

2-1-2012

Milwaukee Longitudinal School Choice Evaluation: Annual School Testing Summary Report 2010-11

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Citation

Jacob, A. M., & Wolf, P. J. (2012). Milwaukee Longitudinal School Choice Evaluation: Annual School Testing Summary Report 2010-11. *School Choice Demonstration Project*. Retrieved from <https://scholarworks.uark.edu/scdp/74>

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Milwaukee Longitudinal School Choice Evaluation:
Annual School Testing Summary Report
2010-II

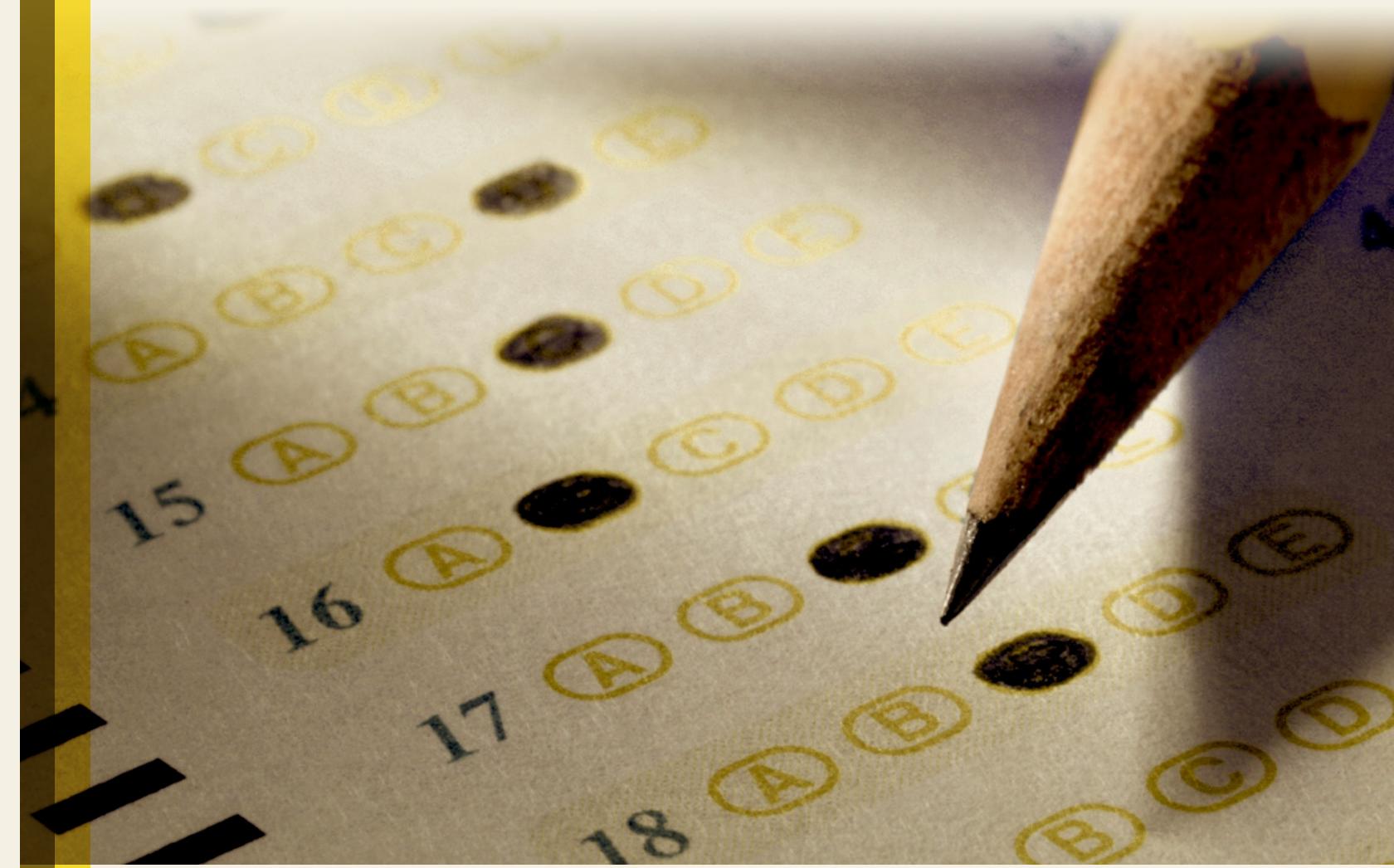
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SCDP Milwaukee Evaluation

Report #32

February 2012





The University of Arkansas was founded in 1871 as the flagship institution of higher education for the state of Arkansas. Established as a

land grant university, its mandate was threefold: to teach students, conduct research, and perform service and outreach.

The College of Education and Health Professions established the Department of Education Reform in 2005. The department's mission is to advance education and economic development by focusing on the improvement of academic achievement in elementary and secondary schools. It conducts research and demonstration projects in five primary areas of reform: teacher quality, leadership, policy, accountability, and school choice.

The School Choice Demonstration Project (SCDP), based within the Department of Education Reform, is an education research center devoted to the non-partisan study of the effects of school choice policy and is staffed by leading school choice researchers and scholars. Led by Dr. Patrick J. Wolf, Professor of Education Reform and Endowed 21st Century Chair in School Choice, SCDP's national team of researchers, institutional research partners and staff are devoted to the rigorous evaluation of school choice programs and other school improvement efforts across the country. The SCDP is committed to raising and advancing the public's understanding of the strengths and limitations of school choice policies and programs by conducting comprehensive research on what happens to students, families, schools and communities when more parents are allowed to choose their child's school.

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**SCHOOL CHOICE
DEMONSTRATION PROJECT**

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Executive Summary

Effective at the start of the 2010-11 school year, 2009 Wisconsin Act 28 requires private schools participating in the Milwaukee Parental Choice Program (MPCP) to administer the state test, the Wisconsin Knowledge and Concepts Examinations (WKCE) in reading, mathematics and science to all MPCP pupils in the same grades as public school students tested under Title 1 of the federal No Child Left Behind Act. Prior to the 2010-11 school year, 2005 Wisconsin Act 125 required private schools participating in the MPCP to administer a nationally normed standardized test of their choosing annually in reading, mathematics, and science to the MPCP students enrolled in the 4th, 8th, and 10th grades. Schools are currently given the option to continue to administer other nationally normed tests if they wish, in addition to the WKCE. The law further directs MPCP schools to submit copies of the test scores from all tests and examinations administered to their pupils in 2010-11 to the School Choice Demonstration Project (SCDP) for processing and reporting to the Legislative Audit Bureau. During the 2010-11 school year, all 102 MPCP schools that were required to administer tests did so and provided the results to the SCDP. Specifically, the SCDP received 10,657 WKCE test scores. Sixty-three schools submitted only the WKCE test scores and the remaining 39 schools submitted both nationally normed tests, such as the Iowa Test of Basic Skills and the WKCE. Five MPCP schools were not required to send in scores as they enrolled no MPCP students in mandatory testing grades.

MPCP students can be compared approximately to similarly income-disadvantaged students in the Milwaukee Public Schools (MPS) as similar household income limits apply to participation in both the MPCP and the federal free-and reduced-price lunch program (FRL). Based on such a comparison using 2010-11 testing data we find:

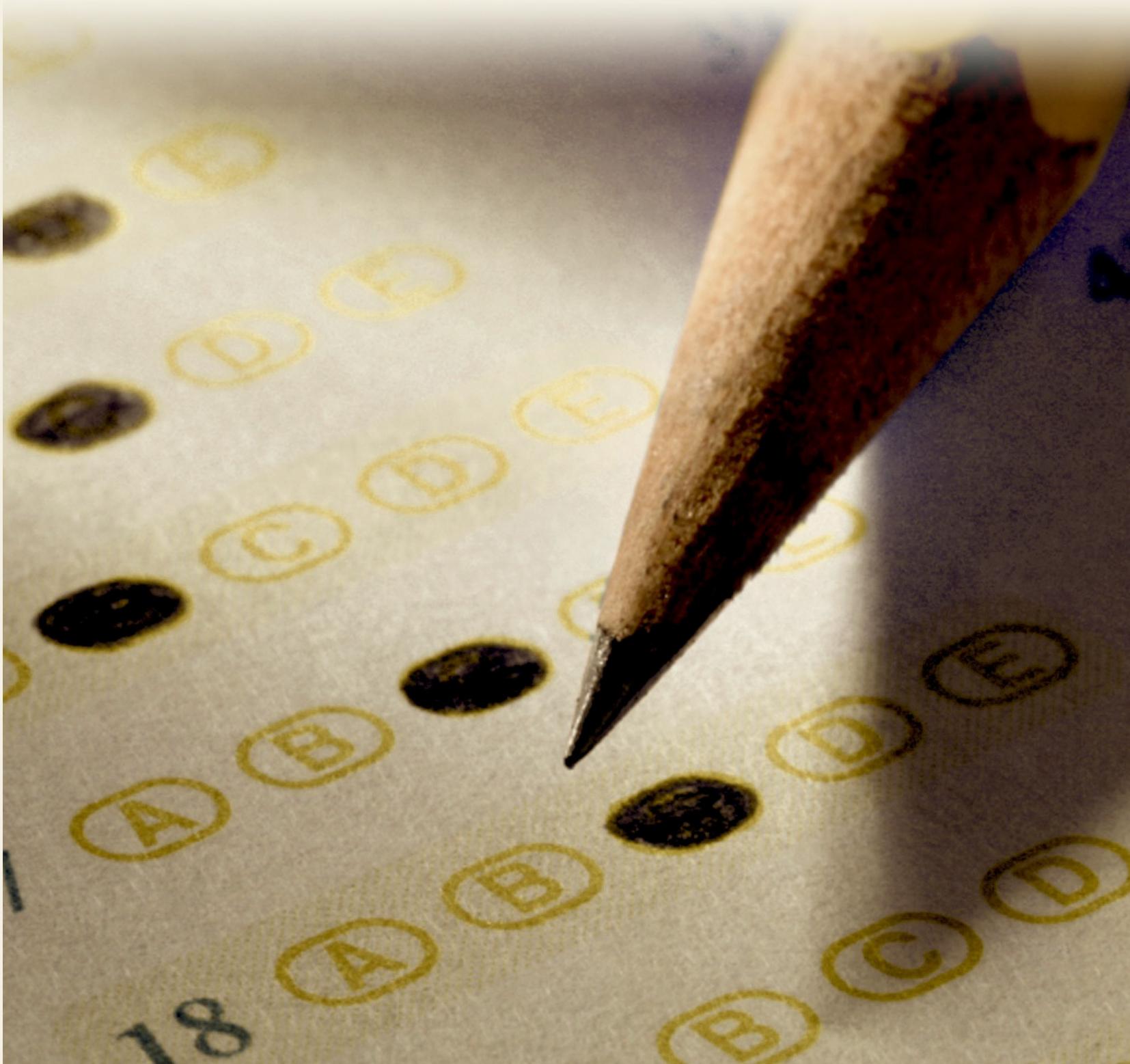
- 4th grade MPCP students on average scored 4 to 13 scaled score points below the average reading, math and science scores of MPS FRL 4th graders;
- 8th grade MPCP students performed better than MPS FRL students in reading and science, by 7 and 3 scaled score points respectively, but below the average scores of MPS FRL students in math by 7 points;
- Similarly, 10th grade MPCP students performed better than MPS FRL students in reading and science, by 6 and 3 scaled score points respectively, but below the average scores of MPS FRL students in math by 4 points;
- Black-White and Latino-White achievement gaps are larger in the MPCP than among FRL students in MPS;
- Of the 76 very low performances¹ by school, grade-level, and subject in 2010-11, a total of 35 were from MPCP while 41 were from MPS;
- WKCE proficiency rates tend to be higher for MPCP students than MPS students in reading and science, and in the 8th and 10th grades, but lower for MPCP students than MPS students in math and in 4th grade.

1 “Very low performance” is defined as below 400 scaled score points in 4th grade math and reading and below 450 scaled score points in 8th and 10th grade math and reading.

Our results differ slightly from the MPCP test score comparisons released by the Wisconsin Department of Public Instruction (DPI) on March 29, 2011, for two reasons. First, DPI was required by law to include non-testers in the denominator of their proficiency rate calculations, basically treating every non-tester as non-proficient when their actual proficiency was unknown. Since more MPCP students (3%) than MPS students (1%) opted out of testing, leaving non-testers in the denominator for both groups biased DPI's proficiency rate comparison against the MPCP by about 1 full percentage point. Second, the MPS accountability database provided to us by MPS differs slightly from the one used by DPI, resulting in differences of .1 to .4 percentage points in the proficiency rate calculations for MPS FRL students that serve as our comparison group. As a result of these two differences, our comparison of the 2010 proficiency rates for all grades combined shows that the MPCP rate was higher than the MPS FRL rate in reading by 0.7 percentage points (DPI reported the MPCP rate was lower by 0.1 percentage points) but lower in math by 8.4 percentage points (DPI reported it was lower by 9.5 percentage points).

Readers should be cautious when judging the relative success of the MPCP or MPS based upon these rough descriptive comparisons. Any differences observed between the test scores of MPCP and MPS FRL students are open to varying interpretations. For example, the higher scores observed for MPS FRL over MPCP students in the 4th grade could be attributed to higher natural ability among remaining MPS students than those who have left to participate in the MPCP. It may be that MPCP students “catch up to” their MPS peers in most subjects by 8th grade either because the MPCP schools are outperforming MPS or because students that perform poorly in the MPCP tend to switch to MPS. The point is that this report describes the test scores of students in the two sectors, plain and simple. Any reliable determination of the effectiveness of a school choice program like the MPCP can only come from a rigorous experimental or longitudinal study that follows a representative group of choice students over time and compares their achievement gains to those of a comparable and consistent set of public school students. For such an evaluation we refer readers to the MPCP Longitudinal Educational Growth Study (LEGS) also being conducted by the SCDP.

This report and its companion reports are the fifth and final set in a series of annual reports on the Milwaukee Parental Choice Program (MPCP) conducted by the School Choice Demonstration Project according to Wisconsin state law. This research project has been funded by a diverse set of philanthropies including the Annie E. Casey, Joyce, Kern Family, Robertson, and Walton Family Foundations. We thank them for their generous support and acknowledge that the actual content of this report is solely the responsibility of the authors and does not necessarily reflect any official positions of the various funding organizations or the University of Arkansas.



