



POLICY BRIEF

Opting Out: Enrollment Trends in Response to Continued Public School Shutdowns

Dr. Will Flanders

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Executive Summary

A Wisconsin Institute for Law & Liberty (WILL) study, released in November 2020, showed, consistent with national research, fall 2020 school district reopening decisions in Wisconsin appear to be driven more by politics and teachers unions than by the local presence of COVID-19. But what are the implications of those decisions for enrollment trends? Using recently released enrollment data from the state of Wisconsin, this study goes further to show whether school district decisions to go virtual, as opposed to in-person, led families to make other educational choices including enrollment in virtual schools, or delaying enrollment in school. Key findings were as follows:

Enrollment declined statewide more than usual. On average, districts saw a 2.67% decline in enrollment this year relative to 0.3% in previous years. This represents a 790% increase in enrollment decline relative to previous years, and suggests an important impact of the pandemic on Wisconsin schools.

School districts that chose virtual learning to start the 2020 school year saw the largest enrollment declines. Districts with exclusively virtual education saw a 3% decline in enrollment on average relative to other districts in the state.

School districts with virtual charter schools saw an increase in enrollment. The 44 districts in Wisconsin with virtual charters saw an increase of approximately 4.5% in enrollment on average relative to other districts.

Private school choice continues to grow. Enrollment in Wisconsin's parental choice programs increased by more than 2,700 in a year where public schools saw declines of nearly 36,000.

Takeaways

The COVID-19 pandemic has uncovered systemic issues in public education. Despite widespread support from both parents and health professionals that in-person learning can be done safely, many school districts went the opposite direction. Consequently, it appears that many families are utilizing school choice to move to districts that did offer in-person instruction, or those that had established, effective means of online education. Now, more than ever, it is incumbent on policymakers to ensure that families have the ability to take advantage of all educational options that are available to them.

Introduction

The COVID-19 pandemic severely affected almost every aspect of American life—from the workplace to grocery shopping. But perhaps few impacts will be more consequential than the impact on students in K-12 education. In the spring 2020 semester, when little was known about the virus, schools throughout the country shut down in-person instruction. Yet, as health experts learned more about the relative safety of allowing students to return to school (Kampe et. al. 2020; Insights for Education 2020), many districts made the decision to remain shut down for the fall semester.

Research has found that these decisions were driven less by real fears about COVID-19 than by pressure from teachers unions (DeAngelis and Makridis 2020; Flanders 2020; Hartney and Finger 2020) and local politics (Flanders 2020; Hartney and Finger 2020). But what has been the reaction of families to these decisions?

Using data from Wisconsin on school district enrollment combined with data on school district reopening decisions, we seek to answer that question. Like in many other situations, we find that parents behave in a rational manner when it comes to reopenings: opting out of schools that aren't meeting the needs of their families for schools better equipped to educate their children or delaying enrolling in school entirely.

Literature Review

There are many reasons that families may find continued virtual education does not meet the educational needs of their children. A study from Germany examined the amount of time that children were spending on school-related activities since the pandemic began (Woesmann et. al. 2020). The research found that students were only spending about half the time they were prior

to the pandemic on learning, while spending more time on television and video games. The resulting loss of learning may be more profound in math than in reading (Kuhfeld et. al. 2020) Closer to home, WILL surveyed parents during the early stages of the pandemic and found that more than 80% report that their children were spending less than 20 hours per week on school work. The largest percentage at the high school level were spending 10 hours or less (Flanders 2020).

This reduced focus on learning could have long-term economic consequences. A recent study by Hanushek and Woessman (2020) estimated that students who miss just one third of a year of schooling would reduce their lifelong earnings potential by 3%. This would, in turn, result in a loss of GDP in present value of a staggering \$14.2 billion to the U.S. If learning loss continues through the fall, that cost would essentially double to \$27.9 billion. Given that families have an intrinsic desire for their children to do well in life, they are likely to do all they can to avoid the realization of these economic costs to their own children.

