WISCONSIN DEPARTMENT OF
Public Instruction

OEA
Office of Educational Accountability

Technical Guide

2022-23 School and District Report Cards

Document Control

Document Information

Title	Report Card Technical Guide – 2022-23
Revision	N/A
Issue Date	9/26/2023
Security Level	Public
Filename	Report Card Technical Guide_2022-23_Final.pdf
Description	Technical documentation updated for 2022-23 Report Cards
Changes	N/A

Using This Document

This document provides descriptions for calculating the scores used in Wisconsin's school and district report cards. This document focuses on the three school-level report cards:

- Public school report card,
- Private school - Choice students report card, and
- Private school - All students report card.

All calculations and descriptions also apply to the district report card. Any differences between these report cards are specifically noted.

- Public report cards are available on the Department of Public Instruction's (DPI) website: http://dpi.wi.gov/accountability/report-cards.
- Secure (unredacted) report cards are available to authorized users in SAFE, the Secure Access File Exchange: http://dpi.wi.gov/wisedash/districts/safe.

This document connects the data on the school report card to the school's **overall score** and corresponding **accountability rating**.

You can approximate the calculations used to arrive at a school's overall and priority area scores using data from the **report card** (secure or public) and this document. Scores calculated with this document may not exactly match a school's score due to rounding, both in the calculation itself and in the display of values on the report card.

For further information on reading and interpreting the school and district report cards please refer to our resources available here: http://dpi.wi.gov/accountability/resources.

Table of Contents

Introduction

This technical guide is meant to provide clarity about the calculations behind the 2022-23 school and district report cards produced by the Wisconsin Department of Public Instruction (DPI). Using this guide in conjunction with the Report Card Guide helps with understanding and reproducing the scores that are on the report cards. Report cards and related resources can be accessed on the Report Cards Home page.

This guide provides a series of explanations and walkthrough examples for each of the four report card priority areas (Achievement, Growth, Target Group Outcomes, and On-Track to Graduation). This guide also assists in understanding differences between district, public school, and private school report cards. The report cards are designed to reflect the performance of schools and districts regardless of type—public, charter, or private.

Schools in the Private School Choice Programs receive a Private School – Choice Students Report Card that bases scores only upon students attending under the Choice program. These schools may also opt in to receive a Private School – All Students Report Card that scores all students in the school (those attending under the Choice program and private-paying students).

Building the Overall Score

Wisconsin's school accountability system uses multiple components across four priority areas to build a 0 to 100 point score for each school.

The overall score is a weighted average of scores for each of four priority areas—Achievement, Growth, Target Group Outcomes, and On-Track to Graduation.

Like the overall score, each of the priority areas are scored on a scale from 0 to 100. However, because Wisconsin has schools of many different sizes, grade levels, and student populations, not all of the priority areas apply in the same way to every school. Therefore, combining the priority area scores to arrive at an overall score is more complicated than taking a simple average. The following pages detail the steps taken to calculate the overall score.

Background

DPI bases the process of calculating a school's overall score on two important principles:

1. **We cannot calculate every priority area score for every school.** Every component of the report cards requires at least 20 students with data to calculate a score. Some schools are too small to calculate scores for some priority areas.
2. **A school should not be advantaged or disadvantaged by the presence or lack of a priority area or component.** Simply averaging the raw scores for available priority areas would create a bias for schools with fewer priority areas.

In order to mitigate this kind of bias, the overall score is calculated by applying the following rules:[1]

1. **The scales of Growth and Target Group Outcomes scores are aligned with the scale of Achievement scores.** Aligning scores to a common scale avoids creating a bias between these priority areas.
2. **The Target Group Outcomes priority area score requires a Target Group Achievement, Target Group Growth, and Target Group Attendance/Graduation Score.** The priority area may also include Chronic Absenteeism. Weights within the priority area are fixed. For the method of generating the Target Group Outcomes priority area score, please refer to the calculation section.
3. **The graduation/attendance and chronic absenteeism components within the On-Track to Graduation priority area have a fixed weight no matter how many other priority area scores or components are calculated.** Because these components cause the On-Track to Graduation scores to be typically much higher than the scores of the other priority areas, freezing the weight of these components prevents an unfair bias towards schools and districts that lack other priority areas, or other components of the On-Track to Graduation priority area.
4. **At minimum, Achievement and On-Track to Graduation priority area scores are needed to produce an overall score.** On-Track Attendance/Graduation is also needed to produce an On-Track to Graduation score.

Steps

The process for determining a school's overall score consists of calculating a **weighted average of** the priority area scores. This method also takes into account state statutory requirements for weighting Achievement and Growth according to the percentage of students in a school or district who are economically disadvantaged. Only the overall score incorporates this variable weighting scheme.

The steps below show how a school's overall score is calculated using priority area scores. Details on how these priority area scores are calculated are provided in the sections that follow.

Step 1: Calculate Priority Area Multipliers

Achievement multiplier

- If there is no Growth score, Achievement has a multiplier of 1.
    - If there is no Growth score, there will not be a Target Group Outcomes score either.
- If there is a Growth score:
    - If % of Economically Disadvantaged Students is less than or equal to 5%, Achievement has a multiplier of 0.9.
    - If % of Economically Disadvantaged Students is greater than or equal to 65%, Achievement has a multiplier of 0.1.
    - If the % of Economically Disadvantaged (ECD) Students is between 5% and 65%, Achievement has a multiplier of:

$$1 - \left[\left(\frac{4}{3} \right) * \% \; of \; ECD \; Students \; + \; \frac{1}{30} \right]$$

---

[1] DPI has a School and District Report Card Weighting Calculator that shows the weights applied to schools with different data availability and priority areas. See: https://oea-dpi.shinyapps.io/report_card_weighting_calculator/.

Growth multiplier

- If % of Economically Disadvantaged students is less than or equal to 5%, Growth has a multiplier of 0.1.
- If % of Economically Disadvantaged students is greater than or equal to 65%, Growth has a multiplier of 0.9.
- If % of Economically Disadvantaged Students is between 5% and 65%, Growth has a multiplier of 1 - Achievement multiplier.

Target Group Outcomes multiplier

- Target Group Outcomes has a multiplier of 0.5.

On-Track to Graduation multiplier

- If there is a 3rd Grade ELA score or 8th Grade Math score under the On-Track to Graduation priority area, On-Track to Graduation has a multiplier of 1; if not, it has a multiplier of 0.8.

Step 2: Calculate Priority Area Weights

Achievement Weight

- If there is a 3rd Grade ELA score or 8th Grade Math score under the On-Track to Graduation priority area, Achievement has a weight of:

$$\left(\frac{Achievement\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3}{4}$$

- If there is not a 3rd Grade ELA score or 8th Grade Math score, Achievement has a weight of:

$$\left(\frac{Achievement\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3.2}{4}$$

Growth Weight

- If there is a 3rd Grade ELA score or 8th Grade Math score under the On-Track to Graduation priority area, Growth has a weight of:

$$\left(\frac{Growth\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3}{4}$$

- If there is not a 3rd Grade ELA score or 8th Grade Math score, Growth has a weight of:

$$\left(\frac{Growth\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3.2}{4}$$

Target Group Outcomes Weight

- If there is a 3rd Grade ELA score or 8th Grade Math score under the On-Track to Graduation priority area, Target Group Outcomes has a weight of:

$$\left(\frac{Target\ Group\ Outcomes\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3}{4}$$

- If there is not a 3rd Grade ELA score or 8th Grade Math score, Target Group Outcomes has a weight of:

$$\left(\frac{Target\ Group\ Outcomes\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3.2}{4}$$

On-Track to Graduation Weight

- On-Track to Graduation weight equals the On-Track to Graduation multiplier divided by 4.

Step 3: Calculation of Overall Score

(Achievement Score*Achievement Weight) + (Growth Score*Growth Weight) + (Target Group Outcomes Score*Target Growth Outcomes Weight) + (On-Track to Graduation Score*On-Track to Graduation Weight)=Overall Score

The overall score determines the accountability rating category for a school or district. Each accountability rating category corresponds to a number of stars. Note that the thresholds for these categories were updated in 2020-21 in response to updates to report card calculations including the improved priority area - Target Group Outcomes.

Accountability Rating Category	Accountability Score Range	
	Minimum	Maximum
Significantly Exceeds Expectations – ★★★★★	83	100
Exceeds Expectations – ★★★★☆	70	82.9
Meets Expectations – ★★★☆☆	58	69.9
Meets Few Expectations – ★★☆☆☆	48	57.9
Fails to Meet Expectations – ★☆☆☆☆	0	47.9

Overall Score Walkthroughs

Below are three walkthroughs using hypothetical school examples to show how the overall score is calculated, how those calculations may vary depending on school type (e.g., elementary, middle, high school), and how many priority areas or score components are available for the school.

Overall score weights for priority areas and components are dependent upon school characteristics and data availability. Schools/districts can find their weights by using the Report Card Weighting Calculator at https://oea-dpi.shinyapps.io/report_card_weighting_calculator/.

