



Needs Improvement: How Wisconsin's Report Card Can Mislead Parents

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Executive Summary

This year, no Forward Exam was administered to Wisconsin students due to the coronavirus and school shutdowns. For policymakers, this presents a challenge as it makes it more difficult to understand where problems lie, and where the focus should be for improvement. However, this also presents an opportunity to make modifications to some of the deficient components of the report card that can mislead parents and policymakers on school quality.

This first section of this policy brief is designed to explain how the current report card works. The second section builds on this knowledge to highlight issues with the current report card, and suggest ways to improve it. The key takeaways of this brief include:

Report Card Scores are Based on Several Components of Student Performance. Forward Exam scores, growth, and gap closure all play important roles.

The Composition of the Report Card Score Varies Based on Student Demographics. In schools with fewer low-income students, overall performance is given more weight. In schools with more low-income students, growth is given more weight.

Report Card Makes Some Bad Schools Look Good. Some schools with less than 5% proficiency in math and English are rated as “Meets” or “Exceeds” expectations on the current report card. This severely limits the ability of families to make use of the report card as a metric for school quality.

Mismeasurement of Disability Status & Economic Status Harm Choice Schools. Disability status effects growth scores and the economic status of students effects the weight of growth in the report card score. Both of these factors are often measured inaccurately in choice schools, harming their overall scores.

Inability for Systems to Get School-Level Reports Harms Choice Schools. The Wisconsin Department of Public Instruction (DPI) has made it so that private school systems must choose between byzantine enrollment and auditing systems or getting individual school report cards for their schools. Without individual school report cards, it is more difficult for schools to determine how each school in their system is doing.

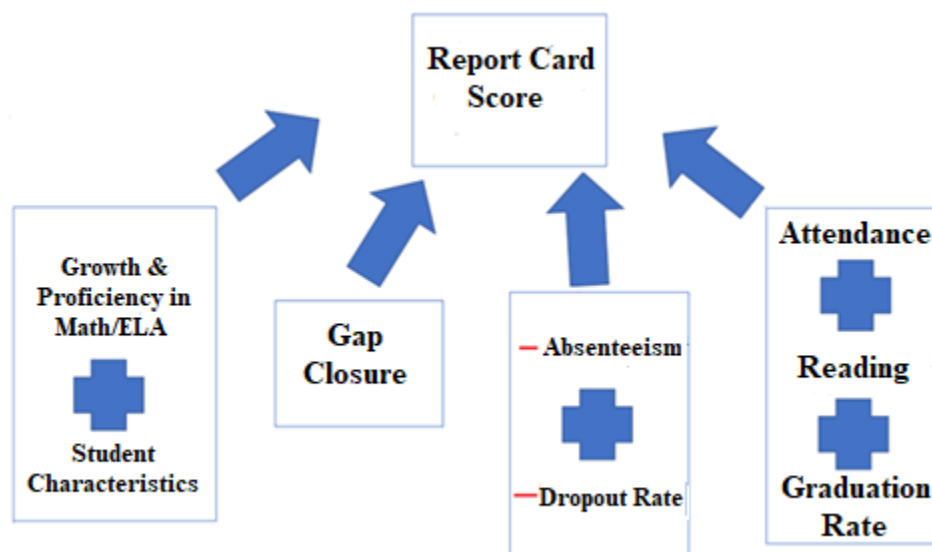
Policy Implications

The report card is meant to be a useful tool for parents and policymakers to understand the quality of schools throughout the state, but its usefulness is limited in its current form. Policymakers should take the opportunity afforded by a lack of Forward Exam testing to make the report cards more comparable across sectors and user-friendly. Weighting for growth based on economic status should be adjusted so that overall achievement has a larger role in the scores schools receive. Moreover, DPI should be required to allow choice schools that are part of school systems to receive report cards for each of their schools just like all other schools in the state do.

The Components of the Report Card

The report card is constructed using the last three years of data from the state’s annual exam, the Forward Exam, and three other primary measures: growth, gap closure, and on track/post-secondary readiness. The combination of these components depends on the demographics and grade level of the school. A simplified overview is presented in Figure 1 below.

Figure 1. The Components of the Wisconsin Report Card



Student Achievement: This category is based on the overall performance of students in the school on the Forward Exam in reading and mathematics. Schools earn 1.5 points per student who is in the advanced category on the Forward Exam, 1 point per student in the proficient category, and 0.5 points per student in the basic category. No points are given for students in the lowest category, below basic.