Introduction

The Milwaukee Parental Choice Program (MPCP) is the nation's oldest and largest urban school choice program, offering private-school scholarships to low-income students in the city of Milwaukee since 1990. In the early years of the program, voucher schools were not required to test their students, though many of them did so using nationally normed standardized tests. That changed on March 10, 2006, when Wisconsin Governor Jim Doyle signed Wisconsin Act 125 into law. The Act required participating private schools to administer either the state test, the Wisconsin Knowledge and Concepts Examination (WKCE), or a nationally normed test annually in reading, mathematics and science to MPCP (aka "Choice") students enrolled in 4th, 8th, and 10th grades. Beginning in 2006 and extending through 2011, the law required that the individual student results of the tests be provided to the School Choice Demonstration Project (SCDP), an independent research organization. Additionally, Act 125 required that:

The [Wisconsin] legislative audit bureau shall review and analyze the standardized test data received from the School Choice Demonstration Project. Based on its review, in 2007 and annually thereafter until 2011, the bureau shall report to the legislature under s.13.172 (2) the result of the standardized tests administered under subd.1., the scores of a representative sample of pupils participating in the program under ss. 118.30 and 121.02 (1) (r), and scores of a comparable group of pupils enrolled in the school district operating under this chapter on the tests under ss 118.30 and 121.02 (1) (r).¹

An important change became effective starting in the 2010-11 school year. 2009 Wisconsin Act 28 requires MPCP schools to administer the state test, the Wisconsin Knowledge and Concepts Examinations (WKCE) in reading, mathematics and science to all participating pupils in the same grades as public school students tested under Title 1 of the federal No Child Left Behind Act. Schools were given the option to continue to administer additional nationally normed tests if they wished. MPCP schools remain under obligation to provide the test scores of all standardized tests administered to their students to the School Choice Demonstration Project through the end of the 2010-11 academic year.

This report describes the results of student testing conducted by MPCP schools during the 2010-11 academic year. Participating MPCP schools sent the WKCE scores from their test administration to the Department of Public Instruction, which shared the resulting scores with the School Choice Demonstration Project in the

¹ WI Act 125, Sec. 8, 119.23 (7) (e), 2.

spring of 2011. Participating schools that opted to continue administering additional nationally normed tests reported those results directly to the SCDP, with most of them arriving in the summer of 2011. The SCDP staff carefully entered these scores into a single database and delivered the data to the Legislative Audit Bureau on December 16, 2011.²

A relatively small and unrepresentative number of schools opted to continue administering additional nationally normed tests such as the Terra Nova or the Iowa Test of Basic Skills (ITBS) (Table 1).³ These types of tests measure performance by including questions meant to produce a full range of scores (i.e. very easy questions ranging to very difficult questions in order to separate the highest and lowest performing students), and performance is gauged relative to a large national sample of students. By contrast, the Wisconsin Knowledge and Concepts Examination is a criterion-referenced, standardized test designed to measure a student's performance with respect to Wisconsin state academic standards. The WKCE must be administered by all public and some private schools in Wisconsin, but is not used outside of this state; therefore, no national distribution exists to allow a direct performance comparison with nationally normed tests such as the ITBS or Terra Nova. Even though the producers of both norm- and criterion-referenced tests claim that the assessments cover the same general subject domain, students likely exhibit different patterns of proficiency on the two types of tests due to differences in content, difficulty, and framework.

Given the undersized and unrepresentative sample of students taking additional, norm-referenced tests compared to the complete sample of students taking the WKCE, and the difficulty in comparing scores from norm-referenced and criterion-referenced assessments, this report focuses solely on the WKCE results for its analysis. We report the performance of MPCP students and schools compared with student- and school-level WKCE test scores for Milwaukee Public School (MPS) students who participate in the federal free and reduced-price lunch (FRL) program.⁴

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- 2 The majority of MPCP schools administered the norm-referenced, standardized tests late in spring 2011, with some administering in the fall of 2010. The companies that produce the tests require several months to score them and send the test results to the schools. Since most schools operate with a minimum staff over the summer, in some cases the test results were not compiled and sent to the SCDP until late summer 2011. The test score database was entered and checked for errors between the date of receipt of test scores and the date on which test scores were received by the LAB.
 - 3 This group of 39 schools is not representative of the MPCP as a whole. For instance, 59% of them are Catholic schools and 80% serve the elementary and middle grades.
 - 4 As a mechanism for comparing MPCP and MPS students, eligibility for the federal lunch program is limited in two ways. First, the family income ceiling for eligibility for the lunch program is 185 percent of the poverty line, which is slightly higher than the income ceiling of 175 percent of poverty for initial eligibility for the MPCP but somewhat below the income ceiling of 220 percent of poverty for renewal of MPCP eligibility. Second, many students who are income eligible for the federal lunch program choose not to participate. The rate of non-participation tends to increase steadily as students move from the lower grades to the higher grades. Although federal lunch program participation is an imperfect measure of family disadvantage, it was the best criterion available to generate approximate comparisons for this particular element of the evaluation. For this and other reasons described in this report, readers are cautioned against drawing any strong conclusions about the relative performance of MPCP and MPS students from the descriptive comparisons provided here.

Table 1: Types of Tests Taken by MPCP Schools and Students

	Schools		Students	
	Number	Percentage	Number	Percentage
WKCE Only	63	61.8%	3,838	36.0%
Additional Nationally Normed Tests¹	39	38.2%	6,819	64.0%
Total	102	100.0%	10,657	100.0%

The scores received from the MPCP schools are summarized in two results sections below. The first section describes the aggregate student-level scores for the groups of all MPCP students who took the WKCE in each of the tested grades. The second section presents the distribution of MPCP test scores, by grade and subject matter, averaged at the school level.

Although school-level test scores are presented in the second results section, individual schools are not identified by name. In some cases, less than 10 students at an individual school were in tested grades. Connecting any individual MPCP school explicitly to information about its student test scores could enable some readers to determine or at least estimate the performance of some individual participants in the study, in violation of the assurances of confidentiality that are required when conducting such research.⁵ The preservation of the anonymity of participants in educational evaluations is so important that the federal statute establishing the evaluation division of the U.S. Department of Education expressly prohibits the naming of individual students, parents, or schools in any of its reports.⁶ Because state law requires the affected MPCP schools to administer tests and submit scores to the SCDP, we do mention by name in this report the schools that did and did not perform those required actions (Appendix A). Because the information submitted by the schools is designed to facilitate an education evaluation, however, any subsequent presentation of the data provided by schools and students must remain anonymous.⁷

5 As with all academic research with human participants, the SCDP research team had to gain approval of an extensive protocol for protecting the anonymity of participants and the confidentiality of the information that they provide before research on the MPCP could begin. Approvals of our research protocols, which prohibit us from associating any data with named individuals or schools, were obtained from the Institutional Review Boards for Human Subjects Research at the University of Arkansas, the University of Wisconsin, the University of Kentucky, and Westat.

6 “The Director shall ensure that all individually identifiable information about students, their academic achievements, their families, and information with respect to individual schools, shall remain confidential...” See Education Sciences Reform Act of 2002, 20 U.S.C., 1232g, 1232h.

7 Many schools in the MPCP provide school-level information by school name voluntarily to parents and organizations to facilitate the school choice process. In Milwaukee and in other major cities around the country, the organization Great Schools Dot Net is spearheading efforts to consolidate such information into comprehensive school choice guides called “My School Chooser”. Because such efforts are voluntary and are not part of a research evaluation, the prohibition against connecting descriptive information to named schools does not apply to such school choice guides. Copies of the “Milwaukee School Chooser” are available at <http://www.greatschools.net/geo/landing/milwaukee.page>

The MPCP Annual School Testing Summary report has important strengths and limitations. The main strength of the report is its ability to provide a data-rich snapshot of the current academic performance of a large number of students from nearly all of the schools participating in the MPCP. Such information is informative to policymakers and stakeholders.

There are three primary limitations to this report. First, students are not required to test in consecutive grades, so we cannot use these data to examine year-over-year changes in individual test scores. Differences in test score averages between the previous year's report and the current report reflect the achievement of different cohorts of students.

Second, the comparison of MPCP and MPS FRL students is not ideal. Eligibility for the federal lunch program is limited in two ways. The family income ceiling for eligibility for the lunch program is 185 percent of the poverty line, which is slightly higher than the income ceiling of 175 percent of poverty for initial eligibility for the MPCP but somewhat below the income ceiling of 220 percent of poverty for renewal of MPCP eligibility. Moreover, many students who are income eligible for the federal lunch program choose not to participate. The rate of non-participation tends to increase steadily as students move from the lower grades to the higher grades. Although federal lunch program participation is an imperfect measure of family disadvantage, it was the best criterion available to generate approximate comparisons for this particular element of the evaluation.

The third shortcoming of this report is the fact that the performance of the two groups we compare cannot be considered a reflection of the effectiveness of either the MPCP or the MPS, as the voluntary movement of students into and out of the two groups precludes a strict scientific comparison. Altogether, these data show us how a large group of MPCP students is performing academically, but tell us nothing with certainty about what has caused them to perform at that level. Since many factors, including the backgrounds and home lives of students as well as the quality of their educational experiences likely influence their performance on standardized tests at a given point in time, it would be a mistake for readers to draw conclusions concerning the effectiveness of the MPCP based on these or any other annual descriptive statistics. At present, though this report offers a thorough description of MPCP student achievement, it can show neither progress in the learning of individual students, nor whether the MPCP as a program is more or less effective at educating students than MPS.

The Longitudinal Educational Growth Study (LEGS), also being conducted by the SCDP, overcomes some of the limitations of this report. By tracking student achievement longitudinally, rather than giving a series of cross-sectional snapshots of achievement, the report is better able to assess the effect over time of the MPCP on individual student achievement growth. It contains a comparison of the achievement gains over time of a representative sample of MPCP students relative to a matched set of peers in MPS-run traditional public and public charter schools. It tracks the performance of the same set of MPCP and MPS students as they progress through their education. This report, by contrast, examines a different set of MPCP students each year at fixed points in their educational experience. It is not a growth or value-added comparison against peers in MPS or any other group. Readers who are interested in student performance differences that can be reasonably attributed to the influence of the MPCP program are advised to follow the progress of the MPCP Longitudinal Educational Growth Study.

Process for Obtaining MPCP Test Scores

The School Choice Demonstration Project has performed an extensive set of duties over the past five years to make this report possible. For the four previous annual testing summary reports, schools were notified, well in advance of testing deadlines, of the requirement that they submit test scores to the SCDP. After successive reminders, in previous years the SCDP has achieved a response rate of more than 97 percent of affected MPCP schools submitting acceptable test scores.

Starting with the 2010-11 academic year, 2009 Wisconsin Act 28 requires all MPCP schools to administer the Wisconsin Knowledge and Concepts Examinations (WKCE) in reading and mathematics to all MPCP (aka “choice”) students in grades 3-8 and 10. Additionally, all MPCP schools are required to administer the WKCE in the added disciplines of science, language arts, and social studies to MPCP students in grades 4, 8, and 10 (see October 2010 letter, Appendix B). Copies of these test scores were provided by the Wisconsin Department of Public Instruction, with the permission of each MPCP school, to the School Choice Demonstration Project on April 11, 2011.

In accordance with 2005 Wisconsin Act 125, student level test scores from any standardized testing administered by MPCP schools must be shared with the SCDP until the end of the 2010-11 academic year. As a result, scores from any standardized tests that the MPCP schools administered during the 2010-11 school year, beyond the newly mandated WKCE testing, were also shared with the SCDP. To identify which schools administered supplemental tests, the SCDP added the following questions in the 2010-11 MPCP principals’ survey:

Please check one of the following:

- Our school administered only the mandated WKCE tests during the 2010-11 school year.
- Our school administered other standardized tests (e.g. Terra Nova, SAT-10) in addition to the mandated WKCE tests during the 2010-11 school year.

On May 25, 2011, all schools that indicated that they had administered supplemental standardized tests, in addition to the WKCE, were sent pre-labeled FedEx mailing materials to use when submitting scores to the SCDP (see the Appendix). School leaders were given a test score submission deadline of July 31st, 2011. Two reminder letters, along with additional FedEx mailing materials were sent to schools on July 6th and September 13th 2011. By October 25, 2011, 40 of the 44 schools (91% response rate) that administered supplemental tests had provided student level test scores to the SCDP.

Scaled Score Results at the Student Level

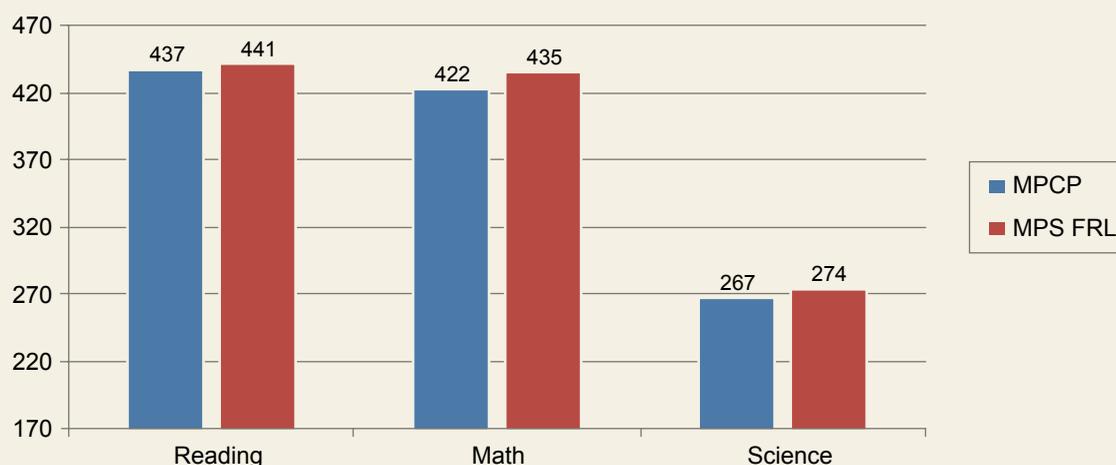
The fact that all MPCP and MPS students took the criterion-referenced WKCE in 2010-11 allows us to present those results for comparison. MPS free and reduced-price lunch (FRL) students are likely to be more similar to MPCP students than any national norming population, since both groups of students live in the same city and qualify as low income. Still, because this approximate match is not very precise, readers are cautioned against drawing conclusions about the effects of the MPCP program from this snapshot comparison.

Table 2 illustrates the summary statistics for 4th and 8th grade MPCP students who took the WKCE in the fall of 2008 through 2010 as well as the statistics for similar MPS FRL students. In previous years, the number of 10th graders taking the WKCE was too small to make aggregate statistics about that subgroup sufficiently reliable to present. This is reflected in the table below.