Overall Score Walkthrough #1

Sample Elementary School has the following priority area scores, and an economically disadvantaged student percentage of 20%:

Priority Area or Component	Score/Possible
Achievement	71.7 / 100
Growth	59.0 / 100
Target Groups Outcomes	62.4 / 100
On-Track to Graduation	93.1 / 100
Chronic Absenteeism	*96.5 / 100*
Attendance	*97.5 / 100*
3rd Grade English Language Arts	*77.5/ 100*

Step 1: Calculate Priority Area Multipliers

Achievement multiplier

- Since there are Growth and Target Group Outcomes scores and since the percentage of Economically Disadvantaged Students is between 5% and 65%, Achievement has a multiplier of:

$$1 - \left[\left(\frac{4}{3}\right) * \% \ of \ ECD \ Students \ + \ \frac{1}{30}\right]$$

$$1 - \left[\left(\frac{4}{3}\right) * .20 \ + \ \frac{1}{30}\right] = 0.7$$

Growth multiplier

- Since there is a Growth score and % of Economically Disadvantaged Students is between 5% and 65%, Growth has a multiplier of 1 - Achievement multiplier.

$$1 - 0.7 = 0.3$$

Target Group Outcomes multiplier

- Since there is a Target Group Outcomes score, the Target Group Outcomes has a multiplier of 0.5.

On-Track to Graduation multiplier

- Since there is a 3rd Grade ELA score, the On Track to Graduation multiplier is 1.

Step 2: Calculate Priority Area Weights

Achievement Weight

- Since there is a 3ʳᵈ Grade ELA score, Achievement weight equals:

$$\left(\frac{Achievement\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3}{4}$$

$$\left(\frac{0.7}{0.7 + 0.3 + 0.5}\right) * \frac{3}{4} = .35\ (\text{or } 35\%)$$

Growth Weight

- Since there is a 3ʳᵈ Grade ELA score, Growth weight equals:

$$\left(\frac{Growth\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3}{4}$$

$$\left(\frac{0.3}{0.7 + 0.3 + 0.5}\right) * \frac{3}{4} = .15\ (\text{or } 15\%)$$

Target Group Outcomes Weight

- Since there is a 3ʳᵈ Grade ELA score, Target Group Outcomes weight equals:

$$\left(\frac{Target\ Group\ Outcomes\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right) * \frac{3}{4}$$

$$\left(\frac{0.5}{0.7 + 0.3 + 0.5}\right) * \frac{3}{4} = .25\ (\text{or } 25\%)$$

On-Track to Graduation Weight

- On-Track to Graduation weight equals On-Track to Graduation multiplier divided by 4.

$$\frac{1}{4} = .25\ (\text{or } 25\%)$$

Step 3: Calculation of Overall Score

(Achievement Score*Achievement Weight) + (Growth Score*Growth Weight) + (Target Group Outcomes Score*Target Growth Outcomes Weight) + (On-Track to Graduation Score*On-Track to Graduation Weight) = Overall Score

(71.7*35%) + (59.0*15%) + (62.4*25%) + (93.1*25%) =72.8

Sample Elementary School's overall score is 72.8. A score of 72.8 means Sample Elementary School gets an overall accountability rating of 4 stars—**Exceeds Expectations**.

Overall Score Walkthrough #2

Example High School has the following priority area scores, and an economically disadvantaged student percentage of 52%:

Priority Area or Component	Score/Possible
Achievement	56.9 / 100
Growth	41.5 / 100
Target Group Outcomes	68.2 / 100
On-Track to Graduation	86 / 100
Chronic Absenteeism	*89.4 / 100*
Graduation	*70.6 / 100*

Step 1: Calculate Priority Area Multipliers

Achievement multiplier

- Since there are Growth and Target Group Outcomes scores and since the % of Economically Disadvantaged Students is between 5% and 65%, Achievement has a multiplier of:

$$1 - \left[\left(\frac{4}{3} \right) * \ \% \ of \ ECD \ Students \ + \ \frac{1}{30} \right]$$

$$1 - \left[\left(\frac{4}{3} \right) * \ .52 \ + \ \frac{1}{30} \right] = 0.27$$

Growth multiplier

- Since there is a Growth score and % of Economically Disadvantaged Students is between 5% and 65%, Growth has a multiplier of 1 - Achievement multiplier.

$$1 - 0.27 = 0.73$$

Target Group Outcomes multiplier

- If there is a Target Group Outcomes score, Target Group Outcomes has a multiplier of 0.5.

On-Track to Graduation multiplier

- Since there is not a 3rd Grade ELA score or 8th Grade Math score, On-Track to Graduation has a multiplier of 0.8.

Step 2: Calculate Priority Area Weights

Achievement Weight

- Since there is not a 3rd Grade ELA score or 8th Grade Math score, Achievement has a weight of:

$$\left(\frac{Achievement\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right)*\frac{3.2}{4}$$

$$\left(\frac{0.27}{0.27 + 0.73 + 0.5}\right)*\frac{3.2}{4} = .144\ (\text{or }14.4\%)$$

Growth Weight

- Since there is not a 3rd Grade ELA score or 8th Grade Math score, Growth has a weight of:

$$\left(\frac{Growth\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right)*\frac{3.2}{4}$$

$$\left(\frac{0.73}{0.27 + 0.73 + 0.5}\right)*\frac{3.2}{4} = .389\ (\text{or }38.9\%)$$

Target Group Outcomes Weight

- Since there is not a 3rd Grade ELA score or 8th Grade Math score, Target Group Outcomes has a weight of:

$$\left(\frac{Target\ Group\ Outcomes\ multiplier}{Achievement\ multiplier + Growth\ multiplier + Target\ Group\ Outcomes\ multiplier}\right)*\frac{3.2}{4}$$

$$\left(\frac{0.5}{0.27 + 0.73 + 0.5}\right)*\frac{3.2}{4} = .267\ (\text{or }26.7\%)$$

On-Track to Graduation Weight

- On-Track to Graduation weight equals On-Track to Graduation multiplier divided by 4.

$$\frac{0.8}{4} = .20\ (\text{or }20\%)$$

Step 3: Calculation of Overall Score

(Achievement Score*Achievement Weight) + (Growth Score*Growth Weight) + (Target Group Outcomes Score*Target Growth Outcomes Weight) + (On-Track to Graduation Score*On-Track to Graduation Weight) = Overall Score

(56.9*14.4%)+(41.5*38.9%)+(68.2*26.7%)+(86*20%)=59.7

Example High School's overall score is 59.7. A score of 59.7 means Example High School gets an overall accountability rating of 3 stars - **Meets Expectations**.

Overall Score Walkthrough #3

Rural Elementary School has the following priority area scores, and an economically disadvantaged percent of 35%:

Priority Area or Component	Score/Possible
Achievement	63.5 / 100
On-Track to Graduation	87.6 / 100
Chronic Absenteeism	*93.0 / 100*
Attendance	*94.5 /100*
3rd Grade English Language Arts	*63.0 /100*

Step 1: Calculate Priority Area Multipliers

Achievement multiplier

- Since there is no Growth and no Target Group Outcomes scores, Achievement has a multiplier of 1.

On-Track to Graduation multiplier

- Since there is a 3rd Grade ELA score, On Track to Graduation has a multiplier of 1.

Step 2: Calculate Priority Area Weights

Achievement Weight

- Since there is a 3rd Grade ELA score, Achievement ha a weight of:

$$\left(\frac{Achievement\ multiplier}{Achievement\ multiplier\ +\ Growth\ multiplier\ +\ Target\ Group\ Outcomes\ multiplier} \right) * \frac{3}{4}$$

$$\left(\frac{1}{1\ +\ 0\ +\ 0} \right) * \frac{3}{4} = .75 \text{ (or 75\%)}$$

On-Track to Graduation Weight

- On-Track to Graduation weight equals On-Track to Graduation multiplier divided by 4.

$$\frac{1}{4} = .25 \text{ (or 25\%)}$$

Step 3: Calculation of Overall Score

(Achievement Score*Achievement Weight) + (Growth Score*Growth Weight) + (Target Group Outcomes Score*Target Growth Outcomes Weight) + (On-Track to Graduation Score*On-Track to Graduation Weight) = Overall Score

$(63.5*75\%)+(87.6*25\%)=69.5$

Rural Elementary School's overall score is 69.5. A score of 69.5 means Rural Elementary School gets and overall accountability rating of 3 stars - **Meets Expectations**.