To better understand this process, consider the hypothetical ELA scores for a school:

Table 1. Hypothetical Forward Exam Scores

Year	Students	Advanced	Proficient	Basic	Below Basic
2016-17	10	10%	40%	30%	20%
2017-18	9	22.2%	44.4%	22.2%	11.1%
2018-19	10	20%	30%	30%	20%

In 2016-17, 40% of the students in the school—or four students—scored in the proficient category. The school would have received (4*1.0) points for those students. 30% of students scored in the Basic category. The school would have received (3*0.5) points for those students. The process is repeated for each category and year. These totals are then divided by the number of students in the school in that year.

Table 2. Points Calculation

Year	Points	Total
2016-17	$[(1*1.5)+(4*1.0)+(3*.05)+(2*0)]/10$	0.70
2017-18	$[(3*1.5)+(4*1.0)+(2*0.5)+(1*0)]/9$	0.86
2018-19	$[(2*1.5)+(3*1.0)+(3*0.5)+(2*0)]/10$	0.75

Because more recent data likely provides more information about a school's performance today, older data is weighted less. However, if there are outlier years with many more or many fewer students tested, this could be unfair to the school. In order to account for both of these factors, each year's results are adjusted by the number of students tested in that year relative to the average number of students tested. The initial weight for the most recent year is 1.5, for one year ago, 1.25, and for two years ago, 1.0.

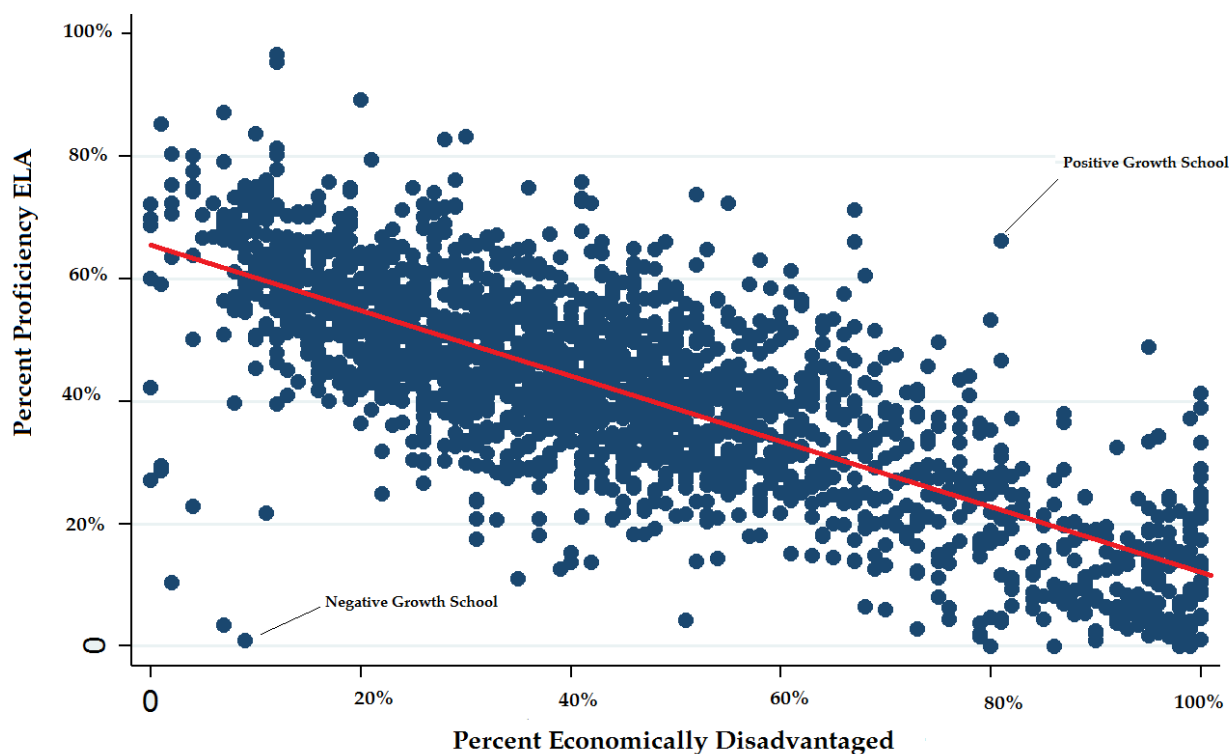
Table 3. Weights Calculation

Year	Weight	Total
2016-17	$1.0*(10/9.67)$	1.03
2017-18	$1.25*(9/9.67)$	1.16
2018-19	$1.50*(10/9.67)$	1.60

The final score is calculated by summing the points calculated in Table 2 and dividing by the sum of the weights calculated in Table 3. This number is then multiplied by 50 to create an easier-to-understand student achievement score on a 50-point scale.

