DISTRICT REPORT CARD
TECHNICAL GUIDE
8/20/2014

Document Control

Document Information

Title	District Report Card Technical Guide
Revision	3
Issue Date	8/20/14
Security Level	Public
Filename	District Report Card Technical Guide 2014.docx
Changes	8/7/14: Updated link on page 22. 8/20/14: Updated "Fall 2011" to "Fall 2012" on page 24 and modified On-Track worksheet to clarify graduation rate calculations.

About This Document

This document provides descriptions for calculating the scores comprising Wisconsin's Accountability Index. These scores are displayed in the District Report Card and the District Report Card Detail:

- Overall Accountability Score
- Priority Area Scores
- Student Engagement Indicator Deductions

You can approximate the calculations used to arrive at a district's Accountability Index scores using data from the **District Report Card Detail** (secure or public) and this document. Scores calculated with this document may not exactly match a district's score due to rounding, both in the calculation itself and in the display of values on the District Report Card Detail. Public report cards are available on the Department of Public Instruction's (DPI) website: http://reportcards.dpi.wi.gov/. Secure Report Cards are available in SAFE, the Secure Access File Exchange: http://wise.dpi.wi.gov/wise_wisedash districts.

The Overall Accountability Score, Priority Area Scores, and Student Engagement Indicator Deductions are shown on the District Report Card and the first page of the District Report Card Detail. The example to the right shows how the summary information is laid out. For further information on reading and interpreting the District Report Card, please refer to our resources available here: http://reportcards.dpi.wi.gov
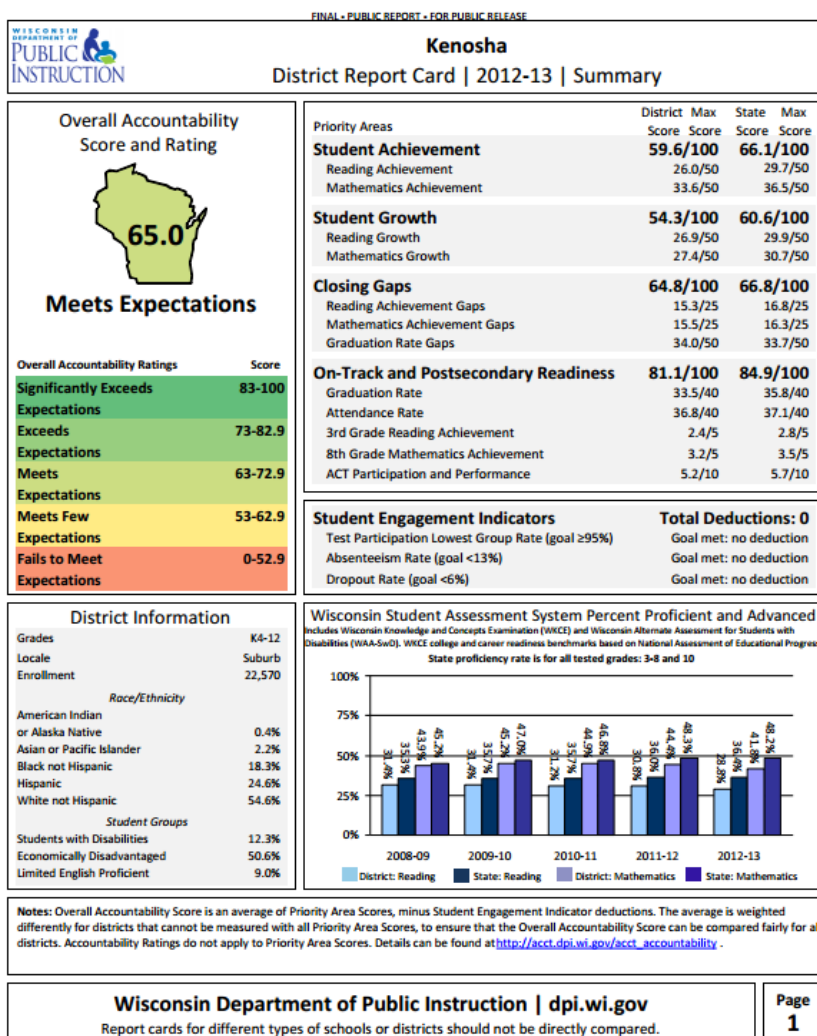

FINAL • PUBLIC REPORT • FOR PUBLIC RELEASE

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION

Kenosha
District Report Card | 2012-13 | Summary

Overall Accountability Score and Rating

65.0

Meets Expectations

Overall Accountability Ratings	Score
Significantly Exceeds Expectations	83-100
Exceeds Expectations	73-82.9
Meets Expectations	63-72.9
Meets Few Expectations	53-62.9
Fails to Meet Expectations	0-52.9

Priority Areas	District Score	Max Score	State Score	Max Score
Student Achievement	**59.6/100**		**66.1/100**	
Reading Achievement	26.0/50		29.7/50	
Mathematics Achievement	33.6/50		36.5/50	
Student Growth	**54.3/100**		**60.6/100**	
Reading Growth	26.9/50		29.9/50	
Mathematics Growth	27.4/50		30.7/50	
Closing Gaps	**64.8/100**		**66.8/100**	
Reading Achievement Gaps	15.3/25		16.8/25	
Mathematics Achievement Gaps	15.5/25		16.3/25	
Graduation Rate Gaps	34.0/50		33.7/50	
On-Track and Postsecondary Readiness	**81.1/100**		**84.9/100**	
Graduation Rate	33.5/40		35.8/40	
Attendance Rate	36.8/40		37.1/40	
3rd Grade Reading Achievement	2.4/5		2.8/5	
8th Grade Mathematics Achievement	3.2/5		3.5/5	
ACT Participation and Performance	5.2/10		5.7/10	

Student Engagement Indicators	Total Deductions: 0
Test Participation Lowest Group Rate (goal ≥95%)	Goal met: no deduction
Absenteeism Rate (goal <13%)	Goal met: no deduction
Dropout Rate (goal <6%)	Goal met: no deduction

District Information

Grades	K4-12
Locale	Suburb
Enrollment	22,570
Race/Ethnicity	
American Indian or Alaska Native	0.4%
Asian or Pacific Islander	2.2%
Black not Hispanic	18.3%
Hispanic	24.6%
White not Hispanic	54.6%
Student Groups	
Students with Disabilities	12.3%
Economically Disadvantaged	50.6%
Limited English Proficient	9.0%

Wisconsin Student Assessment System Percent Proficient and Advanced

Includes Wisconsin Knowledge and Concepts Examination (WKCE) and Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD). WKCE college and career readiness benchmarks based on National Assessment of Educational Progress.

State proficiency rate is for all tested grades: 3-8 and 10

District: Reading | State: Reading | District: Mathematics | State: Mathematics

Notes: Overall Accountability Score is an average of Priority Area Scores, minus Student Engagement Indicator deductions. The average is weighted differently for districts that cannot be measured with all Priority Area Scores, to ensure that the Overall Accountability Score can be compared fairly for all districts. Accountability Ratings do not apply to Priority Area Scores. Details can be found at http://acct.dpi.wi.gov/acct_accountability .

Wisconsin Department of Public Instruction | dpi.wi.gov
Report cards for different types of schools or districts should not be directly compared.

Page 1

Wisconsin Department of Public Instruction
Office of Educational Accountability

Table of Contents

Building the Overall Accountability Score

Wisconsin's accountability system uses multiple measures across four Priority Areas and expectations of student engagement to build a 0-to-100 point score for each district. This document connects the data on the District Report Card Detail to the district's **Overall Accountability Score** and corresponding **Accountability Rating**.

The Overall Accountability Score is derived from the Accountability Index, which includes separate scores for each of four Priority Areas—Student Achievement, Student Growth, Closing Gaps, and On-Track to Graduation and Postsecondary Readiness—as well as deductions for districts missing statewide goals for the three Student Engagement Indicators: Absenteeism, Dropout Rate, and Test Participation. Like the Overall Accountability Score, each of the Priority Areas is scored on a 0-to-100 scale. However, because Wisconsin has districts of many different sizes, grade levels, and student populations, not all of the Priority Areas apply in the same way to every district. Therefore, combining the Priority Area scores to arrive at an overall score is more complicated than taking a straight average. The following pages detail the steps taken to calculate the Overall Accountability Score.

Background

The Wisconsin Department of Public Instruction (DPI) bases the process of building a district's Overall Accountability Score on three important principles:

1. **We cannot calculate every Priority Area score for every district.** For example, Student Growth requires the state to have WKCE test scores for consecutive grades in the same district; because Wisconsin only tests high school students in 10th grade, districts that have only grades 9-12 are excluded. Also, every component of the Accountability Index requires there be at least 20 students with data to calculate a score. Some districts are too small to calculate scores for some Priority Areas.
2. **A district should not be advantaged or disadvantaged by the presence or lack of a Priority Area or component.** Simply averaging the Priority Areas would create a bias for districts with only grades 9-12, which are generally not measured on Student Growth, increasing their overall scores compared to other districts.
3. **The majority of Wisconsin districts have very high rates of attendance and graduation, the major determinants of the On-Track and Postsecondary Readiness Priority Area score.** There is very little overall statewide variation in these measures—performance gaps are driven primarily by a few "outlier" districts with low rates.

We use two solutions to build an overall score that follows these principles:

1. **Student Growth and Closing Gaps scores are aligned with Student Achievement.** Aligning scores to a common scale avoids creating a bias between these Priority Areas.
2. **On-Track and Postsecondary Readiness scores have a fixed weight no matter how many other Priority Area scores are calculated.** Fixing the weight of this Priority Area allows us to account for the narrow overall range of high attendance and graduation rates.

Steps

The process for determining a district's Overall Accountability Score consists of calculating a **weighted average Priority Areas score** from the individual Priority Area scores and then subtracting any applicable Student Engagement Indicator deductions. The following method takes into account that scoring for the On-Track and Postsecondary Readiness Priority Area is a little different than scoring for the first three Priority Areas: some districts will only have a possible maximum score of 80 points, rather than the typical 100 points, for On-Track.

1. Begin deriving the weighted average Priority Areas score by taking the average of the Student Achievement, Student Growth, and Closing Gaps scores. The average is the sum of the points earned for those Priority Areas divided by the number of the Priority Areas that apply to the district.
2. Next, multiply that average by a factor that is determined by which components of the On-Track and Postsecondary Readiness Priority Area are calculated for the district:
    a. If there are *both* an attendance or graduation score *and* scores for other On-Track components, in which case the maximum score for the On-Track Priority Area is 100, then the average is multiplied by 3.
    b. If there is *only* an attendance or graduation score, in which case the maximum score for the On-Track Priority Area is 80, then the average is multiplied by 3.2.
3. To finish producing the weighted average Priority Areas score, add this multiplied average of the first three Priority Areas to the On-Track and Postsecondary Readiness score, and divide this sum by 4.
4. Finally, subtract any Student Engagement Indicator deductions from the weighted average Priority Areas score to arrive at the Overall Accountability Score. The maximum possible total deduction is 20 points for a district that misses all Student Engagement goals. (See Overall Accountability Score Walkthrough, pg. 7.)

The Overall Accountability Score determines which Accountability Rating Category a district falls into.

Accountability Rating Category	Accountability Score Range	
	Minimum	Maximum
Significantly Exceeds Expectations	83	100
Exceeds Expectations	73	82.9
Meets Expectations	63	72.9
Meets Few Expectations	53	62.9
Fails to Meet Expectations	0	52.9

Global Notes

- The Accountability Index has four Priority Areas and a set of Student Engagement Indicators. Within each area, individual components are calculated. Example: Student Achievement is a Priority Area; Reading Achievement and Mathematics Achievement are its two components, calculated separately.
- Measures based upon data from the Wisconsin Student Assessment System (WSAS)—which include Student Achievement, Student Growth, and the achievement components of Closing Gaps and On-Track and Postsecondary Readiness—reflect the NAEP-based reading and mathematics cut scores developed for the Wisconsin Knowledge and Concepts Examination (WKCE). NAEP-based WKCE cut scores have been applied retroactively so that proficiency level data from prior years are directly comparable to the most current year.

Proficiency level data for the Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD) are unchanged (NAEP cut scores were not used for the WAA-SwD performance levels),-but are factored into priority area scores as applicable.

- 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%). The only exception is Test Participation rates, which are rounded to the nearest whole percentage point. Within the calculation software, rounding is applied in two places: when individual student data are aggregated into a rate or average, and at the end of a sequence of algebraic operations.

- DPI uses a cell size rule, the minimum number of students needed to calculate a data component, of 20 students. In most cases, the cell size is only applied to the current year of data. In the 3rd Grade Reading and 8th Grade Mathematics achievement components of the On-Track and Postsecondary Readiness Priority Area and in the Student Engagement Indicators, the cell size is applied to the two most recent years of data.

- For District Report cards, determination of whether a student attended for the Full Academic Year (FAY) is based on FAY for the district, not the school

- State comparisons are provided on the front page for one of six grade bands (K-5, 6-8, 9-12, K-8, 6-12, and K-12) that most closely matches the district. Comparison scores treat all Wisconsin students within a particular grade band as if they were one giant district. These scores are calculated using the same methodology as individual district scores. Comparisons are not used to determine a district's score or rating category; they are provided for context only.

- Graduation, attendance and 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 2013-14 report cards was from 2012-13.

- Student Achievement, Student Growth, Closing Gaps, On-Track to Graduation and Postsecondary Readiness' 3rd Grade Reading Achievement and On-Track to Graduation and Postsecondary Readiness' 8th Grade Mathematics Achievement calculations include only students who were enrolled for the Full Academic Year (FAY) in the district. FAY status is not considered for any other report card calculations.

- Multiple years of data are considered throughout the report card. With the student engagement indicators, both a three-year rate and current year rate are considered. Districts can meet the indicators with either rate.

Overall Accountability Score Walkthrough

Sample District has the following Priority Area scores:

Priority Area or Component	Score/Possible
Student Achievement	66.1 / 100
Student Growth	71.0 / 100
Closing Gaps	63.7 / 100
On-Track and Postsecondary Readiness	
Attendance	36.1 / 40
Graduation	39.6/40
3rd Grade Reading,8th Grade Mathematics, and ACT	12.7 / 20
Student Engagement Indicators	-5 for Test Participation

Step 1: Combine Student Achievement, Student Growth, and Closing Gaps

This district has scores calculated for all three of these Priority Areas.

$$\text{Average} = \frac{\text{Student Achievement Score} + \text{Student Growth Score} + \text{Closing Gaps Score}}{3}$$

The district also has *both* an attendance and graduation score *and* scores for other On-Track components, so this average is multiplied by 3.

$$\text{Average} \times 3 = \frac{66.1 + 71.0 + 63.7}{3} \times 3 = \mathbf{200.8}$$

Step 2: Add Attendance and Graduation Scores

$$\text{Attendance and Graduation Score} = \text{Attendance Score} + \text{Graduation Score}$$

$$\text{Attendance and Graduation Score} = 36.1 + 39.6 = \mathbf{75.7}$$

Step 3: Combine Result with On-Track and Postsecondary Readiness Scores

Weighted Average Priority Areas Score

$$= \frac{(\text{Average} \times 3) + \text{Attendance and Graduation Score} + \text{Other On-Track Scores}}{4}$$

$$\text{Weighted Average Priority Areas Score} = \frac{200.8 + 75.7 + 12.7}{4} = \mathbf{72.3}$$

Step 4: Apply Student Engagement Indicator Deductions

$$\text{Overall Accountability Score} = \text{Weighted Average Priority Areas Score} - \text{Deductions}$$

$$\text{Overall Accountability Score} = 72.3 - 5 = \mathbf{67.3}$$

Sample District's Overall Accountability Score is 67.3, putting it into the **Meets Expectations** category.

Overall Accountability Score Worksheet

Introduction

This worksheet requires that you have calculated scores found in the District Report Card Detail for each of the four Priority Areas that apply to your district:

- Student Achievement: score out of 100 points
- Student Growth: score out of 100 points
- Closing Gaps: score out of 100 points
- On-Track and Postsecondary Readiness: score out of 100 points
    - Attendance or Graduation: Score out of 80 points
    - 3rd Grade Reading, 8th Grade Mathematics, ACT Participation/Performance: Total out of 20 points

It also requires that you have data on which Student Engagement Indicator deductions, if any, are applied to your district.