Table 2: 2008-2011 WKCE Summary Statistics for Scaled Scores Student Level

	Reading						Math						Science	
	MPCP			MPS FRL			MPCP			MPS FRL			MPCP	MPS FRL
4th Grade	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	10-11	10-11
Mean	435	423	437	442	437	441	412	410	422	429	437	435	267	274
N	262	332	1,627	4,548	4,606	4,559	262	332	1,622	4,611	4,635	4,577	1,612	4,566
Std. Dev.	43	57	48	47	53	49	51	45	47	47	48	48	30	28
8th Grade	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	10-11	10-11
Mean	496	493	493	483	484	486	503	496	488	500	484	495	367	364
N	318	372	1,369	4,151	3,950	3,876	318	370	1,371	4,234	3,971	3,888	1,355	3,862
Std. Dev.	52	48	51	54	52	54	50	53	58	51	52	57	37	39
10th Grade	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	10-11	10-11
Mean	n/a	n/a	484	n/a	n/a	478	n/a	n/a	509	n/a	n/a	513	407	404
N	n/a	n/a	966	n/a	n/a	3,821	n/a	n/a	961	n/a	n/a	3,814	945	3,743
Std. Dev.	n/a	n/a	55	n/a	n/a	59	n/a	n/a	44	n/a	n/a	44	43	47

Participation rates in WKCE testing rose significantly in 2010-11 as this was the first year that all MPCP schools were required to administer the state test. Figures 1 through 7 show scaled score differences between the comparison groups.

Figure 1: Grade 4 WKCE Scaled Scores for MPCP and MPS FRL Students⁸

The Figure 1 results show 4th graders in the MPCP performing 4 to 13 scaled score points below the average levels of MPS FRL 4th graders on the WKCE. This achievement difference is equal to 0.08 to 0.27 of a standard deviation of the MPS test score distribution. These differences are large enough to be considered statistically significant, such that the differences observed are highly unlikely to be due to chance. These gaps represent important differences in the performance of fourth grade students between sectors but, as cautioned before, should not necessarily be considered a reflection of the relative effectiveness of the MPCP or the MPS.

Table 3 compares 4th grade test scores by student race/ethnicity. In 4th grade reading, the average MPCP Black student performs 7 scale score points below the average MPS FRL Black student. Similarly in 4th grade math, the average MPCP Black student performs 15 scale score points below the average MPS FRL Black student. These differences are equal to 0.14 and 0.31 of a standard deviation respectively and both are large enough to be considered statistically significant. In 4th grade math, the results show the average MPCP Hispanic student performs 12 scale score points below the average MPS FRL Hispanic student, equal to 0.27 of a standard deviation of the MPS test score distribution. This difference is large enough to be considered statistically significant. Hispanic students in 4th grade in the MPCP performed in reading at levels comparable to 4th grade Hispanic FRL students in MPS. All other racial/ethnic groups of 4th graders examined had comparable test scores in both reading and math regardless of school sector.

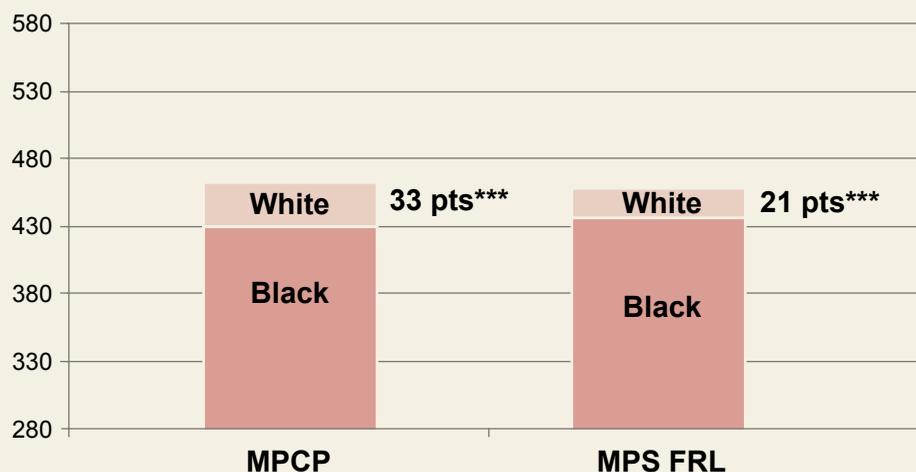
⁸ Figures 1 and 2 have been zeroed to the minimum possible scale score for that grade on the vertical axis.

Table 3: WKCE Scaled Score Summary Statistics in Reading and Math, by Race/Ethnicity, 4th Grade

		Reading			Math		
		MPCP	MPS FRL	Difference	MPCP	MPS FRL	Difference
4th Grade							
White	Mean	462	457	5 (.10 σ)	448	450	-2 (-.04 σ)
	N	159	472		158	476	
	Std. Dev.	46	48		43	48	
Black	Mean	429	436	-7*** (-.14 σ)	411	426	-15*** (-.31 σ)
	N	888	2,619		884	2,618	
	Std. Dev.	49	50		48	49	
Hispanic	Mean	446	445	1 (.02 σ)	432	444	-12*** (-.27 σ)
	N	472	1,225		473	1,238	
	Std. Dev.	41	47		37	44	
Asian /Pacific Islander	Mean	457	449	8 (.19 σ)	453	449	4 (.10 σ)
	N	36	213		36	215	
	Std. Dev.	42	43		39	42	
American Indian/Alaska Native	Mean	452	458	-6 (-.11 σ)	440	445	-5 (-.11 σ)
	N	17	30		17	30	
	Std. Dev.	44	56		34	47	
Total	Mean	437	441	-4*** (-.08 σ)	422	435	-13*** (-.27 σ)
	N	1,627	4,559		1,622	4,577	
	Std. Dev.	48	49		47	48	

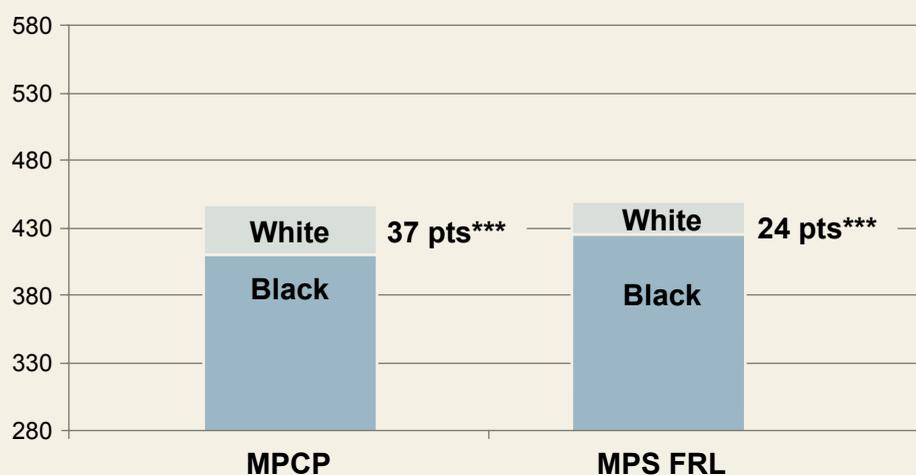
Note: ***p<0.01, **p<0.05, *p<0.1

While Table 3 compares test scores between sectors, it is also possible to look at racial gaps within sectors. Figure 2 compares the reading scores of Black and White students within each sector. The average White student scores 33 points above the average Black student in the MPCP. This achievement difference is equal to 0.69 of a standard deviation. The average White student scores 21 points above the average Black student in MPS FRL. This achievement difference is equal to 0.43 of a standard deviation. These differences are large enough to be considered statistically significant.

Figure 2: Black-White Within-Sector Differences in WKCE Reading Scaled Scores, 4th Grade

Note: Figure has been zeroed to the minimum possible scale score for that grade on the vertical axis.

Figure 3 compares the math scores of Black and White students within each sector. The average White student scores 37 points above the average Black student in the MPCP. This achievement difference is equal to 0.79 of a standard deviation. The average White student scores 24 points above the average Black student in MPS FRL. This achievement difference is equal to 0.5 of a standard deviation. These differences are large enough to be considered statistically significant.

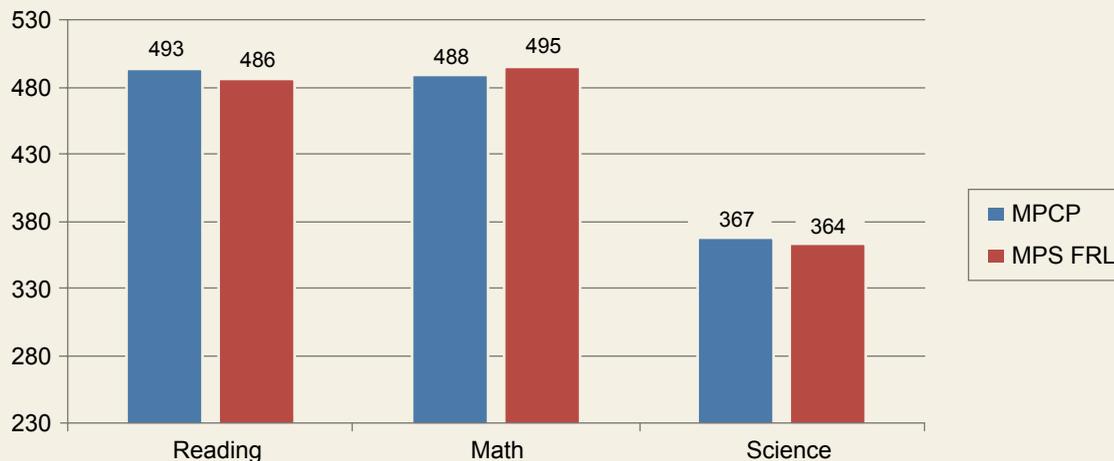
Figure 3: Black-White Within-Sector Differences in WKCE Math Scaled Scores, 4th Grade

Note: Figure has been zeroed to the minimum possible scale score for that grade on the vertical axis.

The Figure 4 results show a different pattern in 8th grade from that of the 4th grade scores. Scaled score averages for MPCP students in 8th grade on the WKCE are higher in reading by 7 scaled score points than those of MPS FRL 8th grade students. This achievement difference is equivalent to 0.13 of a standard deviation of the MPS

test score distribution. In 8th grade math, scaled score averages for MPCP students on the WKCE are lower by 7 scaled score points. This achievement difference is equivalent to 0.12 of a standard deviation of the MPS test score distribution. In 8th grade science, scaled score averages for MPCP students are 3 points higher than those of MPS FRL students, a difference equivalent to 0.08 of a standard deviation. These differences are all large enough to be considered statistically significant.

Figure 4: Grade 8 WKCE Scaled Scores for MPCP and MPS FRL Students



The differences in test score patterns for the 4th and 8th grade comparisons is similar in some respects to those observed in previous reports. In the 2007-08 testing report, MPCP 4th graders taking the WKCE scored lower on average than MPS FRL students in both reading and math. In the 8th grade, MPCP students scored higher than MPS FRL students in both reading and math. The same pattern was observed in 2008-09 and again in 2009-10. These differences remained similar across years despite the fact that each report examined a different cohort of students than the previous report had examined in both 4th and 8th grades. Causes of this consistent variation in previous years are uncertain, though the persistence of similar patterns across years suggests that the variation might not be random. This is the first year that MPCP students in the 8th grade did not score higher on average than their MPS peers in 8th grade math.

Table 4 compares 8th grade reading and math scores by student race/ethnicity. In 8th grade reading, the average MPCP White student performs 20 scale score points above the average MPS FRL White student. Similarly in 8th grade math, the average MPCP White student performs 14 scale score points above the average MPS FRL White student. These differences are equal to 0.34 and 0.26 of a standard deviation respectively and both are large enough to be considered statistically significant.

In 8th grade reading, the average MPCP Black student performs 8 scale score points above the average MPS FRL Black student. We observe the opposite in 8th grade math, where the average MPCP Black student performs 9 scale score points below the average MPS FRL Black student. These differences are equal to 0.15 and 0.16 of a standard deviation, respectively, and are large enough to be considered statistically significant.

In 8th grade math, the average MPCP Hispanic student scores 10 scale score points below the average MPS FRL Hispanic student, equal to 0.20 of a standard deviation. Significant differences are also observed between MPCP and MPS FRL 8th grade Asian/Pacific Islander students in math, with the average MPCP Asian/Pacific

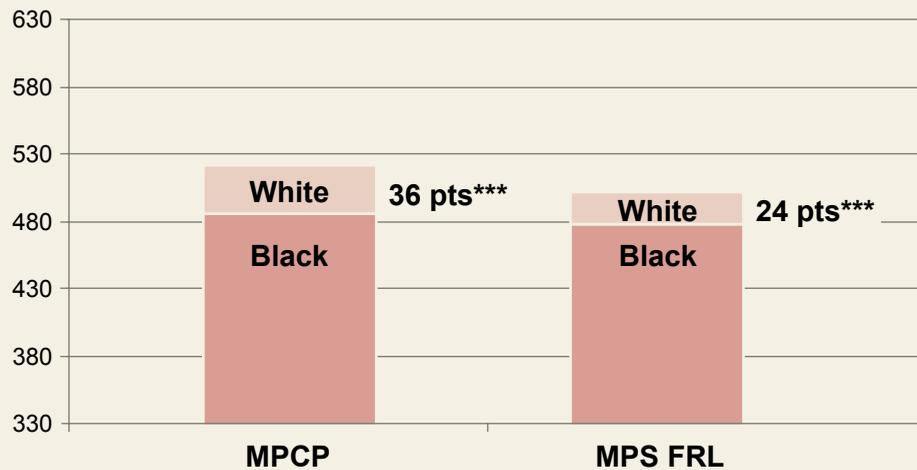
Islander student performing 21 points below the average MPS FRL Asian/Pacific Islander student, equal to 0.37 of a standard deviation. Finally, a difference is also observed between MPCP and MPS FRL American Indian/Alaska Native students, but this difference is not significant at conventional levels.