Global Notes

- The report cards have four priority areas. Within each priority area, individual components are calculated. Example: Achievement is a priority area; English Language Arts (ELA) Achievement and Mathematics Achievement are two components of this priority area, each calculated separately.
- All scores are calculated and reported to one-tenth of a point.
- Calculations are rounded to the third decimal point (0.001, or 0.1%). Rounding is done at two stages in the calculation process: first, when individual student data are aggregated into a rate or average, and second, at the end of a sequence of algebraic operations.
- DPI uses a cell size, the minimum number of students needed to calculate a data component, of 20 students (N=20). In most cases, the cell size is applied to each year of data separately. In the 3rd Grade English Language Arts and 8th Grade Mathematics achievement components of the On-Track to Graduation priority area, the cell size is applied to the two most recent years of data combined. In other words, if a school meets cell size by combining the two most recent years, but would not if not combined, the data from the two most recent years are used in the calculation. This is done to provide these component scores for as many schools as possible.
- State-level priority area score comparisons are provided on the front page of the report card, based on average state scores from the grade band that most closely matches the school. There are six grade bands for which state average scores are calculated: K-5, 6-8, 9-12, K-8, 6-12, and K-12. State-level comparison scores treat all Wisconsin students within a particular grade band as if they were one giant school. These scores are calculated using the same methodology as individual school scores. State-level comparison scores do not affect a school's score or rating category; they are provided for context only.
- Graduation, attendance, and chronic absenteeism data are from the prior year, not the current year, due to data availability. For example, the most recent graduation, attendance, and absenteeism data used in 2022-23 report cards are from the 2021-22 school year.
- Multiple years of data are considered throughout the report card:
  - Achievement requires a minimum of two consecutive years of data, and may contain up to three years of data in both ELA and mathematics.
  - Growth requires two consecutive years of assessment data in both ELA and mathematics per student included in the calculation. Students do not need to have attended the same school in the prior year to be included as long as they took a WSAS assessment in the prior year.
  - The graduation component of the On-Track priority area requires one of the four-year or seven-year graduation rates (both rates are used when present). The attendance component uses one year of data.
  - The chronic absenteeism component of the On-Track priority area uses up to three years of data where available but may use only one year.
  - The component scores of Target Group Outcomes — Target Group Achievement, Target Group Growth, Target Group Attendance/Graduation, and Target Group Chronic

Absenteeism — contain the same pattern of data years as the analogous priority area component scores for all students in the school.

- Whether a student attended a school for the full academic year (FAY) is determined differently at the school and district levels. For school report cards, FAY determination is based on FAY for the school, not the district; for district report cards, FAY determination is based on FAY for the district, not the school. FAY is determined at the student level through continuous enrollment from Third Friday of September (TFS) to testing/end of the spring assessment window. For past and current definitions of FAY, please visit: http://dpi.wi.gov/wisedash/help/glossary.
- Whether a student has FAY status factors into whether they are included in report card calculations, for certain priority areas. The following table shows when FAY status determines whether a student is included in a calculation:

FAY Students Only	All Students (FAY and not FAY)
Achievement	Graduation Rate
Growth	Attendance Rate
On-Track to Graduation: 3rd Grade English Language Arts Achievement	Chronic Absenteeism Rate - students must have been enrolled for 90+ total school days to be included in this rate.
On-Track to Graduation: 8th Grade Mathematics Achievement	

Exceptions

An Overall Score cannot be calculated for schools in the following situations:

- New schools (those with only one year of data).
- Schools without tested grades (e.g., K4-2 schools).
- Schools with fewer than 20 full academic year (FAY) students in WSAS tested grades (Grades 3-11) assessed in the most recent year (2022-23) or the prior year (2021-22).

Public schools in these situations are assigned a rating based on an alternate accountability process. They may receive an AR rating of *"Alternate Rating - Satisfactory Progress"* or *"Alternate Rating - Needs Improvement"* based on a district-supervised self-evaluation process. Starting in 2020-21, schools that do not meet any of the above criteria, but who exclusively serve at-risk students are no longer part of the alternate accountability process. Instead, they are evaluated under the standard accountability process. More information about alternate accountability can be found online: http://dpi.wi.gov/accountability/alternate-accountability.

In addition to the situations listed above, Choice schools may not meet the requirements for calculating an overall score based on the following two scenarios:

1. The school submitted insufficient Choice enrollment data, inhibiting the ability to produce an overall score.
2. The school submitted data for only one of the two years required for producing a score. This applies to new Choice schools and Choice schools switching opt-in statuses for the Private School-All Students Report Card.

When a Choice school falls under one of these two scenarios, it is assigned a rating of "NR-DATA"; Choice schools do not participate in alternate accountability.

Calculating Priority Area Scores
Achievement Priority Area

The Achievement priority area is designed to show **how well the students in a school have learned the knowledge and skills they are supposed to attain**. DPI uses state assessment data over the past three years to build a score, with more recent years bearing more weight on the score. Achievement is a points-based measure that gives credit for outcomes at multiple performance levels, with higher levels of performance earning more points.

Background

The simplest way to measure Achievement with state assessment results is by the percentage of students scoring at or above the proficient level. Wisconsin state proficiency level definitions were developed through a detailed process involving educators and testing professionals, and designed to approximate the proficiency benchmarks of the National Assessment of Educational Progress (NAEP) test. Proficiency level definitions were created for each Wisconsin assessment in the state accountability system, including the Forward Exam, DLM, PreACT Secure, and the ACT with Writing, and the prior assessments – the Badger Exam, WKCE, WAA-SwD, and ACT Aspire.

To ensure schools are treated fairly, and to help further differentiate school performance, the Achievement measure allocates points to schools based on student performance at the partially proficient (Basic), proficient, or beyond the proficient (Advanced) thresholds. Schools earn 0 points for students who are at the Below Basic level.

- Advanced level: **1.5 points**
- Proficient level: **1 point**
- Basic level: **0.5 points**
- Below Basic level: **0 points**

The calculation also incorporates up to three years of data to account for variation in year-to-year results, weighting the most recent years more heavily.

Reading the Report Card

To arrive at an Achievement score, separate component scores for ELA and mathematics are calculated first and then averaged. The Performance Levels by Year graphs for ELA and mathematics in the Achievement section show the count of students scoring at each performance level over the last three years. Non-tested students and students with invalidated tests are not included in the Achievement calculations; neither are students who are not FAY. Consider the following example data on ELA achievement for a sample school, which will be used throughout the walkthrough below:

ENGLISH LANGUAGE ARTS
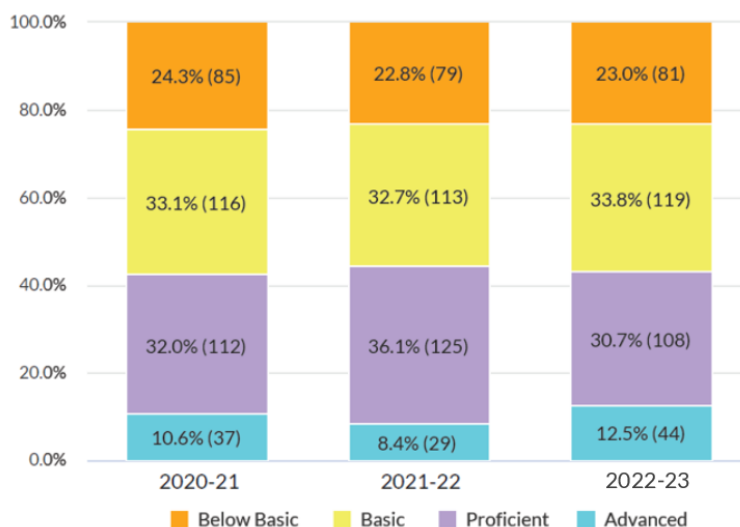
This chart shows that 350 students with FAY status were tested at this school two testing years prior (2020-21), with 37 scoring Advanced, 112 scoring Proficient, 116 scoring Basic, and 85 scoring Below Basic. Counts for the prior (2021-22) and most recent year (2022-23) are similarly displayed. This graph also shows the percent of students scoring in each performance category two years prior, with 10.6% scoring Advanced, 32.0% scoring Proficient, 33.1% scoring Basic, and 24.3% scoring Below Basic. Percentages for the prior and most recent years are similarly displayed.

Achievement Walkthrough

This walkthrough guides the user through the calculation of an Achievement score for a single content component (ELA). To determine an overall Achievement score, the process is repeated for the other content component (mathematics), and the two component scores are averaged.

Throughout this walkthrough, we use three terms to describe the year of data used in each step:

- "Prior Year 2" refers to the school year two testing years before the year of the report card and is the left-most school year shown in the achievement section. For the 2022-23 Report Card, it refers to 2020-21.
- "Prior Year 1" refers to the school year one testing year before the year of the report card and is the center school year shown in the achievement section. For the 2022-23 Report Card, it refers to 2021-22.
- "Current Year" refers to the most recent year of assessment data used and is the right-most school year shown in the achievement section. For the 2022-23 Report Card, it refers to 2022-23.

Step 1: Assign and Average Points

The first step is to assign points for performance levels attained on the content component and calculate the average points per student for each year. Students scoring Advanced are assigned 1.5 points each; students scoring Proficient, 1 point; and students scoring Basic, 0.5 points. Students scoring Below Basic are assigned zero points. These point values are multiplied by the number of students to determine the points awarded in each category. The points for each year are then added together and divided by the

total number of students tested to determine an average. Each year's average is capped at a maximum of 1.