Instructions

Work through the worksheet using data you have already calculated for the district. Once you have calculated the Overall Accountability Score, use it to determine the accountability rating. In the future, DPI plans for the level and type of support to align with Rating Categories:

Accountability Rating Category	Accountability Score Range	
	Minimum	Maximum
Significantly Exceeds Expectations	83	100
Exceeds Expectations	73	82.9
Meets Expectations	63	72.9
Meets Few Expectations	53	62.9
Fails to Meet Expectations	0	52.9

Worksheet

Step 1: Combine Student Achievement, Student Growth, and Closing Gaps Priority Areas

Leave a box blank if there is no score to enter.

(1a) Enter the Student Achievement score, if applicable | 1a |

(1b) Enter the Student Growth score, if applicable | 1b |

(1c) Enter the Closing Gaps score, if applicable | 1c |

(1d) Add boxes 1a through 1c | 1d |

(1e) How many boxes in 1a through 1c have scores? | 1e |

Average: (1f) Divide 1d by 1e | 1f |

Step 2: Average Attendance and Graduation Scores

Leave a box blank if there is no score to enter.

(2a) Enter the Attendance Score | 2a |

(2b) Enter the Graduation Score | 2b |

(2c) Add 2a and 2b | 2c |

(2d) Enter the Attendance Maximum Score | 2d |

(2e) Enter the Graduation Maximum Score | 2e |

(2f) Add 2d and 2e | 2f |

Step 3: Combine Result with On-Track and Postsecondary Readiness Priority Area

Leave a box blank if there is no score to enter.

(3a) Enter the Attendance and Graduation score from 2c in step 2 | 3a |

(3b) If 2f is 100, multiply 3a by 0.8, otherwise multiply 3a by 1.0. | 3b |

(3c) Enter the 3rd Grade Reading score, if applicable | 3c |

(3d) Enter the 8th Grade Mathematics score, if applicable | 3d |

(3e) Enter the ACT Participation/Performance score, if applicable | 3e |

(3f) Add 3b through 3e for On-Track score | 3f |

(3g) Enter the value from 1f in Step 1 | 3g |

(3h) If 3c, 3d, and 3e *all* are blank, enter 3.2; else enter 3 | 3h |

(3i) Multiply 3g by 3h | 3i |

(3j) Add 3f and 3i | 3j |

Weighted average Priority Areas Score: (3k) Divide 3j by 4 | 3k |

Step 4: Apply Student Engagement Indicator Deductions

(4a) Enter the Weighted average Priority Areas score from 3k in Step 3 | 4a |

(4b) What was the district's lowest group participation rate (to the nearest percent)? | 4b |

(4c) If 4b is less than 95% but at least 85%, enter -5; if 4b is less than 85%, enter -10 | 4c |

(4d) Did the district's dropout rate meet the goal (<6%)? ☐ Yes ☐ No If "No," enter -5 | 4d |

(4e) Did the district's absenteeism rate meet the goal (<13%)? ☐ Yes ☐ No If "No," enter -5 | 4e |

Overall Accountability Score: (4f) Add boxes 4a, 4c, 4d, and 4e | 4f |

Calculating Priority Area Scores
Student Achievement Priority Area

The Student Achievement Priority Area is designed to show **how well the students in a district have learned the knowledge and skills they are supposed to attain**. DPI uses assessment data over the past three years to build a score, with more recent years bearing more weight on the score. Student Achievement is a points-based measure that gives credit for proficiency across multiple performance levels.

Background

The simplest way to measure student achievement with assessment results, as mandated in the federal No Child Left Behind Act of 2001, is by the percentage of students scoring at or above the proficient level. The definition of "proficient" for the Wisconsin Knowledge and Concepts Examination (WKCE) was originally developed in 1997 through a detailed process involving educators and testing professionals; a similar process was used in 2007 for the Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD). While Wisconsin achieved high statewide proficiency rates under that definition for many years, other assessments revealed different results. For example, the 2010-11 National Assessment of Educational Progress (NAEP) found 47 percent of Wisconsin 4th graders scoring proficient in mathematics, whereas the WKCE and WAA-SwD found 79 percent proficient.

As part of developing Wisconsin's accountability system, DPI set college and career readiness benchmarks for the WKCE based on NAEP cut scores, thus moving to higher proficiency standards. We could not make a similar change with the WAA-SwD because that test is constructed differently. As such, the WAA-SwD performance levels remain the same as those set in 2007. The new Dynamic Learning Maps assessment being implemented in 2014-15 will reflect new cut scores.

To ensure districts are treated fairly, the Student Achievement measure allows students to earn points for their district based whether they are partially proficient, proficient or perform beyond the proficiency threshold.

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

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

Reading the Report Card Detail

To arrive at a Student Achievement score, separate scores for reading and mathematics are calculated first and then added together. Tables for reading and mathematics in the student achievement section show the count of students scoring at each performance level over the last three years. Consider the following data on reading achievement for a sample district, which we will use throughout this walkthrough:

Sample Elementary | Student Achievement – Reading											
Performance Level	Points Multiplier	2011-12			2012-13			2013-14		
		Students		Points	Students		Points	Students		Points
		Count	Percent		Count	Percent		Count	Percent	
Advanced	1.5	22	16.3%	33	22	17.2%	33	21	16.9%	31.5
Proficient	1	35	25.9%	35	34	26.6%	34	41	33.1%	41
Basic	0.5	37	27.4%	18.5	38	29.7%	19	33	26.6%	16.5
Minimal Performance	0	41	30.4%	0	34	26.6%	0	29	23.4%	0
Total Tested	-	135	100.0%	86.5	128	100.0%	86	124	100.0%	89

This table shows that 135 students were tested at this district in 2011-12, with 22 scoring Advanced, 35 scoring Proficient, 37 scoring Basic, and 41 scoring Minimal Performance. Counts for 2012-13 and 2013-14 are similarly displayed. This table also shows the percent of students scoring in each performance category in 2011-12, with 16.3% scoring Advanced, 25.9% scoring Proficient, 27.4% scoring Basic, and 30.4% scoring Minimal Performance. Percentages for 2012-13 and 2013-14 are similarly displayed. Points and Points Multipliers for each performance level are also displayed.

Student Achievement Walkthrough

This walkthrough guides the user through the calculation of a Student Achievement score in a single content area (reading). To determine an overall Student Achievement score, the process is repeated for the other content area (mathematics) and the two content area scores are added.

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

- "Prior Year 2" means the left-most school year shown on the report card. In this example, it refers to 2011-12.
- "Prior Year 1" means the center school year shown on the report card. In this example, it refers to 2012-13.
- "Current Year" means the right-most school year shown on the report card. In this example, it refers to 2013-14.

Step 1: Assign and Average Points

The first step is to assign points for Student Achievement and take an average 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 Minimal Performance are assigned zero points. These point values are multiplied by the number of students to determine the points awarded in each category. Then the points for each year are 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.

Performance Level	Points Multiplier	2011-12			2012-13			2013-14		
		Students		Points	Students		Points	Students		Points
		Count	Percent		Count	Percent		Count	Percent	
Advanced	1.5	22	16.3%	33	22	17.2%	33	21	16.9%	31.5

Proficient	1	35	25.9%	35	34	26.6%	34	41	33.1%	41
Basic	0.5	37	27.4%	18.5	38	29.7%	19	33	26.6%	16.5
Minimal Performance	0	41	30.4%	0	34	26.6%	0	29	23.4%	0
Total Tested	-	135	100.0%	86.5	128	100.0%	86	124	100.0%	89

Calculation

$$\text{Prior Year 2 Average} = 86.5/135 = \mathbf{0.641}$$

$$\text{Prior Year 1 Average} = 86/128 = \mathbf{0.672}$$

$$\text{Current Year Average} = 89/124 = \mathbf{0.718}$$

Step 2: Calculate Annual Weights

Next, we calculate a weight for each year's average which takes into account (1) year-to-year fluctuations in numbers of students tested and (2) that more recent years should count more heavily. To do this, we calculate a weight that is the product of a "students tested weight"—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: The current year weight is 1.

Formulas

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

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

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

Calculation

$$\text{Prior Year 2 Weight} = 1 \times \frac{135}{(135 + 128 + 124)/3} = \mathbf{1.047}$$

$$\text{Prior Year 1 Weight} = 1.25 \times \frac{128}{(135 + 128 + 124)/3} = \mathbf{1.240}$$

$$\text{Current Year Weight} = 1.5 \times \frac{124}{(135 + 128 + 124)/3} = \mathbf{1.442}$$

Step 3: Combine Points and Weights

In step three we multiply the averages determined in Step 1 by the weights calculated in Step 2.

Formulas

$$\text{Prior Year 2 Score} = \text{Prior Year 2 Average} \times \text{Prior Year 2 Weight}$$

$$\text{Prior Year 1 Score} = \text{Prior Year 1 Average} \times \text{Prior Year 1 Weight}$$

$$\text{Current Year Score} = \text{Current Year Average} \times \text{Current Year Weight}$$

Calculation

$$\text{Prior Year 2 Score} = 0.641 \times 1.047 = \mathbf{0.671}$$

$$\text{Prior Year 1 Score} = 0.672 \times 1.240 = \mathbf{0.833}$$

$$\text{Current Year Score} = 0.718 \times 1.442 = \mathbf{1.035}$$

Step 4: Calculate Content Area Achievement Score

The achievement score for this content area is calculated by adding the scores from Step 3, dividing the result by the sum of the weights determined in Step 2, and then multiplying the final value by 50 (creating a content area score out of 50 points).

Formula

$$\text{Content Area Achievement Score} = \frac{\text{Prior Year 2 Score} + \text{Prior Year 1 Score} + \text{Current Year Score}}{\text{Prior Year 2 Weight} + \text{Prior Year 1 Weight} + \text{Current Year Weight}} \times 50$$

Calculation

$$\text{Content Area Achievement Score} = \frac{0.671 + 0.833 + 1.035}{1.047 + 1.240 + 1.442} \times 50 = \mathbf{34.0}$$

This district's Student Achievement score for this content area is 34.0.

Student Achievement Priority Area Worksheet

Introduction

This worksheet has two parts, one for reading and one for mathematics. Both parts require you to copy data from the Student Achievement detail page of the District Report Card Detail. Be sure to **use the counts, not the percentages**. **Note that the score calculated here may not exactly match the report card due to rounding differences**. Here is a key to the data needed to complete the worksheet:

Performance Level	Points Multiplier	2011-12 Students Count	2011-12 Students Percent	2011-12 Points	2012-13 Students Count	2012-13 Students Percent	2012-13 Points	2013-14 Students Count	2013-14 Students Percent	2013-14 Points
Advanced	1.5	22	16.3%	33	22	17.2%	33	21	16.9%	31.5
Proficient	1	35	25.9%	35	34	26.6%	34	41	33.1%	41
Basic	0.5	37	27.4%	18.5	38	29.7%	19	33	26.6%	16.5
Minimal Performance	0	41	30.4%	0	34	26.6%	0	29	23.4%	0
Total Tested	-	**A** 135	100.0% **B**	86.5 **C**	128	100.0% **D**	86 **E**	124	100.0% **F**	89

Letters shown on the key are used to help identify data on the worksheet. Tables for reading and mathematics achievement have the same layout. In the worksheet, "Prior Year 2" means the left-most year shown (2011-12 in the key), "Prior Year 1" the center year shown (2012-13 in the key), and "Current Year" the right-most year shown (2013-14 in the key).

Instructions

Work through the individual reading and mathematics worksheets step by step, entering data from the detailed district report card where appropriate. When both are complete, add both content area scores to determine the district's score for the Student Achievement Priority Area:

Reading Achievement Score: _____ out of 50 points

Mathematics Achievement Score: **+** _____ out of 50 points

Student Achievement Priority Area Score: _____ out of 100 points

Reading Achievement Worksheet

Step 1: Assign and Average Points

If a year does not have data shown, leave that year's boxes blank.

Prior Year 2 Average

(1a) Total points earned (B)	1a
(1b) Count of tested students (A)	1b
(1c) Is 1a greater than 1b?	1c ☐ Yes ☐ No
Average: (1d) If 1c is "Yes," enter 1; if 1c is "No," divide 1a by 1b	1d

Prior Year 1 Average

(1e) Total points earned (D)	1e
(1f) Count of tested students (C)	1f
(1g) Is 1e greater than 1f?	1g ☐ Yes ☐ No
Average: (1h) If 1g is "Yes," enter 1; if 1g is "No," divide 1e by 1f	1h

Current Year Average

(1i) Total points earned (F)	1i
(1j) Count of tested students (E)	1j
(1k) Is 1i greater than 1j?	1k ☐ Yes ☐ No
Average: (1l) If 1k is "Yes," enter 1; if 1k is "No," divide 1i by 1j	1l

Step 2: Calculate Annual Weights

Average Number Tested

(2a) Prior Year 2 count of tested students (A) – leave blank if not shown	2a
(2b) Prior Year 1 count of tested students (C) – leave blank if not shown	2b
(2c) Current Year count of tested students (E)	2c
(2d) Add 2a through 2c	2d
(2e) How many of 2a through 2c have values?	2e
Average count of tested students: (2f) Divide 2d by 2e	2f

Prior Year 2 Weight

(2g) Is 2a blank?　　2g ☐ Yes ☐ No　　If "Yes," move on to the "Prior Year 1 Weight" section.	
(2h) Enter the count from 2a	2h
(2i) Enter the average from 2f	2i
Prior Year 2 Weight: (2j) Divide 2h by 2i	2j

Prior Year 1 Weight

(2k) Is 2b blank?　　2k ☐ Yes ☐ No　　If "Yes," move on to the "Current Year Weight" section.	
(2l) Enter the count from 2b	2l
(2m) Enter the average from 2f	2m
(2n) Divide 2l by 2m	2n
(2o) If 2g is "Yes," enter 1; if 2g is "No," enter 1.25	2o
Prior Year 1 Weight: (2p) Multiply 2n by 2o	2p

Current Year Weight

    (2q) Are both 2a and 2b blank?   2q ☐ Yes ☐ No   If "Yes," skip to 2t.

        (2q) Enter the count from 2c   2q

        (2r) Enter the average from 2f   2r

        (2s) Divide 2q by 2r   2s

        Current Year Weight: (2t) If 2q is "No," multiply 2s by 1.5; otherwise, enter 1   2t

Step 3: Combine Points and Weights

If a year does not have data, leave that year's boxes blank.

Prior Year 2 Score

                              (3a) Enter the average from 1d   3a

                              (3b) Enter the weight from 2j   3b

                              Prior Year 2 Score: (3c) Multiply 3a by 3b   3c

Prior Year 1 Score

                              (3d) Enter the average from 1h   3d

                              (3e) Enter the weight from 2p   3e

                              Prior Year 1 Score: (3f) Multiply 3d by 3e   3f

Current Year Score

                              (3g) Enter the average from 1l   3g

                              (3h) Enter the weight from 2t   3h

                              Current Score: (3i) Multiply 3g by 3h   3i

Step 4: Calculate Reading Achievement Score

(4a) Enter the score from 3c   4a   (4e) Enter the weight from 2j   4e

(4b) Enter the score from 3f   4b   (4f) Enter the weight from 2p   4f

(4c) Enter the score from 3i   4c   (4g) Enter the weight from 2t   4g

(4d) Add 4a through 4c   4d   (4h) Add 4e through 4g   4h

                              (4i) Divide 4d by 4h   4i

        Reading Achievement Score: (4j) Multiply 4i by 50   4j

Mathematics Achievement Worksheet

Step 1: Assign and Average Points

If a year does not have data shown, leave that year's boxes blank.