Table 4: WKCE Scaled Score Summary Statistics in Reading and Math, by Race/Ethnicity, 8th Grade

		Reading			Math		
		MPCP	MPS FRL	Difference	MPCP	MPS FRL	Difference
8th Grade							
White	Mean	522	502	20*** (.34 σ)	529	515	14*** (.26 σ)
	N	124	351		124	350	
	Std. Dev.	47	58		49	54	
Black	Mean	486	478	8*** (.15 σ)	474	483	-9*** (-.16 σ)
	N	788	2391		790	2,389	
	Std. Dev.	52	53		58	56	
Hispanic	Mean	498	497	1 (.02 σ)	502	512	-10*** (-.20 σ)
	N	395	897		395	907	
	Std. Dev.	46	52		51	50	
Asian /Pacific Islander	Mean	492	499	-7 (-.13 σ)	499	520	-21** (-.37 σ)
	N	38	211		38	216	
	Std. Dev.	60	52		66	57	
American Indian/Alaska Native	Mean	482	518	-36* (-.70 σ)	485	517	-32 (-.64 σ)
	N	8	26		8	26	
	Std. Dev.	60	51		73	50	
Total	Mean	493	486	7*** (.13 σ)	488	495	-7*** (-.12 σ)
	N	1,369	3,876		1,371	3,888	
	Std. Dev.	51	54		58	57	

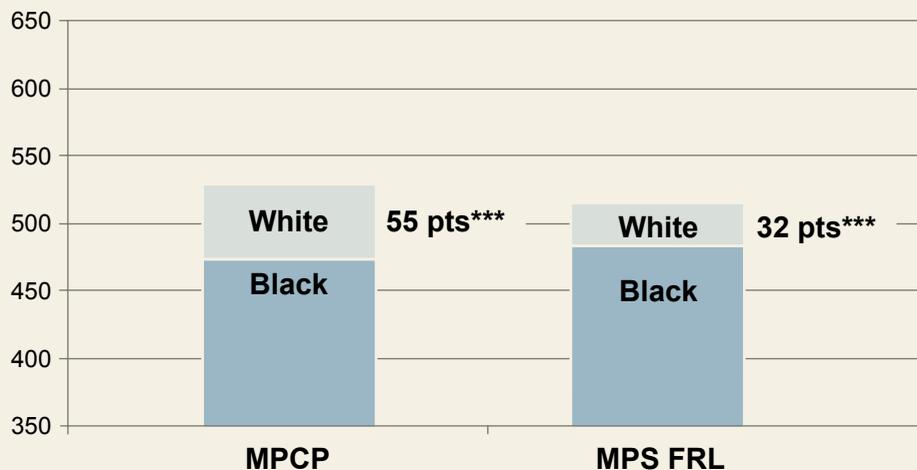
Note: ***p<0.01, **p<0.05, *p<0.1

While Table 4 compares test scores between sectors in 8th grade, Figures 5 and 6 look at racial gaps within sectors at the 8th grade level. Figure 5 compares the reading scores of Black and White students within each sector. The average White student scores 36 points above the average Black student in the MPCP. This achievement difference is equal to 0.71 of a standard deviation. The average White student scores 24 points above the average Black student in MPS FRL. This achievement difference is equal to 0.44 of a standard deviation. These differences are large enough to be considered statistically significant.

Figure 5: Black-White Within-Sector Differences in WKCE Reading Scaled Scores, 8th Grade

Note: Figure has been zeroed to the minimum possible scale score for that grade on the vertical axis.

Figure 6 compares the math scores of Black and White students within each sector at the 8th grade level. The average White student scores 55 points above the average Black student in the MPCP. This achievement difference is equal to 0.95 of a standard deviation. This is the largest within-sector difference between Black and White students observed at either the 4th or 8th grade level. In MPS FRL, the average White student scores 32 points above the average Black student. This achievement difference is equal to 0.56 of a standard deviation. These differences are all large enough to be considered statistically significant.

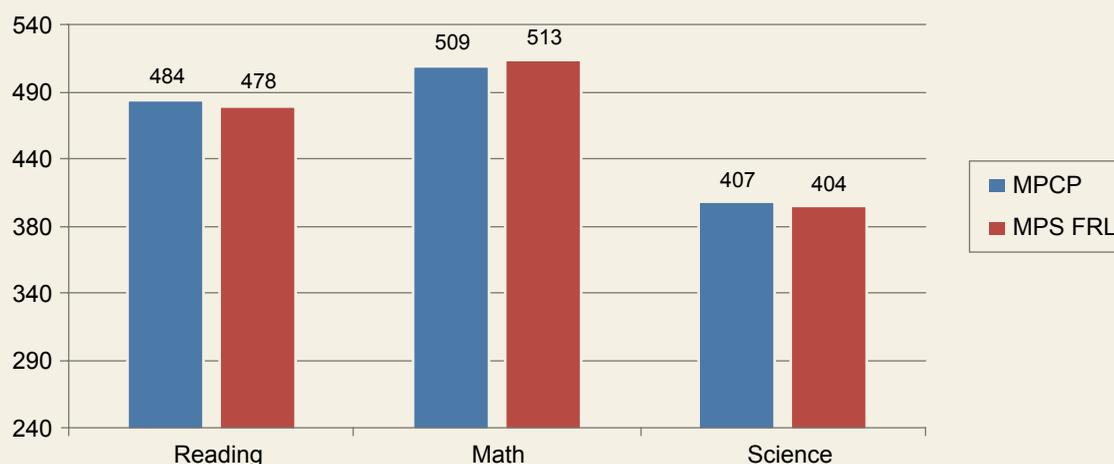
Figure 6: Black-White Within-Sector Differences in WKCE Math Scaled Scores, 8th Grade

Note: Figure has been zeroed to the minimum possible scale score for that grade on the vertical axis.

In previous years, there were insufficient numbers of 10th graders in MPCP schools taking the WKCE to generate reliable comparisons. For example, in 2009-10, only 80 MPCP 10th graders took the WKCE, making aggregate statistics about that small subgroup insufficiently reliable to present. In contrast, in the 2010-11 school year, all 10th graders in the MPCP were obliged to take the WKCE and nearly 1,000 of them did so. Mean test scores for this group in reading, math, and science are presented in Figure 7.

The 10th grade scores in Figure 7 show the same pattern as the 8th grade scores. Scaled score averages for MPCP students in 10th grade on the WKCE are higher in both reading and science, by 6 and 3 scaled score points respectively, than those of MPS FRL 10th grade students. This achievement difference at the 10th grade level is equal to 0.10 and 0.06 of a standard deviation. These differences are large enough to be considered statistically significant. In math, MPCP students scored 4 points below the average level of MPS FRL 10th graders, an achievement difference equal to 0.09 of a standard deviation of the MPS test score distribution. This difference is large enough to be considered statistically significant.

Figure 7: Grade 10 WKCE Scaled Scores for MPCP and MPS FRL Students



Although the number of 10th grade WKCE test scores in the MPCP this year was sufficient to compare with MPS FRL students, it was not sufficiently large to support a comparison of MPCP and MPS 10th graders disaggregated by race/ethnicity.

Performance Distributions at the School Level

This section describes the distribution of results of the 2010-11 school testing at the school level. Rather than aggregating all MPCP students as a single population and providing averages for that group, this section treats school-level averages for MPCP and MPS schools as the unit of analysis. The MPS school averages are limited to FRL students at each school to make them more comparable to the MPCP school-level averages limited to Choice Program students.

Table 5 presents the WKCE scaled score data aggregated to the school level. Although similar to Table 2, one can see how statistics change when test scores are distributed within schools and then averaged at the school level as opposed to aggregated across an entire program or school system. Under almost all circumstances, the

averages of subgroup averages (e.g. performance by school) will provide different results than taking the total average of the population (e.g. all testers). Still, the performance of school-level groupings of 4th grade MPCP students remains lower than the performance of school-level groupings of 4th grade MPS FRL students.

Table 5: 2008-2011 WKCE Summary Statistics for Scaled Scores School Level

	Reading						Math						Science	
	MPCP			MPS FRL			MPCP			MPS FRL			MPCP	MPS FRL
4 th Grade	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	10-11	10-11
Mean	444	432	439	444	440	442	421	409	424	439	438	435	269	274
N	20	21	78	118	115	113	20	21	78	118	115	113	78	113
Std. Dev.	46	31	27	43	21	21	44	44	26	43	19	22	17	13
8 th Grade	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	10-11	10-11
Mean	506	495	497	478	477	483	511	504	489	495	494	492	368	361
N	25	22	71	90	91	88	26	22	71	90	91	88	69	88
Std. Dev.	43	33	27	47	29	29	32	32	37	43	29	30	25	23
10 th Grade	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	08-09	09-10	10-11	10-11	10-11
Mean	n/a	n/a	477	n/a	n/a	469	n/a	n/a	505	n/a	n/a	505	402	396
N	n/a	n/a	23	n/a	n/a	56	n/a	n/a	23	n/a	n/a	56	23	56
Std. Dev.	n/a	n/a	35	n/a	n/a	32	n/a	n/a	28	n/a	n/a	23	27	23

The following 12 histograms illustrate 4th and 8th grade scores in reading, math and science at the school level. These histograms have a normal distribution overlay, depicted by the line in each graph. This normal distribution overlay is relative to the empirical data that underlay it. That means it is appropriately scaled and has the same mean and standard deviation as the data. These histograms allow for slightly more disaggregation, since the school level is the unit of analysis and not just the instrument of aggregation.

Figure 8a: 4th Grade WKCE Reading Histogram for MPCP Schools

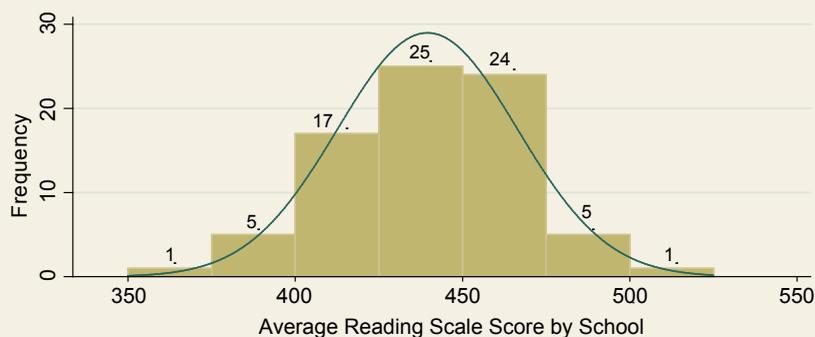


Figure 8b: 4th Grade WKCE Reading Histogram for MPS FRL

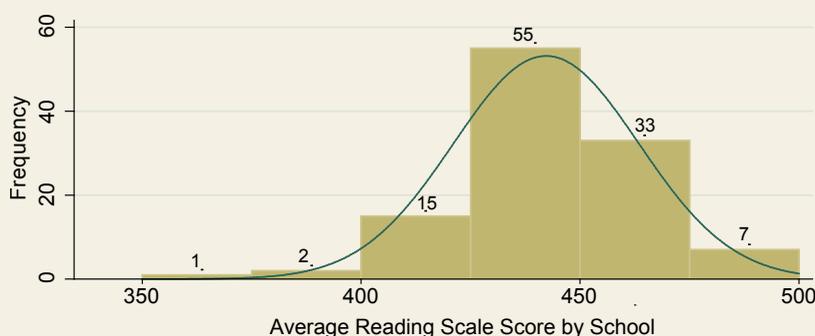


Figure 9a: 4th Grade WKCE Math Histogram for MPCP Schools

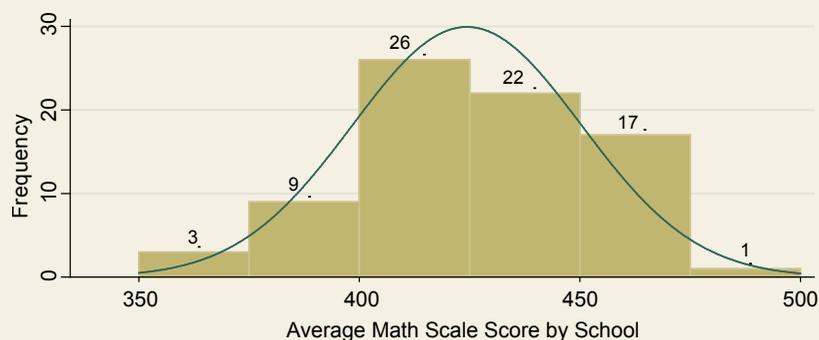
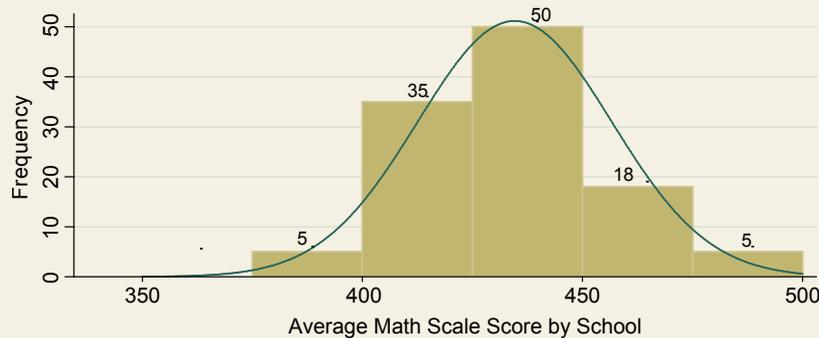


Figure 9b: 4th Grade WKCE Math Histogram for MPS FRL



Figures 8a and 8b represent 4th grade WKCE reading performance for each sector. The means of the two populations are statistically indistinguishable, implying the average school is performing at the same level in both sectors. The standard deviation of the MPCP distribution is slightly larger and its shape more closely approximates a normal distribution. The MPS distribution has what is called a “negative skew”, or thin lower tail, because in reading it has fewer very low performing 4th grade schools (only 3) compared to the MPCP (6).

The histogram of MPCP school-level math scores (Figure 9a) shows a distribution with what is known as a slight “positive skew”, meaning that the MPCP has slightly more lower performing schools in 4th grade math (12 compared to 5) and slightly fewer high performing schools (1 compared to 5). The mean of MPCP school-level scaled scores is lower than for MPS FRL (Figure 9b) by 11 scaled score points, while the standard deviation of MPCP scaled score averages is higher than that for MPS FRL students, reflecting greater variation in the school-level math performance of students in the MPCP.

In the case of 4th grade science, shown in Figures 10a and 10b, a greater proportion of FRL students in MPS schools averaged near the mean, resulting in a lower standard deviation for MPS schools than for MPCP schools. The MPCP histogram also shows a slightly lower mean than the MPS figure, by 5 scaled score points.

