

#### **PUBLIC SCHOOL ACCOUNTABILITY SYSTEM**

Updated September 2016

South Dakota's accountability system takes a thoughtful, balanced approach to defining the indicators of a strong public education system. It encompasses multiple indicators that are critical pieces in preparing students for the rigors of the 21st century world.

The accountability system holds schools accountable through annual public reporting and classification of schools. The expectation is that the model will be used to inform school leaders, teachers, parents and the public as to how schools are progressing. With its emphasis on continuous improvement, it sets a high bar for ongoing reflection and goal setting.

## **School Performance Index**

South Dakota's accountability system centers around a 100-point index, called the School Performance Index, or SPI. The SPI consists of three key indicators of performance. A numeric value is assigned to each of the indicators. These values are added to create a total SPI score out of 100 points. Each public school in the state receives a SPI score, with limited exceptions due to school size and/or mission.

Two distinct indexes are used: one for high school accountability and one for elementary and middle school accountability.

High School	Elementary and Middle School		
Student Achievement	1. Student Achievement		
2. High School Completion	2. Academic Growth		
3. College and Career Readiness	3. Attendance		

The charts below illustrate the point values for each of the SPI key indicators for the 2015-16 school year.

# High School:

Indicator	Maximum P	oints Available
Student Achievement	Math English Language Arts	20 20
	Total	40
High School Completion	High School Completion Four-Year Cohort Graduation Ra	15 te 15
	Total	30
College and Career Ready	College English 10 College Math 10 Career 10	College English 15 College Math 15 Career (exempt)
	Total 30	Total 30
Total	100	100

# Elementary and Middle School:

Indicator	M	aximum Poi	nts Available	
Student Achievement	Math ELA	20 20		
	Total	40		
Attendance	Total	20		
Academic Growth	With Lowest Quartile All Students ELA All Students Math Lowest Quartile ELA Lowest Quartile Math	10 10 10	Without Lowest C All Students ELA All Students Math	20
	Total	40	Total	40
Total		10	0	

# **Annual Measurable Objectives (AMOs): Goals and Targets**

The SPI score provides a broad first lens through which to view school performance. The model also applies a second lens; this second lens is specific to Indicator #1: Student Achievement.

South Dakota's overarching goal for Student Achievement is to reduce by half the percentage of students (all subgroups) who are not proficient within six years. Proficiency is measured by performance on the annual statewide assessment.

Targets, based on this six-year goal, are set for each subgroup at each school, in equal increments, to give that school a unique trajectory that recognizes where the school's subgroups started in terms of student proficiency and to support continuous improvement. Targets are set separately for reading and math. The 2014-15 school year served as the base year for setting the six-year goal and annual targets.

#### **Annual Reporting**

Each year, the Department of Education calculates a School Performance Index score for each public school in the state, with some exceptions for very small schools and schools with a unique mission. The scores are ranked and reported. The SPI score is used to determine schools for recognition purposes as well as for interventions and support (see page 9). Progress towards AMO goals and targets at the subgroup level are reported annually, and individual subgroup data is reported as well.

#### **School Performance Index**

#### **INDICATOR #1: Student Achievement**

At the High School level, the Student Achievement score is based on the percent of students scoring at or above the cut score denoting proficiency on the statewide assessment in English language arts and math, delivered in 11th grade.

At the Elementary and Middle School levels, the Student Achievement score is based on the percent of students scoring at or above the cut score denoting proficiency on the statewide assessment in English language arts and math in grades 3-8.

Points are given for two groups: the **Gap group** and **Non-Gap group**. The points are weighted according to the size of the group. Calculations are done separately for English language arts and math, which each account for half of the total points for this indicator. (See chart on page 5 for calculation).