Prior Year 2 Average

(1a) Total points earned (B)	1a
(1b) Count of tested students (A)	1b
(1c) Is 1a greater than 1b?	1c ☐ Yes ☐ No
Average: (1d) If 1c is "Yes," enter 1; if 1c is "No," divide 1a by 1b	1d

Prior Year 1 Average

(1e) Total points earned (D)	1e
(1f) Count of tested students (C)	1f
(1g) Is 1e greater than 1f?	1g ☐ Yes ☐ No
Average: (1h) If 1g is "Yes," enter 1; if 1g is "No," divide 1e by 1f	1h

Current Year Average

(1i) Total points earned (F)	1i
(1j) Count of tested students (E)	1j
(1k) Is 1i greater than 1j?	1k ☐ Yes ☐ No
Average: (1l) If 1k is "Yes," enter 1; if 1k is "No," divide 1i by 1j	1l

Step 2: Calculate Annual Weights

Average Number Tested

(2a) Prior Year 2 count of tested students (A) – leave blank if not shown	2a
(2b) Prior Year 1 count of tested students (C) – leave blank if not shown	2b
(2c) Current Year count of tested students (E)	2c
(2d) Add 2a through 2c	2d
(2e) How many of 2a through 2c have values?	2e
Average count of tested students: (2f) Divide 2d by 2e	2f

Prior Year 2 Weight

(2g) Is 2a blank? 2g ☐ Yes ☐ No If "Yes," move on to the "Prior Year 1 Weight" section.	
(2h) Enter the count from 2a	2h
(2i) Enter the average from 2f	2i
Prior Year 2 Weight: (2j) Divide 2h by 2i	2j

Prior Year 1 Weight

(2k) Is 2b blank? 2k ☐ Yes ☐ No If "Yes," move on to the "Current Year Weight" section.	
(2l) Enter the count from 2b	2l
(2m) Enter the average from 2f	2m
(2n) Divide 2l by 2m	2n
(2o) If 2g is "Yes," enter 1; if 2g is "No," enter 1.25	2o
Prior Year 1 Weight: (2p) Multiply 2n by 2o	2p

Current Year Weight

(2q) Are both 2a and 2b blank?   2q ☐ Yes ☐ No   If "Yes," skip to 2t.

(2q) Enter the count from 2c	2q
(2r) Enter the average from 2f	2r
(2s) Divide 2q by 2r	2s
Current Year Weight: (2t) If 2q is "No," multiply 2s by 1.5; otherwise, enter 1	2t

Step 3: Combine Points and Weights

If a year does not have data, leave that year's boxes blank.

Prior Year 2 Score

(3a) Enter the average from 1d	3a
(3b) Enter the weight from 2j	3b
Prior Year 2 Score: (3c) Multiply 3a by 3b	3c

Prior Year 1 Score

(3d) Enter the average from 1h	3d
(3e) Enter the weight from 2p	3e
Prior Year 1 Score: (3f) Multiply 3d by 3e	3f

Current Year Score

(3g) Enter the average from 1l	3g
(3h) Enter the weight from 2t	3h
Current Score: (3i) Multiply 3g by 3h	3i

Step 4: Calculate Mathematics Achievement Score

(4a) Enter the score from 3c	4a	(4e) Enter the weight from 2j	4e
(4b) Enter the score from 3f	4b	(4f) Enter the weight from 2p	4f
(4c) Enter the score from 3i	4c	(4g) Enter the weight from 2t	4g
(4d) Add 4a through 4c	4d	(4h) Add 4e through 4g	4h
		(4i) Divide 4d by 4h	4i
		Mathematics Achievement Score: (4j) Multiply 4i by 50	4j

Calculating Priority Area Scores
Student Growth Priority Area

The Student Growth Priority Area evaluates districts on their **students' progress toward higher performance levels** and any **student declines below the Proficient level**. This tool allows us to set target growth trajectories for students in Wisconsin and compare their actual growth to those targets. This measure is designed so that districts can earn the most credit for helping accelerate the growth of students furthest behind their peers. At the same time, districts are not penalized for high levels of achievement.

Background

At the foundation of the Student Growth score are growth metrics called **Student Growth Percentiles** (**SGPs**). While the calculations behind SGPs are complex, the concept is fairly straightforward. When we look at one student's WKCE scores over time, we can find many other students with similar score histories, which allows us to establish an academic peer group of all these students. Using the peer group, we can appropriately compare student performance. An SGP is a percentile rank that **compares one student's change in WKCE scores from last year to this year to the growth of the student's peers**. SGPs allow us to describe an individual student's growth across the full range of performance levels, rather than focusing on growth to one specific level. Wisconsin districts already use student level SGP reports that both describe individual students' past growth and project ranges of low, typical, and high growth for students in the next year.[1] For the Student Growth Priority Area, we employ the same statistic, the SGP, to make another kind of projection than is shown on our student level SGP reports. For Student Growth, we choose three specific performance targets and use the SGP methodology to project the rate of growth a particular student would have to exhibit to reach each of those targets. The targets in question are straightforward: attaining the threshold scores for the Basic, Proficient, and Advanced WKCE performance levels within a period of three years. These target SGPs, or **target growth trajectories**, provide us with benchmarks against which we can compare a student's actual growth.

Setting target growth trajectories is possible because we have a large body of historical, student-level, test score data. For any individual student, we can pull out of this body of data just the data for a peer group of students with similar test score histories up to the current grade of the student in question. Many of these peers drawn from our historical data set also have test scores for grades that our current student has yet to reach, and it is these data that allow us to project the rates of growth our student will need in order to reach different performance levels within the given three year measurement period. These rates of growth are the target SGPs or target growth trajectories. The box titled "A Closer Look at Target Growth Trajectories" provides a more specific illustration of how target growth trajectories are derived and used.

Specifically, we calculate, for every student with growth data, target growth trajectories for the Basic, Proficient, and Advanced levels, based on the student's score in the previous year. For a performance level above a student's current level, the target trajectory is the most lenient SGP—i.e., slowest pace of improvement—out of the SGPs associated with improving to that level in one, two, and three years' time. (Usually, but not always, the most lenient SGP will be the one

---

[1] . For more information on SGPs and the individual student growth reports available to districts, please see: http://oea.dpi.wi.gov/files/oea/pdf/sgperc.pdf.

related to the student taking a full three years to grow to the higher level.) For a performance level below a student's current level, it is the most lenient SGP—i.e., most rapid decline—out of the SGPs associated with declining to that level in one, two, and three years' time. (Usually, the most lenient SGP will be one the related to the student declining to the lower level after just one year.)

In the current year, we compare each student's actual SGPs in reading and math against the student's target SGPs. If, for example, a student who was below the Proficient level produces an SGP that exceeds his target SGP for the Proficient level, then we can say that this student is on a trajectory to reach the Proficient level— even if the change in levels hasn't happened yet. Using a "value table," we **assign positive points if the student's actual SGP equals or exceeds his target SGPs for higher levels and negative points if the student was above the Proficient level but has an actual SGP that falls below his target SGP** for the Proficient level. Points earned by all a district's students are summed to arrive at that district's Student Growth score.

Because of the WKCE fall-to-fall testing cycle, for this Priority Area, a district's students are those that it enrolled in the prior year, since most of the students' growth between the two tests occurred at that district. However, a student's Full Academic Year (FAY) status is determined in the current year.

A Closer Look at Target Growth Trajectories

Consider a sixth-grade student who last year, as a fifth grader, was rated Proficient in Reading, with a score of 515. (This illustration uses the NAEP-based WKCE performance levels.) Let us focus on the target of attaining the Advanced performance level within three years of that fifth-grade starting point. To reach the Advanced level in Reading as a sixth grader, our student would need to score 573. To reach Advanced as a seventh grader, she would need a 590, and to reach it as an eighth grader, she would need a 613. Once we have the student's sixth-grade test results, it will be obvious whether or not she reached the target in the first year of the three year window. But by using the SGP to establish target growth trajectories, we will also be able to tell whether or not she is on a growth path to meeting the target by the second year or the third year.

To derive the target trajectory, we draw upon our body of historical data to identify a peer group for our student comprised of students older than she who have already progressed ahead of her through the sixth, seventh, and eighth grades *but who had the same or similar track record of Reading scores from the third through the fifth grade*. Using the sixth-grade through eighth-grade test data for this population of older peers, we can identify three specific SGPs: the SGP for a member of this peer group who just made it to the threshold of the Advanced level as a sixth grader, the SGP for a member who made it as a seventh grader, and the SGP for one who made it as an eighth grader. The most lenient (lowest) of these becomes our student's target SGP or growth trajectory for the Advanced level. (For intuitively apparent reasons, the SGP associated with meeting a higher target in the third year will usually be the most lenient, as is true for this example; however, depending on a student's situation, infrequently the first or second year projected SGP may be the most lenient.)

When we receive our student's sixth-grade Reading score, we can calculate her individual SGP characterizing her fifth-grade-to-sixth-grade growth in the context of all current sixth graders. Now, we can compare her actual SGP with her target SGP. If it meets or surpasses the target, we can say that this student is on a trajectory to improve to the Advanced level.

For a different student who was at the Basic level in Reading in fifth grade, we would follow the same procedure to determine a target trajectory for the Proficient level as well as Advanced, and for another student who started at the Minimal level in fifth grade, we would also determine a target for the Basic level.

So far we have talked about growth trajectories to higher levels. But for the Student Growth Priority Area, being on a path to drop below the Proficient level also matters. Therefore, for our student, the other important target to determine besides the target growth trajectory to Advanced is the decline trajectory to scoring below the threshold for Proficient, which is 525 for sixth graders, 535 for seventh graders, and 548 for eighth graders. The most lenient of the SGPs relating to our student's next three years becomes her target decline trajectory. (In this case, as will be the case for most decline trajectories, decline below the target in one year's time yields the most lenient SGP.)

Reading the Report Card Detail

To arrive at a Student Growth score, separate scores for reading and mathematics are calculated first and then added together. The four-by-four grids for reading and mathematics shown in the Student Growth detail summarize the comparisons of actual SGPs to target trajectories for all students in a district. Consider the following data on reading growth for a sample district, which we will use throughout the walkthrough:

Sample District – Reading Growth

Reading Growth Score is based on the students tested in fall 2012
with data for growth to fall 2013.

Starting Level		Growth/Decline Trajectory			
		Min. Perf.	Basic	Proficient	Advanced
Minimal Performance	33	10	**16**	**6**	**1**
	19.2%	5.8%	**9.3%**	**3.5%**	**0.6%**
Basic	66	6	46	**11**	**3**
	38.4%	3.5%	26.7%	**6.4%**	**1.7%**
Proficient	60	*1*	*16*	34	**9**
	34.9%	*0.6%*	*9.3%*	19.8%	**5.2%**
Advanced	13	*0*	*0*	7	6
	7.6%	*0.0%*	*0.0%*	4.1%	3.5%

On the left, under "Starting Level," students at Sample District (with WKCE growth data from fall 2012 to fall 2013 to calculate SGPs and target trajectories over the next three years) are grouped by their fall 2012 performance levels. To the right, they are grouped further based on whether or not their actual growth met the target trajectory for a particular level (or under Minimal Performance, whether they fell below the Basic trajectory).

Example (shown with the bold border): 66 students started at the Basic level in fall 2012. Of those, 11 met the Proficient target trajectory but not the Advanced target trajectory.

The layout of the table reflects how these comparisons are used to calculate a district's Student Growth score. The green/bold highlighted cells show students whose actual growth put them on a trajectory toward a higher performance level, and the red/italic highlighted cells show those whose actual decline put them on a trajectory to fall below Proficient.

Student Growth Walkthrough

This walkthrough guides the user through determination of a Student Growth score in a single content area, reading, for Sample District. To determine the Student Growth Priority Area score, the process is repeated for mathematics, and the two content area scores are added.

Step 1: Assign Growth and Decline Points

The first step is to assign points for each student's comparison of actual SGP to target trajectories. We use two basic principles to assign points:

1. Students earn +1 point for each higher level they are on a trajectory toward attaining.
2. Students earn -1 point if they are on a trajectory to decline below Proficient.

These principles can be combined to create a value table showing how many points a student can earn for each combination of starting level and target trajectory met:

Starting Level	Growth/Decline Trajectory			
	Min. Perf.	Basic	Proficient	Advanced
Min. Perf.	0	+1	+2	+3
Basic	0	0	+1	+2
Proficient	-1	-1	0	+1
Advanced	-1	-1	0	0

By applying the value table to our sample district's report card data, we can figure out how many points students earned:

Starting Level		Growth/Decline Trajectory			
		Min. Perf.	Basic	Proficient	Advanced
Minimal Performance	33 students	10 students	16 students	6 students	1 student
		0 points	+16 points	+12 points	+3 points
Basic	66 students	6 students	46 students	11 students	3 students
		0 points	0 points	+11 points	+6 points
Proficient	60 students	1 student	16 students	34 students	9 students
		-1 point	-16 points	0 points	+9 points
Advanced	13 students	0 students	0 students	7 students	6 students
		0 points	0 points	0 points	0 points

Total Growth Points: +57 points	Total Decline Points: -17 points

Step 2: Calculate Growth and Decline Factors

One thing to note about Step 1 is that because of the way we look at student growth, certain students cannot earn points—Advanced students cannot earn positive growth points since they have no trajectory to a higher performance level, and Minimal Performance or Basic students cannot earn negative decline points since they are already below

Proficient. We incorporate Advanced students into growth and Minimal Performance or Basic students into decline by calculating **growth and decline factors**, values that represent the average numbers of points earned by students who can earn points, scaled by the percentages of students who cannot.

Definitions

Note: Within definitions, a performance level (Minimal Performance, Basic, Proficient, or Advanced) refers to the *starting level* in the growth detail table, not the trajectory.

$$\text{Average Growth Points} = \frac{\text{Total Growth Points}}{\text{Number Min. Perf.} + \text{Number Basic} + \text{Number Proficient}}$$

$$\text{Percent Advanced} = \frac{\text{Number Advanced}}{\text{Total Students with Growth Data}}$$

$$\text{Average Decline Points} = \frac{\text{Total Decline Points}}{\text{Number Proficient} + \text{Number Advanced}}$$

$$\text{Percent Min. Perf. or Basic} = \frac{\text{Number Min. Perf.} + \text{Number Basic}}{\text{Total Students with Growth Data}}$$

Formulas

$$\text{Growth Factor} = \text{Average Growth Points} + \text{Percent Advanced} - (\text{Average Growth Points} \times \text{Percent Advanced})$$

$$\text{Decline Factor} = \text{Average Decline Points} - (\text{Average Decline Points} \times \text{Percent Min. Perf. or Basic})$$

Note: The formulas are set up this way so that a district with all Advanced students receives full credit for growth (Growth Factor = 1) and a district with all Minimal Performance or Basic students receives no penalty for decline (Decline Factor = 0).

Calculation

$$\text{Average Growth Points} = \frac{+57 \text{ points}}{33 \text{ Min. Perf. students} + 66 \text{ Basic students} + 60 \text{ Proficient students}} = 0.358$$

$$\text{Percent Advanced} = \frac{13 \text{ Advanced students}}{172 \text{ total students}} = 0.076$$

$$\text{Growth Factor} = 0.358 + 0.076 - (0.358 \times 0.076) = \mathbf{0.407}$$

$$\text{Average Decline Points} = \frac{-17 \text{ points}}{60 \text{ Proficient students} + 13 \text{ Advanced students}} = -0.233$$

$$\text{Percent Min. Perf. or Basic} = \frac{33 \text{ Min. Perf. students} + 66 \text{ Basic students}}{172 \text{ total students}} = 0.576$$

$$\text{Decline Factor} = -0.233 - (-0.233 \times 0.576) = \mathbf{-0.099}$$

Step 3: Combine Growth and Decline Factors into Total Factor

Once the growth and decline factors have been calculated, they are combined into a single value, the **total factor**. The basic formula for the total factor is:

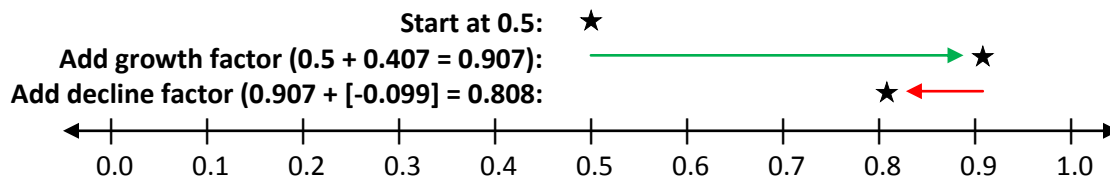$$\text{Total Factor} = \text{Growth Factor} + \text{Decline Factor} + 0.5$$

Why add the growth and decline factors to 0.5? The reason is to create a value like a rate that we can use to determine a score. This makes more sense if we illustrate the calculation for our sample district:

$$\text{Total Factor} = 0.407 + (-0.099) + 0.5 = \mathbf{0.808}$$

The total factor formula puts the district on a range between zero and one. A total factor of 0.5 represents a district where student growth and decline are balanced. As the total factor moves away from 0.5 it shows that either growth or decline is more predominant:

← More Decline than Growth | **More Growth than Decline →**

0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0

We can show the total factor calculation on this number line:

Start at 0.5: ★
Add growth factor (0.5 + 0.407 = 0.907): ★
Add decline factor (0.907 + [-0.099] = 0.808: ★

0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0

A total factor of 0.808 shows that our sample district has quite a bit more growth than decline.