Figure 10a: 4th Grade WKCE Science Histogram for MPCP Schools

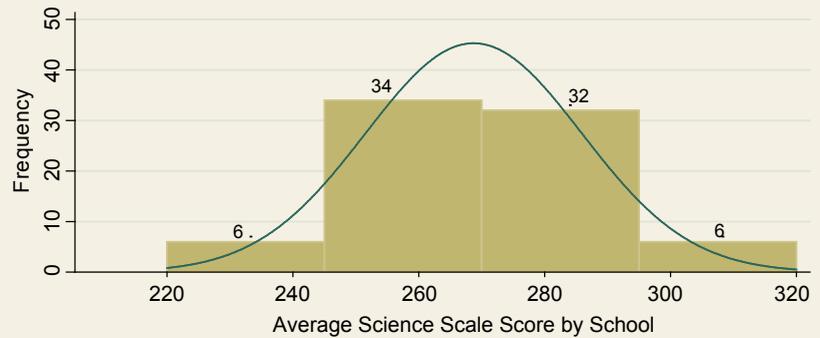


Figure 10b: 4th Grade WKCE Science Histogram for MPS FRL

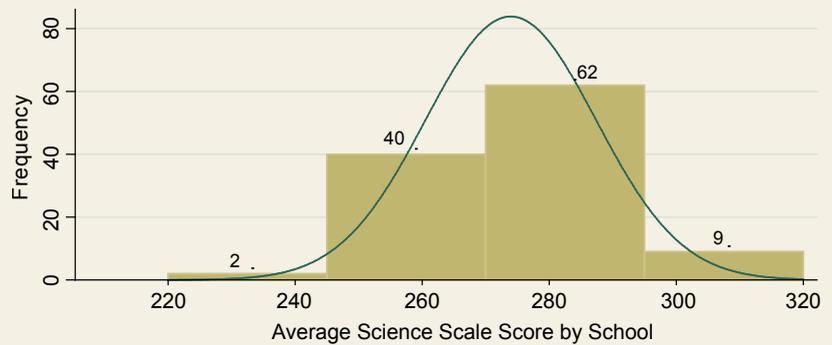


Figure 11a: 8th Grade WKCE Reading Histogram for MPCP Schools

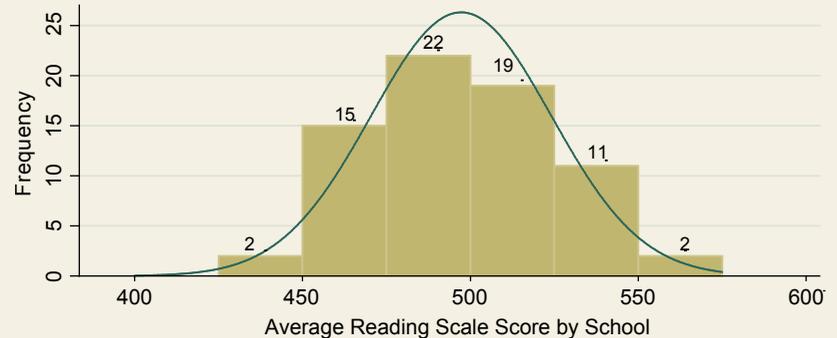
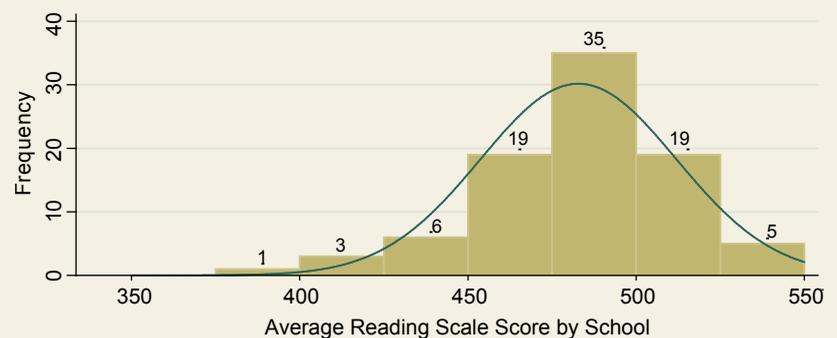


Figure 11b: 8th Grade WKCE Reading Histogram for MPS FRL



In the case of 8th grade reading, shown in Figures 11a and 11b, the standard deviation of the distributions is very similar, while the MPCP histogram shows a higher mean than the MPS figure, by 14 scaled score points, and the MPS distribution has a distinct negative skew. A total of 10 MPS schools have very low school-level 8th grade reading scores compared to only 2 MPCP schools with average scores so low.

The 8th grade math scores (Figures 12a and 12b) have the highest standard deviation difference between the two groups while the mean difference is statistically indistinguishable. We would expect this wider variation in school-level achievement among the variegated set of MPCP schools. The distribution for MPCP schools is a bimodal distribution, meaning it has two distinct peaks, one just above the average (23 schools) and one just below the average (16 schools).

Figure 12a: 8th Grade WKCE Math Histogram for MPCP Schools

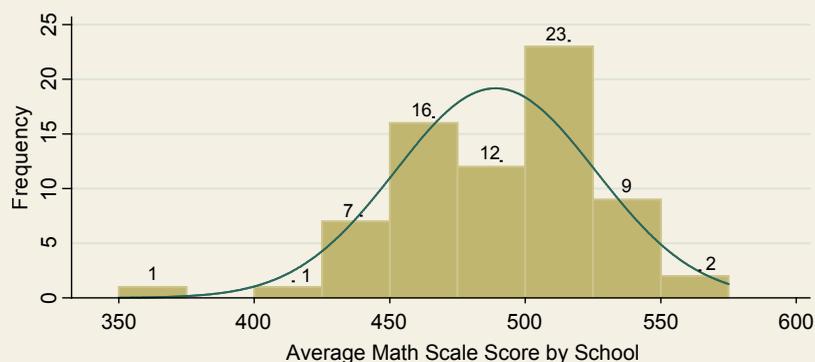


Figure 12b: 8th Grade WKCE Math Histogram for MPS FRL

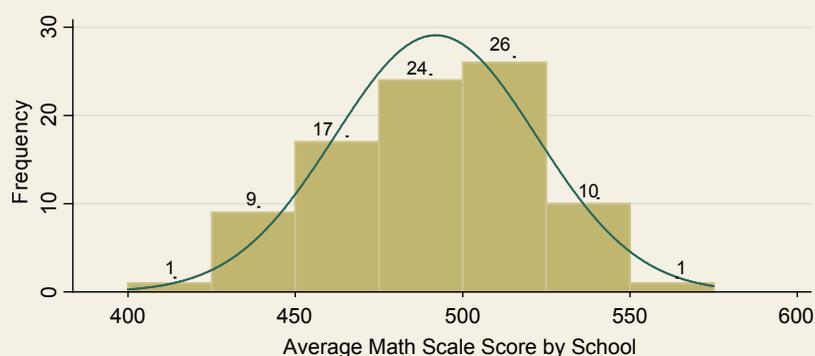


Figure 13a: 8th Grade WKCE Science Histogram for MPCP Schools

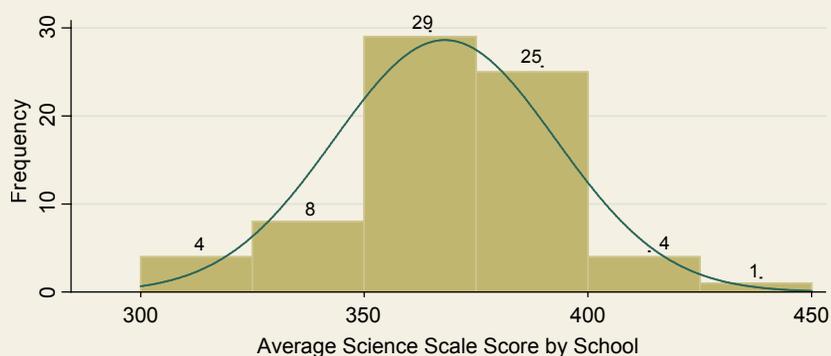
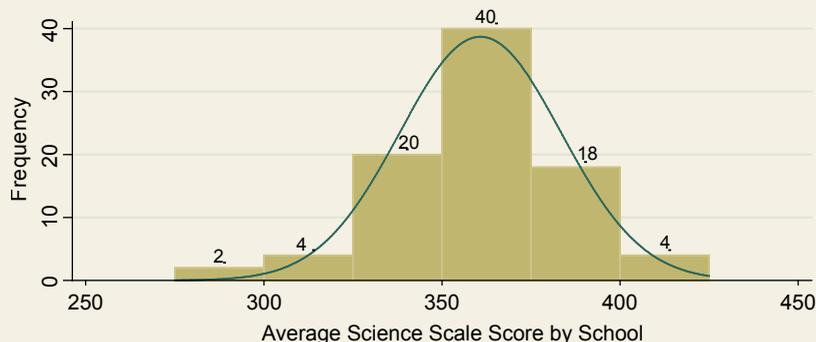


Figure 13b: 8th Grade WKCE Science Histogram for MPS FRL



The science histogram for 8th grade MPCP (Figure 13a) shows a relatively normal distribution. The MPS histogram (Figure 13b), on the other hand, displays a clear spike around the mean or “tighter” distribution with a smaller standard deviation. The school level average for MPCP schools is 7 points higher than that of MPS FRL students aggregated at the school level.

As given in Figures 14a and 14b, the means of the two populations regarding 10th grade reading are statistically indistinguishable but the MPCP group has a slightly higher standard deviation, indicating greater variation in performance. The MPCP distribution in Figure 14a is clearly affected by the outlier school that averaged relatively high scores on the reading exam while the MPS distribution is affected by a few very low-performing schools in its lower tail. With the small number of schools serving 10th grade students, particularly in the MPCP, these types of results that deviate somewhat from a normal distribution are expected.

In the case of 10th grade math (Figures 15a and 15b), we see a relatively normal distribution for each of the two groups, though the distribution of MPS schools has a negative skew caused by one very low-performing school.

Figure 14a: 10th Grade WKCE Reading Histogram for MPCP Schools

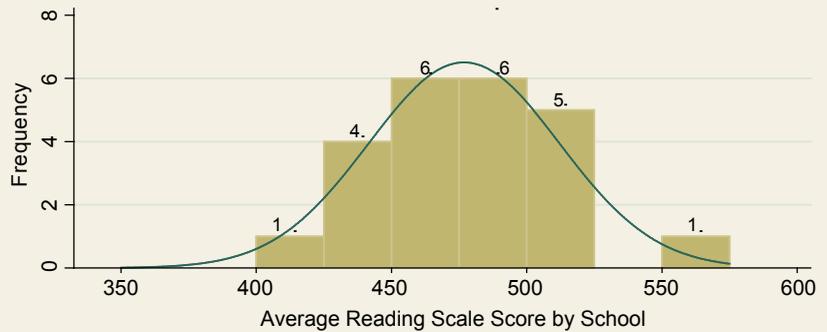


Figure 14b: 10th Grade WKCE Reading Histogram for MPS FRL

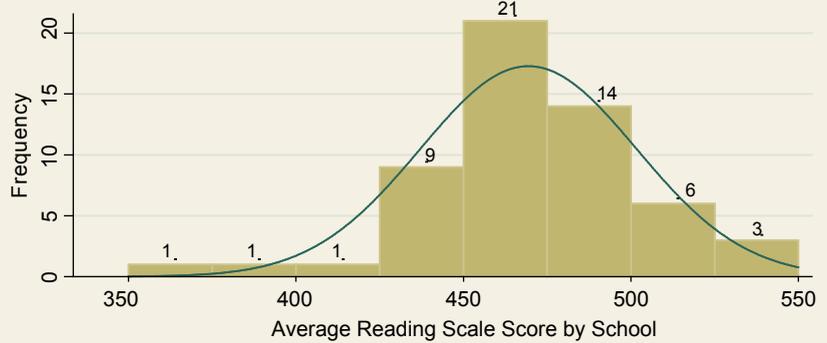


Figure 15a: 10th Grade WKCE Math Histogram for MPCP Schools

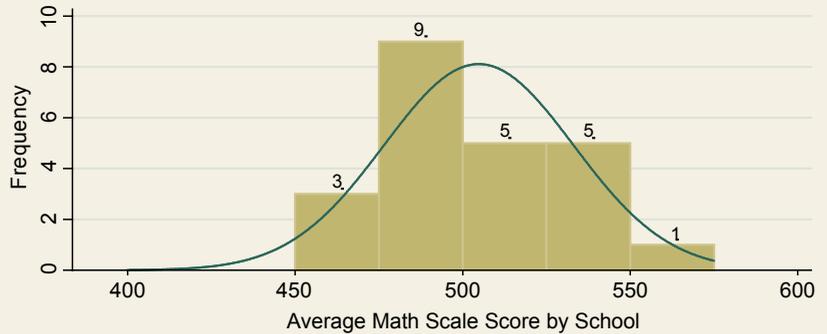
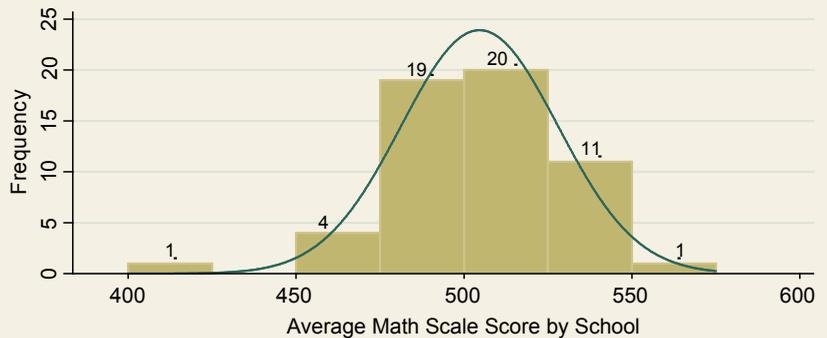


Figure 15b: 10th Grade WKCE Math Histogram for MPS FRL



The 10th grade science scores (Figures 16a and 16b) have almost identical means but the MPCP group has a slightly higher standard deviation indicating greater variation in performance. Despite one outlier in the lower tail, the MPS distribution has a clustering of schools around the mean, which likely explains the lower standard deviation.

These histograms suggest there are schools in both sectors (MPCP and MPS FRL) in which certain students are performing well above or well below the MPS FRL group average. These results suggest there is a wide range of scores in both groups. The standard deviations for the MPCP group are often higher, which is likely because of the lower number and greater diversity of schools in that group.

Recently, several media reports have emphasized the fact that low-performing schools endure in the Choice Program and recommend that the public school system of accountability be more fully applied to schools in the MPCP.⁹ While our examination of the school-level WKCE test-score data from 2010-11 confirms that some MPCP schools, in some grades and some subjects, have very-low student performance, it also demonstrates that similarly low-performing schools endure in the MPS under the public-school accountability system. In fact, of the 76 very low school-level performances in reading or math documented in our data, a majority of them (41) were produced by MPS and not MPCP schools (Table 6).