Student Growth: Student growth represents an attempt to measure the extent to which a particular school or teacher is working to improve the performance of a student. It starts with the principle that factors that are beyond the control of the school--such as poverty, disability, or having limited English proficiency--have an impact on the performance that a student is likely to achieve. These factors are included in an econometric model to arrive at a predicted level of performance for each school based on these factors. Schools that exceed these predictions have a positive impact on student growth, schools that do worse than these predictions have a negative impact on growth. As an example, consider the graph below which compares student performance on the 2016 Forward Exam in English with the percentage of students in the school who are economically disadvantaged and then plots those data points for all schools in the state.

Figure 2. Relationship between Economic Status and ELA Proficiency, Wisconsin 2016



While growth assessments are made at the individual student level and aggregated, we can use statewide data to illustrate the point. The red line represents the predicted share of students in the school who would score proficient or above. The blue dots represent the actual performance of each school. There is a clear relationship between academic performance and economic status—schools with high levels of poverty tend to perform worse. But there are exceptions. Two schools are noted. The school in the bottom left corner has low poverty but also performance well below the expected line. This school would receive a low growth score because it is not living up to its predicted performance. On the far right is a school characterized by high poverty but also high levels of proficiency. This school would receive a positive growth score. The report card process makes similar evaluations to what is presented here, but considers more variables simultaneously.

Gap Closure: Gap closure is also included in recognition of the reality that certain groups have traditionally had lower levels of achievement than others, which has often been in accordance with economic disparities. For example, the achievement gap between white and African American students has often been discussed in Wisconsin. Gap closure is the average year-to-year change in the achievement on the Forward Exam between each target group (American Indian, Asian, Hispanic, Hawaiian, multiracial, disabled, economically disadvantaged, English language learner students) and their complementary group (white, non-disabled, non-

economically disadvantaged and English language proficient students). If the school doesn't have at least 20 students in one of the target groups, combinations of students may be formed.

For example, consider this hypothetical example below comparing a school's proficiency among economically disadvantaged students with their average proficiency among non-disadvantaged children. For simplification, assume that the number of economically-disadvantaged students in the school stays the same every year.¹

Table 4. Proficiency by Year, Hypothetical School and Actual State

Hypothetical School-Econ. Disadvantaged					Not Econ. Disadvantaged				
14-15	15-16	16-17	17-18	18-19	14-15	15-16	16-17	17-18	18-19
55%	56%	59%	58%	62%	80%	78%	82%	83%	81%

The slope of the best fit line of the hypothetical school is 1.6%, meaning that proficiency, on average, increased by 1.6% per year.² The best fit line for the non-disadvantaged students is 0.7%, meaning that the proficiency for non-economically disadvantaged students increased by 0.7% on average over this time frame. The difference in these two numbers—0.9%, would be the school's gap closure score for economically disadvantaged children. The process is repeated for each target group listed above, then averaged to create a school gap closure score.

On-Track and Postsecondary Readiness: This component of the report card combines a number of different measures—attendance rate, graduation rate, third grade reading, and eighth grade reading—that are not available for all schools. The attendance rate is simply the number of days of school attended for all of the students in the school divided by the possible number of school days. Attendance rates are utilized for middle schools, elementary schools, and K-8 schools, while graduation rates are used for high schools. These measures constitute the majority of a school's score in this category. The remainder is made up of the reading and math scores mentioned above, if they are available. These are calculated in a similar manner to the description of student achievement above.

¹ In the true formula, observations are weighted by the number of students so as not to give outsized influence to a school year in which there were very few students in the target group or a large shift in the number of students.

² Note that this is *not* the same as the average change between each year. This figure can be arrived at by regressing the percentage proficient in each year on a count of the number of years.

Deductions

In addition to the points that schools can earn in each of these categories, points can be deducted from the report card score in two areas: absenteeism and dropout rate.

