GREAT LAKES CENTER
FOR EDUCATION RESEARCH & PRACTICE

DOCUMENT REVIEWED:	"Graduation Rates for Choice and Public School Students in Milwaukee, 2003-2008"
AUTHOR:	John Robert Warren
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REVIEWER:	Casey D. Cobb, University of Connecticut
E-MAIL ADDRESS:	casey.cobb@uconn.edu
PHONE NUMBER:	860-486-0253

Summary of Review

This review examines a research study that compares high school graduation rates of students who used vouchers to attend private high schools in Milwaukee and students who attended public high schools in that same city. The study reports that for the most recent year of data, a sample of voucher students had estimated graduation rates 12 percentage points higher on average than a sample of public school students. Overall, the trend favoring voucher students was observed in five of the previous six years. The analysis is technically accurate and makes defensible assumptions as necessary for the final calculations. However, although the results are descriptively useful, any real claims about whether the voucher program is actually causing higher graduation rates would depend on a much stronger research design.

Review

I. INTRODUCTION

The report reviewed here, *Graduation Rates for Choice and Public School Students in Milwaukee, 2003-2008*, is a research brief authored by John Robert Warren, a professor of sociology at the University of Minnesota.[1] Dr. Warren wrote the publication on behalf of School Choice Wisconsin, a nonprofit organization that advocates for increased school choice options.[2] The report is the third in a series of studies comparing high school graduation rates between the Milwaukee Parental Choice Program (MPCP) and the Milwaukee Public Schools (MPS). This particular report adds graduation data for 2007-08, the most recent year available, to prior years' calculations dating back to 2002-03.

High school graduation rates have taken on a newfound importance in discussions surrounding school performance and accountability. Reports of dismal graduation rates imply schools are under-serving large percentages of students, causing increasing numbers of high school dropouts, and ultimately undermining our nation's economic health.[3] Best estimates point to a national graduation rate of only 70%.[4] Further, low graduation rates disproportionally occur in poor communities and among students of color.[5]

Within the last several years, concerns have been raised over the way the rates have been calculated. Increased pressures to look good on these measures led to methods of calculation that tended to inflate state completion rates.[6] In 2008, the U.S. Department of Education began requiring states to use a uniform formula under the No Child Left Behind Act.[7]

School choice outcomes of interest therefore should include graduation rates. The findings presented in this report show that students enrolled in private schools via the Milwaukee Parental Choice Program (MPCP) have higher graduation rates than students in the Milwaukee Public Schools (MPS).

II. FINDINGS AND CONCLUSIONS OF THE REPORT

The study reports that for the most recent year of data, a sample of MPCP students had estimated graduation rates that were 12 percentage points higher on average than a sample of MPS students. After making statistical adjustments for ninth grade retention and making assumptions about net migration, the 2007-08 graduation rate for MPCP students was estimated at 77% compared with 65% for MPS students. Overall, the trend shows MPCP students with higher estimated graduation rates than MPS students in five of the previous six years. The report concludes that "students in the MPCP are more likely to graduate from high school than MPS students" (p. 2). It estimates that a cumulative total of 3,352 more MPS students would have graduated over the past six years had MPS graduated students at the same rate as MPCP students.

III. THE REPORT'S RATIONALE FOR ITS FINDINGS AND CONCLUSIONS

The report helpfully discusses the complexities and challenges of measuring graduation rates.[8] The best methods involve longitudinal monitoring systems, where the enrollment status of each student in a state, school district, or school is tracked. However, such systems are costly and hard to administer.

The analysis here relies on a relatively straightforward calculation, what is sometimes referred to as the "on-time" graduation rate. The graduation rate is determined by taking the total number of graduates in year X and dividing it by the number of students who entered the school for the first time as ninth graders in year X-4. As noted in the report, this is not a perfect measure but is intuitively simple and, with certain adjustments, provides reasonable estimates of graduation rates. Ideally, these adjustments take into account mortality (whether students die), grade retention, and net migration from the school—but these adjustments can only be made with data sets containing complete information on mortality rates and net migration rates among students. For this study, those data were not available, but reasonable assumptions and estimates were made to account for migration and grade repeaters.

IV. THE REPORT'S USE OF RESEARCH LITERATURE

The report itself is a short research brief and as such, devotes little space to a review of the research literature. Yet what is reported for prior evidence probably puts voucher programs in a better light than what is deserved. The previous studies cited present a one-sided view. To the author's credit, most of the studies cited to show that voucher students academically outperform comparison traditional public school students were from peer-reviewed journals. But many other peer-reviewed studies that have shown no effects or negative effects on student achievement were not referenced.[9]

V. REVIEW OF THE REPORT'S METHODS

The methods used in the report are statistically precise and explained in very clear detail in the appendix. As noted earlier, efforts were made to provide good-faith estimates of graduation rates for the two groups. A number of different estimates were derived based upon varying degrees of net migration and ninth grade retention within, for the most part, empirically supported ranges for both groups. For instance, in Appendix Table 3 (p. 12), estimated graduation rates for the class of 2008 are presented under different assumptions for net migration (-10%, 0%, 10%) and ninth grade retention (5%, 15%, 25%). This allows the reader to see how the estimated graduation rates are affected by assumptions for student enrollment over the four-year period for each group. The result is that under most scenarios, MPCP graduation rates are higher than MPS rates.