The basic equation above can give a value for the total factor of less than zero or greater than one. Therefore, we add two conditions that restrict the final value to a zero-to-one range:

If Growth Factor + Decline Factor + 0.5 < 0, then Total Factor = 0

If Growth Factor + Decline Factor + 0.5 > 1, then Total Factor = 1

Otherwise, Total Factor = Growth Factor + Decline Factor + 0.5

Step 4: Calculate a 75% Confidence Interval

As with any measure, there is some statistical uncertainty in the calculation of a Student Growth score. One way to address this uncertainty is to calculate a **confidence interval**, a value that expresses how the number of students in the measure creates uncertainty. As a universal rule, fewer students leads to more uncertainty. Calculating a confidence interval can be tricky because it does not work well with values close to zero or one, or for very small numbers of students. Using a confidence interval is a necessary statistical safeguard, but it adds a layer of complexity to the calculation.

N and P

A rule of thumb for confidence intervals is that the product of N (the number of items in a sample—in this case, the number of students) and P (the percentage or rate calculated) should be at least 5, and the product of N and $(1 - P)$ should also be at least 5. When either of these products is less than 5, we substitute a new value of P that meets the rule of thumb.

Example 1: $N = 20; P = 0.6. N \times P = 20 \times 0.6 = \mathbf{12}; N \times (1 - P) = 20 \times 0.4 = \mathbf{8}.$
We're OK!

Example 2: $N = 20; P = 0.1. N \times P = 20 \times 0.1 = \mathbf{2}; N \times (1 - P) = 20 \times 0.9 = \mathbf{18}.$
Fails the N × P test! Solution: $P_{New} = 5/N = 5/20 = \mathbf{0.25}.$

Example 3: $N = 20; P = 0.8. N \times P = 20 \times 0.8 = \mathbf{16}; N \times (1 - P) = 20 \times 0.2 = \mathbf{4}.$
Fails the N × (1 − P) test! Solution: $P_{New} = 1 - (5/N) = 1 - (5/20) = \mathbf{0.75}.$

Definitions

N = Total number of students with growth data

TF = Total Factor determined in previous step

Total Factor-CI = Total Factor used in confidence interval calculation:

If $N \times TF \geq 5$ and $N \times (1 - TF) \geq 5$, then Total Factor-CI = TF

If $N \times TF < 5$, then Total Factor-CI = $5/N$

If $N \times (1 - TF) < 5$, then Total Factor-CI = $1 - (5/N)$

Formula

$$\text{Confidence Interval} = 1.15 \times \sqrt{\frac{\text{Total Factor-CI} \times (1 - \text{Total Factor-CI})}{\text{Total number of students with growth data}}}$$

Calculation

$N = 172; TF = 0.808$

$N \times TF = 172 \times 0.808 = 139; N \times (1 - TF) = 172 \times 0.192 = 33$

Passes both tests, so Total Factor-CI = $TF = 0.808$

$$\text{Confidence Interval} = 1.15 \times \sqrt{\frac{0.808 \times 0.192}{172}} = \mathbf{0.035}$$

Note: A confidence interval is a value that is added or subtracted to create a range. In this example, the confidence interval means we are reasonably confident that the true growth score for these 172 students falls within a range from 0.773 to 0.843 (0.808 ± 0.035). As we will see in the next step, the top of this range—the maximum value we can reliably determine for the district—is used to determine the growth score.

Step 5: Determine the Content Area Student Growth Score

Now that we have the total factor and the 75 percent confidence interval, we can determine this district's Student Growth score in reading. The formula is complex in order to put Student Growth scores on a similar scale as Student Achievement. Like the WKCE, the new district accountability system includes different kinds of data and different scores that carry different meanings; it is necessary to align components like Student Growth to a common scale.

Formula

$$\text{Content Area Student Growth Score} = ([(\text{Total Factor} + \text{Confidence Interval}) \times 1.01] - 0.16) \times 50$$

Note: Adding the confidence interval to the total factor gives the highest reasonable value for growth within the 75 percent confidence interval. 1.01 and 0.16 are numbers that align Student Growth to the common scale based on Student Achievement scores. 50 sets the content area growth score out of 50 points.

Calculation

$$\text{Content Area Student Growth Score} = ([(0.808 + 0.035) \times 1.01] - 0.16) \times 50 = \mathbf{34.6}$$

Sample District's Student Growth score in reading is 34.6.

Student Growth Priority Area Worksheet

Introduction

This worksheet has two parts, one for reading and one for mathematics. Both parts require you to copy data from the Student Growth detail of the District Report Card Detail. Be sure to **use the counts, not the percentages**. **Note that the score calculated here may not exactly match the report card due to rounding differences**. Here is a key to the data needed to complete the worksheet:

Sample Elementary – Reading Growth

Reading Growth Score is based on the students tested in fall 2012 with data for growth to fall 2013.

Starting Level		Growth/Decline Trajectory			
		Min. Perf.	Basic	Proficient	Advanced
Minimal Performance	**B** 33	10	**F** 16	**G** 6	**H** 1
	19.2%	5.8%	9.3%	3.5%	0.6%
Basic	**C** 66	6	46	**I** 11	**J** 3
	38.4%	3.5%	26.7%	6.4%	1.7%
Proficient	**D** 60	**L** 1	**M** 16	34	**K** 9
	34.9%	0.6%	9.3%	19.8%	5.2%
Advanced	**E** 13	**N** 0	**O** 0	7	6
	7.6%	0.0%	0.0%	4.1%	3.5%

Letters shown on the key are used to help identify data on the worksheet. Although the key shows an example for reading growth, the same components are used for mathematics growth as well.

Instructions

Work through the individual reading and mathematics worksheets step by step, entering data from the District Report Card Detail where appropriate. When both are complete, add both content area scores to determine the district's Student Growth Priority Area score:

Reading Student Growth Score: _____ out of 50 points

Mathematics Student Growth Score: **+** _____ out of 50 points

Student Growth Priority Area Score: _____ out of 100 points

Reading Student Growth Score

Step 1: Assign Growth and Decline Points		

Growth Points

(1a) Min. Perf. toward Advanced students (H)	× 3 =	1a
(1b) Min. Perf. toward Proficient students (G)	× 2 =	1b
(1c) Basic toward Advanced students (J)	× 2 =	1c
(1d) Min. Perf. toward Basic students (F)	× 1 =	1d
(1e) Basic toward Proficient students (I)	× 1 =	1e
(1f) Proficient toward Advanced students (K)	× 1 =	1f
(1g) Total Growth Points: Add 1a through 1f		1g

Decline Points

(1h) Proficient toward Min. Perf. students (L)	× -1 =	1h
(1i) Proficient toward Basic students (M)	× -1 =	1i
(1j) Advanced toward Min. Perf. students (N)	× -1 =	1j
(1k) Advanced toward Basic students (O)	× -1 =	1k
(1l) Total Decline Points: Add 1h through 1k (will be a negative number)		1l

Step 2: Calculate Growth and Decline Factors	

Total Students with Growth Data

(2a) Number of Min. Perf. students (B)	2a
(2b) Number of Basic students (C)	2b
(2c) Number of Proficient students (D)	2c
(2d) Number of Advanced students (E)	2d
(2e) Total students: Add 2a through 2d	2e

Growth Factor

(2f) Number of Min. Perf. students (B)	2f
(2g) Number of Basic students (C)	2g
(2h) Number of Proficient students (D)	2h
(2i) Enter Total Growth Points from 1g	2i
(2j) Add 2f through 2h	2j
(2k) Average Growth Points: 2i ÷ 2j	2k
(2g) Number of Advanced students (E)	2l
(2h) Enter total students with growth data from 2e	2m
(2n) Percent Advanced: 2l ÷ 2m	2n
(2o) Growth Factor: 2k + 2n − (2k × 2n)	2o

Decline Factor

(2p) Number of Proficient students (D)	2p
(2q) Number of Advanced students (E)	2q
(2r) Enter Total Decline Points from 1l	2r
(2s) Add 2p and 2q	2s
(2t) Average Decline Points: 2r ÷ 2s (will be a negative number)	2t
(2u) Number of Min. Perf. students (B)	2u
(2v) Number of Basic students (C)	2v

(2w) Add 2u and 2v

| 2w |

(2x) Enter total students with growth data from 2e

| 2x |

(2y) Percent Min. Perf. or Basic: 2w ÷ 2x

| 2y |

(2z) Decline Factor: 2t − (2t × 2y) (will be a negative number)

| 2z |

Step 3: Combine Growth and Decline Factors into Total Factor

(3a) Enter Growth Factor from 2o

| 3a |

(3b) Enter Decline Factor from 2z

| 3b |

(3c) 3a + 3b + 0.5

| 3c |

(3d) Is 3c less than zero? 3d ☐ Yes ☐ No

(3e) If 3d is 'Yes,' enter 0

| 3e |

(3f) Is 3c greater than one? 3f ☐ Yes ☐ No

(3g) If 3f is 'Yes,' enter 1

| 3g |

(3h) If 3d and 3f are 'No,' enter 3c

| 3h |

(3i) Total Factor: Enter whichever one of 3e, 3g, or 3h contains a value

| 3i |

Step 4: Calculate a 75% Confidence Interval

(4a) Total students with growth data (A)

| 4a |

(4b) Enter Total Factor from 3i

| 4b |

(4c) Multiply 4a by 4b

| 4c |

(4d) Enter 5 ÷ 4a

| 4d |

(4e) Is 4c less than 5? 4e ☐ Yes ☐ No

(4f) If 4e is 'Yes,' enter 4d

| 4f |

(4g) Enter 1 minus 4b

| 4g |

(4h) Multiply 4a by 4g

| 4h |

(4i) Is 4h less than 5? 4i ☐ Yes ☐ No

(4j) If 4i is 'Yes,' enter (1 − 4d)

| 4j |

(4k) If both 4e and 4i are 'No,' enter Total Factor from 4b

| 4k |

(4l) Enter whichever one of 4f, 4j, or 4k contains a value

| 4l |

(4m) Enter 1 minus 4l

| 4m |

(4n) Multiply 4l by 4m

| 4n |

(4o) Divide 4n by 4a

| 4o |

(4p) Take the square root of 4o

| 4p |

(4q) Confidence Interval: Multiply 4p by 1.15

| 4q |

Step 5: Determine the Reading Growth Score

(5a) Enter the Total Factor from 3i

| 5a |

(5b) Enter the Confidence Interval from 4q

| 5b |

(5c) Add 5a and 5b

| 5c |

(5d) Multiply 5c by 1.01

| 5d |

(5e) Enter 5d minus 0.16

| 5e |

(5f) Reading Student Growth Score: Multiply 5e by 50

| 5f |

Mathematics Growth Score

Step 1: Assign Growth and Decline Points			
Growth Points			
(1a) Min. Perf. toward Advanced students (H)		× 3 =	1a
(1b) Min. Perf. toward Proficient students (G)		× 2 =	1b
(1c) Basic toward Advanced students (J)		× 2 =	1c
(1d) Min. Perf. toward Basic students (F)		× 1 =	1d
(1e) Basic toward Proficient students (I)		× 1 =	1e
(1f) Proficient toward Advanced students (K)		× 1 =	1f
(1g) Total Growth Points: Add 1a through 1f			1g
Decline Points			
(1h) Proficient toward Min. Perf. students (L)		× -1 =	1h
(1i) Proficient toward Basic students (M)		× -1 =	1i
(1j) Advanced toward Min. Perf. students (N)		× -1 =	1j
(1k) Advanced toward Basic students (O)		× -1 =	1k
(1l) Total Decline Points: Add 1h through 1k (will be a negative number)			1l

Step 2: Calculate Growth and Decline Factors	
Total Students with Growth Data	
(2a) Number of Min. Perf. students (B)	2a
(2b) Number of Basic students (C)	2b
(2c) Number of Proficient students (D)	2c
(2d) Number of Advanced students (E)	2d
(2e) Total students: Add 2a through 2d	2e
Growth Factor	
(2f) Number of Min. Perf. students (B)	2f
(2g) Number of Basic students (C)	2g
(2h) Number of Proficient students (D)	2h
(2i) Enter Total Growth Points from 1g	2i
(2j) Add 2f through 2h	2j
(2k) Average Growth Points: 2i ÷ 2j	2k
(2g) Number of Advanced students (E)	2l
(2h) Enter total students with growth data from 2e	2m
(2n) Percent Advanced: 2l ÷ 2m	2n
(2o) Growth Factor: 2k + 2n − (2k × 2n)	2o
Decline Factor	
(2p) Number of Proficient students (D)	2p
(2q) Number of Advanced students (E)	2q
(2r) Enter Total Decline Points from 1l	2r
(2s) Add 2p and 2q	2s
(2t) Average Decline Points: 2r ÷ 2s (will be a negative number)	2t
(2u) Number of Min. Perf. students (B)	2u
(2v) Number of Basic students (C)	2v

(2w) Add 2u and 2v | 2w
(2x) Enter total students with growth data from 2e | 2x
(2y) Percent Min. Perf. or Basic: 2w ÷ 2x | 2y
(2z) Decline Factor: 2t – (2t × 2y) (will be a negative number) | 2z

Step 3: Combine Growth and Decline Factors into Total Factor

(3a) Enter Growth Factor from 2o | 3a
(3b) Enter Decline Factor from 2z | 3b
(3c) 3a + 3b + 0.5 | 3c
(3d) Is 3c less than zero? | 3d ☐ Yes ☐ No
(3e) If 3d is 'Yes,' enter 0 | 3e
(3f) Is 3c greater than one? | 3f ☐ Yes ☐ No
(3g) If 3f is 'Yes,' enter 1 | 3g
(3h) If 3d and 3f are 'No,' enter 3c | 3h
(3i) Total Factor: Enter whichever one of 3e, 3g, or 3h contains a value | 3i

Step 4: Calculate a 75% Confidence Interval

(4a) Total students with growth data (A) | 4a
(4b) Enter Total Factor from 3i | 4b
(4c) Multiply 4a by 4b | 4c
(4d) Enter 5 ÷ 4a | 4d
(4e) Is 4c less than 5? | 4e ☐ Yes ☐ No
(4f) If 4e is 'Yes,' enter 4d | 4f
(4g) Enter 1 minus 4b | 4g
(4h) Multiply 4a by 4g | 4h
(4i) Is 4h less than 5? | 4i ☐ Yes ☐ No
(4j) If 4i is 'Yes,' enter (1 – 4d) | 4j
(4k) If both 4e and 4i are 'No,' enter Total Factor from 4b | 4k
(4l) Enter whichever one of 4f, 4j, or 4k contains a value | 4l
(4m) Enter 1 minus 4l | 4m
(4n) Multiply 4l by 4m | 4n
(4o) Divide 4n by 4a | 4o
(4p) Take the square root of 4o | 4p
(4q) Confidence Interval: Multiply 4p by 1.15 | 4q

Step 5: Determine the Mathematics Student Growth Score

(5a) Enter the Total Factor from 3i | 5a
(5b) Enter the Confidence Interval from 4q | 5b
(5c) Add 5a and 5b | 5c
(5d) Multiply 5c by 1.01 | 5d
(5e) Enter 5d minus 0.16 | 5e
(5f) Mathematics Student Growth Score: Multiply 5e by 50 | 5f

Calculating Priority Area Scores
Closing Gaps Priority Area

The Closing Gaps Priority Area evaluates districts based on the **rate of change in student achievement and graduation from one year to the next among key student groups**. It focuses on the groups with statewide achievement gaps, and rewards districts that improve these groups' performance at a rate greater than their statewide comparison group, closing the achievement gap.