Figure 16a: 10th Grade WKCE Science Histogram for MPCP Schools

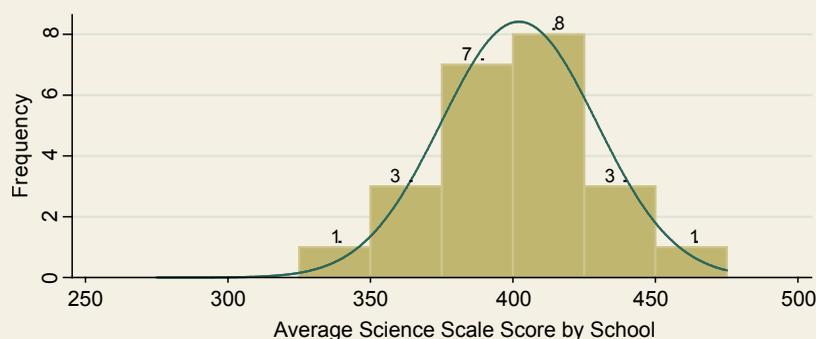


Figure 16b: 10th Grade WKCE Science Histogram for MPS FRL

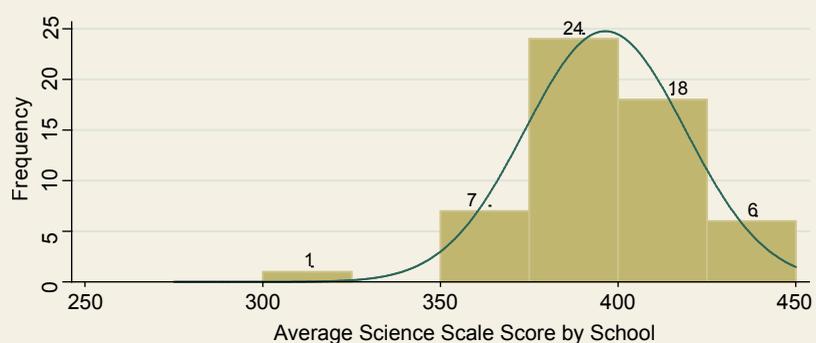


Table 6: MPCP and MPS Schools with Very Low Performance Scores by Grade-Level and Subject

Item	MPCP Schools	MPS Schools	Difference
4th Grade Reading (below 400)	6	3	3
4th Grade Math (below 400)	12	5	7
8th Grade Reading (below 450)	2	10	-8
8th Grade Math (below 450)	9	10	-1
10th Grade Reading (below 450)	5	12	-7
10th Grade Math (below 450)	1	1	0
Total Very Low-Performances	35	41	-6

Note: Counts represent specific school-level performances and not necessarily individual schools.

⁹ See Alan J. Borsuk's articles "Quality Doesn't Follow Rise in Voucher Schools" (November 19, 2011) and "Bad Schools Still Manage to Navigate the System" (December 3, 2011), both at <http://www.jsonline.com>.

Proficiency Score Results

Scaled scores are not the only way to report results from criterion referenced tests such as the WKCE. States and schools often report scores in terms of proficiency rates. This is required by the No Child Left Behind Act of 2001, the federal legislation requiring states to bring all students to “proficiency” by the 2013-14 school year. A student is considered proficient or advanced in a particular subject area if he/she receives a specific scaled score or higher. This section of the report shows the MPCP students’ results in terms of proficiency percentages. We include this section for ease of comparison with other reports presenting scores in this manner, such as those released by the Wisconsin DPI, and for clarity and ease of interpretation for audiences accustomed to seeing data presented as proficiency percentages.

Calculating Proficiency Rates

As per Wisconsin Statute 118.30 (1r) 2.3, when a parent or guardian requests that a student be excused from participating in the WKCE, this request must be honored at grades 4, 8, and 10. When considering those students excused by parent opt-out, the Wisconsin Department of Instruction (DPI) counts those students as “not proficient” for the purposes of determining Adequate Yearly Progress (AYP). Statistically, this means those non-tested students are automatically assigned a score of zero for proficiency, even though their actual proficiency is unknown, instead of being omitted from proficiency calculations. This practice is statistically unwise as it likely biases proficiency percentages downward. For the purposes of this report, students with missing data, whose parents may have chosen the opt-out option, are excluded from any analysis of proficiency percentages in an effort to avoid statistical bias in either sector.

Table 7 provides the percentage of students proficient in each grade for each subject for MPCP and the free and reduced-price lunch (FRL) students of MPS. On the 4th grade reading test 52% of MPCP 4th graders are proficient while 57% of MPS free and reduced-price lunch (FRL) students are proficient. In 4th grade math and science, MPS FRL students again exhibit higher proficiency rates than their MPCP counterparts. However, the story is different for 8th graders. In reading and science, MPCP students show a higher rate of proficiency than do MPS FRL students, with the difference in rates varying from a 5 percentage point advantage in reading to a 2 percentage point advantage in science. In math, however, proficiency rates of 8th grade MPS FRL students are 5 percentage points higher than MPCP rates. The 10th grade proficiency rates are similar between the MPCP and MPS in all subjects.

Viewing WKCE scores in terms of proficiency percentages thus presents a picture similar to that described in Table 2. MPCP students score below their MPS counterparts in 4th grade in all subjects, generally higher than MPS students in 8th grade (except for math), and about the same in 10th grade.

Table 7: Percent Proficient in Reading, Math and Science, MPCP and MPS FRL, 4th, 8th and 10th Grade

Grade	Subject	MPCP % Proficient	MPS FRL % Proficient
4th	Reading	52%	57%
	Math	38%	50%
	Science	37%	46%
8th	Reading	66%	61%
	Math	36%	41%
	Science	42%	40%
10th	Reading	37%	36%
	Math	25%	27%
	Science	29%	29%

School Level Proficiency Percentages

Aggregating the proficiency data to the school level can help us see how individual MPCP schools fare compared to the MPS FRL average. This presentation strategy demonstrates the range of proficiency rates within the MPCP sector by school, as opposed to just considering a sector average. The following 6 figures show the percent proficient in each MPCP school with an indication of the MPS average for FRL students in that particular grade and subject. The MPS FRL average remains at the student level instead of being aggregated to the school level, as this would unfairly weight schools of unequal enrollment.

In these figures the school percent proficient rates are not weighted in any way based on the number of students in the school. The minimum number of MPCP student scores needed in a grade, subject, and school was 3. As indicated by the red line in Figure 17, 57 % of MPS free and reduced-price lunch students are proficient in 4th grade reading. Thirty-six MPCP schools had percentages of reading proficiency above 57%. Figure 18 shows 4th grade math scores in the same manner. In math, 50 % of MPS FRL students scored proficient on the WKCE and 19 MPCP schools averaged a higher proficiency rate than 50%. Figure 19 displays the 26 MPCP schools that averaged above the 46% MPS FRL proficiency rate in 4th grade science.

Figure 17: 4th Grade Reading Proficiency Percentage by MPCP School

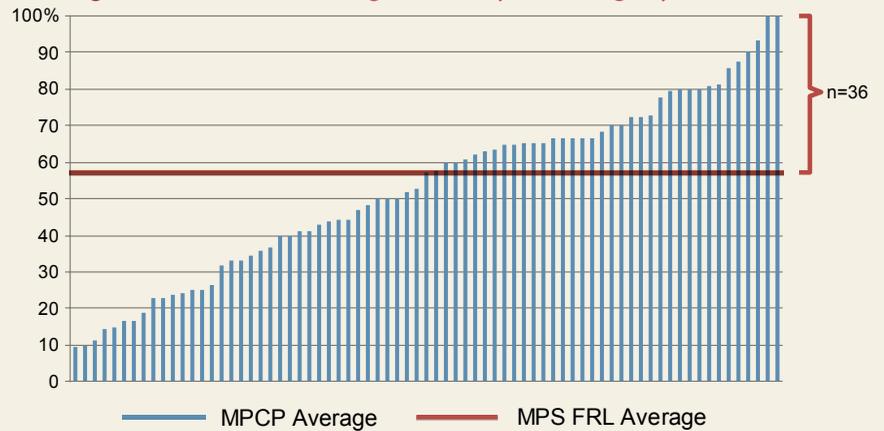


Figure 18: 4th Grade Math Proficiency Percentage by MPCP School

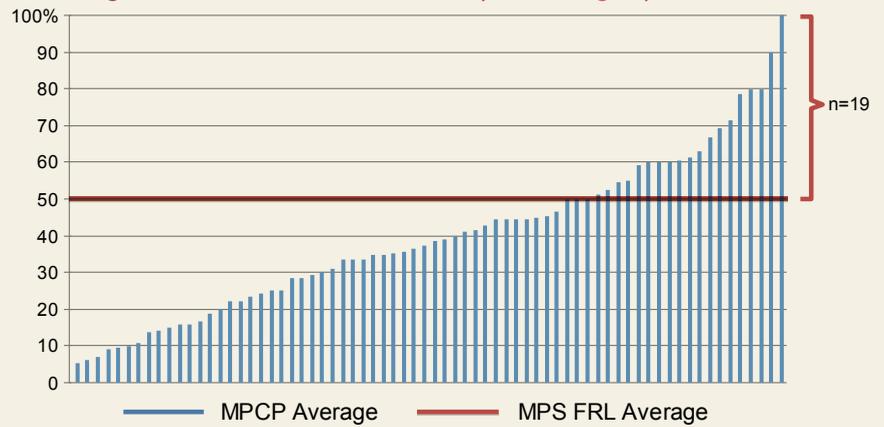
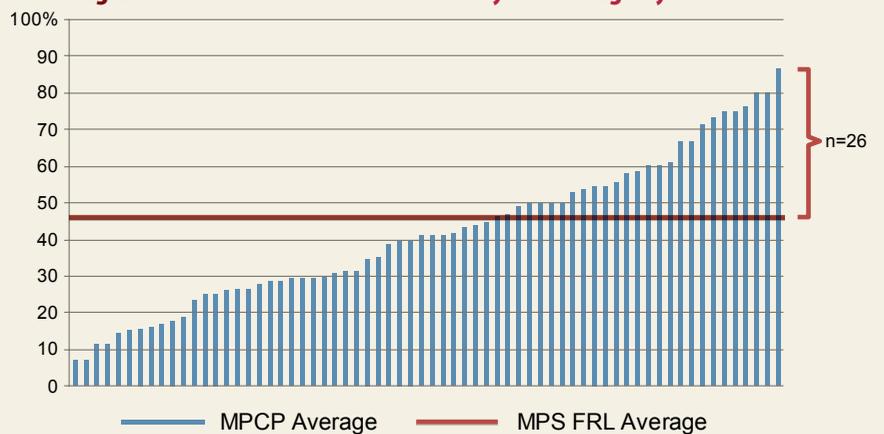


Figure 19: 4th Grade Science Proficiency Percentage by MPCP School



As indicated by the red line in Figure 20, 61% of MPS free and reduced-price lunch students are proficient in 8th grade reading. Forty-two MPCP schools had percentages of proficiency above 61%. Figure 21 shows the 30 MPCP schools that averaged above the 41% MPS FRL proficiency rate in 8th grade math and Figure 22 shows the 35 MPCP schools that averaged above the 40% MPS FRL proficiency rate in 8th grade science.

As before, it must be said that the differences demonstrated here are for two different groups of students; the fact that MPCP 8th grade cohorts do better relative to MPS FRL students may not necessarily mean that MPCP students improve more than MPS students as they move through the respective systems. Current 8th graders may have different backgrounds and preparation than current 4th graders, for example, so one cannot infer relative improvement in MPCP student proficiency rates over time based solely on such snap-shots of student performance, nor can one draw conclusions from these data regarding the effectiveness of the MPCP relative to the MPS.

Figure 20: 8th Grade Reading Proficiency Percentage by MPCP School

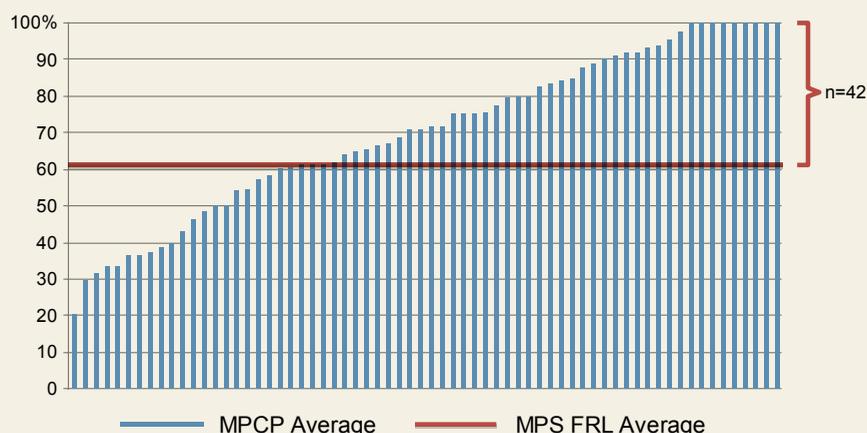


Figure 21: 8th Grade Math Proficiency Percentage by MPCP School

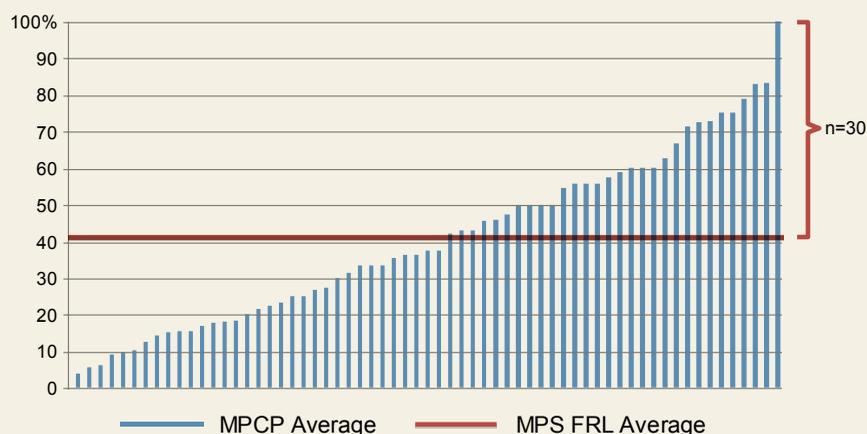
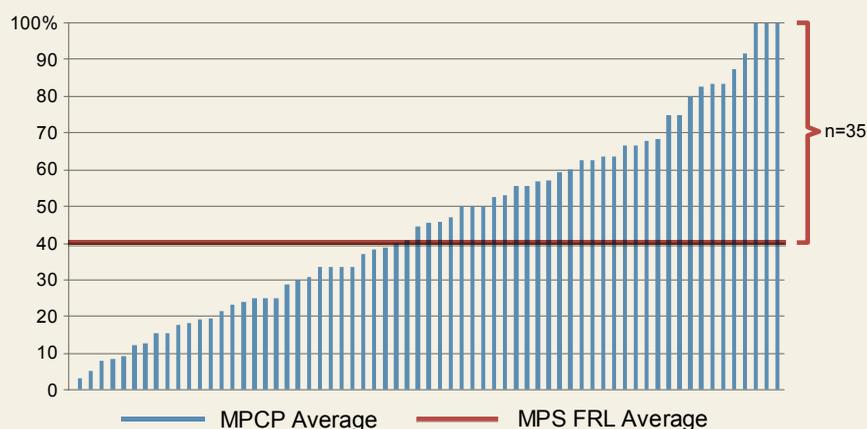


Figure 22: 8th Grade Science Proficiency Percentage by MPCP School



Summary and Recommendations

The purpose of this report is to provide descriptive data regarding the test scores of Milwaukee Parental Choice Program students in grades 4, 8, and 10 in reading, math and science, as reported to the School Choice Demonstration Project for the 2010-11 school year. The tables, graphs, and histograms presented in this report provide a snapshot of these students' scaled scores and proficiency rates on the WKCE relative to MPS FRL students.

