Reducing the Gap
Annual Measureable Objective

General Information

As part of its approved ESEA Flexibility Request, Kansas agreed to design an accountability system around closing the achievement gap. Kansas also agreed to identify Title I schools with the greatest achievement gaps as *Focus* schools (for more information see *Identifying Focus Schools: A Field Guide*). The gap analysis used for both of these purposes compares the lowest performing 30% of students in each building to a state benchmark representing the highest performing 30% of buildings in the state.

Goals

Several goals were considered when designing Kansas's gap reduction annual measurable objective (AMO):

- Provide an index for gap reduction that is specific to each school
- Emphasize gains across all five of Kansas's performance categories
- Eliminate double counting students across subgroups
- Allow gap calculations at all Kansas schools

Definition of the Achievement Gap Score

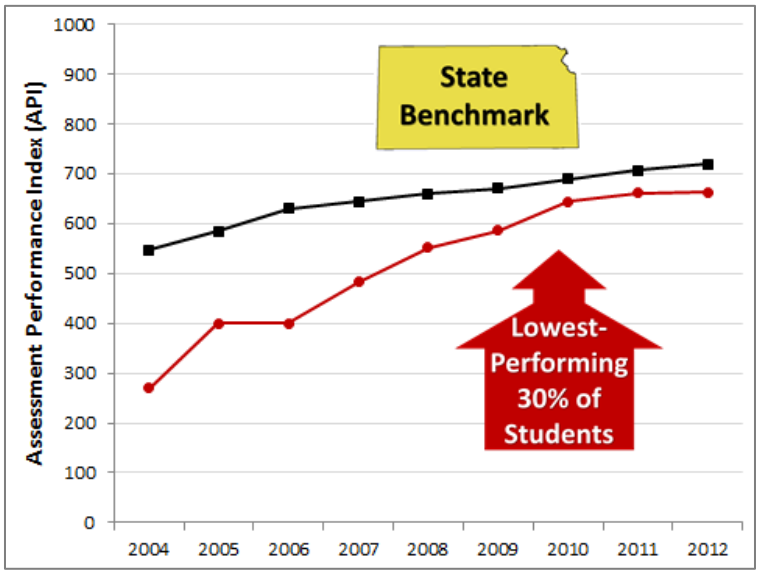
An achievement gap score provides information on the performance of a building's lowest performing 30% of students relative to the performance of top performing buildings in Kansas. Larger gap values suggest more disparity between the top performing buildings in the state and a building's lowest performing students.

Assessment Performance Index (API)

Gap reduction calculations use the assessment performance index (API). An API converts Kansas's five performance categories (*academic warning*, *approaching standard*, *meets standard*, *exceeds standard*, and *exemplary*) into point values (see table below). Once each score is weighted by the points associated with the performance category, the sum of the accrued points is divided by the total number of scores in the calculation to provide an average performance value (or API).

Assessment Performance Index			
Performance Category	Points per Score	# of Scores	Total Points
Exemplary	1,000	15	15,000
Exceeds Standard	750	22	16,500
Meets Standard	500	20	10,000
Approaching Standard	250	7	1,750
Academic Warning	0	2	0
Total		66	43,250
API = 43,250 ÷ 66 = 655			

Visual Display of Gap Reduction AMO



State Benchmarks

State benchmarks index the achievement of the top performing buildings in Kansas. State benchmarks within the accountability system are based on assessment data from the four years previous to the current year. State benchmarks are calculated separately for math and reading. The state benchmark is equal to the API score for the building at the 70th percentile across the state.

Building's Lowest Performing 30% of Students

The score compared to the state benchmark is the API value for the lowest performing 30% of students within a building using the two most recent years of assessments. Separate API values are calculated for math and reading.

Gap Reduction AMO

The goal of Reducing the Gap AMO is to reduce each building's achievement gap in half by 2016-2017 school year. Progress toward this goal is made in equal, annual increments (i.e., AMOs). Reducing the Gap AMOs are building specific, set in academic year 2011-2012, and remain in place until academic year 2016-2017. A building may also achieve its Gap Reduction AMO by demonstrating an API score of 500 or greater for its lowest performing 30% of students.

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Calculating a Building's Gap Score

A building's gap score indexes the performance difference between a building's lowest performing 30% of students and a state benchmark. This gap calculation also determines a building's Annual Measurable Objective (AMO) for gap reduction. Gap scores use the Assessment Performance Index (API).

Example Assessment Data

	Math			Reading		
Performance Category	2011	2012	Total	2011	2012	Total
Exemplary	21	20	41	25	26	51
Exceeds Standard	26	29	55	38	35	73
Meets Standard	58	61	119	47	54	101
Approaching Standard	12	13	25	11	7	18
Academic Warning	8	2	10	4	3	7
Totals	125	125	250	125	125	250

Whole Building Math API Score (optional calculation)

Using the most recent two years of math, a whole building's API looks like this:

Whole Building Math API			
Performance Category	Points per Assessment	# of Assessments	Total Points
Exemplary	1,000	41	41,000
Exceeds Standard	750	55	41,250
Meets Standard	500	119	59,500
Approaching Standard	250	25	6,250
Academic Warning	0	10	0
Totals		250	148,000
Assessment Performance Index (API) = 148,000 ÷ 250 = 592			

API for Building's Lowest Performing 30%

Step 1: Determine the number of students comprising lowest performing 30% of students.

$$Total\ \#\ of\ Math\ Assessments \times 30\%$$

$$(\mathbf{250} \times .\mathbf{30}) = \mathbf{75}$$

Step 2: Construct a new API table using math assessment scores starting from the lowest performance categories and work upward. The number of assessments should equal 30% of the total number of assessments.

Building's Math API for Lowest Performing 30% of Students			
Performance Category	Points per Assessment	# of Assessments	Total Points
Exemplary	1,000	-	-
Exceeds Standard	750	-	-
Meets Standard	500	40	20,000
Approaching Standard	250	25	6,250
Academic Warning	0	10	0
Totals		75	26,250
Assessment Performance Index (API) = 26,250 ÷ 75 = 350			

Gap Reduction AMO State Benchmarks

Year	Reading	Math
2012	734	719

Calculating a Building's Achievement Gap Score

Step 3: Subtract the state benchmark for math from the API for lowest performing 30% of students.

$$State\ Benchmark - Lowest\ Performing\ 30\%\ API$$

$$\mathbf{719 - 350 = 369\ API\ Points}$$

Calculating a Building's Gap AMO

Step 4: Split gap in half.

$$Building's\ Gap\ Score\ \div 2$$

$$\mathbf{369\ \div 2 = 184.5\ API\ Points}$$

Step 5: Divide resulting gap value by six years.

$$Value\ from\ previous\ step\ \div 6$$

$$\mathbf{184.5\ \div 6 = 30.75\ API\ Points\ per\ Year}$$

In order to make the gap reduction AMO for math, the building in the example above must increase the API for its lowest performing 30% of students by 30.75 API points each year. Or, raise the API for its lowest performing 30% of students to 500 or higher.

When steps 1 through 5 are repeated using reading assessments, the gap reduction AMO for reading is 28.4 API points per year.

More Information

E-mail questions to: waiver@ksde.org