Background

Wisconsin has a number of specific and significant gaps in reading and mathematics achievement and graduation. The Closing Gaps Priority Area is designed to **look at improvement among particular student groups** in a way that **rewards districts for contributing to closing our achievement gaps**. We evaluate districts' progress in closing achievement gaps using the point-based proficiency rate also used in the Student Achievement Priority Area, and we evaluate districts' progress in closing graduation gaps using the high school cohort graduation rate. In each area, we examine the change in the point-based proficiency or graduation rate over up to five years. Then, each district's average rate of change is contrasted with a statewide comparison group's average rate of change over the same time period. This is done by comparing the trend lines of the two groups. The district target groups and comparison groups included in Closing Gaps scores are:

District Target Group	Statewide Comparison Group
American Indian & Alaskan Native	White not Hispanic
Asian and Pacific Islander	White not Hispanic
Black not Hispanic	White not Hispanic
Hispanic	White not Hispanic
Students with disabilities	Students without disabilities
Economically disadvantaged	Not economically disadvantaged
English language learners	English proficient
Supergroup*	Not in Supergroup*

*Supergroups

A **"supergroup"** is **a group of students belonging to one or more of the three groups** that are not racial or ethnic subgroups: students with disabilities, economically disadvantaged students, or English language learners. We use a supergroup only when these individual groups do not have enough students to be considered in a district's Closing Gaps score, but when combined into the supergroup, they do.

For example, in a district with 14 students with disabilities and 16 economically disadvantaged students, there are too few students in either group to be considered in Closing Gaps. However, if there are 25 students in the "students with disabilities/economically disadvantaged" supergroup (9 with disabilities, 11 economically disadvantaged, and 5 in both groups) then we can consider all of those students together in the supergroup.

Reading the Report Card Detail

All of the Closing Gaps measures are based on comparisons between specific groups of students in the district and their peers in a statewide comparison group:

- For racial/ethnic groups we compare each targeted racial/ethnic group: American Indian or Alaska Native, Asian or Pacific Islander, Black (not Hispanic), and Hispanic students, to their White (not Hispanic) student counterparts. In report card calculations, a student is only counted in a single racial/ethnic group.
- For other groups, those where a student either is or is not a member: students with disabilities, economically disadvantaged students, and English language learners, we compare the students within the group at the district level to those outside of it at the state level. A student may be counted in more than one of these groups.
- For supergroups (groups combining two or three groups outside of racial/ethnic group, used only when those individual groups do not have enough students for comparison but the supergroup does), we compare the students within the supergroup to those outside it. A student belonging to more than one of the combined groups is only counted once in the supergroup.
- If a district has a very high performing subgroup, the subgroup is rewarded with the highest change score achieved by the subgroup in any district in the state.

DPI uses a cell size of 20 as the minimum number of students in a subgroup required for Closing Gaps calculations. Closing Gaps calculations require three years of data. At a minimum, a district's subgroup must have achievement or graduation data for the current year and the two most recent years to be included in the calculation. A district must have at least one subgroup or supergroup that meets the group size requirement for at least 3 years in order to have a Closing Gaps score. "NA" is reported when subgroups do not meet the minimum number of students for the minimum number of years.

The Closing Gaps data in the District Report Card Detail includes summary tables for Closing Achievement Gaps (one for reading and one for mathematics) and Closing Graduation Gaps. The layout of all three tables is the same, but the data are slightly different. Consider the following table showing Sample Elementary's performance in closing reading achievement gaps:

Closing Achievement Gaps - Reading | Score: 37.8/50

Group (School Target Group Point-Based Proficiency Rates)	2009-10 Points	2010-11 Points	2011-12 Points	2012-13 Points	2013-14 Points	Group (State Comparison Group Point-Based Proficiency Rates)	2009-10 Points	2010-11 Points	2011-12 Points	2012-13 Points	2013-14 Points	School Target Group (Rate of Change)	State Comparison Group (Rate of Change)	Difference in Rate of Change
American Indian or Alaska Native	NA	NA	NA	NA	NA							NA		NA
Asian or Pacific Islander	0.393	0.442	0.448	0.500	0.429	White not Hispanic	0.642	0.649	0.648	0.657	0.658	0.012	0.004	0.008
Black not Hispanic	0.299	0.370	0.344	0.520	0.348							0.023		0.019
Hispanic	0.262	0.316	0.372	0.425	0.440							0.046		0.042
Students with Disabilities	0.217	0.247	0.226	0.301	0.248	Students without Disabilities	0.622	0.628	0.626	0.634	0.634	0.011	0.003	0.008
Economically Disadvantaged	0.306	0.360	0.380	0.447	0.415	Not Economically Disadvantaged	0.687	0.696	0.698	0.705	0.710	0.030	0.006	0.024
Limited English Proficient	0.196	0.268	0.294	0.322	0.292	English Proficient	0.595	0.601	0.600	0.610	0.609	0.024	0.004	0.020
"All 3" Supergroup	NA	NA	NA	NA	NA	Not in "All 3" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-ECD" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-ECD" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"ECD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "ECD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA

The table includes five point-based proficiency rate columns, labeled "Points" for both the district target groups and the state comparison groups, representing the five most recent years. Point-based proficiency is calculated using the same method as is used for the Achievement Priority Area.

The "Rate of Change" columns show **the improvement for the target group and the comparison group,** calculated as the line of best fit of the point-base proficiency rate values, weighted by the number of tested students represented by each point.

Finally, the table includes a "Difference in Rate of Change" column, showing the difference in the rates of change between the target group and the comparison group across the five years. A positive number means that the gap is decreasing; a negative number means that the gap is increasing.

The Closing Graduation Gaps table has the same layout, but instead of achievement points it shows the graduation rates and rates of change in graduation rates. Additionally, because cohort graduation rate data are only available beginning in 2009-10, only four data columns are present for each group. The following sample Closing Graduation Gaps table reflects these differences:

Closing Graduation Gaps | Score: 43.9/50

School Target Group Graduation Rates					State Comparison Group Graduation Rates					Rate of Change		
Group	2009-10 Graduation Rate	2010-11 Graduation Rate	2011-12 Graduation Rate	2012-13 Graduation Rate	Group	2009-10 Graduation Rate	2010-11 Graduation Rate	2011-12 Graduation Rate	2012-13 Graduation Rate	School Target Group	State Comparison Group	Difference in Rate of Change
American Indian or Alaska Native	NA	NA	NA	NA						NA		NA
Asian or Pacific Islander	0.366	0.949	0.974	0.872	White not Hispanic	0.908	0.915	0.923	0.925	0.149	0.006	0.143
Black not Hispanic	NA	NA	NA	NA						NA		NA
Hispanic	NA	NA	NA	NA						NA		NA
Students with Disabilities	0.451	0.767	0.646	0.659	Students without Disabilities	0.889	0.901	0.904	0.905	0.055	0.005	0.050
Economically Disadvantaged	0.505	0.876	0.818	0.800	Not Economically Disadvantaged	0.907	0.921	0.931	0.931	0.075	0.008	0.067
Limited English Proficient	0.097	0.939	0.939	0.739	English Proficient	0.865	0.879	0.885	0.887	0.213	0.007	0.206
"All 3" Supergroup	NA	NA	NA	NA	Not in "All 3" Supergroup	NA	NA	NA	NA	NA	NA	NA
"SwD-ECD" Supergroup	NA	NA	NA	NA	Not in "SwD-ECD" Supergroup	NA	NA	NA	NA	NA	NA	NA
"SwD-LEP" Supergroup	NA	NA	NA	NA	Not in "SwD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA
"ECD-LEP" Supergroup	NA	NA	NA	NA	Not in "ECD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA

Closing Gaps Walkthrough

This walkthrough guides the user through calculation of a Closing Achievement Gaps score in reading for Sample Elementary. It also includes a shorter description of a Closing Graduation Gaps determination for Sample High, illustrating how graduation differs in this Priority Area. To determine an overall Closing Gaps score, reading, mathematics, and graduation scores are calculated as applicable and added.

Reading Gaps Example

Step 1: Calculate the Difference in Rates of Change for Each Target Group-Comparison Pair

Closing Achievement Gaps calculations are based on achievement points like those of the Student Achievement area. Please note, if the group's average point-based proficiency rate is greater than or equal to 0.9 (a Point-Based Proficiency Rate may exceed one because 'extra-credit' is given for advanced students), the change score is adjusted to be equal to the highest change score observed for that subgroup at any district in the state. This will be indicated on the report card by the symbol "!". This is to ensure that districts with very high achievement are not penalized with low Closing Gaps scores for small increases in gaps. Additionally, to be included in Closing Gaps calculations a subgroup must have at least three years of data, including the current year. A district must have at least one subgroup which meets the requirements to have a Closing Gaps score.

The first step in determining a Closing Achievement Gaps score is to subtract the state comparison group Rate of Change from the district target group Rate of Change for each student subgroup to determine that subgroup's Difference in Rate of Change:

Difference in Rate of Change
$$= \text{District Target Group Change in Rate - State Comparison Group Change in Rate}$$

Let's step through the process to illustrate using Sample District data.

Sample District – Reading Achievement

Closing Achievement Gaps - Reading | Score: 37.8/50

School Target Group Point-Based Proficiency Rates						State Comparison Group Point-Based Proficiency Rates						Rate of Change		
Group	2009-10 Points	2010-11 Points	2011-12 Points	2012-13 Points	2013-14 Points	Group	2009-10 Points	2010-11 Points	2011-12 Points	2012-13 Points	2013-14 Points	School Target Group	State Comparison Group	Difference in Rate of Change
American Indian or Alaska Native	NA	NA	NA	NA	NA							NA		NA
Asian or Pacific Islander	0.393	0.442	0.448	0.500	0.429	White not Hispanic	0.642	0.649	0.648	0.657	0.658	0.012	0.004	0.008
Black not Hispanic	0.299	0.370	0.344	0.520	0.348							0.023		0.019
Hispanic	0.262	0.316	0.372	0.425	0.440							0.046		0.042
Students with Disabilities	0.217	0.247	0.226	0.301	0.248	Students without Disabilities	0.622	0.628	0.626	0.634	0.634	0.011	0.003	0.008
Economically Disadvantaged	0.306	0.360	0.380	0.447	0.415	Not Economically Disadvantaged	0.687	0.696	0.698	0.705	0.710	0.030	0.006	0.024
Limited English Proficient	0.196	0.268	0.294	0.322	0.292	English Proficient	0.595	0.601	0.600	0.610	0.609	0.024	0.004	0.020
"All 3" Supergroup	NA	NA	NA	NA	NA	Not in "All 3" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-ECD" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-ECD" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"ECD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "ECD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA

Difference in Rate of Change = District Target Group - State Comparison Group

Asian students: $Difference\ in\ Rate\ of\ Change = 0.012 - 0.004 = 0.008$

Black students: $Difference\ in\ Rate\ of\ Change = 0.023 - 0.004 = 0.019$

Hispanic students: $Difference\ in\ Rate\ of\ Change = 0.046 - 0.004 = 0.042$

Students with Disabilities: $Difference\ in\ Rate\ of\ Change = 0.011 - 0.003 = 0.008$

Economically Disadvantaged students: $Difference\ in\ Rate\ of\ Change = 0.030 - 0.006 = 0.024$

Limited English Proficient students: $Difference\ in\ Rate\ of\ Change = 0.024 - 0.004 = 0.020$

Step 2: Determine the Closing Achievement Gaps Score

Once we have a Difference in Rate of Change for each group-comparison pair in the district, we average those scores together and use a formula to determine the Closing Achievement Gaps score, in order to put Closing Gaps scores on a similar scale to Student Achievement.

Definitions

Average Difference in Rate of Change
= Average of all "Difference in Rate of Change" values calculated for the district

Possible Points
= 25 points each for reading and mathematics if the district has Closing Graduation Gaps data, or 50 each if it does not

Formula

$$\text{Closing Achievement Gaps Score}$$
$$= [(\text{Average Difference in Rate of Change} \times 4.28) + 0.67] \times \text{Possible Points}$$

Note: 4.28 and 0.67 are numbers that align Closing Gaps to a scale based on Student Achievement scores.

Calculation

$$\text{Average Change Score} = \frac{0.008 + 0.019 + 0.042 + 0.008 + 0.024 + 0.020}{6} = 0.020; \text{Possible Points} = 50$$

$$\text{Closing Achievement Gaps Score} = [(0.020 \times 4.28) + 0.67] \times 50 = \mathbf{37.8}$$

Sample Elementary has a **Closing Achievement Gaps** score in reading of **37.8**.

Closing Graduation Gaps Example

The process for calculating a Closing Graduation Gaps score is similar to that for achievement gaps, with some differences:

1. "Students in Cohort" takes the place of "Students Tested."
2. "Graduation Rates" take the place of "Point-Based Proficiency Rates."
3. The number of possible points is 50 if the district has Closing Achievement Gaps data described above, or 100 if it does not.
4. The numbers in the score formula that align Closing Gaps to Student Achievement are different:

$$\text{Closing Graduation Gaps Score} = [(\text{Average Difference in Rate of Change} \times 2.05) + 0.64] \times \text{Possible Points}$$

Let's step through the process to illustrate using Sample District data.

Step 1: Calculate the Difference in Rates of Change for Each Target Group-Comparison Pair

Closing Graduation Gaps | Score: 43.9/50

School Target Group Graduation Rates					State Comparison Group Graduation Rates					Rate of Change		
Group	2009-10 Graduation Rate	2010-11 Graduation Rate	2011-12 Graduation Rate	2012-13 Graduation Rate	Group	2009-10 Graduation Rate	2010-11 Graduation Rate	2011-12 Graduation Rate	2012-13 Graduation Rate	School Target Group	State Comparison Group	Difference in Rate of Change
American Indian or Alaska Native	NA	NA	NA	NA						NA		NA
Asian or Pacific Islander	0.366	0.949	0.974	0.872	White not Hispanic	0.908	0.915	0.923	0.925	0.149	0.006	0.143
Black not Hispanic	NA	NA	NA	NA						NA		NA
Hispanic	NA	NA	NA	NA						NA		NA
Students with Disabilities	0.451	0.767	0.646	0.659	Students without Disabilities	0.889	0.901	0.904	0.905	0.055	0.005	0.050
Economically Disadvantaged	0.505	0.876	0.818	0.800	Not Economically Disadvantaged	0.907	0.921	0.931	0.931	0.075	0.008	0.067
Limited English Proficient	0.097	0.939	0.939	0.739	English Proficient	0.865	0.879	0.885	0.887	0.213	0.007	0.206
"All 3" Supergroup	NA	NA	NA	NA	Not in "All 3" Supergroup	NA	NA	NA	NA	NA	NA	NA
"SwD-ECD" Supergroup	NA	NA	NA	NA	Not in "SwD-ECD" Supergroup	NA	NA	NA	NA	NA	NA	NA
"SwD-LEP" Supergroup	NA	NA	NA	NA	Not in "SwD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA
"ECD-LEP" Supergroup	NA	NA	NA	NA	Not in "ECD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA

Difference in Rate of Change = District Target Group - State Comparison Group

Asian students: $Difference\ in\ Rate\ of\ Change = 0.149 - 0.006 = 0.143$

Students with Disabilities: $Difference\ in\ Rate\ of\ Change = 0.055 - 0.005 = 0.050$

Economically Disadvantaged students: $Difference\ in\ Rate\ of\ Change = 0.075 - 0.008 = 0.067$

Limited English Proficient students: $Difference\ in\ Rate\ of\ Change = 0.213 - 0.007 = 0.206$

Step 2: Determine the Closing Graduation Gaps Score

Once we have a Difference in Rate of Change score for each group-comparison pair in the district, we average those raw scores together and use a formula to determine the Closing Graduation Gaps score, in order to put Closing Gaps scores on a similar scale to Student Achievement.