ENGLISH LANGUAGE ARTS
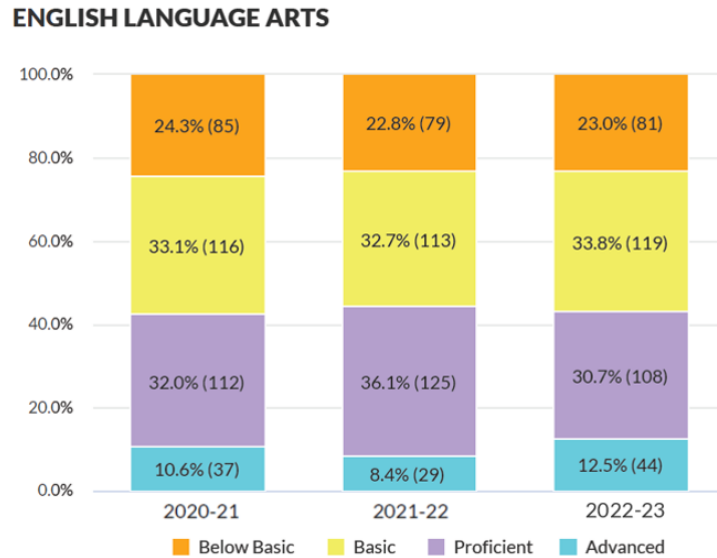
Calculation

Calculate proficiency points earned in Prior Year 2. Similar calculations are performed for Prior Year 1 and Current Year.

$Points\ =\ Points\ Multiplier\ *\ Count\ of\ FAY\ students\ in\ that\ performance\ level$

$Prior\ Year\ 2\ Advanced\ Points\ =\ 1.5\ *\ 37\ =\ 55.5$

$Prior\ Year\ 2\ Proficient\ Points\ =\ 1\ *\ 112\ =\ 112$

$Prior\ Year\ 2\ Basic\ Points\ =\ 0.5\ *\ 116\ =\ 58$

$Prior\ Year\ 2\ Below\ Basic\ Points\ =\ 0\ *\ 85\ =\ 0$

$Prior\ Year\ 2\ Points\ =\ 55.5\ +\ 112\ +\ 58\ +\ 0\ =\ 225.5$

Calculate the average points per student for each year.

$Prior\ Year\ 2\ Average\ =\ Prior\ Year\ 2\ Points\ /\ Prior\ Year\ 2\ Count$

$Prior\ Year\ 1\ Average\ =\ Prior\ Year\ 1\ Points\ /\ Prior\ Year\ 1\ Count$

$Current\ Year\ Average\ =\ Current\ Year\ Points\ /\ Current\ Year\ Count$

$Prior\ Year\ 2\ Average = \frac{225.5}{350} = 0.644$

$Prior\ Year\ 1\ Average = \frac{225}{346} = 0.650$

$Current\ Year\ Average = \frac{233.5}{352} = 0.663$

Step 2: Calculate Annual Weights

Next, we calculate a weight for each year's average, which (1) weights more recent years more heavily, and (2) takes into account year-to-year fluctuations in numbers of students tested. These fluctuations are captured by comparing the number of students tested in a given year to the average number tested across three years of data. To do this, we calculate a weight that is the product of a "students tested weight"—that is, the number of students tested that year divided by the average tested across all three years—and a "year weight" that is higher for more recent years.

The values that go into each year's weight depend upon how many years of data are available that meet our cell size (minimum number of students with data) of 20:

- Three years available: "Year weights" are 1.5 for the current year, 1.25 for the prior year, and 1 for the year before that; the number of students tested is averaged across all three years.
- Two years available: "Year weights" are 1.5 for the current year and 1 for the prior year; the number of students tested is averaged across only the current and prior years.
- One year available: *No score.* A minimum of two years available data are required to calculate an Achievement score.

Formulas

$$Average\ Number\ Tested = \frac{Prior\ Year\ 2\ Number\ Tested + Prior\ Year\ 1\ Number\ Tested + Current\ Year\ Number\ Tested}{Number\ of\ Years\ Available}$$

$$Prior\ Year\ 2\ Weight = 1 * \frac{Prior\ Year\ 2\ Number\ Tested}{Average\ Number\ Tested}$$

$$Prior\ Year\ 1\ Weight = 1.25 * \frac{Prior\ Year\ 1\ Number\ Tested}{Average\ Number\ Tested}$$

$$Current\ Year\ Weight = 1.5 * \frac{Current\ Year\ Number\ Tested}{Average\ Number\ Tested}$$

Calculation

$$Prior\ Year\ 2\ Weight = 1 * \frac{350}{\frac{(350+346+352)}{3}} = 1.002$$

$$Prior\ Year\ 1\ Weight = 1.25 * \frac{346}{\frac{(350+346+352)}{3}} = 1.239$$

$$Current\ Year\ Weight = 1.5 * \frac{352}{\frac{(350+346+352)}{3}} = 1.512$$

Step 3: Combine Points and Weights

In step three, we multiply the average points determined in Step 1 by the weights calculated in Step 2.

Formulas

$$Prior\ Year\ 2\ Score\ =\ Prior\ Year\ 2\ Average\ *\ Prior\ Year\ 2\ Weight$$

$$Prior\ Year\ 1\ Score\ =\ Prior\ Year\ 1\ Average\ *\ Prior\ Year\ 1\ Weight$$

$$Current\ Year\ Score\ =\ Current\ Year\ Average\ *\ Current\ Year\ Weight$$

Calculation

$$Prior\ Year\ 2\ Score\ =\ 0.644\ *\ 1.002\ =\ 0.645$$

$$Prior\ Year\ 1\ Score\ =\ 0.650\ *\ 1.239\ =\ 0.805$$

$$Current\ Year\ Score\ =\ 0.663\ *\ 1.512\ =\ 1.002$$

Step 4: Calculate Content Component Score

The achievement score for this content area is calculated by (1) adding the scores from Step 3, (2) dividing the result by the sum of the weights determined in Step 2, and (3) then multiplying the final value by 100. This creates a subject area component score out of 100 points, which, when averaged with the other subject area component score, will result in an overall priority area score.

Formula

$$Subject\ Area\ Achievement\ Score\ =\ \frac{Prior\ Year\ 2\ Score+Prior\ Year\ 1\ Score+Current\ Year\ Score}{Prior\ Year\ 2\ Weight+Prior\ Year\ 1\ Weight+Current\ Year\ Weight}\ *\ 100$$

Calculation

$$Subject\ Area\ Achievement\ Score\ =\ \frac{0.645+0.805+1.002}{1.002+1.239+1.512}\ *\ 100\ =\ 65.3$$

This school's score for the ELA component of the Achievement Area Score is 65.3.

Calculating Priority Area Scores
Growth Priority Area

The Growth priority area evaluates schools on their **students' growth over time compared to the growth of similar students in other Wisconsin schools.** This measure provides information on a school's contribution to their students' progress, regardless of the prior achievement level of those students. This is in contrast to Achievement which focuses attention on a smaller subset of students near the thresholds between performance levels.
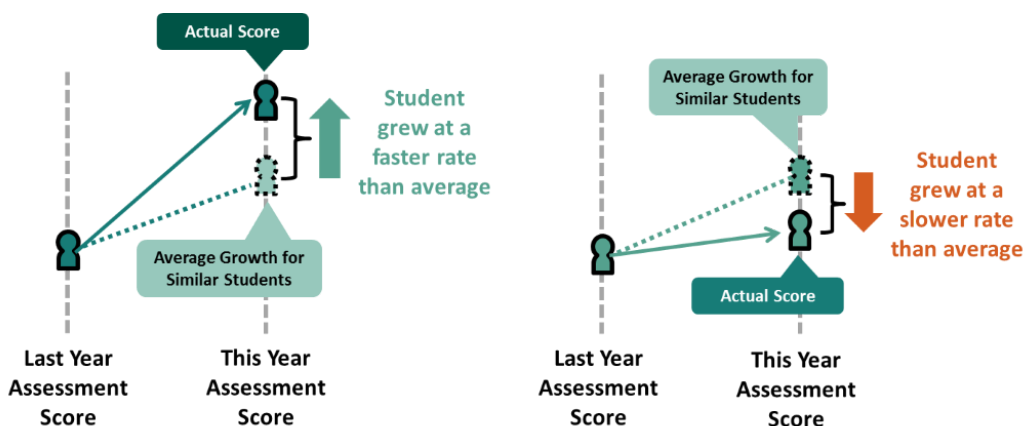
Background

At the foundation of the Growth score is a statistical technique known as value-added, which is used in many states and districts as a measure of school performance. There are different types of value-added measures, each with different technical properties. Value-added measures belong to a class of statistical models that quantify how much growth students make over time after applying statistical controls for factors that are generally beyond a school's control but may influence how much growth students make. These include factors such as students' prior achievement and certain characteristics about the students themselves, such as whether they come from families with lower income levels or have a disability and/or are English learners.

The purpose of statistically controlling for prior achievement and other student attributes is *not* to establish lowered expectations for some students' performance – since high expectations are already reinforced and rewarded through the Achievement priority area – but rather to recognize the fact that schools often differ substantially with respect to the students they serve. Some schools' enrollments are composed largely of students from more affluent families and communities who often enter school with higher levels of achievement and school readiness, while others have higher concentrations of historically marginalized populations, and therefore higher percentages of students who begin schooling with lower levels of readiness. Research accumulated across many years affirms that these kinds of factors often influence the rate at which students grow. It therefore makes sense to include in the report cards not just measures of how well students are performing at a point-in-time (Achievement), but also the rate at which all students, regardless of prior achievement level and background, are progressing over time (Growth).