What's worse, these losses are not evenly spread across the population. The fact that virtual education relies on technology means that many lower-income families and those in rural areas without ready access to high-speed internet may be most likely to suffer. According to polling from the Pew Research Center, low-income parents are far more concerned about their children falling behind than parents from other income groups (Horowitz 2020). Dorn et. al. (2020) estimate that achievement gaps between low-income and wealthier students could grow by as much as 15-20% after the pandemic.

Existing research suggests that families behave rationally when the traditional public-school environment isn't meeting their children's needs. For example, in New York's public school system, families are more likely to enroll in schools with better academic outcomes when provided simple information about these schools (Corcoran et. al. 2016). In Milwaukee, academics and student safety drive enrollment in the city's school voucher program (DeAngelis and Flanders 2018). If parents find the virtual school environment dissatisfying, we would expect them to make alternative choices. The broad availability of public school choice in Wisconsin makes this an ideal venue to examine this proposition.

Public School Choice and Virtual Charters

Wisconsin has a relatively permissive open enrollment program that allows families to open enroll out of their home district into other surrounding districts that may better fit their needs. Each year, school districts decide on the number of seats they will open. School districts are not required to open any seats, however most districts in the state participate broadly, as the program offers financial benefit to the receiving district (Kava 2019). Families are allowed to apply to up to three districts per year, and may specify the school within the district they wish to attend. The

window for traditional open enrollment opens in February and closes in the first week of April. However, there is an alternative application process that is open year-round that many virtual schools made a push to make known during the summer as districts were deciding how to handle the Fall semester (RightWisconsin 2020).

The open enrollment program is the largest school choice program in the state of Wisconsin, with over 62,000 students participating according to the most recent data. The program is growing: 7.3% of Wisconsin students were enrolled in the program during the 2018-19 school year compared to 1.10% in 2001-02 (Ibid 2019).

Wisconsin also has a number of virtual charter schools that may be better equipped to meet the needs of students forced into at-home education. Virtual charter schools are organized, like other public schools, under the umbrella of a school district. Currently, the state has 52 virtual charter schools operating with 44 school districts. Many of these schools have been in operation for several years, and are likely to have nailed down effective processes for online education. Families apply to the virtual charter schools through the same open enrollment process that is used to apply to other public schools in the state.

Methods

The dependent variable in this analysis is the percent change in enrollment between the 2019-20 school year and the 2020-21 school year. To account for the possibility that some districts may simply be shrinking faster than others for reasons beyond the decision to go virtual, we include a number of control variables in the analysis. These variables include the percentage change in enrollment during the previous two years, the percentage of students in the district who are African American, the number of low-income students in the district, and the population of the area in which the school is located.

Our key independent variable is *Move to Virtual*. This variable takes on a value of “1” if a district went to virtual education to start the 2020-21 school year and a “0” if other methods were utilized. For simplicity, we only consider districts that have gone fully virtual here. Districts that utilized hybrid models of educating students in-person for a few days per week, or those that educated students in different grades using different means, are not considered.¹ Consequently, our model can be considered a conservative estimate of the impact on enrollment of moving to virtual education.

Formally, for each district:

¹ Other districts have gone virtual subsequent to the school year starting. These districts are not considered either as we are interested in the enrollment decisions that parents made prior to the school year.

(eq. 1)|

$$\text{Enrollment Change } 20 - 19 = \alpha + \beta_1(\text{Move to Virtual}) + \beta_2(\text{Enrollment } 19 - 18) + \beta_3(\text{Controls})$$

We are also interested in whether districts that have previously established virtual schools are attractive to parents. Theoretically, such schools may have worked out many of the “kinks” surrounding virtual education that traditional school districts are only beginning to reconcile with. To address this possibility, we run a second model with *Existing Virtual* as the variable of interest, and all previously mentioned variables still included. This variable is coded as “1” if the district had a virtual school in place prior to the 2020-21 school year, and a “0” otherwise².