Definitions

Average Change Score = Average of all change scores calculated for the district

Possible Points = 50 if the district has Achievement Gaps data, or 100 if it does not

Formula

Closing Graduation Gaps Score = [(Average Change Score × 2.05) + 0.64] × Possible Points

Note: 2.05 and 0.64 are numbers that align Closing Gaps to a scale based on Graduation Rates.

Calculation

$$\text{Average Change Score} = \frac{0.143 + 0.050 + \ 0.067 + 0.206}{4} = 0.117; \text{Possible Points} = 50$$

$$\text{Closing Graduation Gaps Score} = [(0.117 \times 2.05) + 0.64] \times 50 = \mathbf{43.9}$$

Sample High has a Closing Graduation Gaps score of 43.9.

Closing Gaps Priority Area Worksheet

This worksheet has three parts: Closing Reading Achievement Gaps, Closing Mathematics Achievement Gaps, and Closing Graduation Gaps. Each part requires you to pull data from the Closing Gaps detail in the District Report Card Detail. **Note that the score calculated here may not exactly match the report card due to rounding differences**.

- The detailed report card for a particular district will include some or all Closing Gaps data: Closing Reading Achievement Gaps and Closing Mathematics Achievement Gaps only
- Closing Graduation Gaps only
- Both achievement and graduation components

A district will not have Closing Achievement Gaps data and scores reported unless they are available for both reading and mathematics. The combination of Closing Gaps components calculated and reported for a district determines the number of possible points for each component:

Component	Scenario 1 Achievement Only		Scenario 2 Graduation Only		Scenario 3 Achievement and Graduation	
	Present?	Possible points	Present?	Possible points	Present?	Possible points
Closing Reading Achievement Gaps	Yes	50	No	-	Yes	25
Closing Mathematics Achievement Gaps	Yes	50	No	-	Yes	25
Closing Graduation Gaps	No	-	Yes	100	Yes	50

Instructions

Complete the worksheets that include components calculated for the district, entering data from the District Report Card Detail where appropriate. When all applicable worksheets are complete, add the component scores to determine the district's total Closing Gaps score:

Closing Reading Achievement Gaps Score: _____ out of _____ points

Closing Mathematics Achievement Gaps Score: _____ out of _____ points

Closing Graduation Gaps Score: **+** _____ out of _____ points

Closing Gaps Priority Area Score: _____ out of 100 points

Closing Reading Achievement Gaps Worksheet

Step 1: Calculate the Difference in Rate of Change

Enter data from the Closing Achievement Gaps - Reading "Rate of Change" columns under the "District Target Group" and "State Comparison Group" headings in the report card detail table. If "NA" is given for a particular pair of target and comparison groups, leave the boxes blank for that pair.

Subtract the state comparison from the district target group in Point-Based Proficiency Rate to determine the difference in rate of change.

Rate of Change

District Target Group	State Comparison Group	District Target Group	State Comparison Group		Difference in Rate of Change
American Indian or Alaska Native	White not Hispanic	1a	2a	1a-2a:	3a
Asian or Pacific Islander	White not Hispanic	1b	2b	1b-2b:	3b
Black not Hispanic	White not Hispanic	1c	2c	1c-2c:	3c
Hispanic	White not Hispanic	1d	2d	1d-2d:	3d
Students with Disabilities	Students without Disabilities	1e	2e	1e-2e:	3e
Economically Disadvantaged	Not Economically Disadvantaged	1f	2f	1f-2f:	3f
Limited English Proficient	English Proficient	1g	2g	1g-2g:	3g
"All 3" Supergroup	Not in "All 3" Supergroup	1h	2h	1h-2h:	3h
"SwD-ECD" Supergroup	Not in "SwD-ECD" Supergroup	1i	2i	1i-2i:	3i
"SwD-LEP" Supergroup	Not in "SwD-LEP" Supergroup	1j	2j	1j-2j:	3j
"ECD-LEP" Supergroup	Not in "ECD-LEP" Supergroup	1k	2k	1k-2k:	3k

Step 2: Determine the Closing Reading Achievement Gaps Score

(4a) Count number of non-blank Difference in Rate of Change values
   (in Step 1: 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k)   [4a]

(4b) Sum the Change Scores
   (from Step 1: 3a+3b+3c+3d+3e+3f+3g+3h+3i+3j+3k)   [4b]

(4c) Determine the Average Change Score (4b/4a)   [4c]

(4d) Does the district have Closing Graduation Gaps data?   4d ☐ Yes ☐ No

Possible Points: (4e) If 4d is "Yes," enter 25; if "No," enter 50:   [4e]

(4f) Enter Average Change Score from 4c: [4f]

(4g) Multiply 4f by 4.28:   [4g]

(4h) Add 4g to 0.67:   [4h]

(4i) Enter Possible Points from 4e: [4i]

(4j) Closing Reading Achievement Gaps Score Multiply 4h and 4i: [4j]

Closing Mathematics Achievement Gaps Worksheet

Step 1: Calculate the Difference in Rate of Change

Enter data from the Closing Achievement Gaps - Mathematics "Rate of Change" columns under the "District Target Group" and "State Comparison Group" headings in the report card detail table. If "NA" is given for a particular pair of target and comparison groups, leave the boxes blank for that pair.

Subtract the state comparison from the district target group in Point-Based Proficiency Rate to determine the difference in rate of change.

Rate of Change

District Target Group	State Comparison Group	District Target Group	State Comparison Group		Difference in Rate of Change
American Indian or Alaska Native	White not Hispanic	1a	2a	1a-2a:	3a
Asian or Pacific Islander	White not Hispanic	1b	2b	1b-2b:	3b
Black not Hispanic	White not Hispanic	1c	2c	1c-2c:	3c
Hispanic	White not Hispanic	1d	2d	1d-2d:	3d
Students with Disabilities	Students without Disabilities	1e	2e	1e-2e:	3e
Economically Disadvantaged	Not Economically Disadvantaged	1f	2f	1f-2f:	3f
Limited English Proficient	English Proficient	1g	2g	1g-2g:	3g
"All 3" Supergroup	Not in "All 3" Supergroup	1h	2h	1h-2h:	3h
"SwD-ECD" Supergroup	Not in "SwD-ECD" Supergroup	1i	2i	1i-2i:	3i
"SwD-LEP" Supergroup	Not in "SwD-LEP" Supergroup	1j	2j	1j-2j:	3j
"ECD-LEP" Supergroup	Not in "ECD-LEP" Supergroup	1k	2k	1k-2k:	3k

Step 2: Determine the Closing Mathematics Achievement Gaps Score

(4a) Count number of non-blank Difference in Rate of Change values

(in Step 1: 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k) | 4a |

(4b) Sum the Change Scores

(from Step 1: 3a+3b+3c+3d+3e+3f+3g+3h+3i+3j+3k) | 4b |

(4c) Determine the Average Change Score (4b/4a) | 4c |

(4d) Does the district have Closing Graduation Gaps data?   4d ☐ Yes ☐ No

Possible Points: (4e) If 4d is "Yes," enter 25; if "No," enter 50: | 4e |

(4f) Enter Average Change Score from 4c: | 4f |

(4g) Multiply 4f by 4.28: | 4g |

(4h) Add 4g to 0.67: | 4h |

(4i) Enter Possible Points from 6e: | 4i |

(4j) Closing Mathematics Achievement Gaps Score: Multiply 4h and 4i: | 4j |

Closing Graduation Gaps Worksheet

Step 1: Calculate the Difference in Rate of Change

Enter data from the Closing Graduation Gaps "Rate of Change" columns under the "District Target Group" and "State Comparison Group" headings in the report card detail table. If "NA" is given for a particular pair of target and comparison groups, leave the boxes blank for that pair.

Subtract the state comparison from the district target group in Point-Based Proficiency Rate to determine the difference in rate of change.

Rate of Change

District Target Group	State Comparison Group	District Target Group	State Comparison Group		Difference in Rate of Change
American Indian or Alaska Native	White not Hispanic	1a	2a	1a-2a:	3a
Asian or Pacific Islander	White not Hispanic	1b	2b	1b-2b:	3b
Black not Hispanic	White not Hispanic	1c	2c	1c-2c:	3c
Hispanic	White not Hispanic	1d	2d	1d-2d:	3d
Students with Disabilities	Students without Disabilities	1e	2e	1e-2e:	3e
Economically Disadvantaged	Not Economically Disadvantaged	1f	2f	1f-2f:	3f
Limited English Proficient	English Proficient	1g	2g	1g-2g:	3g
"All 3" Supergroup	Not in "All 3" Supergroup	1h	2h	1h-2h:	3h
"SwD-ECD" Supergroup	Not in "SwD-ECD" Supergroup	1i	2i	1i-2i:	3i
"SwD-LEP" Supergroup	Not in "SwD-LEP" Supergroup	1j	2j	1j-2j:	3j
"ECD-LEP" Supergroup	Not in "ECD-LEP" Supergroup	1k	2k	1k-2k:	3k

Step 2: Determine the Closing Graduation Achievement Gaps Score

(4a) Count number of non-blank Difference in Rate of Change values

    (in Step 1: 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k) | 4a |

(4b) Sum the Change Scores

    (from Step 1: 3a+3b+3c+3d+3e+3f+3g+3h+3i+3j+3k) | 4b |

(4c) Determine the Average Change Score (4b/4a) | 4c |

    (4d) Does the district have Closing Achievement Gaps data?   4d ☐ Yes ☐ No

    Possible Points: (4e) If 4d is "Yes," enter 50; if "No," enter 100: | 4e |

        (4f) Enter Average Change Score from 4c: | 4f |

        (4g) Multiply 4f by 4.28: | 4g |

        (4h) Add 4g to 0.67: | 4h |

        (4i) Enter Possible Points from 6e: | 4i |

(4j) Closing Graduation Gaps Score: Multiply 4h and 4i: | 4j |

Calculating Priority Area Scores
On-Track and Postsecondary Readiness Priority Area

The On-Track and Postsecondary Readiness Priority Area is designed to evaluate districts on high-impact indicators that predict student success. It includes attendance and graduation, ACT participation and performance, and student achievement at key transition points: 3rd grade reading and 8th grade mathematics.

Background

The mission of Wisconsin public schools is to ensure that every student becomes a high school graduate ready for college and career. The process of getting a student to 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 future likelihood of success. This Priority Area is designed to hold districts accountable for a number of these key indicators.

A graduation/attendance component makes up the bulk of this Priority Area's score. Districts that graduate students are held accountable for both graduation rates and attendance rates; districts that do not graduate students are held accountable for attendance rates only.

- **Attendance** drives all aspects of student success throughout their school career.
- **Graduation rate**, which we measure as a cohort rate—the percentage of students starting high school together who graduate within a certain time—measures the outcome of our districts' overarching mission.

Attendance data and graduation data have some similarities. Both are lagging indicators in that the current school year data is not yet available. As such, we report on the most recent prior year's data. Also, attendance and graduation track each other fairly closely and have similar, narrow distributions of high rates. That is, the state average is around 90% to 95% for both attendance and graduation.

Several other On-Track measures may also contribute to a district's Priority Area score.

- **Reading 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.
- **Participation and performance on the ACT**— the most widely-taken college placement examination in Wisconsin—is a highly regarded measure of college readiness.

Due to the diversity of district types in Wisconsin, not all of these other On-Track measures apply to every district. As a result, combining the measures into a Priority Area score in a way that treats all districts fairly was necessarily a complex process. As other indicators become available, we will evaluate them for inclusion in this Priority Area.

Reading the Report Card Detail

Attendance

The first table shown in the On-Track and Postsecondary Readiness detail is the attendance rate, the number of days that students actually attended divided by the number of days they could possibly have attended. Only students in kindergarten through 12th grade are included in attendance calculations. Data are presented for all students and the lowest-attending student group, which are averaged, to determine the attendance score. Supergroups are used when individual student groups are too small to be measured individually; see Closing Gaps for a description of supergroups.

Group	Enrollment	Attended Days	Possible Days	Rate
All Students	252	42468.0	44100.0	96.3%
Lowest Group: Hispanic	35	4591.0	4900	93.7%

Graduation

The next table shows graduation rate information:

Group	Four-Year Cohort Graduation Rate			Six-Year Cohort Graduation Rate		
	Students in Cohort	Graduates	Rate	Students in Cohort	Graduates	Rate
All Students	21	19	90.5%	NA	NA	NA

Graduation rates are given for a cohort of students comprising the high school students who make up a particular four-year graduating class and do not transfer to a private school, move to another state or country, or are deceased. We report two graduation rates:

- The four-year cohort graduation rate is the percentage of students in the cohort at the end of the fourth year who have graduated from high school.
- The six-year cohort graduation rate is the percentage of students in the cohort at the end of the sixth year (e.g. at the end of 2013-14 for the 2011-12 cohort) who have graduated from high school. This "extended" rate is used to include students who require more than four years to finish high school. Note that in this example, data for the six-year cohort rate are not calculated—presumably, the six-year cohort must not meet the cell size of 20.

ACT Participation and Performance

The third table provides information on how many 12th grade students took the ACT and how they did. If the student took the ACT at any time in high school, it will be included; a student's highest score is used for those that have taken the ACT more than once.

Group	Enrolled	Tested		Reading		English		Mathematics		Science	
	Students	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent
12th Graders	313	170	54.3%	125	73.5%	142	83.5%	120	70.6%	160	94.1%

The percentage of 12th graders tested divided by the number enrolled gives the district's ACT participation rate. The content area breakdowns show how many of the ACT-tested students reached college readiness benchmarks on those portions of the ACT (we use students' best exams for this measure):

- Reading: 22 or higher
- English: 18 or higher
- Mathematics: 22 or higher
- Science: 23 or higher

More information on ACT's college readiness benchmarks is available online: http://www.act.org/education/benchmarks.html).

Example: At the district shown, 170 of 313 (54.3%) of 12th graders took the ACT. Of those 170 tested students, 125 (73.5%) scored 22 or higher in reading, 142 (83.5%) scored 18 or higher in English, 120 (70.6%) scored 22 or higher in mathematics, and 160 (94.1%) scored 23 or higher in science.

3rd Grade Reading/8th Grade Mathematics Achievement

The final two tables in the On-Track and Postsecondary Readiness detail give information on reading achievement for 3rd grade students and mathematics achievement for 8th grade students. These tables are presented in the same format as Student Achievement, described on page 10.

The difference between this specific measure and other parts of the report card is 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 in the most recent year, but applying this to a single grade would omit a large number of small districts. Instead, for this measure only, we use a cell size of 20 over the two most recent 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.

Combining Individual Components into a Priority Area Score

The graduation/attendance component of On-Track, which applies to every district, has a maximum score of 80 points. The other On-Track components add up to a possible maximum of 20 points. Because different components out of the three 'Other' On-Track components apply to different types of districts, the number of points possible for each one depends on what mix of them apply to a given district, as specified by the following table.

3rd Grade Reading	Alone	**20 points**
	With 8th grade mathematics	**10 points**
	With both 8th grade mathematics and ACT participation & performance	**5 points**
8th Grade Mathematics	Alone	**20 points**
	With 3rd grade reading	**10 points**
	With ACT participation & performance	**10 points**
	With both 3rd grade reading and ACT participation & performance	**5 points**
ACT Participation and Performance	Alone	**20 points**
	With 3rd grade reading and/or 8th grade mathematics	**10 points**

'Other' On-Track Components

On-Track Walkthrough

This walkthrough will use data on graduation, attendance, ACT participation, 8th grade mathematics achievement, and 3rd grade reading to determine a score for Sample District.