While the calculations behind value-added are complex, the concept is fairly straightforward. Value-added compares the growth of students at a given school to the growth of similar students across the state of Wisconsin. Similar students are determined by prior achievement and a selected set of characteristics about the students themselves that are generally beyond a school's control yet may influence students' growth over time. In addition to prior achievement, the value-added model used in the report cards (developed at the University of Wisconsin-Madison)[2] includes statistical controls for students' family income status (as measured by free/reduced lunch eligibility), disability status, English language proficiency level, gender, and race/ethnicity. The objective is to facilitate "apples to apples" comparisons between schools that often serve very different student populations, and to include growth across the entire spectrum of student performance, rather than just a subset that moves across proficiency levels.

---

[2] Additional information on the Wisconsin value-added model is available at http://dpi.wi.gov/accountability/report-cards, http://dpi.wi.gov/accountability/growth, and at http://varc.wceruw.org/what-we-do/professional-development.aspx.

In addition to applying statistical controls for students' prior achievement and selected attributes such as family income, the value-added model also includes a statistical correction for measurement error, a common issue in standardized assessments. Measurement error refers to the idea that students' scores on a single administration of a standardized test are not a perfect measure of their true knowledge and ability, and may differ if the same student were to take the same test again. Such variation in scores is especially common when assessment results are very low or very high, but can be statistically adjusted for in the pre-test score to help ensure that schools with large numbers of low- or high-performing students are not penalized in the Growth measure.

Reading the Report Card

To arrive at a Growth score, separate value-added component scores for ELA and mathematics are calculated by DPI's value-added vendor Education Analytics. Note that three years of value-added results are used, when available, in calculating the weighted average value-added scores. As in other parts of the report card, the current year is weighted more heavily than prior years' data:

- Three years available: "Year weights" are 1.5 for growth in the current year, 1 for the prior year, and 0.5 for the year before that; with results averaged across three years.
- Two years available: "Year weights" are 1.5 for growth in the current year, 1 for the prior year; with results averaged across both years.
- One year available: "Year weight" is 1 for growth in the current year.

The value-added scores generally range from 0 to 6, in which a score of 3 is average. While rare, a value-added score can extend below 0 or above 6 when growth is much higher or lower than expected.

DPI converts these value-added scores to Growth component scores for each subject on a 0-100 point scale. The subject-level component scores are then averaged together. Graphs for ELA and mathematics in the Growth section also report multi-year average value-added scores by student group, including the count of students included in the calculations.

Growth Walkthrough

This walkthrough guides the user through the calculation of a Growth score from Sample Elementary.

Consider the following example data on growth for a sample school.

ENGLISH LANGUAGE ARTS			MATHEMATICS		
All Students	(372)	2.0	All Students	(383)	3.1
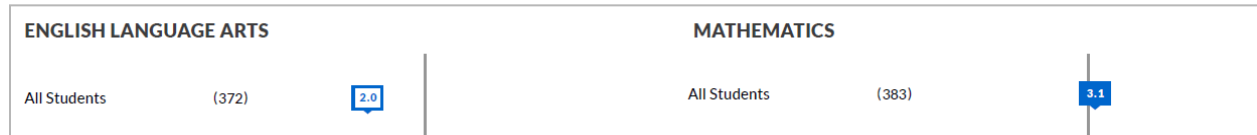
This graph shows that 372 students were included in value-added calculation for ELA and 383 for mathematics, with a multi-year weighted average value-added scores of 2.0 for ELA and 3.1 for mathematics. The blue box on mathematics denotes that this school has above statewide average (>3) growth.

Step 1: Determine the Growth Component Scores

First, we use a formula to determine the Growth subject-level component scores and put them on a similar scale to Achievement.

Formula

$$Growth\ Component\ Score = [(Value\ Added\ Score * 0.19) + 0.09] * Possible\ Points$$

Note: 0.19 and 0.09 are numbers that align Growth to a scale based on Achievement scores. Growth and Target Group Outcomes priority area score distributions are rescaled to align with the Achievement so that overall scores and ratings are comparable for schools with and without these priority areas.

Calculation

$$ELA\ Growth\ Score = [(2.0 * 0.19) + 0.09] * 100 = 47.0$$

$$Mathematics\ Growth\ Score = [(3.1 * 0.19) + 0.09] * 100 = 67.9$$

Sample Elementary has Growth component scores in English language arts of 47.0 and in mathematics of 67.9.

Step 2: Determine the Growth Priority Area Score

To calculate the Growth priority area, average the two Growth component scores together.

Formula

$$Growth\ Score = (ELA\ Growth\ score\ +\ Mathematics\ Growth\ Score)/2$$

Calculation

$$Growth\ Score = (47.0\ +\ 67.9)/2 = 57.5$$

Calculating Priority Area Scores
Target Group Outcomes Priority Area

Target Group Outcomes is an **updated priority area.** It examines multiple measures for students in the bottom quartile (25%) of performance based on the prior year's test results, along with any students who scored less than proficient on that year's DLM alternate assessment. This priority area is designed to inform improvement efforts, resulting in positive change for learners who most need it while also improving outcomes for all students. It replaces the Closing Gaps priority area.

Background

The Target Group Outcomes priority area (like Closing Gaps before it) is aimed at increasing achievement for historically underserved populations of students. But rather than scoring the outcomes of demographics-based groups, it forms a single group within a school based on test scores in the prior year. This is done to:

- Focus attention on students most in need of support:

  Improving achievement for all requires that support be targeted to the students who face the greatest obstacles. When the performance of the lowest-performers in a school increases, the overall performance of (and score for) the school increases. While the target group is not formed by explicit reference to demographic groups, it still aims to raise achievement of historically marginalized students (students of color, students with disabilities, low-income students, and English learners), because low performers from these groups are included in the target group. This measure emphasizes support for all low-performing students regardless of race/ethnicity or service group.

- More consistently score a priority area focused on gap closure, across schools of varying composition, and across report card years:

  Previously, student groups at a school that did not have at least 20 students (e.g., 17 Black students, 19 Hispanic/Latino students) were not included in the Closing Gaps measure and student groups that hovered around 20 from year-to-year could jump in and out of cell size (and scoring), causing large and distracting score fluctuations. The performance-based construction of the target group approach allows for the inclusion of students who are in most need of support, regardless of the size of their demographic group, while providing a more stable group size year-to-year.

- Support continuous improvement:

  Identifying a lowest-performing group reinforces the idea that every school has work to do to close gaps. By focusing on a target group that is roughly 25% of students, schools are also provided with a manageable number of students on whom to focus.

For more information on how students are assigned to the target group, please see the Target Group Outcomes Guide available at http://dpi.wi.gov/accountability/resources.

Target Group Outcomes Scoring

Target groups are scored using the familiar measures of achievement, value-added growth, chronic absenteeism, and graduation or attendance rates. These scores are calculated using the same methodologies as the analogous priority area and component scores for all students (see table below). The only difference is that within the Target Group Outcomes priority area these calculations only apply to students in the target group. Note that students in the target group continue to be included in calculations for the Achievement, Growth, and On-Track to Graduation priority areas, in addition to being scored separately in the Target Group Outcomes priority area.

Target Group Outcomes Scoring Component	Calculation
Achievement	Multi-year weighted average of English Language Arts (ELA) and mathematics points-based proficiency rates.
Growth	Multi-year weighted average of English Language Arts (ELA) and mathematics value-added growth.
Chronic Absenteeism	Multi-year weighted average of chronic absenteeism rate subtracted from one. Students with attendance rate below 90% are considered chronically absent.
Graduation or Attendance	Graduation is calculated using the average of four-year and seven-year cohort graduation rates. Attendance is calculated by dividing the number of actual days attended by the number of possible days attended.

At a minimum, for Target Group Outcomes to be scored, a school must meet cell-size requirements for each of Target Group Achievement, Target Group Growth, and Target Group Attendance or Graduation. The Target Group Outcomes priority area score is a weighted average of the included components. Weighting of these components for a typical school is displayed in the table below.

Target Group Outcomes Scoring Component	Weight within Target Group Outcomes priority area score
Achievement	20%
Growth	50%
Chronic Absenteeism	15%
Graduation or Attendance	15%

Note that unlike in overall report card score weighting, **achievement and growth are not subject to variable weighting within Target Group Outcomes**. The percentage of economically disadvantaged students at a school or district does not impact how achievement and growth are weighted in Target Group Outcomes, as it does in the overall report card weighting. For a comprehensive look at Target Group Outcomes and report card weighting scenarios, please refer to our online report card weighting calculator.
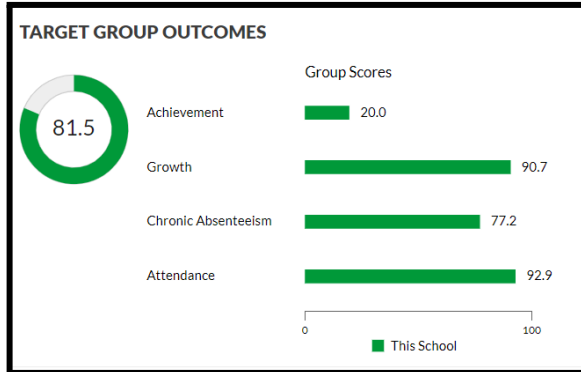
Target Group Outcomes Walkthrough

This walkthrough guides the user through calculation of a Target Group Outcomes (TGO) score for the example Mid-Sized Middle school report card.

