01, \*\* p<0.05, \* p<0.1**

Regardless of the coefficient value, however, the results here are consistent with much of the research from a decade ago. It suggests that school choice programs in Wisconsin do not represent a harm to public school proficiency, and indeed may help to raise it, at least in the case of ELA.

## Conclusion

Consistent with older, existing work on the topic, this paper provides evidence that there is no negative effect of school choice programs on public schools, and potentially even a modest positive effect. This makes sense when one considers that there is a strong, countering force to any drivers in a negative direction that opponents focus on—the value of competition. Ever since the first concept of school choice was written down by Milton Friedman<sup>viii</sup>, the market forces that school choice programs can bring to bear on what was

previously a public education monopoly have been a key part of the narrative.

Of course, we still do not live in a complete education marketplace—where money follows the student no matter which school door they walk through. WILL<sup>ix</sup> and School Choice Wisconsin<sup>x</sup> have long been proponents of moving towards such a system. But until that goal is achieved, the public education bureaucracy can fight back against the market by rewarding poor performing school districts with additional taxpayer money. It is possible that this explains the lack of a positive relationship we found in the case of math proficiency.

Regardless, the results of this paper suggest that claims about harm to public schools from increased competition ring hollow—and should be ignored in debates about expanding access to educational options.

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<sup>i</sup><https://themadisontimes.themadent.com/article/working-twice-as-hard-to-get-half-as-much-a-requiem-for-education/>

<sup>ii</sup>[https://www.hngnews.com/sun\\_prairie\\_star/opinion/school-choice-detrimental-to-public-schools/article\\_5ba86a51-2503-5cc2-9a0a-5e5abfaf6549.html](https://www.hngnews.com/sun_prairie_star/opinion/school-choice-detrimental-to-public-schools/article_5ba86a51-2503-5cc2-9a0a-5e5abfaf6549.html)

<sup>iii</sup><http://www.edchoice.org/wp-content/uploads/2016/05/A-Win-Win-Solution-The-Empirical-Evidence-on-School-Choice.pdf>

<sup>iv</sup><https://eric.ed.gov/?q=the+effects+of+technology+on+students+with+disabilities&pg=9519&id=ED520755>

<sup>v</sup><https://files.eric.ed.gov/fulltext/ED530091.pdf>

<sup>vi</sup><https://dpi.wi.gov/parental-education-options/choice-programs/data>

<sup>vii</sup><https://dpi.wi.gov/accountability/report-cards>

<sup>viii</sup>[https://www.jbnoe.fr/IMG/pdf/friedman\\_-\\_cheque\\_education.pdf](https://www.jbnoe.fr/IMG/pdf/friedman_-_cheque_education.pdf)

<sup>ix</sup><https://will-law.org/wp-content/uploads/2021/07/FundEveryKidv101.pdf>

<sup>x</sup><https://www.wisconsineducationfreedom.org/>