Step 1: Calculate the Graduation/Attendance Score

Attendance

Group	Enrollment	Attended Days	Possible Days	Rate
All Students	252	42468.0	44100.0	96.3%
Lowest Group: Hispanic	35	4591.0	4900	93.7%

First calculate the attendance score. The attendance score is simply the average of the all students and lowest group rates (expressed as a decimal, not a percentage) multiplied by 80:

$$\text{Attendance Score} = \frac{\text{All Student Rate} + \text{Lowest Group Rate}}{2} \times 80$$

$$\text{Attendance Score} = \frac{0.963 + 0.937}{2} \times 80 = \mathbf{76.0}$$

Graduation

Group	Four-Year Cohort Graduation Rate			Six-Year Cohort Graduation Rate		
	Students in Cohort	**Graduates**	**Rate**	**Students in Cohort**	**Graduates**	**Rate**
All Students	21	19	90.5%	NA	NA	NA

Next calculate the graduation score. In this example, data for the six-year cohort rate are not calculated (the six-year cohort must not meet the cell size of 20) and therefore, the graduation score is based only on the four-year cohort rate:

$$\text{Graduation Score} = \text{4-Year Cohort Rate} \times 80$$

$$\text{Graduation Score} = 0.905 \times 80 = \mathbf{72.4}$$

Now average the attendance and graduation scores.

$$\text{Attendance/Graduation Score} = \frac{\mathbf{76.0 + 72.4}}{2} = \mathbf{74.2}$$

Step 2: Calculate the ACT Participation and Performance Score

Group	Enrolled Students	Tested Students	Tested Percent	Reading Students	Reading Percent	English Students	English Percent	Mathematics Students	Mathematics Percent	Science Students	Science Percent
12th Graders	21	14	66.7%	10	47.6%	11	52.4%	8	38.1%	5	23.8%

With 8th grade mathematics and 3rd grade reading achievement present for the district, the possible score for this component is 10 points. However, in this example, fewer than 20 students participated in the ACT, which triggers an exception to the rule for calculating the ACT Participation and Performance score. When fewer than 20 students participate, only the participation rate is used in the calculation, because the percent that achieved benchmark score for each of the four content areas is too unreliable. The modified formula that applies to this example is:

$$\text{ACT Score} = \frac{\text{Participation} \cancel{+ \text{Reading} + \text{English} + \text{Mathematics} + \text{Science}}}{1 \ \cancel{5}} \times \text{Possible Score}$$

$$\text{ACT Score} = \frac{0.667}{1} \times 10 = \mathbf{6.7}$$

Step 3: Calculate the 8th Grade Mathematics Achievement Score

Performance Level	Points Multiplier	2010-11 Students Count	2010-11 Students Percent	2010-11 Points	2011-12 Students Count	2011-12 Students Percent	2011-12 Points	2012-13 Students Count	2012-13 Students Percent	2012-13 Points
Advanced	1.5	4	21.1%	6	3	16.7%	4.5	3	14.3%	4.5
Proficient	1	6	31.6%	6	5	27.8%	5	7	33.3%	7
Basic	0.5	5	26.3%	2.5	6	33.3%	3	8	38.1%	4
Minimal Performance	0	4	21.1%	0	4	22.2%	0	3	14.3%	0
Total Tested	-	19	100.0%	14.5	18	100.0%	12.5	21	100.0%	15.5

Step 3A: Assign and Average Points

$$\text{Prior Year 2 Average} = 14.5/19 = \mathbf{0.763}$$

$$\text{Prior Year 1 Average} = 12.5/18 = \mathbf{0.694}$$

$$\text{Current Year Average} = 15.5/21 = \mathbf{0.738}$$

Step 3B: Calculate Annual Weights

$$\text{Prior Year 2 Weight} = 1 \times \frac{19}{(19 + 18 + 21)/3} = \mathbf{0.983}$$

$$\text{Prior Year 1 Weight} = 1.25 \times \frac{18}{(19 + 18 + 21)/3} = \mathbf{1.164}$$

$$\text{Current Year Weight} = 1.5 \times \frac{21}{(19 + 18 + 21)/3} = \mathbf{1.629}$$

Step 3C: Combine Points and Weights

$$\text{Prior Year 2 Score} = 0.763 \times 0.983 = \mathbf{0.750}$$

$$\text{Prior Year 1 Score} = 0.694 \times 1.164 = \mathbf{0.808}$$

$$\text{Current Year Score} = 0.738 \times 1.629 = \mathbf{1.202}$$

Step 3D: Calculate Component Score

With ACT participation and performance and 3rd grade reading achievement present for the district, the possible score for this component is 5 points:

$$\text{8th Grade Mathematics Achievement Score} = \frac{0.750 + 0.808 + 1.202}{0.983 + 1.164 + 1.629} \times 5 = \mathbf{3.7}$$

Step 4: Calculate the 3rd Grade Reading Achievement Score

Performance Level	Points Multiplier	2010-11 Students Count	Percent	Points	2011-12 Students Count	Percent	Points	2012-13 Students Count	Percent	Points
Advanced	1.5	7	31.8%	10.5	3	17.6%	4.5	6	31.3%	9
Proficient	1	10	45.5%	10	8	47.1%	8	6	43.8%	6
Basic	0.5	3	13.6%	1.5	4	23.6%	2	3	18.8%	1.5
Minimal Performance	0	2	9.1%	0	2	11.8%	0	1	6.3%	0
Total Tested	-	22	100.0%	22	17	100.0%	14.5	16	100.0%	16.5

Step 4A: Assign and Average Points

Prior Year 2 Average $= 22/22 = \mathbf{1.000}$

Prior Year 1 Average $= 14.5/17 = \mathbf{0.853}$

Current Year Average $= 16.5/16 > \mathbf{1.000}$

Note: Remember that the average has a ceiling of one—the true average for the current year is 1.031 (16.5/16) but we use 1.000 in the calculation.

Step 4B: Calculate Annual Weights

$$\text{Prior Year 2 Weight} = 1 \times \frac{22}{(22 + 17 + 16)/3} = \mathbf{1.200}$$

$$\text{Prior Year 1 Weight} = 1.25 \times \frac{17}{(22 + 17 + 16)/3} = \mathbf{1.159}$$

$$\text{Current Year Weight} = 1.5 \times \frac{16}{(22 + 17 + 16)/3} = \mathbf{1.309}$$

Step 4C: Combine Points and Weights

Prior Year 2 Score $= 1.000 \times 1.200 = \mathbf{1.200}$

Prior Year 1 Score $= 0.853 \times 1.159 = \mathbf{0.989}$

Current Year Score $= 1.000 \times 1.309 = \mathbf{1.309}$

Step 4D: Calculate Component Score

With ACT participation and performance and 8th grade mathematics achievement present for the district, the possible score for this component is 5 points:

$$\text{3rd Grade Reading Achievement Score} = \frac{1.200 + 0.989 + 1.309}{1.200 + 1.159 + 1.309} \times 5 = \mathbf{4.8}$$

Step 5: Determine the Total On-Track and Postsecondary Readiness Score

Graduation/Attendance Score	74.2
ACT Participation and Performance Score	6.7
8th Grade Mathematics Achievement Score	3.7
3rd Grade Reading Achievement Score +	4.8
Total On-Track and Postsecondary Readiness Score	**89.4**

Sample K-12 District has an On-Track and Postsecondary Readiness score of 89.4.

On-Track and Postsecondary Readiness Priority Area Worksheet

Introduction

This worksheet has four parts, for Graduation/Attendance, ACT Participation and Performance, 8th Grade Mathematics Achievement, and 3rd Grade Reading Achievement. Each part requires you to copy data from the On-Track and Postsecondary Readiness detail on **pages 8 and 9** of the district report card, and your district may not have data for every component—we only report data for components that have scores. **Note that the score calculated here may not exactly match the report card due to rounding.** The key on page 14 of this document may be used to help read the 8th grade mathematics/3rd grade reading tables.

Instructions

Complete the following worksheet only for the components of On-Track and Postsecondary Readiness with data on your district's report card. Remember that for most districts both attendance and graduation are used to calculate the attendance/graduation portion of the score, which is worth up to 80 points. Use this grid to determine the number of possible points for each of the other On-Track components:

Possible points for 'Other' On-Track components

3rd Grade Reading	Alone	**20 points**
	With 8th grade mathematics	**10 points**
	With both 8th grade mathematics and ACT participation & performance	**5 points**
8th Grade Mathematics	Alone	**20 points**
	With 3rd grade reading	**10 points**
	With ACT participation & performance	**10 points**
	With both 3rd grade reading and ACT participation & performance	**5 points**
ACT Participation and Performance	Alone	**20 points**
	With 3rd grade reading and/or 8th grade mathematics	**10 points**

Total the components calculated for your district to determine the total Priority Area score:

Graduation/Attendance Score: _____ out of 80 points

ACT Participation and Performance Score: _____ out of _____ points

8th Grade Mathematics Achievement Score: _____ out of _____ points

3rd Grade Reading Achievement Score: **+** _____ out of _____ points

Total On-Track and Postsecondary Readiness Score: _____ out of _____ points

Graduation/Attendance Worksheet

Calculate the Graduation/Attendance Score	
(1a) Enter the attendance rate (in %):	1a
(1b) Enter the lowest group attendance rate (in %):	1b
(1c) Add 1a and 1b:	1c
(1d) Divide 1c by 200:	1d
(1e) Enter the 4-year cohort graduation rate (in %):	1e
(1f) Enter the total number of students in the 4-year cohort:	1f
(1g) Multiply 1e and 1f:	1g
(1h) Enter the 6-year cohort graduation rate (in %):	1h
(1i) Enter the total number of students in the 6-year cohort:	1i
(1j) Multiply 1h and 1i:	1j
(1k) Add 1g and 1j and divide by 100:	1k
(1l) Add 1f and 1i:	1l
(1m) Divide 1k by 1l:	1m
(1n) Add 1d and 1m and divide by 2*: *If your district has only an attendance or graduation score, fill that in here:	1n
(1o) Graduation/Attendance Score: Multiply 1n by 80:	1o

ACT Participation and Performance Worksheet

Calculate the ACT Participation and Performance Score	
(1a) Enter the number of 12th graders tested on the ACT:	1a
(1b) Enter the percent of 12th graders tested on the ACT:	1b
(1c) Is 1a, the number of tested students, 20 or more?	1c ☐ Yes ☐ No
If "No," skip lines 1d through 1g and enter the value for 1b in 1h	
(1d) Enter the percent tested meeting the Reading benchmark:	1d
(1e) Enter the percent tested meeting the English benchmark:	1e
(1f) Enter the percent tested meeting the Mathematics benchmark:	1f
(1g) Enter the percent tested meeting the Science benchmark:	1g
(1h) Add 1b and 1d through 1g:	1h
(1i) Divide 1h by 500 if 1c is "Yes" or 100 if 1c is "No":	1i
(1j) Enter the number of possible points:	1j
(1k) ACT Participation & Performance Score: Multiply 1i by 1j:	1k

8th Grade Mathematics Achievement Worksheet

Step 1: Assign and Average Points	
If a year does not have data shown, leave that year's boxes blank.	
Prior Year 2 Average	
(1a) Total points earned (B)	1a
(1b) Count of students tested (A)	1b
(1c) Is 1a greater than 1b?	1c ☐ Yes ☐ No
(1d) Average: If 1c is "Yes," enter 1; if 1c is "No," divide 1a by 1b	1d

Prior Year 1 Average

(1e) Total points earned (D)	1e
(1f) Count of students tested (C)	1f
(1g) Is 1e greater than 1f?	1g ☐ Yes ☐ No
(1h) Average: If 1g is "Yes," enter 1; if 1g is "No," divide 1e by 1f	1h

Current Year Average

(1i) Total points earned (F)	1i
(1j) Count of students tested (E)	1j
(1k) Is 1i greater than 1j?	1k ☐ Yes ☐ No
(1l) Average: If 1k is "Yes," enter 1; if 1k is "No," divide 1i by 1j	1l

Step 2: Calculate Annual Weights

Average Enrollment

(2a) Prior Year 2 count of students tested (A) – leave blank if not shown	2a
(2b) Prior Year 1 count of students tested (C) – leave blank if not shown	2b
(2c) Current Year count of students tested (E)	2c
(2d) Add 2a through 2c	2d
(2e) How many of 2a through 2c have values?	2e
(2f) Average number tested: Divide 2d by 2e	2f

Prior Year 2 Weight

(2g) Is 2a blank? 2g ☐ Yes ☐ No If "Yes," move on to the "Prior Year 1 Weight" section.	
(2h) Enter the count from 2a	2h
(2i) Enter the average from 2f	2i
(2j) Prior Year 2 Weight: Divide 2h by 2i	2j

Prior Year 1 Weight

(2k) Is 2b blank? 2k ☐ Yes ☐ No If "Yes," move on to the "Current Year Weight" section.	
(2l) Enter the count from 2b	2l
(2m) Enter the average from 2f	2m
(2n) Divide 2l by 2m	2n
(2o) If 2g is "Yes," enter 1; if 2g is "No," enter 1.25	2o
(2p) Prior Year 1 Weight: Multiply 2n by 2o	2p

Current Year Weight

(2q) Are both 2a and 2b blank? 2q ☐ Yes ☐ No If "Yes," skip to 2t.	
(2q) Enter the count from 2c	2q
(2r) Enter the average from 2f	2r
(2s) Divide 2q by 2r	2s
(2t) Current Year Weight: If 2q is "No," multiply 2s by 1.5; otherwise, enter 1	2t

Step 3: Combine Points and Weights

If a year does not have data, leave that year's boxes blank.

Prior Year 2 Score

(3a) Enter the average from 1d	3a
(3b) Enter the weight from 2j	3b

(3c) Prior Year 2 Score: Multiply 3a by 3b | 3c

Prior Year 1 Score

(3d) Enter the average from 1h | 3d

(3e) Enter the weight from 2p | 3e

(3f) Prior Year 1 Score: Multiply 3d by 3e | 3f

Current Year Score

(3g) Enter the average from 1l | 3g

(3h) Enter the weight from 2t | 3h

(3i) Current Score: Multiply 3g by 3h | 3i

Step 4: Calculate Index Score

(4a) Enter the score from 3c	4a	(4e) Enter the weight from 2j	4e
(4b) Enter the score from 3f	4b	(4f) Enter the weight from 2p	4f
(4c) Enter the score from 3i	4c	(4g) Enter the weight from 2t	4g
(4d) Add 4a through 4c	4d	(4h) Add 4e through 4g	4h

(4i) Divide 4d by 4h | 4i

(4j) Enter the number of possible points | 4j

(4k) 8th Grade Mathematics Achievement Score: Multiply 4i by 4j | 4k

3rd Grade Reading Achievement Worksheet

Step 1: Assign and Average Points

If a year does not have data shown, leave that year's boxes blank.

Prior Year 2 Average

(1a) Total points earned (B) | 1a

(1b) Count of students tested (A) | 1b

(1c) Is 1a greater than 1b? | 1c ☐ Yes ☐ No

(1d) Average: If 1c is "Yes," enter 1; if 1c is "No," divide 1a by 1b | 1d

Prior Year 1 Average

(1e) Total points earned (D) | 1e

(1f) Count of students tested (C) | 1f

(1g) Is 1e greater than 1f? | 1g ☐ Yes ☐ No

(1h) Average: If 1g is "Yes," enter 1; if 1g is "No," divide 1e by 1f | 1h

Current Year Average

(1i) Total points earned (F) | 1i

(1j) Count of students tested (E) | 1j

(1k) Is 1i greater than 1j? | 1k ☐ Yes ☐ No

(1l) Average: If 1k is "Yes," enter 1; if 1k is "No," divide 1i by 1j | 1l

Step 2: Calculate Annual Weights

Average Enrollment

(2a) Prior Year 2 count of students tested (A) – leave blank if not shown | 2a

(2b) Prior Year 1 count of students tested (C) – leave blank if not shown | 2b

(2c) Current Year count of students tested (E) | 2c

(2d) Add 2a through 2c	2d
(2e) How many of 2a through 2c have values?	2e
(2f) Average number tested: Divide 2d by 2e	2f

Prior Year 2 Weight

(2g) Is 2a blank?　　　2g ☐ Yes ☐ No　　　If "Yes," move on to the "Prior Year 1 Weight" section.