Final calculations for the two groups represent reasonable estimates for this particular four-year graduation rate. For this study mortality was assumed to be equal across the two groups, a reasonable assumption. The report also goes to great lengths to make suitable statistical adjustments to grade retention in the two groups. For the final calculations, MPCP program ninth grade retention was estimated to be 5% based on reports from administrators in those schools and 25% for MPS schools based on available data from the MPS Office of Student Services. These appear to be fair adjustments that do not favor one group over the other. Finally, net migration was assumed to be zero for both MPCP and MPS groups. This is an important assumption, because if either of the groups have net in- or out-migration, this affects the graduation rate. For instance, net in-migration has the effect of upwardly biasing the rate, while net out-migration has the opposite effect. There is no evidence presented in the report to support the assumption of zero net migration for both groups. Without such evidence, it is

difficult to tell if this is a safe assumption or not.

VI. Review of the Validity of the Findings and Conclusions

The analysis is technically sound and the final results are descriptively useful—to a point. Any real claims about whether the MPCP is actually causing higher graduation rates (compared to the MPS) must be based on stronger research designs, such as randomized experiments or causal modeling. The report acknowledges this caveat and references forthcoming results from a longitudinal study that looks at two similar groups of students in the two treatments.[10] The study began looking at ninth graders three years ago, so it is too early to learn about graduation rates from that cohort at this time.

The drawback of issuing a descriptive report such as this is that it may mislead an untrained audience into believing that MPCP high schools do a better job of graduating students than MPS high schools. As the author himself points out, it cannot support that conclusion. Moreover, the author's caution is undermined by a key assertion in the report. It poses the question, "What if the MPS graduate rate in these six years had been equal to the rate for high school students participating in the MPCP?" It then answers by concluding that a "cumulative total of 3,352 additional MPS students would have graduated under that scenario." Although mathematically accurate, such extrapolation invites causal inferences from descriptive data. Given the report's accurate and important caveats about the limits of its study design, readers will only be misled by this causal conjecture.

In scientific terms, what's missing from this research design is a "counterfactual." The counterfactual, in this case, would test how the MPCP students in the sample would have fared in the MPS system. This is why we look to study designs with a matched comparison group of students (in this case, a matched comparison group of students in the MPS). There is no matched comparison group in this study, which is why the authors acknowledge their results cannot proclaim the MPCP *caused* the higher estimated graduation rates.

VII. Usefulness of the Report for Guidance of Policy and Practice

The report offers helpful descriptions of the policy context and measurement issues surrounding graduation rates. This is useful to policymakers and educators who may not be aware of these matters. The report also provides descriptive information about graduation rates, which is useful particularly for a Milwaukee audience. However, the report may confuse readers with its suggestion that more MPS students would benefit from the MPCP experience. To its credit, the report acknowledges that a stronger research design is needed to detect private versus public school effects for low-income students. It references a longitudinal study being conducted by researchers at the University of Arkansas that involves matched pairs of students in MPS and MPCP schools. This type of design, if appropriately carried out, is far better equipped to address the questions of causality that would interest most policymakers.

Notes and References

[1] Warren, J. R. (2010). *Graduation rates for choice and public school students in Milwaukee, 2003-2008.* Milwaukee: School Choice Wisconsin. Retrieved February 24, 2010, from http://www.schoolchoicewi.org/currdev/detail.cfm?id=309.

[2] For more information, see www.schoolchoicewi.org.

[3]McKinsey & Company (2009). *The economic impact of the achievement gap in America's schools.* Author.

[4] Barton, P. (2005). *One-third of a nation: Rising dropout rates and declining opportunities.* Policy Information Center. Princeton, NJ: Educational Testing Service.

For recent graduation rates by state, see *Diplomas Count 2009. Broader horizons: The challenge of college readiness for all students.* Editorial Projects in Education Research Center, 2009, available online at www.edweek.org/ew/toc/2009/06/11/index.html.

[5] Balfantz, R., & Legters, N. (2004). *Locating the dropout crisis.* Center for Research on the Education of Students Placed At Risk, Report 70. Baltimore, MD: The Johns Hopkins University.

Losen, D., Orfield, G., & Balfanz, R. (2006). *Confronting the graduation rate crisis in Texas.* Cambridge, MA: The Civil Rights Project.

[6] See, for example, Barton, P. (2005). *One-third of a nation: Rising dropout rates and declining opportunities.* Policy Information Center. Princeton, NJ: Educational Testing Service.

[7] See "Rules Mandate Uniform Graduation Rates" in *Education Week*, November 5, 2008.

[8] For a thorough explanation of measures of graduation rates, see: Warren, J. R. (2005). State-level high school completion rates: Concepts, measures, and trends. *Education Policy Analysis Archives, 13*(51). Retrieved March 7, 2010 from http://epaa.asu.edu/epaa/v13n51/. John R. Warren is the author of the report under review.

[9] For a more thorough review of the research on voucher programs and their effects on student achievement, see Barrow & Rouse (2008). In that review the authors concluded, "The best research to date finds relatively small achievement gains for students offered education vouchers, most of which are not statistically different from zero, meaning that those gains may have arisen by chance" (p. 12). Barrow, L., & Rouse, C. E. (2008). School vouchers: Recent findings and unanswered questions. *Federal Reserve Bank of Chicago Economic Perspectives, 3Q, 32*(3), 2-16.

[10] For more information, see www.uark.edu/ua/der/SCDP.html.

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