## What are the Gap and Non-Gap Groups?

The Gap group is an aggregate count of student subgroups in the state that have historically experienced achievement gaps. The South Dakota Department of Education (SD DOE) analyzed three years of state assessment data, most recently after the 2014-15 school year, to determine the composition of the Gap group, which includes the following subgroups: Black or African American, American Indian or Alaska Native, Hispanic/Latino, Economically Disadvantaged, Students with Disabilities, and Limited English Proficient. The Non-Gap group includes students in the remaining subgroups used for accountability purposes: White/Caucasian; Asian; Native Hawaiian-Pacific Islander; Two or More Races.

Use of a Gap and Non-Gap group for the Student Achievement calculation results in an unduplicated count of students. Unlike the old accountability system in which a single student

could be counted multiple times, this system counts each student once – in either the Gap or Non-Gap group – but not more than once.

### **Example: Unduplicated Count**

- Addy -- Special Education and Economically Disadvantaged subgroups. Scores at the level denoting proficient.
- Marcus Limited English Proficient and Economically Disadvantaged subgroups. Scores below the level denoting proficient.
- Cheyenne Native American. Scores above the level denoting proficient.

Based on the above, an unduplicated count would show three total students with two of the students (Addy and Cheyenne), or 66.66 percent, counting as at or above the level denoting proficient in the Gap group.

The system uses an n-size of 10. By using an n of 10 and the aggregate of subgroups that have historically experienced achievement gaps, almost every school in the state will have a focus on those groups of students who have traditionally experienced the largest achievement gaps. Data for individual subgroups of students is still disaggregated and reported.

## **Example: Student Achievement Calculation**

- Step 1: Divide the maximum allowable index points in half to allow equal weight for English language arts and math.
- Step 2: Calculate the # of students that fall into the Gap Group and Non-Gap Group.
- Step 3: Calculate the % of students that fall into the Gap Group and Non-Gap Group by dividing each by the total number of students.
- Step 4: Take the overall possible points (column 1) times the % of students (column 3) in each group to get the weighted points for each group.
- Step 5: Calculate the % scoring at or above the level denoting proficiency for each group.
- Step 6: Calculate the score for each group by multiplying the % from step 5 (column 5) times the weighted points for each group (column 4).
- Step 7: The sum of these represents total points for Student Achievement category.

Step:		1	2	3	4	5	6	7
		Overall	Number	% of	Weighted	% Scoring at or	Score	Total Points for
		Index	of	Students	Points	above		Student
		points	Students			Proficiency		Achievement
		possible						
Math	Gap	20	71	26.20%	5.24	58.00%	3.04	
	Non-		200	73.80%	14.76	83.00%	12.25	
	Gap							
English	Gap	20	71	26.20%	5.24	62.00%	3.25	
Language	Non-		200	73.80%	14.76	88.00%	12.99	
Arts	Gap							
Total		40			40.00			31.53

**INDICATOR #2: High School Completion OR Academic Growth** 

At the High School level, the second indicator is High School Completion. This indicator consists of two weighted measures: a High School Completion Rate and a Four-Year Cohort Graduation Rate.\* Each accounts for half of the points for Indicator #2. High School Completion Rate is defined as the percent of students in the most recently completed school year who have attained a diploma or a GED.

\*Graduation Rate is defined as the four-year cohort Graduation Rate required under Title I.

## **Example: Completion Rate Calculation**

HS Diploma = 100 + GED = 7 (Total = 107)

Dropouts = 7 + HS Diplomas = 100 + GED = 7 (Total = 114)

107/114 = 93.86% Completer Rate

### **Example: Calculation of High School Completion**

- Step 1: Calculate weighted points for each factor by multiplying weighted % for each factor by total possible points (30 total possible points)
- Step 2: Calculate the rate for each factor
- Step 3: Calculate the score for each factor by multiplying the rate times the weighted points for each group

Step 4: The sum of these is the points for High School Completion Indicator

Step:		1	2	3	4
		Weighted			Total points
	Weighted as %	Points	Rate as %	Score	for Indicator
High School	50%	15.00	93.86%	14.08	
Completion Rate					
Four-year Cohort	50%	15.00	93.46%	13.08	
Graduation Rate					
Total	100%	30.00			27.16

At the Elementary and Middle School levels, the second indicator is Academic Growth, which is based on Student Growth Percentiles model. In this model, every student is compared to his or her peers – those with a like score history. Students are grouped with other South Dakota students based on their performance on year one of the assessment, then their scores for year two are compared to determine how much they grew. Those students who have a higher year two score, i.e., they grew more, will have a higher SGP. Those with a lower year two score, i.e., they grew less than their peers, will have a lower SGP.