1. **Target Group Outcomes component scores**

    These are displayed prominently on the front page of the report card.

2. **Multiply each component score by its weight**

    Formulas

    Weighted TGO Achievement   *= (TGO achievement component score * TGO achievement weight)*

    Weighted TGO Growth   *= (TGO growth component score   * TGO growth weight)*

    Weighted TGO Chronic Absenteeism = (TGO absenteeism component score * TGO absenteeism weight)

    Weighted TGO Attendance   = (TGO attendance component score   * TGO attendance weight)

    Note that:

    a. Both TGO achievement and TGO growth are based on simple averages of their respective ELA and mathematics subcomponents; and
    b. In cases where the TGO absenteeism component is absent, TGO attendance or TGO graduation is weighted 30% instead of 15% within the TGO priority area score.

    Calculations

Weighted TGO Achievement	=	*(20.0 * 0.2)*	=	*4.0*
Weighted TGO Growth	=	*(90.7 * 0.5)*	=	*45.35*
Weighted TGO Chronic Absenteeism	=	*(77.2 * 0.15)*	=	*11.58*
Weighted TGO Attendance	=	*(92.9 * 0.15)*	=	*13.94*

3. **Sum the weighted component scores and apply the scale adjustment**

Recall that the scale adjustment is applied so that Target Group Outcomes scores are on the same scale as the Achievement priority area score for the school.

Formula

TGO priority area score = *(Sum of weighted components* * 1.77) - 51.01

Calculation

TGO priority area score = *((4.0 + 45.35 + 11.58 + 13.94)* * 1.77) - 51.01

$$= 81.5$$

Calculating Priority Area Scores
On-Track to Graduation

The purpose of this priority area is to give schools and districts an indication of how successfully students are achieving educational milestones that lead to postsecondary readiness. The priority area score includes up to three components - chronic absenteeism, attendance /graduation, and achievement at key transition points: 3rd grade English language arts and/or 8th grade mathematics.

Background

The process of preparing a student for graduation begins well before 12th grade, and there are key indicators throughout elementary, middle, and high school that have a direct impact on a student's likelihood of future success. This priority area is designed to hold schools accountable for a number of these key indicators.

Chronic absenteeism and graduation/attendance components make up the bulk of this priority area's score. Districts and schools that graduate students are held accountable for graduation rates, and all other schools are held accountable for attendance rates.

- **Chronic absenteeism** is an important indicator of student engagement.
- **Attendance** drives all aspects of student success throughout their school career.
- **Graduation rate** measures the outcome of a schools' overarching mission and is calculated as a cohort rate—the percentage of students starting high school together who graduate within a certain number of years.

Chronic absenteeism data, attendance data, and graduation data have some similarities. All are lagged indicators, because 2022-23 data for these measures are not yet available. As such, we report on the 2021-22 data. Additionally, chronic absenteeism, attendance, and graduation all have similar, narrow distributions of high scores. That is, the state average is around 90% to 95% for both attendance and graduation, and around 90 - 95 for chronic absenteeism scores (100 - chronic absenteeism rate).

Two additional On-Track measures may contribute to a school's priority area score.

- **English language arts achievement in 3rd grade** and **mathematics achievement in 8th grade** are measures that strongly predict future success as students move into middle school and high school.

Due to the diversity of school and district types in Wisconsin, not all of these On-Track measures apply to every school or district. Combining the measures into a priority area score in a way that treats all schools fairly, regardless of grade span, is necessary but is also complex.

Attendance

Attendance rate is the number of days that students actually attended (days in seat) divided by the number of days they could possibly have attended (days enrolled). Students in kindergarten through 12th grade are included in attendance calculations. Data are presented for all students at the school and are for one year only. Attendance data are lagged by one year in report cards, so attendance data from 2021-22 are used in the 2022-23 report cards.

$$School/District\ Wide\ Attendance\ = \frac{Total\ Number\ of\ Attended\ Days}{Total\ Number\ of\ Possible\ Days\ of\ Attendance}$$

Chronic Absenteeism

Students are considered to be chronically absent if they miss 10% of school days out of the total number of school days during which they were enrolled. Chronic absenteeism is derived from attendance data and only students who are enrolled in the accountable school for at least 90 total days (may be multiple enrollments during the school year) are included in the measure. A school's chronic absenteeism score is based on a multi-year weighted average using up to three years of absenteeism rates, which is then converted into a score by subtracting from 1 and multiplying by 100. Absenteeism data, derived from attendance data, are lagged by one year in report cards.

Calculating the Current Year Absenteeism Rate
1. Count the number of students who enrolled in your school for at least 90 days total during the prior school year. Due to data collection timelines, DPI must use the prior year's enrollment (2021-22 enrollment for the 2022-23 report card) and attendance data to calculate the absenteeism rate.
2. For each individual student in Step 1, calculate that student's attendance rate. This is done by dividing the total number of days the student attended school by the total number of possible days the student could have attended school. **Note that DPI does <u>not</u> differentiate between excused versus unexcused absences – it is the district's responsibility to ensure that attendance days are being recorded and reported in accordance with DPI guidelines.**

$$Individual\ Student\ Attendance\ Rate\ = \frac{Total\ Number\ of\ Days\ of\ Attendance}{Total\ Number\ of\ Possible\ Days\ of\ Attendance}$$

3. Count the number of students who were enrolled for at least 90 days whose attendance rate, rounded to the nearest whole percentage, is below 90%. These students are flagged as being chronically absent.

4. Divide the count of students flagged as chronically absent (Step 3) by the count of students who were enrolled for at least 90 days (Step 1). This is the school's current year absenteeism rate.

$$Current\ Year\ Absenteeism\ Rate\ = \frac{Number\ of\ Students\ Chronically\ Absent}{Number\ of\ Students\ Enrolled\ 90\ Days}$$

The first table shown in the On-Track to Graduation - Additional Information page contains single-year chronic absenteeism rates for student groups present in the school. Students appear in the numerator of the chronic absenteeism rate calculation if they were absent for more than 10% of possible attendance days. For each year shown, the 'Students' column contains the total number of students for each group. The 'Rate' column reports the percentage of students in that group that were chronically absent in the given year. We will use the example table below as we walk through the remaining steps of the chronic absenteeism calculation:

Student Group Chronic Absenteeism Rates, Single-Year

	2019-20		2020-21		2021-22	
	Students	Rate	Students	Rate	Students	Rate
All Students: 9-12 State	265,727	18.9%	265,360	18.9%	264,767	17.9%
All Students	524	18.9%	512	19.9%	514	21.6%
American Indian or Alaskan Native	< 20	*	< 20	*	< 20	*
Asian	< 20	*	< 20	*	< 20	*
Black or African American	42	52.4%	43	53.5%	36	63.9%
Hispanic or Latino	51	19.6%	55	27.3%	70	27.1%
Native Hawaiian or Pacific Islander	< 20	*	< 20	*	< 20	*
White	390	14.4%	373	13.1%	368	14.9%
Two or More Races	20	25.0%	< 20	*	< 20	*
Economically Disadvantaged	204	33.8%	187	33.2%	198	35.9%
English Learners	25	12.0%	32	28.1%	29	31.0%
Students with Disabilities	64	31.2%	68	36.8%	63	44.4%

Calculating Absenteeism Rate over Multiple Years

The multi-year chronic absenteeism rate is calculated by averaging single-year absenteeism rates across one to three years of data, depending on how many years a school meets cell size (at least 20 students who were enrolled for at least 90 days total during the school year). To do this, we calculate a weight that is the product of a "students weight"—that is, the number of students who enrolled in the school for at least 90 days of the school year divided by the average number of students enrolled for at least 90 days across all three years—and a "year weight" that is higher for more recent years:

- Three years available: "Year weights" are 1.5 for the current year, 1.25 for the prior year, and 1 for the year before that; the number of students enrolled for at least 90 days is averaged across all three years. For the 2022-23 Report Card, the three years of absenteeism data come from 2021-22, 2020-21, and 2019-20.
- Two years available: "Year weights" are 1.5 for the current year and 1 for the prior year; the number of students enrolled for at least 90 days is averaged across only the current and prior years. For the 2022-23 Report Card, the two years of absenteeism data come from 2021-22 and 2020-21.
- One year available: "Year weight" is 1 for chronic absenteeism in the current year. For the 2022-23 Report Card one year of absenteeism data comes from 2021-22.

