

# School Progress Index (SPI) Tutorial

## Reading the Gap Reduction Indicator Graph

This graph shows the data for one middle school's Gap Reduction Indicator. The data is represented in a bar graph and is set up like the School Progress Index graph. However, only the data for the Gap Reduction Indicator is represented by the gold bars.

The header on the left hand side that reads **Indicators Grades 6-8** shows the school's performance on the Gap Reduction Indicator. At the bottom of the first three gold bars, we can see the proportional significance assigned to Gap in Math, Reading and Science which is 33.33% for each content.

The header on the right hand side that reads **SPI Grades 6-8** shows the Gap Reduction Indicator Contribution, which is represented by the single gold bar. The value below the gold bar represents the proportional significance assigned to Gap Reduction in calculating the SPI, which is 40%.

The dotted black line represents the average of the three performances using the weighting shown under the bar. The average is called the Progress Scale Value and is shown below the three bars. For this school, the Progress Scale Value for the Gap Reduction Indicator is .8257.

The Y-axis or vertical line on the left represents the new indices for SPI and is called the Progress Scale. The number "1.00" on the scale would indicate that the performance met the Annual Measurable Objective or AMO. Numbers above 1.00 surpass the AMO whereas numbers below 1.00 do not meet the AMO.

The table shows how the Gap Reduction Indicator calculations were made.

As shown on the first line of the table, the 2012 Highest Performing Subgroup percent of Students Who Scored Advanced or Proficient on the state assessment on each content minus that school's 2012 Lowest Performing Subgroup percent of Students Who Scored Advanced or Proficient equals "This Year's Gap" for each content.

We'll use Math to work through this calculation. The Highest Performing Subgroup at this school in 2012 was the White subgroup with 84.47% of students scoring advanced or proficient. The Lowest Performing Subgroup was the Special Education subgroup with 61.11% of the students scoring advanced or proficient. When we subtract the % of students scoring advanced or proficient in the Lowest Performing Subgroup, which was 61.11%, from the Highest Performing Subgroup, which was 84.47%, we get a gap of 23.36%. The complement is used in calculating Gap Reduction in order to provide continuity in comparisons between measures. The complement is 100 minus the gap reduction percentage. In this case the complement of 23.36% is 76.64%.

This year's gap is divided by the 2012 Gap Reduction AMO to get the Measure Progress Scale Value. For this school, 76.64% divided by 90.96% equals the Measure Progress Scale Value of .8425. The Measure Progress Scale Value is then multiplied by the Proportional Significance Assigned to Each Measure of 33.33% to get the Measure Contribution of .2808.

The next step is to sum the Measure Contributions for the three content areas. In this case the sum is .8257. The last step is to multiply the Combined Measure Contribution by the Proportional Significance Assigned to Gap (40%), which gives us the Gap Reduction Contribution Value used in the calculation of the school's SPI. This school's Gap Reduction Contribution Value is .3303.