Absenteeism: Absenteeism differs from attendance in that it is only concerned with the percentage of students who are chronically absent from school. This means that a student misses more than 16% of the school days throughout the semester. DPI has a target chronic absenteeism rate of less than 13%. If fewer than 13% of students are chronically absent, no points are deducted from the school's overall accountability score. If more than 13% of students are chronically absent, the school loses 5 points.

Dropout Rate: The DPI target for dropout rate is 6%. Like with absenteeism, meeting this target leads to no points deduction and having a dropout rate higher than 6% leads to a 5-point deduction from the school's overall accountability score.

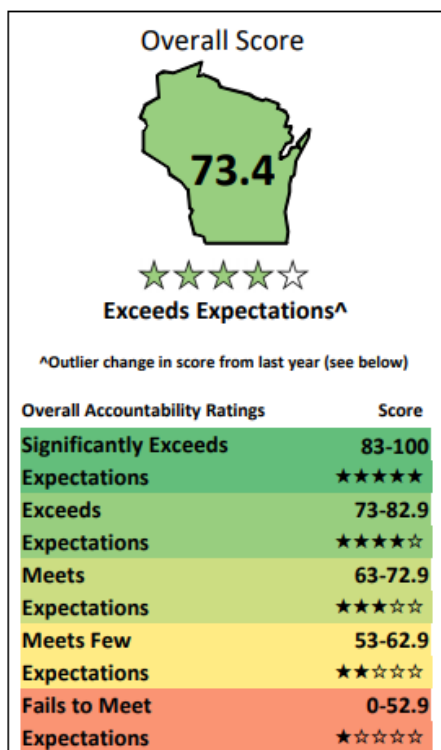
Putting It All Together

A school's overall report card score is the combination of the categories described above. The combination of these factors differs depending on the percentage of the school that is made up of economically disadvantaged students. In schools with high percentages of economically disadvantaged students, growth counts more. If more than 65% of the students in a school are economically disadvantaged, growth is weighted at 90% and student achievement is weighted at 10%. In schools with fewer economically disadvantaged students, student achievement counts more. In schools with 5% or fewer economically disadvantaged students, growth is weighted at 10% and student achievement is weighted at 90%. Some factors may not be available for every school, which changes the weight given to each factor in the combination.

Consider the example of Bryant Elementary in Milwaukee, a high-poverty school for which all categories of information are available. The 2018-19 report card for the school is reproduced below. Here, we will illustrate how to use the components of the report card to arrive at that score—73.4.



Bryant Elementary
Milwaukee | Public - All Students
 School Report Card | 2018-19 | Summary



School Information

Grades	K3-5
School Type	Elementary School
Enrollment	221
Percent Open Enrollment	0.5%
Race/Ethnicity	
American Indian or Alaskan Native	0.9%
Asian	3.2%
Black or African American	88.2%
Hispanic/Latino	2.7%
Native Hawaiian or Other Pacific Islander	0.5%
White	0.9%
Two or More Races	3.6%
Student Groups	
Students with Disabilities	22.2%
Economically Disadvantaged	97.7%
English Learners	0.0%

Priority Areas	School Score	Max Score	K-5 State	K-5 Max
Student Achievement	29.1/100		65.7/100	
English Language Arts (ELA) Achievement	13.1/50		31.6/50	
Mathematics Achievement	16.0/50		34.1/50	
School Growth	87.0/100		66.0/100	
English Language Arts (ELA) Growth	37.8/50		33.0/50	
Mathematics Growth	49.2/50		33.0/50	
Closing Gaps	76.3/100		73.9/100	
English Language Arts (ELA) Achievement Gaps	37.9/50		37.9/50	
Mathematics Achievement Gaps	38.4/50		36.0/50	
Graduation Rate Gaps	NA/NA		NA/NA	
On-Track and Postsecondary Readiness	75.0/100		86.8/100	
Graduation Rate	NA/NA		NA/NA	
Attendance Rate	70.1/80		74.5/80	
3rd Grade English Language Arts (ELA) Achievement	4.9/20		12.3/20	
8th Grade Mathematics Achievement	NA/NA		NA/NA	

Priority Area Weights	Percentage Weight
Student Achievement	5.0%
School Growth	45.0%
Closing Gaps	25.0%
On-Track and Postsecondary Readiness	25.0%

Note: For details about how weights are determined, see weighting calculator:
https://oea-dpi.shinyapps.io/overall_weighting_calculator/

Student Engagement Indicators	Total Deductions: -5
Absenteeism Rate (goal <13%)	Goal not met: -5
Dropout Rate (goal <6%)	Goal met: no deduction

Test Participation Information

Includes Forward Exam (grades 3-8), ACT Aspire (9 and 10), ACT (11), and Dynamic Learning Maps (3-11)

Group	ELA 1-Year	ELA 3-Year	Math 1-Year	Math 3-Year
All-Students Rate	100%	100%	100%	100%
Lowest Subgroup Rate: Black	100%	100%	100%	100%

[^] denotes at least a 10-point Overall Score change in a single year when present. Wisconsin DPI considers this amount of change an outlier which may not reflect the actual magnitude of change in performance.