This report draws upon data collected by the Wisconsin Department of Public Instruction (DPI) during 2010-11 and shared with our research team pursuant to the requirements of 2005 Act 125 and 2009 Act 28. The Wisconsin DPI released the results of this round of MPCP student testing earlier, on March 29, 2011. In the Wisconsin DPI release, student test scores were aggregated to the program level, allowing comparisons between the MPCP and MPS, and also aggregated to the school level and tied specifically to named MPCP schools, something that we are not permitted to do as independent education researchers.

The DPI release included a general comparison between the reading, language arts, math, science and social studies proficiency rates of all MPS students who completed the WKCE compared to all MPCP students who took the test. Although a media report of the release hailed this as an “apples-to-apples comparison” of achievement levels in the Choice program and MPS,¹⁰ the comparison was clearly biased by the fact that the MPS sample included students from high-income families who are not eligible for the MPCP. When DPI limited the MPS sample to students participating in the FRL program, as we do in all of our comparisons here, they found that program-wide proficiency rates in reading for the MPCP were similar to those for FRL students in MPS. In math, however, program-wide proficiency rates were lower among MPCP testers compared to FRL testers in the MPS.

The MPS accountability testing database that we were given differs somewhat from the one that DPI used, resulting in small proficiency rate calculation differences of .1 to .4 percentage point in DPI's and our calculations (Table 8, columns 1 and 2 compared).¹¹ More substantially, the MPCP proficiency rates increase by 1.7 percentage points in reading and 1.0 percentage point in math when non-testers are properly treated as having an unknown level of proficiency (columns 2 and 3 compared). The gain on the MPS FRL side due to excluding non-testers is only .4 percentage point in reading .1 percentage point in math. As a result of these two differences in method and data, our overall MPCP proficiency rate calculation in reading is 56.8 percent compared to DPI's calculation of 55.2 percent, a difference of 1.6 percentage points. Our calculation of the reading proficiency rate for FRL students in MPS (56.1%) also differs from DPI's (55.3%). On the math side, we calculate the MPCP proficiency rate at 35.5 percent compared to DPI's calculation of 34.4 percent though our calculations of the MPS FRL rates both are 43.9 percent. Based on the data we received, and a reliable method for calculating proficiency rates in the face of some non-testers, in 2010 the reading proficiency rate for

10 Erin Richards and Amy Hetzner, “Choice Schools not Outperforming MPS,” *Milwaukee Journal Sentinel*, March 29, 2011, available at <http://www.jsonline.com/news/education/118820339.html>

11 We assembled our MPS analytic database from a November 2010 enrollment list and the spring 2011 accountability testing file. The resulting database does not contain precisely the same number of student records as the MPS database used by DPI to make their comparisons, resulting in these tiny differences between our aggregate proficiency rates for MPS and theirs.

MPCP students was 0.7 percentage points higher than, but essentially equivalent to, the MPS FRL rate while the MPCP math proficiency rate was 8.4 percentage points lower than the rate for low-income MPS students.

Table 8: Reading and Math Proficiency Rates for All Tested Grades, MPCP and MPS FRL, by Method and Data Source

Proficiency Rate	DPI Method (1)	Replicating DPI Method (2)	Our Method (3)
	(Non-testers included as zeros) Source: DPI Website	(Non-testers included as zeros) Source: Our data	(Non-testers excluded) Source: Our data
MPCP Reading	55.2% (N=unavailable)	55.1% (N=10,657)	56.8% (N=10,342)
MPS FRL Reading	55.3% (N=unavailable)	55.7% (N=29,604)	56.1% (N=29,430)
Diff.	-0.1	-0.6	0.7
MPCP Math	34.4% (N=unavailable)	34.4% (N=10,657)	35.5% (N=10,321)
MPS FRL Math	43.9% (N=unavailable)	43.8% (N=29,604)	43.9% (N=29,523)
Diff.	-9.5	-9.4	-8.4

Our results here are generally consistent with the program-wide results released earlier by DPI, although only we released results for science. But these overall differences in proficiency rates – tiny in the case of reading but substantial in the case of math – mask important patterns of differences by individual subject areas and grades many of which were originally reported by DPI (see Appendix C, attached table) but never mentioned by the press. Choice students are performing somewhat below income-disadvantaged MPS students in some grades and subjects but somewhat higher than them in other grades and subjects. In general, comparisons of the test-score performance of similarly disadvantaged students in the MPCP and MPS tend to favor the MPCP students in reading and science but the MPS students in math. Our comparisons also tend to show MPCP students performing at lower levels than their MPS peers in 4th grade but higher levels in 8th and 10th grades. In a partial analysis of the racial and ethnic achievement gaps in our MPCP and MPS samples that is original to our study, we generally find that the gaps are smaller among low-income MPS students than among MPCP students.

There are exceptions to these performance, proficiency, and achievement-gap trends across the many comparisons in this descriptive report, but those are the findings that are relatively consistent. These data do not shed any light on why MPCP students tend to perform relatively worse in 4th grade and on math but relatively better in 8th and 10th grade and on reading and science. Those are simply the patterns in the data that are apparent.

Our comparisons of the scale scores of MPCP students and schools with the scores of MPS FRL students and schools is presented descriptively with no claim that the schools themselves were independently responsible for the results. Any reliable determination of the effectiveness of a school choice program like the MPCP can only come from a rigorous longitudinal study that follows a representative group of choice students over time and compares their achievement gains to those of a comparable set of public school students. The MPCP Longitudinal Education Growth Study (LEGS), released simultaneously with this report, serves as the proper source for such a determination.

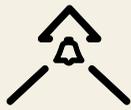


Appendix A:

Schools with MPCP students in tested grades in operation through May 2011 (N= 102)

Alston's Preparatory Academy	Institute of Technology and Academics, Inc.	Saint Gregory the Great Parish School
Atlas Preparatory Academy, Inc.	Jared C. Bruce Academy	Saint Joan Antida High School
Atonement Lutheran School	Learning Bridges Kingdom Academy, Inc.	Saint John Kanty School
Believers in Christ Christian Academy	LifeSkills Academy	Saint John's Lutheran School
Blessed Sacrament School	Lutheran Special School & Education Services	Saint Josaphat Parish School
Blessed Savior - North Campus	Marquette University High School	Saint Lucas Lutheran School
Blessed Savior - South Campus	Messmer High School	Saint Marcus Lutheran School
Blessed Savior - East Campus	Messmer Preparatory Catholic School	Saint Margaret Mary School
Blessed Savior - West Campus	Mills Christian Academy	Saint Martini Lutheran School
Calvary's Christian Academy	Milwaukee Lutheran High School	Saint Peter-Immanuel Lutheran School
Carter's Christian Academy, Inc.	Milwaukee Montessori School	Saint Philip's Lutheran School
Catholic East Elementary	Milwaukee Seventh Day Adventist School	Saint Rafael the Archangel School
CEO Leadership Academy	Montessori School of Garden Homes	Saint Roman Parish School
Ceria M. Travis Academy, Inc.	Mother of Good Counsel School	Saint Rose and Saint Leo Catholic School
Christ Memorial Lutheran School	Mount Calvary Lutheran School	Saint Sebastian School
Christ St Peter Lutheran School	Mount Lebanon Lutheran School	Saint Thomas Aquinas Academy
Christian Faith Academy of Higher Learning	Mustard Seed International School	Saint Vincent Pallotti Catholic School
Clara Mohammed School	New Testament Christian Academy	Salam School
Concordia University School	Northwest Catholic- East Campus	Sharon Junior Academy
CrossTrainers Academy	Northwest Catholic- West Campus	Sherman Park Lutheran School/Preschool
Daughters of the Father Christian Academy	Northwest Lutheran School	Siloah Lutheran School
Destiny High School	Notre Dame Middle School	Tamarack Waldorf School
Divine Savior Holy Angels High School	Oklahoma Avenue Lutheran School	Texas Bufkin Christian Academy
Dr. Brenda Noach Choice School	Our Lady Queen of Peace	The AppleCrest Preparatory Leadership Academy
Early View Academy of Excellence	Parklawn Christian Leadership Academy	The Margaret Howard Christian Leadership Institute
Eastbrook Academy	Pius XI High School	Travis Technology High School
Emmaus Lutheran School	Prince of Peace/Principe de Paz	Victory Christian Academy
Family Montessori School	Right Step Inc.	Washington DuBois Christian Leadership Academy
Garden Homes Lutheran School	Risen Savior Lutheran School	Wisconsin Lutheran High School
Greater Holy Temple Christian Academy	Saint Adalbert School	Word of Life Evangelical Lutheran School
Hickman Academy Preparatory School	Saint Anthony School	Yeshiva Elementary School
Holy Redeemer Christian Academy	Saint Catherine School	Young Minds Preparatory School
Holy Wisdom Academy	Saint Charles Borromeo School	
HOPE Christian School: Fortis	Saint Coletta Day School of Milwaukee	
HOPE Christian School: Prima		
Hope School		

Appendix B: Correspondence with Schools



SCHOOL CHOICE DEMONSTRATION PROJECT

College of Education and Health Professions
Department of Education Reform
School Choice Demonstration Project



UNIVERSITY OF ARKANSAS
1871®

201 Graduate Education Building
Fayetteville, Arkansas 72701
(479) 575-6345
(479) 575-3196 (FAX)

October, 2010

Dear School Administrator:

I hope you are doing well and smoothly transitioning back into the school year. I want to thank you for your hard work with last year's data collection for the Longitudinal Evaluation of the Milwaukee Parental Choice Program (MPCP). We had a very successful year of data collection and we have the MPCP schools to thank for this.

As you recall, the evaluation of the Milwaukee Parental Choice Program (MPCP) is an undertaking required by Wisconsin state law. In March of 2006, the Legislature passed and the governor signed Wisconsin Act 125, which raised the student cap on the program by 50 percent and called for an evaluation of the program by the School Choice Demonstration Project (SCDP).

Changes in Testing Procedures

There have been significant changes to testing procedures from last year. Beginning with this school year (2010-2011), all Milwaukee Parental Choice Program (MPCP) schools will be required to administer to MPCP pupils the Wisconsin Knowledge and Concepts Examination (WKCE) for students in grades 3 through 8 and grade 10. You should have received ordering instructions about this in a letter sent from the Department of Public Instruction (DPI). **The Fall 2010 WKCE testing window is from October 25 - November 26, 2010** and includes the following grades and content areas: Grades 3-8 and 10 for Reading and Math, Grades 4, 8 and 10 for Language Arts, Writing, Science and Social Studies. As you see, this year you will be administering some additional subtests.

WKCE Training will still be offered by Westat in the same format and in the same location (Messmer High) as in years past. You may select one or more staff from your school to attend the training. Please include their names on the enclosed **Training Registration Form** and check the appropriate box to indicate the session he/she will attend.

The training sessions will take place on **October 19, 20, and 21 from 4:30 -6:30 PM** at Messmer High School (742 W. Capitol Drive, Milwaukee, WI 53206). DPI testing and survey procedures and protocol will be explained in detail during the trainings. This year there are many procedural changes from past years so it is very important that at least one staff member from your school attend. Light refreshments will be provided. **Staff only need to attend ONE of these sessions:**

Tuesday, October 19, 2009 – 4:30-6:30 PM
Wednesday, October 20, 2009– 4:30-6:30 PM
Thursday, October 21, 2009 – 4:30-6:30 PM

The Department also provides a webcast and an assessment director guide to assist school staff in administering the assessment in a secure manner. A Guide for District Assessment Coordinators and School Assessment Coordinators provides specific instructions on how to administer the WKCE. For more information on DPI's new WKCE testing requirements, go to <http://www.dpi.state.wi.us/oea/MPCP.html>.

Any questions regarding the administration of the WKCE in Milwaukee Parental Choice Program Schools should be addressed to: Duane Dorn, Office of Educational Accountability, WI Department of Public Instruction. duane.dorn@dpi.wi.gov 608-267-1069

The Milwaukee Benchmark Assessment will NOT be administered to 9th graders this year.

Student Enrollment Verification Form

Last fall your school took part in the Milwaukee Parental Choice Evaluation. As part of the evaluation, a representative sample of MPCP students in grades 4-10 were tested using the WKCE (Wisconsin Knowledge and Concepts Examination) for grades 4-8 and 10 and the Milwaukee Benchmark Test for grade 9. The students who comprise this year's panel were tested last year and are now in grades 5-11. For the purpose of tracking high school graduation, we also remain interested in members of our student panel who are now in grade 12.

Enclosed is the ***Student Enrollment Verification Form***. Please complete this form by checking the box to indicate if the panel students are enrolled or are not enrolled in your school for this school-year (2010-2011). For those students who are not enrolled in your school, please note the reason why they are no longer attending your school and, if possible, list the name of the school they are currently attending. For students listed, there may be pre-filled demographic information. Please review this information and either update as needed, or fill in anything that is missing. Please refer to the instruction sheet for detailed information and definitions for each item on this form.

2009-2010 Graduation List

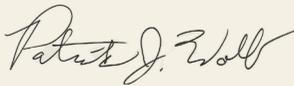
Another important component of the Longitudinal Evaluation of the Milwaukee Parental Choice Program (MPCP) is an Attainment Study. We are very interested in learning about graduation rates. We have identified your school as possibly having panel students in grade 12 during the 2009-2010 school-year, and who may have graduated in 2010. In order to identify panel students, ***we are requesting that your school provide us with the FULL graduation list for 2010***. This list will be strictly confidential. We will not share it with anyone outside the research team and never include any student names from it in any of our public reports. It will be used for research purposes only, and will be destroyed immediately upon the conclusion of the longitudinal study. Please see the attached instruction sheet for more information.

Parent Letters

We feel it is very important that parents be well informed regarding their child's involvement in this evaluation. We have included an informational letter to send home with each of the panel students (those listed on the Enrollment Verification Forms). Please make copies as necessary. The letter from our research team describes the MPCP evaluation.

Please return your completed ***Training Registration Form, School Enrollment Verification Form,*** and ***2010 Graduation List*** in the enclosed pre-paid envelope or by fax **no later than October 14, 2010.** The fax number is 301-294-3917. If you have any questions, please contact Sylvia Segovia via email: sylviasegovia@westat.com

Sincerely,



Patrick J. Wolf, Ph.D.
Professor and Endowed Chair in School Choice
Principal Investigator, SCDP



College of Education and Health Professions
Department of Education Reform
School Choice Demonstration Project

201 Graduate Education Building
Fayetteville, Arkansas 72701
(479) 575-6345
(479) 575-3196 (FAX)

May 25, 2011

Dear School Administrator:

I hope this finds you doing well and enjoying your spring semester. According to the 2011 MPCP Principals' Survey that you recently completed, your school administered some standardized tests (e.g. Terra Nova, SAT-10, etc.) in addition to the mandated WKCE tests during the 2010-11. As I am sure you know, copies of the test results from all testing that your school does are to be shared with the School Choice Demonstration Project (SCDP), under Wisconsin Act 125. The Wisconsin Department of Public Instruction has already provided us with a copy of your students' Fall 2010 WKCE test scores so you do not need to worry about that. This letter is ONLY in reference to the testing that your school administered in addition to the WKCE.