Formulas

$$Average\ Number\ Enrolled\ 90\ Days\ =$$

$$\frac{Prior\ Year\ 2\ Number\ Enrolled\ 90\ Days + Prior\ Year\ 1\ Number\ Enrolled\ 90\ Days + Current\ Year\ Number\ Enrolled\ 90\ Days}{Number\ of\ Years\ Available}$$

$$Prior\ Year\ 2\ Weight\ =\ 1\ *\ \frac{Prior\ Year\ 2\ Number\ Enrolled\ 90\ Days}{Average\ Number\ Enrolled\ 90\ Days}$$

$$Prior\ Year\ 1\ Weight\ =\ 1.25\ *\ \frac{Prior\ Year\ 1\ Number\ Enrolled\ 90\ Days}{Average\ Number\ Enrolled\ 90\ Days}$$

$$Current\ Year\ Weight\ =\ 1.5\ *\ \frac{Current\ Year\ Number\ Enrolled\ 90\ Days}{Average\ Number\ Enrolled\ 90\ Days}$$

Calculation

$$Prior\ Year\ 2\ Weight\ =\ 1\ *\ \frac{524}{\frac{(524+512+514))}{3}}\ =\ 1.014$$

$$Prior\ Year\ 1\ Weight\ =\ 1.25\ *\ \frac{512}{\frac{(524+512+514)}{3}}\ =\ 1.239$$

$$Current\ Year\ Weight\ =\ 1.5\ *\ \frac{514}{\frac{(524+512+514)}{3}}\ =\ 1.492$$

Next, we multiply each year's weighted chronic absenteeism rates and weights together:

Formulas

$$Prior\ Year\ 2\ Weighted\ Rate\ =\ Prior\ Year\ 2\ Rate\ *\ Prior\ Year\ 2\ Weight$$

$$Prior\ Year\ 1\ Weighted\ Rate\ =\ Prior\ Year\ 1\ Rate\ *\ Prior\ Year\ 1\ Weight$$

$$Current\ Year\ Weighted\ Rate\ =\ Current\ Year\ Rate\ *\ Current\ Year\ Weight$$

Calculation

$$Prior\ Year\ 2\ Weighted\ Rate\ =\ 0.189\ *\ 1.014\ =\ 0.192$$

$$Prior\ Year\ 1\ Weighted\ Rate\ =\ 0.199\ *\ 1.239\ =\ 0.247$$

$$Current\ Year\ Weighted\ Rate\ =\ 0.216\ *\ 1.492\ =\ 0.322$$

The chronic absenteeism multi-year rate is then calculated by adding the weighted rates and dividing the result by the sum of the weights:

Formula

$$Multi\ Year\ Rate\ =\ \frac{Prior\ Year\ 2\ Weighted\ Rate + Prior\ Year\ 1\ Weighted\ Rate + Current\ Year\ Weighted\ Rate}{Prior\ Year\ 2\ Weight + Prior\ Year\ 1\ Weight + Current\ Year\ Weight}$$

Calculation

$$\frac{0.192+0.247+0.322}{1.014+1.239+1.492}\ =\ 0.203$$

Convert the multi-year chronic absenteeism rate into a score

A chronic absenteeism score on the report card is calculated by subtracting the multi-year absenteeism rate from 1 and multiplying by 100. This *rate* is converted to a *score* so that, like the rest of the report card, higher numbers are better.

Formula

$$Chronic\ Absenteeism\ Score\ =\ (100\ -\ (Multi\ Year\ Rate\ *\ 100)$$

Calculation

$$Chronic\ Absenteeism\ Score\ =\ (100\ -\ (0.203\ *\ 100)\ =\ 79.7$$

Graduation

The next table shows graduation rate information.

Student Group Graduation Rates

This table shows for each of two cohorts the percentage of students starting high school together who graduated by 2020-21. The four-year rate pertains to students who started high school four years earlier, and the seven-year rate pertains to students who started seven years earlier.

	Four-year cohort graduation rate			Seven-year cohort graduation rate		
	Students in cohort	Graduates	Rate	Students in cohort	Graduates	Rate
All Students: K-12 State	67,283	60,074	89.3%	66,422	61,819	93.1%
All Students	153	144	94.1%	156	146	93.6%
American Indian or Alaskan Native	1	1	100.0%	3	3	100.0%
Asian	5	5	100.0%	2	2	100.0%
Black or African American	13	10	76.9%	14	13	92.9%
Hispanic or Latino	17	14	82.4%	19	16	84.2%
Native Hawaiian or Pacific Islander	0	NA	NA	1	1	100.0%
White	111	108	97.3%	112	107	95.5%
Two or More Races	6	6	100.0%	5	4	80.0%
Economically Disadvantaged	43	36	83.7%	49	40	81.6%
English Learners	6	4	66.7%	6	6	100.0%
Students with Disabilities	19	16	84.2%	19	16	84.2%

Graduation rates are given for a cohort of students. The 2022-23 report card uses 2021-22 graduation rates. The graduation rates are the percentage of each cohort who graduated by 2021-22.

- For the four-year rate the cohort consists of students who started high school in 2018-19
- For the seven-year rate the cohort consists of students who started high school in 2015-16. The seven-year cohort rate captures graduates who take more than four years to complete high school.
- Students are removed from school or district cohorts under some circumstances; most commonly because they transferred to another school or district.
- A more complete discussion of exit-types and their impact on inclusion in the cohort is discussed on the Exit Types WISE data elements page.

3rd Grade English Language Arts/8th Grade Mathematics Achievement

These measures differ from other parts of the report card in how cell size (the minimum number of students with data necessary to calculate a score) is used. In most places, we use a cell size of 20 for each year separately, but applying this to a single grade would omit a large number of small elementary schools. Instead, for these two measures only, we use a cell size of 20 over the two most recent assessment years. This change affects only whether data is presented on the report card and used to determine a score, not the process by which the score is calculated. Refer back to the Achievement section of this guide for the calculation method.

Combining Individual Components into a Priority Area Score

The On-Track to Graduation priority area scores are reported out of 100 maximum points, and are either 20 or 25% of the overall score, depending on the grade configuration of the school or district.

Chronic absenteeism scores are reported out of 100 maximum points. The score is calculated by subtracting the weighted multi-year average chronic absenteeism rate from 100. The chronic absenteeism component accounts for either 40% or 50% of the priority area score.

Attendance/graduation scores are reported out of 100 maximum points and account for either 40% or 50% of the priority area score.

- Attendance scores are the single-year school-wide attendance rate, multiplied by 100.
- Graduation scores are the weighted average of the four-year and seven-year graduation rates, multiplied by 100.

English language arts achievement in 3rd grade and mathematics achievement in 8th grade scores are reported out of 100 maximum points each. These two components account for 20% of the On-Track to Graduation priority area score, when either or both components are present. . If a school or district has only 3rd grade English language arts or only 8th grade mathematics scores available, then the component present is worth 20% of the On-Track to Graduation priority area score; if a school or district has both 3rd grade English language arts and 8th grade mathematics data, each of these components is worth 10% of the On-Track to Graduation priority area score. This is summarized in the following table:

3rd Grade English Language Arts =	20% if no 8th grade mathematics score is available
	10% if 8th grade mathematics scores is available
8th Grade Mathematics =	20% if no 3rd grade English language arts score is available
	10% if 3rd grade English language arts score is available

On-Track Walkthrough #1

This walkthrough uses data on chronic absenteeism, attendance, and 3rd grade English language arts achievement to determine a score for Sample Elementary School.

Step 1: Calculate the Chronic Absenteeism Score

CHRONIC ABSENTEEISM   Score: 91.6

Score is 100 minus the multi-year average chronic absenteeism rate — the percentage of students who missed more than 10% of school days — so a higher score is better.

This School	91.6
K-5 Statewide	90.3

This school has a 3rd grade English language arts score, so chronic absenteeism is weighted at 40%:
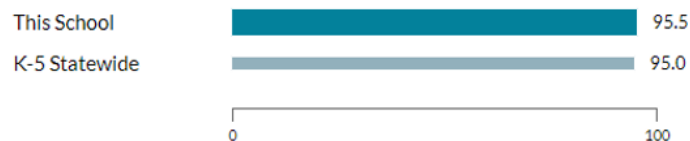
$$Weighted\ Chronic\ Absenteeism\ Score\ =\ 91.6 * 0.4\ =\ 36.64$$

Step 2: Calculate the Graduation/Attendance Score

SCHOOL-WIDE ATTENDANCE   Score: 95.5

This score is the overall attendance rate for the school in 2021-22.

|	
This School	95.5
K-5 Statewide	95.0

This is an elementary school and does not graduate students, so its attendance rate is used. This school has a 3rd grade English language arts score, so attendance is weighted at 40%:

$$Weighted\ Graduation/Attendance\ Score\ =\ 95.5 * 0.4\ =\ 38.2$$

Step 3: Calculate the 3rd Grade English Language Arts Achievement Score

3RD GRADE ENGLISH LANGUAGE ARTS   Score: 59.4

Average points-based proficiency rates.