Thus, the second model:

(eq. 2)

$$\text{Virtual Education} = \alpha + \beta_1(\text{Move to Virtual}) + \beta_2(\text{Enrollment } 18 - 19) + \beta_3(\text{Existing Virt. School}) + \beta_4(\text{Controls})$$

Results

Table 1 displays the summary statistics for our key variables. At this level, one can see that enrollment declines increased substantially relative to the previous year, 18 to 19. This year, enrollment declined by 2.67% statewide whereas enrollment declined by 0.3% in the previous year.³ This 790% increase in enrollment declines suggests an important impact of the pandemic on Wisconsin schools. Other things to note among our key variables: about 10% of districts throughout the state have an established virtual charter school. While we can tell how spread out such charters are throughout the state from this data, it does suggest that a substantial share of the state’s population may have access to such schools.

Table 1. Summary Statistics for Key Variables

Variable Name	Mean (SD)	N
<i>Enrollment Change 19 to 20</i>	-0.0267(0.05882)	421
<i>Move to Virtual</i>	0.0819(0.2745)	415
<i>Established Virtual Charter</i>	0.1045(0.3062)	421

² A full list of virtual charter schools in Wisconsin is included as an Appendix to this document.

³ Looking at longer term trends, the 18-19 decline is far more consistent with average declines.

<i>Enrollment Change 18 to 19</i>	-0.0038(0.0338)	421
<i>Percent Low Income</i>	0.3748(0.1624)	421
<i>Percent African American</i>	0.0213(0.0523)	421
<i>Population(100Ks)</i>	1.431(2.098)	421

Finally, we note that approximately 8% of districts throughout the state went fully virtual. Again, recall that this number does not include schools that utilized a hybrid model or went virtual later in the year.

Table 2 displays the results from the analysis in equation 1. Of note first is that many of the control variables behave in the manner that we might expect. For example, the strongest statistical predictor of 2019-20 enrollment change is the 2018-19 enrollment change. It appears that the pandemic did not shift overall trends of which districts in the state are growing, and which are shrinking.

Area population was insignificantly related to enrollment changes, though the coefficient on the variable is negative. This may be consistent with trends that have been observed of people moving out of close, crowded urban areas during the pandemic on the margins. On our variable of interest, it appears that the decision to go fully virtual did have a negative effect on student enrollment. Districts that went virtual saw an approximately 3% larger decline in enrollment than other districts throughout the state ($p<.05$).

Table 2. Enrollment Change & Decision to Go Virtual

VARIABLES	(1) Enrollment Change '19-'20
Enrollment Change '18-'19	0.357*** (0.0829)
Decision to go Virtual	-0.0289** (0.0121)
African American Share	0.306*** (0.0665)
Economically Disadvantaged Share	-0.0322 (0.0197)
Area Population	-2.29e-08 (1.82e-08)
Constant	-0.0144* (0.00869)
Observations	415

R-squared	0.101
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Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table 3 below adds the *established virtual charter school* variable to the model. Recall that this is an instrumental variable taking on a value of “1” in districts that already had a virtual school in place prior to the pandemic. Our previous key variables function much the same way with the addition of this variable. In this model, the decision to go virtual is related to an approximate 3% decline in enrollment ($p<.01$). Because we are now accounting for movement to existing virtual schools, it arguably represents the decline in enrollment from parents who were dissatisfied with virtual education in general as opposed to that offered by a particular public school district.⁴

That said, having an established virtual charter school appears to have an independent, positive effect on enrollment. Such districts saw an enrollment increase of about 4.6% holding all other variables constant.