The first step is to add the achievement score, the growth score, and the closing gaps and then divide by the sum of the weights each score is given in what we call “Preliminary Score 1.” Because the school has 97.7% students who are economically disadvantaged, growth will have a weight 0.9 and achievement will have a weight of 0.1.

$$\text{Preliminary Score}_1 = \frac{(\text{Achievement Score} * .1) + (\text{Growth Score} * .9) + (\text{Closing Gaps} * .5)}{.1 + .9 + .5}$$

$$\frac{(29.1 * .1) + (87.0 * .9) + (76.3 * .5)}{.1 + .9 + .5} = 79.5733$$

The number here is then multiplied by three to create Preliminary Score 2.

$$\text{Preliminary Score}_2 = 3 * \text{Preliminary Score}_1$$

$$79.5733 * 3 = 238.72$$

Following this step, the On-Track and Postsecondary Readiness score is added to “Preliminary Score 2.” This number is then divided by four to create “Preliminary Score 3”:

$$\text{Preliminary Score}_3 = \frac{\text{Preliminary Score}_2 + \text{On Track and Post Secondary Readiness Score}}{4}$$

$$\frac{238.72 + 75.0}{4} = 78.43$$

This will create a score on the scale from 0-100 that takes all factors into account except the two deduction categories. The final step in creating the report card score is to deduct 5 points from the score if the school exceeds the targets for absenteeism and dropout rate. Bryant Elementary received a 5-point deduction due to absenteeism that must be subtracted here.

$$\text{Final Report Card Score} = \text{Preliminary Score}_3 - (\text{Absenteeism Deduction}) - (\text{Dropout Deduction})$$

$$78.43 - 5.0 = 73.43$$

This score is rounded to 73.4 to arrive at the score shown on the card.

Problems with the Report Card

A number of problems exist with the current report card, both for public schools and for private schools participating in the state's parental choice programs. Many of these problems focus on the measure of student growth which is laudable to include, but arguably implemented poorly.

Growth and the School Report Card

Education experts have long advocated for the inclusion of measures of student growth rather than simply student achievement as a data point for how well or poorly a school is doing. Growth measures take into account where a particular student is starting at the beginning of a school year, and predict where that student will be in a subsequent year based on demographics and other factors. The difference between that prediction and actual student performance represents growth.

As discussed above, growth counts significantly more than achievement in schools with a large number of low-income students. However, the Wisconsin report card arguably goes too far in this regard.

To illustrate this, we look to the data from the 2018-19 report card for Milwaukee. Three schools received a score of "Meets Expectations" with proficiency rates in math and English/Language Arts of less than 10%. Five additional schools have proficiency rates of less than 20%, yet receive this rating.

Table 5. Low Proficiency Schools that Meet/Exceed Expectations

School	Proficiency (Math/ELA)	DPI Rating	% Low Income
Inst of Technology & Academics	2.15%	Meets Expectations	97.40%
Milwaukee Collegiate Academy	2.75%	Meets Expectations	97.50%
Starms Discovery	3.85%	Meets Expectations	98.80%
Kluge Elementary	4.10%	Meets Expectations	93.50%

Milwaukee Sign Language Elementary	4.10%	Meets Expectations	89.00%
Thurston Woods Elementary	4.10%	Meets Expectations	99.30%
Shining Star Christian Schools	6.30%	Meets Expectations	84.90%
Riley Elementary	7.25%	Meets Expectations	88.10%
Bethune Academy	7.50%	Meets Expectations	96.30%
Congress Elementary	8.50%	Meets Expectations	88.90%
Believers in Christ Christian Academy	8.85%	Meets Expectations	98.10%
Kilbourn Elementary	9.35%	Meets Expectations	88.30%
Milwaukee Environmental Science Academy	8.50%	Exceeds Expectations	87.40%
Messmer Catholic Schools ³	8.65%	Exceeds Expectations	70.70%
Allen-Field Elementary	9.20%	Exceeds Expectations	97.50%

All of these schools may do very well in promoting growth for their students, and this is very important when dealing with populations where many students are behind academically. For example, Milwaukee Collegiate Academy (now Dr. Howard Fuller Collegiate Academy) boasts a [100% college admissions rate](#) for eight straight years. But we ought not turn a blind eye to the need to eventually ensure that students are achieving proficiency, and the current report card is woefully inept at doing that in high-poverty schools.