I am enclosing a FedEx envelop and pre-labeled airbill for you to use when sending us your additional test scores. Please insert into this envelop a copy of all individual student level test scores from any testing that your school did this past school year other than the WKCE. Next, complete the top portion of the FedEx airbill with your school's name and address. Remove the "sender's copy" for your records. This copy can be used to track the package in the event that it does not arrive at the SCDP. Please either have a FedEx representative pick up the package at your school or drop off the package at a FedEx store.

Time Frame & Mailing Address

Results of any additional testing that was administered by your school should be mailed to the SCDP by **July 31st**. In the event that your school administered both fall and spring tests, please wait until you have received the results of ALL 2010-11 testing before sending the SCDP your FedEx package.

Format of Scores

A copy of the scores can be submitted to the SCDP in either electronic or paper format, though paper format is strongly preferred.

Security Protocols

To protect the confidentiality of your students, it is important certain data protection strategies be implemented. If you are sending an electronic copy of your students' scores, you must password protect the file and burn the file to a CD. Please use the password MPCP2011 if you send us electronic scores.

We look forward to receiving your school's test scores. As always, if you have any questions, please call me at 479-575-6345.

Sincerely yours,

Laura Jensen
Research Associate
School Choice Demonstration Project



News Release

Education Information Services ■ 125 South Webster Street ■ P.O. Box 7841 ■ Madison, WI 53707-7841 ■ (608) 266-3559

FOR IMMEDIATE RELEASE

Tuesday, March 29, 2011

Contact: Patrick Gasper, DPI Communications Officer, (608) 266-3559

DPI-NR 2011-30 B

Overall MPS results higher than choice schools on statewide exams

Wisconsin Student Assessment System provides first look at MPCP achievement on statewide exams

MADISON — Results from the first administration of statewide exams to students participating in the Milwaukee Parental Choice Program (MPCP) show lower academic achievement in choice schools than performance by students attending Milwaukee Public Schools (MPS). Results also show that both MPS and choice schools have significantly lower student achievement than the statewide average, including for students statewide who are from economically disadvantaged families.

“Clearly for the children of Milwaukee, whether in MPS or choice schools, dramatic improvements in academic achievement are needed,” said State Superintendent Tony Evers. “While both systems have some good schools, our statewide assessment data show, with very few exceptions, that the choice program provides similar or worse academic results than MPS. For the sake of the city and the state, MPS and MPCP results must be improved. And, these results reinforce the need to continue using the same test for all students.”

Results from the 2010 fall administration of exams that are part of the Wisconsin Student Assessment System (WSAS) show that in mathematics, 77.2 percent of all students and 63.2 percent of economically disadvantaged students statewide scored proficient or advanced. For MPS students, 47.8 percent scored proficient or advanced, and for choice students, 34.4 percent scored proficient or advanced in mathematics.

In reading, 55.2 percent of choice students scored proficient or advanced, compared with 59.0 percent of MPS students. Statewide, 83.0 percent of all students and 71.7 percent of economically disadvantaged students scored proficient or advanced in reading.

When comparing low-income MPS students to students in the choice program, 43.9 percent scored proficient or advanced in mathematics, which is higher than choice students. Mean scale scores show that low-

2010-11 Wisconsin Student Assessment System Results - All Grades		
Percent Proficient or Advanced		
	Mathematics	Reading
State	77.2	83.0
State Economically Disadvantaged	63.2	71.7
MPS	47.8	59.0
MPS Economically Disadvantaged	43.9	55.3
MPCP	34.4	55.2

(more)

WSAS Results for MPCP and MPS – Page 2

income MPS students have higher mathematics achievement than choice students in elementary and middle school. Scores for 10th-grade students were not statistically different for mathematics. In reading, 55.3 percent of low-income MPS students were proficient or advanced in reading, which is nearly the same as for choice students. Mean scale scores show slightly higher reading achievement for MPCP students in grades six through eight and grade 10 than for low-income MPS students. Reading achievement was higher for low-income MPS fourth-graders, and in grades three and five, reading achievement for choice and low-income MPS students was not statistically different.

State funds paid for about 10,600 Milwaukee choice students in grades three through eight and grade 10 to take WSAS exams in mathematics and reading last fall at no cost to the private schools. Parents and educators received the results. Choice students in grades four, eight, and 10 also took the state's language arts, science, and social studies exams, along with students in Milwaukee and throughout the state. MPS students' results were higher than choice students on the language arts, science, and social studies exams.

While demographic data about MPCP students was incomplete, the private schools reported about 1.6 percent of choice students have a disability and 0.05 percent of choice students with disabilities took the Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD). In MPS, about 19 percent of students have a disability and less than 2 percent took the WAA-SwD.

"Given results from our statewide assessments, I question plans in the 2011-13 state budget for expanding the choice program in Milwaukee or anywhere else in Wisconsin," Evers stated. "The proposed budget directs more than \$22 million to expand vouchers for more students, including those from higher wealth families, which will have an impact on Milwaukee property taxpayers. Wisconsin should not prioritize more funding for vouchers in Milwaukee while 870,000 public school children across the state will get \$834 million less in state support for their education."

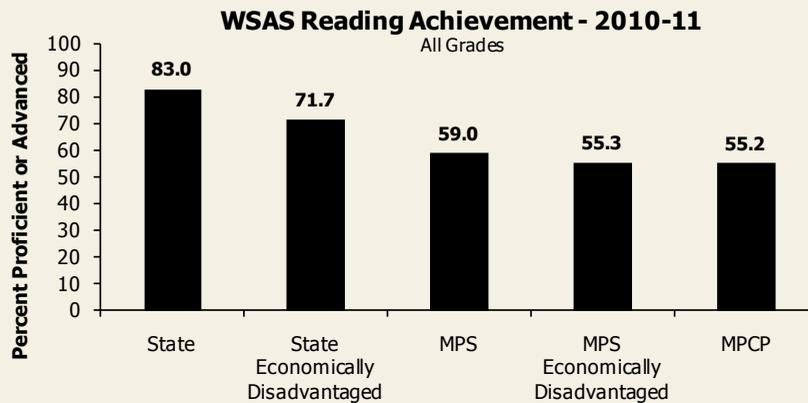
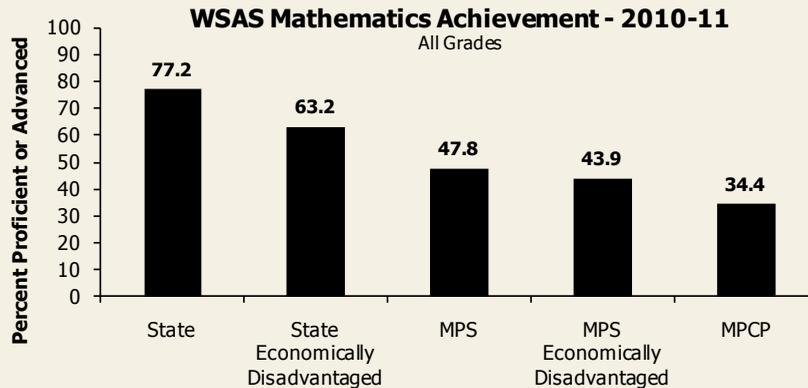
Evers also expressed concern about biennial budget provisions to remove the requirement that choice schools administer statewide assessments. "Taxpayers deserve accountability for a program that will cost the state an estimated \$130.8 million for this year and has cost \$1.1 billion in the past 20 years," he said. "Additionally, with high student mobility in Milwaukee, both within MPS and choice schools and from choice schools to MPS, statewide assessments are one way that parents can monitor their students' achievement. We should not take away tools that can help parents stay involved in their children's education. Parental involvement is a key factor in student success."

###

ATTACHMENT: Charts and a table providing additional data on student achievement follow.

NOTES: Results in this news release are reported for all students, not the full academic year (FAY) reporting that appears on the Wisconsin Information Network for Successful Schools (WINSS) and is customary for school and district-level accountability. Additional data on MPCP performance on the 2010-11 WSAS testing, including data by school, is available at <http://dpi.wi.gov/oea/mpcp/results.html>. This news release is available electronically at http://dpi.wi.gov/eis/pdf/dpinr2011_30.pdf. The August 2010 Legislative Audit Bureau report on "Test Score Data for Pupils in the Milwaukee Parental Choice Program" is available at http://legis.wisconsin.gov/lab/reports/10-schoolchoice_ltr.pdf.

Wisconsin Student Assessment System Results

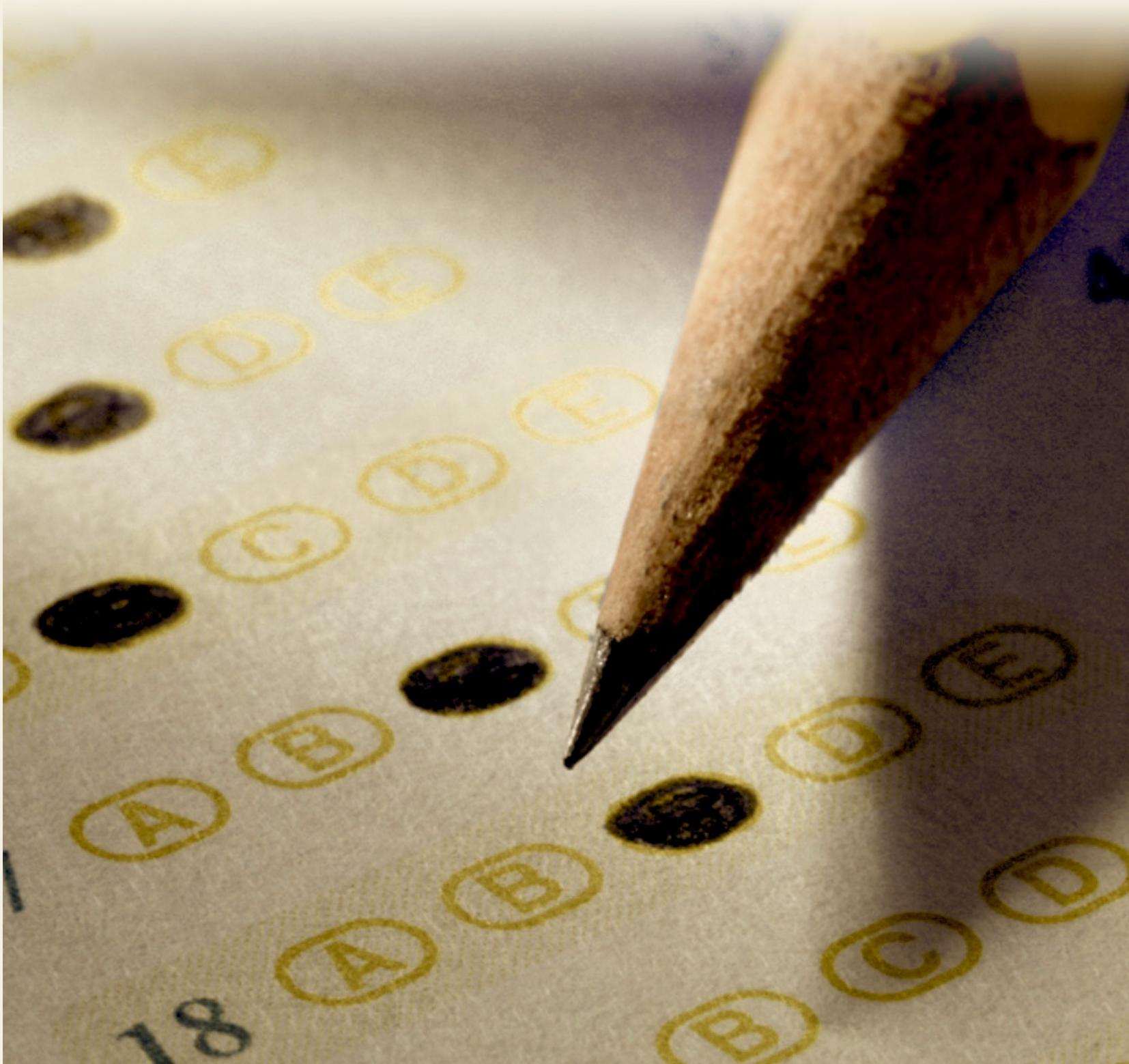


2010-11 Wisconsin Knowledge and Concepts Exam Results by Grade

Mean Scale Scores

	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr 10
MATHEMATICS							
State	431.9*	469.9*	498.2*	522.5*	537.2*	547.2*	562.2*
State Economically Disadvantaged	415.4*	452.7*	478.5*	500.9*	517.7*	524.0*	538.8*
MPS	402.5*	439.3*	463.0*	483.8*	500.7*	500.0*	515.7*
MPS Economically Disadvantaged	397.0*	434.2*	457.5*	478.3*	495.6*	494.2*	512.4
MPCP	384.3	421.5	443.3	468.5	492.0	487.7	509.3
READING							
State	457.8*	477.5*	484.0*	504.3*	516.4*	532.7*	538.9*
State Economically Disadvantaged	442.4*	459.5*	465.4*	483.2*	497.1*	510.5*	510.4*
MPS	432.5*	446.7*	450.0*	466.4	481.6	492.0	483.1
MPS Economically Disadvantaged	426.9	440.9*	444.1	460.3*	475.9*	485.7*	477.2*
MPCP	424.2	437.3	444.9	464.5	480.6	492.6	483.6

* An asterisk means this score is statistically different at the 0.05 level than the score for Milwaukee Parental Choice Program (MPCP) students.



Milwaukee Longitudinal School Choice Evaluation: Annual School Testing Summary Report

About the Authors



Anna M. Jacob is a Ph.D. student in Education Policy and Doctoral Academy Fellow in the Department of Education Reform at the University of Arkansas. She works as a Graduate Assistant with the School Choice Demonstration project, an educational research project based within the University of Arkansas' Department of Education Reform. She received her B.Ed. from St Patrick's College Dublin, where she graduated with first- class honors, and her M.Ed. through the University of Notre Dame's Alliance for Catholic Education program.



Patrick J. Wolf is Professor of Education Reform and 21st Century Endowed Chair in School Choice at the University of Arkansas in Fayetteville. He also is principal investigator of the School Choice Demonstration Project. Wolf has authored, co-authored, or co-edited three books and more than 30 articles and book chapters on school choice, special education, and public management. A 1987 *summa cum laude* graduate of the University of St. Thomas (St. Paul, MN), he received his Ph.D. in Political Science from Harvard University in 1995.



School Choice Demonstration Project

Department of Education Reform

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201 Graduate Education Building

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