This School	59.4
K-5 Statewide	58.9

0   100
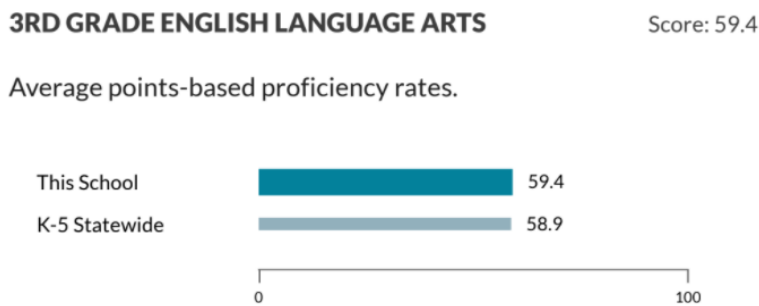
The method for calculating 3rd grade English language arts and 8th grade mathematics scores is the same as described in the Achievement walkthrough (starting on page 20).

Sample Elementary School does not have an 8th grade mathematics score, so the 3rd grade English language arts score is weighted at 20%:

$$Weighted\ 3rd\ Grade\ English\ Language\ Arts\ Score\ =\ 59.4 * 0.2 = 11.88$$

Step 4: Determine the Total On-Track to Graduation Score

The total score for this priority area is the sum of its weighted component scores:

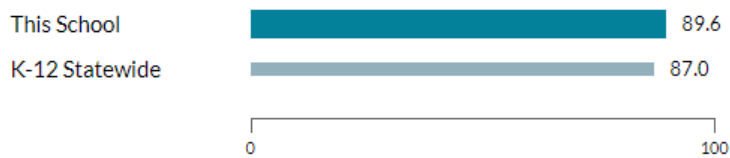|	
Weighted Chronic Absenteeism Score	36.64
+	
Weighted Graduation/Attendance Score	38.2
+	
Weighted 3rd Grade English Language Arts Score	
	11.88=
On-Track to Graduation Score	
86.72	

The result is rounded to one decimal place, therefore Sample Elementary School has an **On-Track to Graduation score of 86.7.**

On-Track Walkthrough #2

This walkthrough will use data on chronic absenteeism, graduation, 8th grade mathematics, and 3rd grade English language arts to determine a score for Sample K-12 School.

## Step 1: Calculate the Chronic Absenteeism Score

This School	89.6
K-12 Statewide	87.0

0   100

This school has 3rd grade English language arts and 8th grade mathematics components, so chronic absenteeism is weighted at 40%:

$$Weighted\ Chronic\ Absenteeism\ Score\ =\ 89.6 * 0.4\ =\ 35.84$$

Step 2: Calculate the Graduation/Attendance Score

Graduation

This School	95.4
K-12 Statewide	91.3

0   100
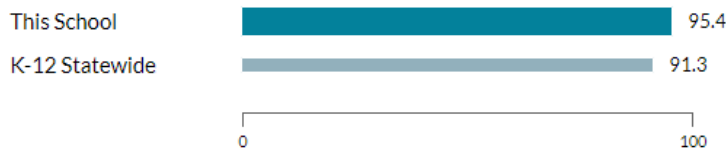
Sample K-12 School graduates students, so we use graduation rates to determine this score. The score is calculated as the average of the four-year cohort rate and the seven-year cohort rate, weighted by the number of students in each cohort. The graduation/attendance component score is then weighted at 40%:.

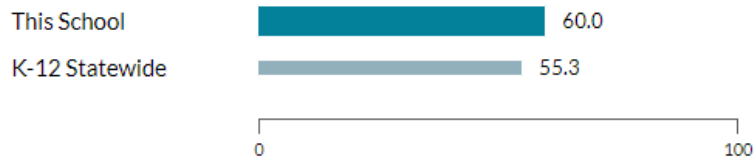$$Weighted\ Graduation/Attendance\ Score\ =\ 95.4 * 0.4\ =\ 38.16$$

Step 3: Calculate the 8th Grade Mathematics Score

8TH GRADE MATHEMATICS   Score: 60.0

Average points-based proficiency rates.

This School	60.0
K-12 Statewide	55.3

0   100

The method for calculating the 3rd grade English language arts and 8th grade mathematics scores is the same as described in the Achievement walkthrough (starting on page 20).

Because 3rd grade English language arts is also present for the school, the 8th grade mathematics weighting is 10%:
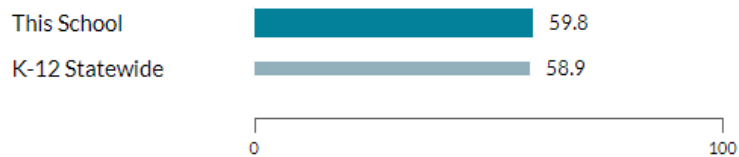
$$Weighted\ 8th\ Grade\ Mathematics\ Score\ =\ 60.0\ *\ 0.1\ =\ 6.0$$

Step 4: Calculate the 3rd Grade English Language Arts Score

3RD GRADE ENGLISH LANGUAGE ARTS   Score: 59.8

Average points-based proficiency rates.

This School	59.8
K-12 Statewide	58.9

0   100

Because 8th grade mathematics is also present for the school, the 3rd grade English language arts weighting is 10%:

$$Weighted\ 3rd\ Grade\ English\ Language\ Arts\ Score\ =\ 59.8\ *\ 0.1\ =\ 5.98$$

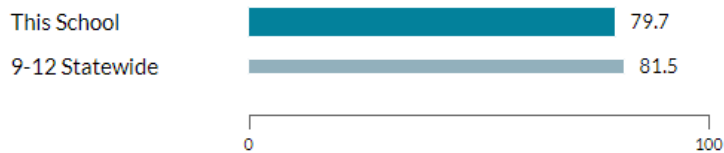**Step 5: Determine the Total On-Track to Graduation Score**

Weighted Chronic Absenteeism Score	35.84
Weighted Graduation/Attendance Score	38.16
Weighted 8th Grade Mathematics Score	+ 6.0
Weighted 3rd Grade English Language Arts Score	+ 5.98 =
On-Track to Graduation Score	**85.98**

The result is rounded to one decimal place, therefore Sample K-12 School has an **On-Track to Graduation score of 86.0.**

On-Track Walkthrough #3

This walkthrough will use data on chronic absenteeism and graduation to determine a score for Sample High School.
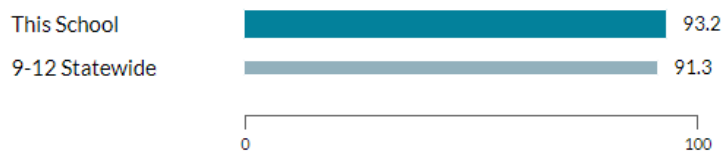
Step 1: Calculate the Chronic Absenteeism Score

This School	79.7
9-12 Statewide	81.5

Due to there *not* being 3rd grade English language arts or 8th grade mathematics component scores , chronic absenteeism is weighted at 50%:

$$Weighted\ Chronic\ Absenteeism\ Score\ =\ 79.7 * 0.5 = 39.85$$

Step 2: Calculate the Graduation/Attendance Score

Graduation

This School	93.2
9-12 Statewide	91.3

Sample High School graduates students, so we use graduation rates to determine this score. Due to there *not* being 3rd grade English language arts or 8th grade mathematics component scores, the graduation/attendance component is weighted at 50%:

$$Weighted\ Graduation/Attendance\ Score\ =\ 93.2\ *\ 0.5\ =\ 46.6$$

Step 3: Determine the Total On-Track to Graduation Score

	Chronic Absenteeism Score	39.85
+	Graduation/Attendance Score	46.6
	Total On-Track to Graduation Score	86.45

The result is rounded to one decimal place, therefore Sample High School has an On-Track to Graduation score of 86.5.

Test Participation Supplemental Data

Test participation rates do not affect scoring on the report card. These data are reported, however, given their importance in highlighting educational inequities and to provide context regarding the proportion of enrolled students included in the Achievement and Growth priority areas. Current year test participation rates for ELA and mathematics are provided for all students and for the lowest-participating student group on the Achievement-Additional Information page.

To calculate test participation for the current year, follow the steps below. These steps should be done separately for mathematics and ELA and can be done at the "All Students" level **and** for each group of students.

1. Count the total number of students enrolled in tested grades at test time in the current year. If a student group has fewer than 20 students enrolled, the group is excluded from reporting.

2. For groups with at least 20 enrolled students, count the total number of students who were assessed using either the general assessment (e.g., Forward, ACT) or the alternate assessment (e.g., DLM).

3. Students for whom this was their first year in the country are excluded from Achievement and Growth, as well as from test participation calculations. Do not include them in step 1 or 2 counts above.

4. To determine each group's current year participation rate, divide the number of students tested (the count from Step 2) by the number of students enrolled (the count from Step 1).

Course and Program Data

For information on the course and program data provided on the Postsecondary Preparation and Arts Course Information pages of the report card, please see the Course and Program Data Guide on the Report Card Resources page.

Resources

Please visit the Report Card Resources page to find additional resources on report cards. You can also contact the OEA team with report card questions at reportcardhelp@dpi.wi.gov.