Disability Status and Educational Choice

A look at the raw data from DPI shows a large disparity in the number of students identified as disabled between public schools and schools in the Milwaukee Parental Choice Program.

³ Note that Messmer is a system of schools. See page 12 for our discussion of the problems created by choice schools only getting one report card for all its schools.

Table 6. Disability Status by Sector, Milwaukee

School Type	Percentage of Students Identified as Disabled
Traditional Public School	21.8%
MPCP School	3.2%
Charter School	12.5%

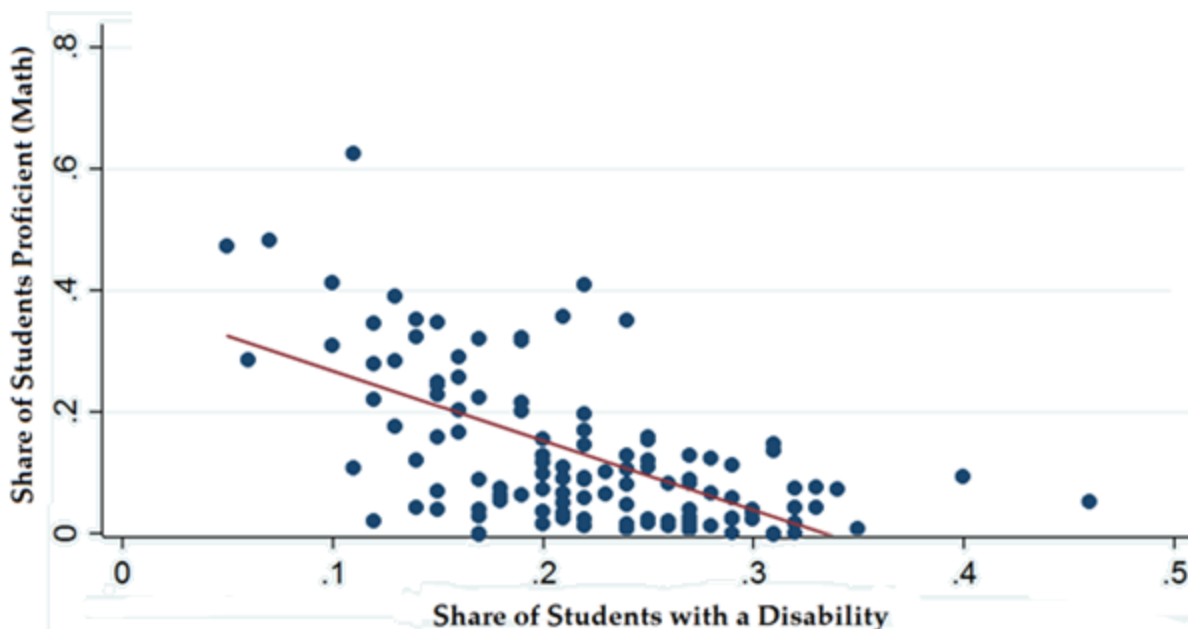
Does this mean that schools in the MPCP do not educate students with disabilities? Previous research suggest that this is not the case. Wolf et. al. (2012) found that a significant share of students who switched between traditional public schools and the parental choice program were no longer classified as disabled after switching. This analysis yielded an estimate of 7.5% to 14.6% of students in MPCP as having a disability.

In a second method of trying to arrive at a better estimate of disabled students, the researchers conducted a survey of parents with students in the MPCP. Only 2.8% of parents reported that their child had a physical disability, while 7.8% of parents reported a learning disability. The 11.8% disability rate arrived at in this research is significantly higher than the rate reported by DPI of 3.2%.

The reasons for lower reported disability rates in the MPCP are left to the realm of speculation, but one likely cause is that private schools in the choice program do not generally receive additional funding for educating disabled students. Unless the student's family applies for a Special Needs Voucher, the school must educate the student under the regular voucher amount—\$7,200 for K-8 students and \$7,856 for 9-12 students.