This information is then used to project out how the student will perform in three years. Those students who are currently proficient and projected to stay proficient receive a designation of "Keeping Up." Those who are not yet proficient but for whom the model projects will become proficient in three years are "Catching Up." Those who are not proficient and not projected to become proficient, but who are achieving significant growth (defined as an SGP of 70 or above), are designated as having "Very High Growth." These students are factored into the numerator of the academic growth calculation. The above three categories of students, plus the students not meeting the growth standard, are the denominator.

Academic growth is based on the students in the current school year who meet Full Academic Year (FAY), or were enrolled continuously between October 1 and May 1, and who took the state assessment anywhere in South Dakota (both public and private schools) in the previous year.

Points are awarded based on the performance of the all students group in both English language arts and math, as well as the performance of the Lowest Quartile students in English language arts and math. Lowest Quartile is calculated on the lowest 25% of the previous year's assessment scores. A Lowest Quartile is only calculated if the all students group is 40 students or more; if not, then all points are derived from the all students group.

Below is an example calculation of how points are earned for Academic Growth:

	Math		ELA		Total SPI Points
	% Meeting Standard	SPI Points	% Meeting Standard	SPI Points	
All Students	78.00%	7.80	73.09%	7.31	
Lowest Quartile	61.30%	6.13	59.03%	5.90	
Total					27.14

#### **INDICATOR #3: College and Career Readiness OR Attendance**

<u>High School Level</u>: at the High School level, the College and Career Readiness score is based on the factors noted below.

Schools have the option to administer a career ready assessment, the National Career Readiness Certificate. In order for a school or district to earn points from this assessment, students must score at the Bronze level or higher. In addition, students can demonstrate college readiness in English and math through the ACT and an additional assessment, the Accuplacer. Students can earn points towards this indicator by meeting or exceeding the Board of Regents (BOR) cut scores set for each.

For schools administering the NCRC career ready assessment, one-third of the points come from the results of assessments measuring college readiness in English; one-third from math; and one-third from the NCRC. For schools opting not to administer this assessment, all points come from the college ready measures in English and math.

The cohort for College and Career Readiness is the previous year's graduating class.

#### With the NCRC:

1. One-third of the points result from percent of previous year's graduating cohort who met or exceeded the BOR cut score on ACT or Accuplacer in math.

- 2. One-third of the points result from the percent of previous year's graduating cohort who met or exceeded the BOR cut score on ACT or Accuplacer in English.
- 3. One-third of the points result from the percent of previous year's graduating cohort who earned a Bronze level or higher on the NCRC. Multiply by 1/3 the total possible points for the CCR indicator.

#### Without the NCRC:

- 1. One-half of the points result from percent of previous year's graduating cohort who met or exceeded the BOR cut score on ACT or Accuplacer in math.
- 2. One-half of the points result from the percent of previous year's graduating cohort who met or exceeded the BOR cut score on ACT or Accuplacer in English.

## Example: Calculating College and Career Readiness Calculation (CCR)

- Step 1: Calculate weighted points for each factor by multiplying weighted % for each factor by total possible points.
- Step 2: Calculate the rate for each factor.
- Step 3: Calculate the score for each factor by multiplying the rate times the weighted points for each group.
- Step 4: The sum of these represents total possible points for College and Career Readiness.