Table 3. Enrollment Change & Established Virtual Schools

VARIABLES	(1)
	Enrollment Change '19-'20
Enrollment Change '18-'19	0.316*** (0.0806)
Decision to go Virtual	-0.0304*** (0.0117)
Established Virtual Charter School	0.0469*** (0.00883)
African American Share	0.278*** (0.0646)
Economically Disadvantaged Share	-0.0399** (0.0191)
Area Population	-1.85e-08 (1.76e-08)
Constant	-0.0165* (0.00843)
Observations	415
R-squared	0.151

Standard errors in parentheses

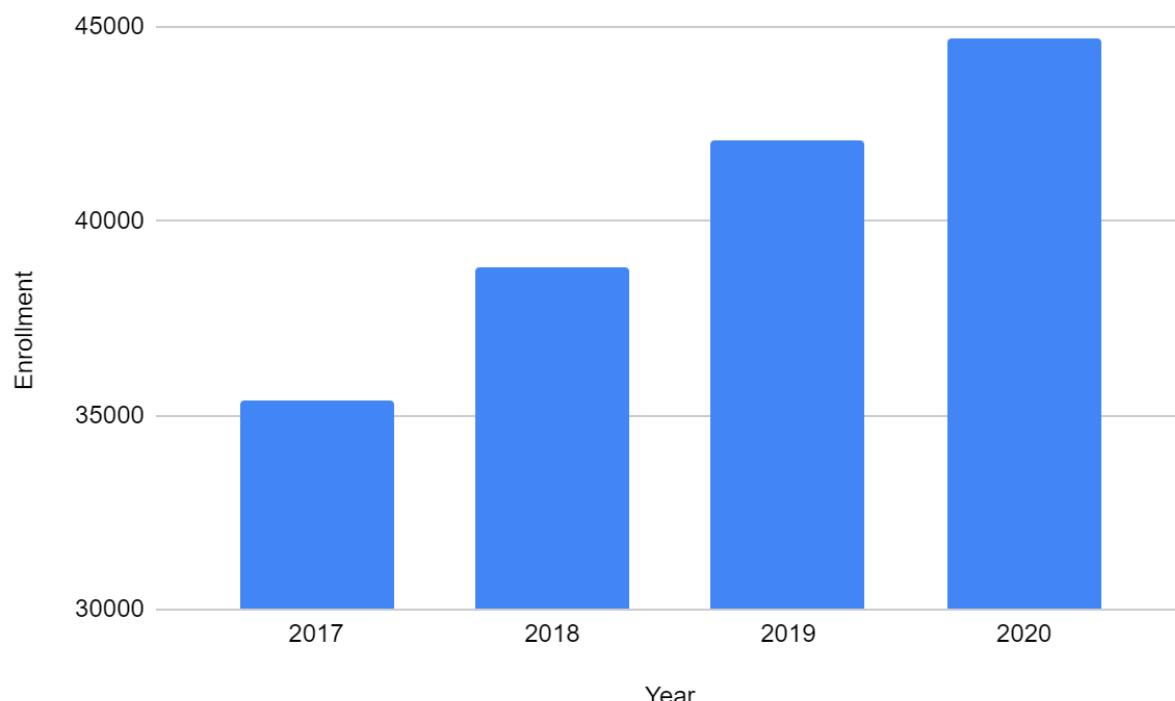
*** p<0.01, ** p<0.05, * p<0.1

⁴ In order to fully bolster this claim, it would be important to account for enrollment at nearby private schools that went virtual and offered in-person instruction. However, this information is not currently available. Future research may attempt to resolve this question.

While virtual charters have seen substantial growth, they cannot entirely account for the downward enrollment trend in 2020. The largest enrollment declines statewide occurred in the Kindergarten and pre-Kindergarten cohorts, while drops at other grade levels were far closer to what is seen in a regular school year (Flanders 2020a).

It also appears that families continued to be interested in the state's private school choice programs. Figure 1 below shows enrollment between the states four parental choice programs (Milwaukee, Racine, Wisconsin, and the Special Needs Scholarship Program) since the 2017 school year. The programs continue to grow by about 2-3,000 students per year, and this year was no exception. About 2,700 additional students took advantage of private school choice this year, suggesting such schools continue to offer a viable alternative for many families even during the pandemic.

Figure 1. School Choice Program Enrollment, 2017-2020 School Years Wisconsin



Greater enrollment growth occurred in the out-state programs than the MPCP. Enrollment in the MPCP went up by 63 students, while the WPCP grew by 2,379, and the RPCP grew by 186. The SNSP grew by 380 students.