(2h) Enter the count from 2a	2h
(2i) Enter the average from 2f	2i
(2j) Prior Year 2 Weight: Divide 2h by 2i	2j

Prior Year 1 Weight

(2k) Is 2b blank?　　　2k ☐ Yes ☐ No　　　If "Yes," move on to the "Current Year Weight" section.

(2l) Enter the count from 2b	2l
(2m) Enter the average from 2f	2m
(2n) Divide 2l by 2m	2n
(2o) If 2g is "Yes," enter 1; if 2g is "No," enter 1.25	2o
(2p) Prior Year 1 Weight: Multiply 2n by 2o	2p

Current Year Weight

(2q) Are both 2a and 2b blank?　　　2q ☐ Yes ☐ No　　　If "Yes," skip to 2t.

(2q) Enter the count from 2c	2q
(2r) Enter the average from 2f	2r
(2s) Divide 2q by 2r	2s
(2t) Current Year Weight: If 2q is "No," multiply 2s by 1.5; otherwise, enter 1	2t

Step 3: Combine Points and Weights

If a year does not have data, leave that year's boxes blank.

Prior Year 2 Score

(3a) Enter the average from 1d	3a
(3b) Enter the weight from 2j	3b
(3c) Prior Year 2 Score: Multiply 3a by 3b	3c

Prior Year 1 Score

(3d) Enter the average from 1h	3d
(3e) Enter the weight from 2p	3e
(3f) Prior Year 1 Score: Multiply 3d by 3e	3f

Current Year Score

(3g) Enter the average from 1l	3g
(3h) Enter the weight from 2t	3h
(3i) Current Score: Multiply 3g by 3h	3i

Step 4: Calculate Index Score

(4a) Enter the score from 3c	4a	(4e) Enter the weight from 2j	4e
(4b) Enter the score from 3f	4b	(4f) Enter the weight from 2p	4f
(4c) Enter the score from 3i	4c	(4g) Enter the weight from 2t	4g
(4d) Add 4a through 4c	4d	(4h) Add 4e through 4g	4h

(4i) Divide 4d by 4h	4i
(4j) Enter the number of possible points	4j
(4k) 3rd Grade Reading Achievement Score: Multiply 4i by 4j	4k

Calculating Student Engagement Indicator Deductions

Some measures in our district accountability system do not show a wide range of variation between districts, but rather allow us to identify the small number of districts whose performance raises concern. Instead of including these measures within one of the Priority Areas, we place them into a separate category called Student Engagement Indicators. Failure to meet specific statewide goals for these indicators results in points being deducted from the district's weighted average Priority Areas score. The weighted average Priority Areas score minus any Student Engagement Indicator deductions equals the district's Overall Accountability Score.

The three Student Engagement Indicators are:

- **Test Participation:** The US Department of Education expects all students to be tested. With so much of the Accountability Index based on assessment data, it is important that districts test as many students as possible so that index scores are valid indications of district performance. As such, t*he goal for this indicator is that districts test at least 95 percent of each group of students* in both the reading and mathematics assessments, as measured by either a one-year or multi-year test rate, whichever is more favorable. A district's performance is determined *by the lowest participation rate among all groups in either content area.* See the "Determining the Deduction" section of the Participation walkthrough below for more detail.

  If a district's test participation rate is below the goal of 95 percent but is at least 85 percent, the district's overall score is reduced by five points. If a district's rate is below 85 percent, its score is reduced by ten points.

- **Absenteeism Rate:** Chronic absenteeism is a strong predictor of whether a student will struggle academically or fail to graduate. For this Student Engagement Indicator, *the district's absenteeism rate is equal to the percentage of its students who are chronically absent*. Chronically absent means a student missed school at least 16 percent of the time.

  The goal for this Student Engagement Indicator is a district absenteeism rate of less than 13 percent—that is, less than 13 percent of a district's students were chronically absent as measured by either a one-year or multi-year rate, whichever is more favorable. Only students in kindergarten through 12th grade are included in absenteeism calculations. If a district's absenteeism rate is 13 percent or more, the district's score is reduced by five points.

- **Dropout Rate:** Dropping out of school has a profound impact on a student's future success. *The goal for this Student Engagement Indicator is a dropout rate of less than 6 percent.*

  If a district has a dropout rate of 6 percent or more, its district score is reduced by five points.

Each missed indicator results in a separate deduction from the weighted average Priority Areas score. For example, a district that misses the goals for absenteeism rate and dropout rate would be penalized 10 points.

The District Report Card Detail does not contain enough data in order to reproduce the exact calculations for the Student Engagement Indicators, so no worksheet is provided for these measures. Instead, this section will thoroughly detail the process by which each of the Student Engagement Indicators is calculated.

Test Participation

As stated above, the test participation engagement indicator is tiered into three levels:

- <u>Meeting the goal</u>: participation greater than or equal to 95% for all each and every group in both math and reading, resulting in no deduction;
- <u>Failing to meet the goal</u>: participation rate is less than 95% but greater than or equal to 85% for at least one group in either math or reading, resulting in a 5 point deduction;
- <u>Failing to meet the lower threshold</u>: participation rate is less than 85% for at least one group in either math or reading, resulting in a 10 point deduction.

Remember that groups can meet test participation thresholds based on the higher of the current year rate or a multi-year rate. The multi-year participation rate is calculated based on the **number of years in which a district has at least 20 students enrolled in tested grades.** For the vast majority of districts, the multi-year participation rate will be calculated using participation data from the last three years; however, some districts' multi-year participation rates will be calculated using the last two years. Districts in which there are at least 20 students enrolled in tested grades in only the current year will use only the current year's participation rates for determining whether or not the district met the goal.

Calculating Test Participation in the Current Year

To calculate test participation for the **current** year, follow the steps below:

1. Count the total number of students enrolled in tested grades at test time in the current year. This should be done at the "All Students" level **and** for each group of students.
2. Count the total number of students who took either the WKCE or the WAA. This should be done at the "All Students" level **and** for each group of students. This step should be done separately for both math and reading. For students for whom this was their first year in country, participation in the ACCESS for English Language Learners test may be used in place of participation on the reading section of the WKCE or WAA.
3. To derive 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). This should be done at the "All Students" level, **and** for each group of students. This step should be done separately for both mathematics and reading.
4. Apply traditional rounding rules, and remember that for test participation, values are rounded to the nearest whole number – for example, if a group had at least 20 students enrolled and its participation rate in mathematics was 94.8%, its participation rate in mathematics would round up to 95%, and the group would be considered to be meeting the goal.

Calculating Test Participation over Multiple Years

To calculate test participation for the **multi-year** rate, follow these steps:

1. Count the total number of students enrolled in tested grades at test time in **each of the last three years**. This should be done at the "All Students" level **and** for each group.
2. If there were at least 20 students enrolled in tested grades in **each** of the last three years, then test participation will be calculated using three years of data. If there were at least 20 students enrolled in tested grades in **each** of

the last **two** years, then test participation will be calculated using two years of data. If there were at least 20 students enrolled in tested grades in only the **current** year, then test participation will be calculated using only the current year's data.

3. **For each year going into the multi-year rate:** Count the total number of students who took either the WKCE or the WAA. This should be done at the "All Students" level **and** for each group. This step should be done separately for both mathematics and reading. For each year, for students for whom that year was the first year in country, participation in the ACCESS for English Language Learners test may be used in place of participation on the reading section of the WKCE or WAA.

4. **Sum the counts from Steps 1 and 3:**
   a. If the district is using three years of participation data (as determined in Step 2), sum the total number of students enrolled in each of the last three years (the counts from Step 1) and the total number of students tested in each of the last three years (the counts from Step 3). This should be done at the "All Students" level and for each individual group. This step should be done separately for mathematics and reading. **Note that when three years of data are being used, each of the three years in the calculation must meet the cell size of 20.**
   b. If the district is using two years of participation data (as determined in Step 2), sum the total number of students enrolled in each of the last two years (the counts from Step 1) and the total number of students tested in each of the last two years (the counts from Step 3). This should be done at the "All Students", and for each individual group. This step should be done separately for mathematics and reading. **Note that when two years of data are being used, each of the two years in the calculation must meet the cell size.**

5. Derive each group's participation rate by dividing the number of students tested (the count of students tested derived in Step 4) by the number of students enrolled (the count of students enrolled derived in Step 4). This should be done at the "All Students" level and for each group of students. This step should be done separately for both math and reading.

6. **Apply the cell size to each group:**
   a. If the district is using **three** years of data, the count of students **enrolled** in a group (derived in Step 4) must be at least 20 for each of the years in the calculation in order for that group's multi-year participation rate to be calculated.
   b. If the district is using **two** years of data, the count of students **enrolled** in a group (derived in Step 4) must be at least 20 for each of the years in the calculation in order for that group's multi-year participation rate to be calculated.

7. Apply traditional rounding rules, and remember that for test participation, values are rounded to the nearest whole number– for example, if a group's multi-year participation rate in mathematics was 94.8%, this would round up to 95%, and the group would be considered to be meeting the goal.

Determining the Deduction

Once both the **current year participation rates** and the **multi-year participation rates** have been calculated, take the following steps for the "All Students" group and for each individual group of students:

1. For both the current year and the multi-year participation rates, take the lower of the mathematics and reading participation rates – this is the participation rate that counts toward the goal. For example, if the **current year**

mathematics participation rate for White students is 93.7% and the **current year** reading participation rate for White students is 95.1%, the participation rate that counts toward the **current year** goal for White students is the mathematics participation rate (93.7%). Use the same process for the multi-year rate.

2. If the group's current year lowest participation rate **and** the group's multi-year lowest participation rate are below the 95% goal (after applying traditional rounding rules), a five point deduction will be taken from the district's Overall Accountability Score. If the group's current year lowest participation rate **and** the multi-year lowest participation rate are below the 85% goal (after applying traditional rounding rules), a ten point deduction will be taken from the district's Overall Accountability Score. This step is calculated for every group present in the district. If **any** of the groups fail to meet **both** the current year goal **and** the multi-year goal, a deduction is taken.

3. Only one deduction will be taken from the district. For example, if a district has data for five groups, and three of the groups miss both the current year goal and the multi-year goal, the district does **not** experience three deductions; only one deduction is taken.

4. If the district has only one year of test participation data, no multi-year participation rates are calculated, and the steps described above are applied only to the current year's participation rates.

Absenteeism

Highly correlated with low achievement, chronic absenteeism is a strong predictor of whether a student will struggle academically or fail to graduate. For this Student Engagement Indicator, the district's absenteeism rate is equal to the **percentage of its students who are chronically absent.** For the purposes of this indicator, chronically absent is defined as a student who misses school at least 16 percent of the time. The **goal** for this Student Engagement Indicator is a district absenteeism rate of **less than 13 percent**—that is, less than 13 percent of the district's students were chronically absent.

Remember that attendance data, upon which absenteeism calculations are based, lag by one year. As such, the "current year" calculations are actually based upon the most recent year of data available. In other words, absenteeism and attendance calculations for 2013-14 report cards are based on 2012-13 attendance data.

Remember that a district can meet the absenteeism rate goal for the current year rate or a multi-year rate if data are available for both of these. The multi-year absenteeism rate is calculated based on the **number of years in which a district has at least 20 students enrolled in tested grades.** For the vast majority of districts, the multi-year absenteeism rate will be calculated using absenteeism data from the last three years; however, some districts' multi-year absenteeism rate will be calculated using the last two years. Districts in which there are at least 20 students enrolled in only the current year will use only the current year's absenteeism rate for determining whether or not the district met the goal.

Calculating Absenteeism Rate in the Current Year

To calculate your district's current year absenteeism rate, use the following steps:

1. Count the number of students who enrolled in your district **for at least 45 days at any time during the prior school year.** Enrollment data come from ISES year end data, and due to data collection timelines, DPI must use the prior year's enrollment and attendance data to calculate the absenteeism rate.
2. For **each individual student** derived 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 not have data on 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.**
3. Count the number of students whose attendance rate is **84.0% or below.** These students are flagged as being chronically absent. Apply traditional rounding rules to the attendance rate – for example, an attendance rate of 84.05% would round up to 84.1%, and the student would **not** be flagged as chronically absent.
4. Divide the count of students flagged as chronically absent (Step 3) by the count of enrolled students (Step 1). This is the district's current year absenteeism rate. Note that no rounding takes place when calculating the absenteeism rate – for example, if a district's absenteeism rate is 12.9%, it will **not** be rounded up to 13%.

Calculating Absenteeism Rate over Multiple Years

To calculate multi-year absenteeism rate, follow the following steps:

1. Count the number of students who enrolled in your district **for at least 45 days in a given year for each of the prior three years. For example, if a student was enrolled for 45 days in the current year and 45 days in the prior year that student would be considered separately for each year.** Enrollment data come from ISES year end data, and due to data collection timelines, DPI must use the prior year's enrollment and attendance data to calculate the absenteeism rate.

2. For **each individual student** derived in Step 1, calculate that student's attendance rate **in each year**. This is done by dividing the total number of days the student attended school in a given year by the total number of possible days the student could have attended school in that year.

3. Count the number of students whose attendance rate is **84.0% or below.** Each year that their attendance rate is 84.0% or below is counted separately. For example, if a student's attendance rate was 84.0% or below in the current year and 84.0% or below in the prior year that student would be counted twice as being chronically absent. Apply traditional rounding rules to the attendance rate – for example, an attendance rate of 84.05% would round up to 84.1%, and the student would **not** be flagged as chronically absent.

4. Divide the count of students flagged as chronically absent (Step 3) by the total count of enrolled students across the three years (Step 1). This is the district's multi-year absenteeism rate. Note that no rounding takes place when calculating the absenteeism rate – for example, if a district's absenteeism rate is 12.9%, it will **not** be rounded up to 13%.

Determining the Deduction

Once both the **current year absenteeism rate** and the **multi-year absenteeism rate** have been calculated, take the following steps:

1. If the district's current year absenteeism rate **and** the district's multi-year absenteeism rate are greater than or equal to 13%, a five point deduction will be taken from the district's Overall Accountability Score.

2. If the district has only absenteeism data for the current year and the current year absenteeism rate is greater than or equal to 13%, a five point deduction will be taken from the district's Overall Accountability Score.

3. If the district has only absenteeism data for the multi-year and the multi-year absenteeism rate is greater than or equal to 13%, a five point deduction will be taken from the district's Overall Accountability Score.

Dropout

Dropping out of school severely limits a student's chances for success. The **goal** for this Student Engagement Indicator is a dropout rate of **less than 6 percent**.

To calculate your district's dropout rate, use the following steps:

Calculating the Dropout Rate for the Current Year

1. Count the number of students who enrolled in your district **who were in 7th grade or above in the prior year.** Note that due to ISES data collection timelines, the prior year's data must be used when calculating the dropout rate. In other words, for 2013-14 report cards, 2012-13 enrollment data are used.
2. Count the number of students who were considered to be either half-term or full-term dropouts in the prior year.
3. Divide the count of total dropouts (derived in Step 2) by the count of total students (derived in Step 1). This is the district's current year dropout rate. Note that no rounding takes place when calculating the dropout rate – for example, if a district's dropout rate is 5.9%, it will **not** be rounded up to 6%. This district would be considered to be meeting the goal.

Calculating the Dropout Rate over Multiple Years

1. Count the number of students who enrolled in your district **who were in 7th grade or above in the three prior years.** Note that due to ISES data collection timelines, the prior year's data must be used when calculating the dropout rate.
2. Count the number of students who were considered to be either half-term or full-term dropouts in the three prior years.
3. Divide the count of total dropouts (derived in Step 2) by the count of total students (derived in Step 1). This is the district's multi-year dropout rate. Note that no rounding takes place when calculating the dropout rate – for example, if a district's dropout rate is 5.9%, it will **not** be rounded up to 6%. This district would be considered to be meeting the goal.

Determining the Deduction

1. Once both the **current year absenteeism rate** and the **multi-year absenteeism rate** have been calculated, take the following steps:
2. If the dropout rate from Step 3 for both the Current Year **and** Multi-Year is **6% or above**, a five point deduction will be taken from the district's Overall Accountability Score.