In relation to report card scores, this difference in the likelihood of identification as special needs is particularly important. To illustrate this, consider the chart below, which depicts the percentage of students in Milwaukee Public Schools who score proficient or higher on the math portion of the Forward Exam to the share of students in the school who are classified as disabled using 2016 data.

Figure 3. Disability Status and Math Proficiency, Milwaukee 2016



The rate of disabled students in the school is highly predictive of the share of students who achieve proficiency on the Forward Exam. This relationship remains strong with the inclusion of other relevant variables. A school that did not have an accurate count of its disabled students would be penalized by the omission of this variable because disability status is factored into a school’s growth calculation. For example, according to the most recent data from DPI, students with emotional/behavioral disabilities score about 3.5% lower, on average, than students without those issues. A student in a choice school who has this issue but is not counted as such will be “penalized” 3.5% on their expected report card score.

Economic Status and Educational Choice

Similar problems exist with the measurement of economic status. Many schools in the MPCP have high numbers of low-income students, but don’t always have accurate counts of those students because of the manner in which information is collected for this measure. Because Milwaukee was made a universal free lunch district during the Obama administration, schools lack incentive to collect information about the income of the families in the school. Now, families must fill out a separate form to be identified for which there are no tangible benefits.

To illustrate the problem, consider two schools in Milwaukee—the Institute of Technology & Academics and Holy Redeemer Christian. Both schools have similar levels of proficiency, with the Institute actually slightly lower on average. Yet the Institute is rated as “Meets Expectations” on the state report card while Holy Redeemer is rated as “Fails to Meet Expectations.”

Table 7. Proficiency and Income Status-Sample Schools

School	Proficiency	Report Card Score	% Low Income
Institute of Technology & Academics	2.2%	Meets Expectations	97.40%
Holy Redeemer Christian	2.4%	Fails to Meet Expectations	11.60%

The difference here largely comes down to the number of students identified as low income at Holy Redeemer. Despite all the students under discussion here utilizing a voucher with an income limit at 300% of the federal poverty limit, only 11.6% of students in the school are judged to be low income.

This is a problem of measurement error. Students in the MPCP who are disabled or low-income under public school definitions are not consistently being identified as such because different standards are being applied to assess whether a student is disabled in these schools.

One possibility is for the count of disabled students in a particular choice school to be re-estimated based on information about the extent of under-counting. Another possibility is for participating schools to become more active in identifying students as disabled and low-income under public school definitions. Failure to identify students is only hurting the report card score of the school, potentially leading to fewer parents selecting the school for their child.

The reliance of the report card on the percentage of students in a school who are economically disadvantaged creates problems for schools that do not have an accurate measure of the economic status of students.

System vs. School Report Cards

One of the more frustrating aspects of the report card for choice schools is that schools that are part of a system can only receive a report card for the entire system rather than for the individual schools in the system. For instance, Siena Catholic Schools has six schools in the Racine area that range from 3K to high school. Yet, they only receive one report card from the state for all of these schools. No other schools in the state are subject to this odd prohibition. Traditional public schools and district-run charter schools all receive individual report cards while still being part of systems.

Becoming a “system” does ease some of the burdens on private schools in the choice program. Systems are able to guarantee a student a spot when they move on from an elementary school to a high school. They also only face one annual audit instead of one for each school. Yet the lack of individual school report cards makes the report card score far less useful for schools to figure out where areas for improvement lie, and which schools are successful. To the extent that performance can vary between schools within a system, the lack of individual report cards makes it harder for families to decide which school is best for their child.

Private schools and systems should not have to make this choice. DPI should allow choice schools to systematize and maintain individual report cards rather than arbitrarily restricting their ability to do so.

Summary

The Wisconsin report card represents a relatively complex collection of different measures of student success. Complexity generally stems from the need to weigh various factors more heavily than others—new information more heavily than old, growth differently in schools with more disadvantaged students etc. Much of the information here is gathered from DPI’s [Report Card Technical Guide](#). This guide provides a far lengthier and more in-depth explanation of the Report Card, as well as examples that one can walk through.

While the report card is useful in assessing school performance, much work is needed to ensure that it provides accurate information about all schools across all sectors. Improvements to the measure of disability and economic status in choice schools, as well as reform to the share of ratings that are based on growth would help in that regard. Moreover, increasing the accountability for choice schools by allowing them to receive report cards at the school level