Conclusions

Many parents throughout the country have been dissatisfied with the decision of school districts to only provide virtual education contrary to the preponderance of scientific evidence that it is generally safe to keep schools open with reasonable protocols in place. While many districts still made that decision, it appears that some parents were willing to “vote with their feet” and seek out other educational options. Families enrolled out of such districts into districts that were offering in-person instruction, or had established virtual school protocols that were likely more well organized than what could be created during this chaotic time.

This study provides even further evidence that families are willing and able to use school choice options when made available to them. It also shows that traditional, district-based educational models have a tenuous hold on families, and that making inter-district movement viable can have broad implications during periods of change.

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Appendix

Table A1. List of Virtual Charter Schools in Wisconsin

District/Authorizer	Charter School Name	District Name	Charter School Name
Appleton Area	Appleton eSchool	Medford Area Public	Rural Virtual Acad
Appleton Area	Wis Connections Acad	Merrill Area	Bridges Virtual Acad
Barron Area	Advanced Learning Acad of WI	Montello	Montello Virtual Charter Sch
Birchwood	Bobcat Virtual Acad	Nekoosa	WISE Acad
Cameron	CAVE	Norris	Norris Acad Virtual Sch
Chetek-Weyerhaeuser	Link2Learn Virtual Charter Sch	Northern Ozaukee	Wisconsin Virtual Learning
Cumberland	Island City Virtual Acad	Northwood	Northwood Virtual
De Soto Area	De Soto Virtual Sch	Prairie du Chien Area	Mighty River Acad--Virtual Edu
Eau Claire Area	Eau Claire Virtual Sch	Richland	Richland Online Acad
Elkhorn Area	Elkhorn Options Virtual Sch	Ripon Area	Odyssey Acad of Virtual Lrng
Elmwood	Western WI Vir Charter	Saint Croix Central	Saint Croix Virtual Acad Inc
Gilman	eSucceed Charter Sch	Sheboygan Area	George D Warriner Hi
Grantsburg	iForward	Sheboygan Area	George D Warriner Mid
Hayward Community	HACIL	Solon Springs	Eagles' Wings Virtual Charter
Hudson	HVCS	Tomorrow River	Tomorrow River Virtual Charter
Janesville	ARISE Virtual Acad	Turtle Lake	Laker Online
Kenosha	Kenosha eSchool K-12	Two Rivers Public	Lighthouse Learning Acad
Kettle Moraine	KM Global Sch	Watertown Unified	eCampus Acad Charter School
Kiel Area	Between the Lakes Virtual Acad	Waukesha	eAchieve Acad - Wisconsin
Kiel Area	Kiel eSchool	Waukesha	eAchieve EI
La Crosse	La Crosse Polytechnic Sch	Wausau	WAVE
Lake Geneva J1	Maple Park Charter Sch	Wauwatosa	Wauwatosa Virtual Acad
Lake Geneva-Genoa City	New Visions Charter Sch	Wonewoc-Union C	W-C Virtual Acad
Little Chute Area	Flex Acad		
Marshall	JEDI Virtual K-12		

Table A2. Districts with the Largest Enrollment Change, 2019-2020

Enrollment Losers	
District	Percent Change
Washington	-35.60%
Cornell	-17.70%
Mercer	-17.20%
Seneca	-14.80%
Hustisford	-14.20%
Shell Lake	-13.90%
Sharon J11	-13.10%
Horicon	-13.00%
Phelps	-12.70%
Pardeeville Area	-12.60%
Enrollment Gainers	
District	Percent Change
Saint Croix Central	7.20%
Dover Elementary	7.60%
Northern Ozaukee	11.00%
Kiel Area	15.00%
Grantsburg	15.60%
Ripon Area	16.80%
Reek Elementary	19.00%
McFarland	20.10%
Gilman	40.20%

Norris	57.90%
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