

Teacher Incentive Allotment FAQ, April 22, 2020

1. How can districts consider utilizing the optional end of year assessments for the Teacher Incentive Allotment?

Districts can consider utilizing the optional end of year assessments as one of multiple data points to examine when determining a student's predicted score and expected growth measure for the 2020-2021 academic year. The optional end of year assessments are not recommended to be used to measure end of year growth or to be used as a factor in teacher evaluation for the '19-'20 school year.

2. If we are using value-added measures or Student Growth Percentiles as our student growth measure, what other statistics can we consider?

For districts using value-added models, the additional descriptors can be considered when determining designations.

Measure	Recognized	Exemplary	Master
1. Confidence-based test statistic (value-added model)	About 0.5	About 1.5	About 4.0
2. Effect size (value-added model)	About .11	About .24	About .56
3. Median student growth percentile	A median student growth percentile of about 55	A median student growth percentile of about 60	A median student growth percentile of about 75

- **A confidence-based test statistic.**

Confidence-based test statistics provide the level of evidence that the growth measure is statistically different from the expectation of growth – essentially, how much evidence is there that a teachers' students demonstrated more or less than the expected growth. The confidence-based test statistic, sometimes referred to as an index in some value added models, is calculated by dividing the growth measure by the standard error. Positive and negative values are possible and the magnitude of the index represents the overall amount of evidence that a teacher's students exceeded the growth expectation (positive values) or fell short of the growth expectation (negative values).

- **Effect size.**

In general, the effect sizes indicate the substantive or practical significance rather than statistical significance. Effect sizes are a measure of magnitude that standardize the growth measures. Whereas confidence-based test statistics are a measure of the amount of available evidence that a teacher exceeded or fell short of the growth expectation, effect sizes address the

magnitude of the difference from expected growth. The specific formula used to arrive at the effect size is the growth measure divided by the standard deviation of the student level growth distribution for that assessment. Effect sizes typically range from -1 to 1, with positive values indicating that students tended to score higher than expected and negative values indicating that students tended to score lower than expected. Different researchers have established different descriptions of how to interpret effect sizes, but in general effect sizes of about .2-.3 are considered “small”, .4-.7 are considered “medium”, and .8 and higher are considered “large.”

- **Student growth percentile models** compare students’ growth to the growth of their academic peers using prior scores from the same subject for the past one, two, or three years. The methodology uses quantile regression to determine the individual students’ growth percentiles based on their prior testing data from the same subject area and where they ultimately scored. From there, the median value across all relevant students is identified for each teacher, weighting using partial instructional responsibility for particular students as applicable.