CCR Calculation for 2015-2016 School Year – with Optional NCRC					
Step:		1	2	3	4
		Weighted			Total points
Factor:	Weighted as	Points	Rate as %	Score	for Indicator
	fraction	(2015-16)			
% Meeting BOR* math	1/3	10	60.00%	6.00	
cut score on ACT or					
Accuplacer					
% Meeting BOR English	1/3	10	72.00%	7.20	
cut score on ACT or					
Accuplacer					
% Earning Bronze level	1/3	10	90.00%	9.00	
or above on NCRC*					
Total	100%	30			
					22.20

CCF	CCR Calculation for 2015-2016 School Year – without Optional NCRC				
Step:		1	2	3	4
	Weighted as fraction	Weighted Points (2015-16)	Rate as %	Score	Total points for Indicator
% Meeting BOR math cut score on ACT or Accuplacer	1/2	15	60.00%	9.00	
% Meeting BOR English cut score on ACT or Accuplacer	1/2	15	72.00%	10.80	
No NCRC results	0	0	0	0	
Total	100%	30			19.80

<u>Elementary and Middle School Levels</u>: at the Elementary and Middle School levels, the indicator is attendance rate based on the percentage of students meeting the state's target attendance rate of 94 percent of enrolled days. A school's attendance points are calculated by multiplying the percent of enrolled students meeting this target rate by the total possible points (20) for the indicator.

<u>Example</u>: At a school 91.25 percent of students have met the target rate of 94 percent. With the total available points of 20, the school's score for this indicator would be 18.25.

### Classification, Recognition, and Support

Due to the passage of the Every Student Succeeds Act (ESSA), the reauthorization of the federal education law, SPI scores are not calculated for the 2015-16 school year. Instead, the classifications out of the 2014-15 school year will be carried over.

Below is an explanation as to how the classifications were derived from the 2014-15 school year data:

Exemplary Schools
High Performing – SPI score at or above the top 5%
High Progress – Top 5% for certain Gap Group indicators
Status Schools
SPI score at/above top 10% (excluding Exemplary)
Progressing Schools
SPI score between bottom 5% and top 10%; all non-Title I schools not designated as Exemplary or Status.
Priority Schools (Title I)
SPI score at or below the bottom 5%

A separate calculation is used to determine the Focus Schools category (see below).

**Exemplary Schools**: All South Dakota public schools are eligible for recognition in one of two Exemplary categories:

- 1) Exemplary High Performing Schools: Schools whose overall SPI scores rank in the top 5 percent of schools across the state.
- 2) Exemplary High Progress Schools: Schools that rank in the top 5 percent for improvement of Student Achievement and Attendance Indicators for the Gap group at the elementary and middle school levels; at the high school level the indicators are Student Achievement and Four-Year Cohort Graduation Rate for the Gap Group over a period of two years.

No school with a significant achievement gap, as determined by the Focus School calculation, is be classified as an Exemplary School. Schools that achieve Exemplary status receive special recognition.

**Status Schools**: Schools whose total score on the SPI is at or above the top 10 percent, excluding Exemplary Schools.

**Progressing Schools**: Schools whose total score on the SPI is above the bottom 5 percent but below the top 10 percent. Per federal requirements, the total number of Priority Schools must be at least 5 percent of the Title I schools in the state. This classification also applies to Title I and Title I eligible high schools whose graduation rate is below 60 percent for the last two years.

In addition to the classifications noted above, there is also a Focus School category that applies only to Title I schools:

**Focus Schools**: Focus Schools are Title I schools that are contributing to the achievement gap. The calculation to determine Focus Schools looks specifically at Student Achievement and Attendance of the Gap group for elementary and middle schools; and Student Achievement and four-year cohort Graduation Rate of the Gap Group at the high school level.

Using this combination of factors, schools whose rank is among the lowest 10 percent of Title I schools across the state are identified as Focus Schools. Any school that is already a Priority school would not be included on this list.

Per federal regulations, the South Dakota Department of Education works with districts that have Priority and Focus schools to implement targeted supports and interventions, which are described in full detail in the state's approved ESEA Flexibility Request, located online at <a href="http://www2.ed.gov/policy/elsec/guid/esea-flexibility/map/sd.html">http://www2.ed.gov/policy/elsec/guid/esea-flexibility/map/sd.html</a>