

Transitioning the Georgia Student Growth Model to the Georgia Milestones Assessment System

One important feature of the methodology used within the Georgia Student Growth Model (GSGM) is that the Student Growth Percentile (SGP) is robust to scale transformations like those associated with changes in assessment systems. SGPs can continue to be generated during the first year of implementation of the Georgia Milestones Assessment System (2014-2015) without interruption.

SGPs describe the amount of growth a student has demonstrated relative to academically-similar students – those with the same achievement history – from across the state. One can think about the prior scores as establishing a student’s *starting point* with the current assessment score being the *ending point*. Typically, the same assessment system is used for the prior and current scores, but it is important to remember that SGPs are not a gain score model in which the current year’s score is subtracted from the previous year’s score. During an assessment transition, the state’s legacy assessments (the Criterion-Referenced Competency Tests (CRCT) and End of Course Tests (EOCT)) will be used for the prior scores while the new assessment (Georgia Milestones) will be used for the current score.

A common concern regarding a new assessment, especially one with higher expectations for student proficiency, is that levels of student growth will be lower. Importantly, overall student growth may not necessarily be lower as a result of the assessment transition. Even though students may demonstrate lower proficiency rates overall on this new *yard stick* (Georgia Milestones), it is likely they will continue to learn and grow – and the GSGM will capture that growth, at all levels.

A new assessment would be problematic for calculating student growth in a gain score model. In a gain score model, one would simply subtract the prior score from the current score and call the difference “growth.” This type of model is simplistic, would not be able to handle a change in assessment systems, and is insufficient for high-stakes purposes (accountability and educator effectiveness). SGPs, by contrast, employ more advanced statistical techniques (quantile regression) that allow growth to be calculated when the assessment systems are on different scales (including assessment programs that are not vertically scaled, like Georgia’s legacy programs, or entirely different numerical scales, again, like Georgia’s legacy programs – the CRCT and EOCT were on different scales). Importantly, growth, as calculated by SGPs, is independent of the proficiency cuts. A student’s SGP describes how he or she grew relative to academically-similar students from across the state, *not* how well he or she attained proficiency on the assessment. Students can demonstrate low or high growth regardless of where they start.

It is reassuring to note that the GSGM has already survived an assessment transition with the implementation of the Coordinate Algebra EOCT in 2012-2013. Statewide SGP results for that assessment confirm that, even though overall proficiency rates were lower, students still demonstrated the full range of growth.

See below for frequently asked questions regarding the transition to Georgia Milestones.

Frequently Asked Questions

Will student growth percentiles be reported in 2014-2015 for the new Georgia Milestones?

Yes, student growth percentiles will be calculated in 2014-2015 without interruption.

What will be used as prior scores?

For at least the first year of Georgia Milestones implementation, the state's legacy state assessment results (CRCT and EOCT) will be used as prior scores in the SGP calculations. CRCT and EOCT scores will likely continue to be used as prior scores in the second year of implementation because of the added stability associated with including second prior scores in the model.

Will SGPs decrease as a result of the increased performance expectations of Georgia Milestones?

Not necessarily. It is anticipated that students will be able to demonstrate the full range of growth on the new assessment as growth is independent of the proficiency cuts. Even though fewer students may be proficient on Georgia Milestones than they were on the CRCT/EOCT due to the increased proficiency expectations, students will likely still learn and grow – and the GSGM will capture that growth. Importantly, achievement and growth are two different, yet related, constructs.

What aspects of the GSGM will be delayed?

Multiple years of implementation of Georgia Milestones will be necessary before new baselines can be set and before student growth targets and projections can be calculated.

When student growth targets are reintroduced, how will they be affected?

Student growth targets describe the amount of growth a student would likely need to demonstrate to achieve at each performance level on the next assessment. Given the higher performance expectations of Georgia Milestones, it is likely that student growth targets will be higher than they were previously (i.e., it will take a higher level of growth to become proficient on Georgia Milestones than it would have on the CRCT). However, this aspect of the model is only for diagnostic purposes, and is not part of accountability or educator effectiveness systems.

How will growth be calculated given that the CRCT included both reading and ELA but Georgia Milestones will only include ELA?

It is anticipated that both Reading and ELA CRCT scores will be used as priors to calculate growth on the ELA Georgia Milestones, which will include reading, language skills, and writing. This method (using both Reading and ELA CRCT scores as priors) is currently used to calculate

SGPs for the 9th Grade Literature and Composition EOCT (7th and 8th grade reading and ELA are used as priors).

How will teacher evaluations be affected as a result of Georgia Milestones?

TKES and LKES utilize student growth, not student proficiency. SGPs will continue to be calculated without interruption for use in the TEM and LEM.

What is the difference between the norm-referenced achievement percentiles provided by Georgia Milestones and the student growth percentiles (SGPs)?

These two metrics differ in terms of what they are measuring (achievement vs. growth) and who students are compared with (all students across the country vs. academically-similar students across Georgia).

Georgia Milestones will provide norm-referenced scores, expressed as percentiles, which indicate how well students *achieved* compared with other students across the country. This comparison of achievement is based on a representative sample of all students in the grade/content area nationally and is not based on academically-similar students.

SGPs indicate how much students *grew* relative to academically-similar students from across Georgia. This comparison of growth is not based on all students across the state, but rather those students across the state who have a similar achievement history in the grade and content area assessed.

How will the state ensure the GSGM transition to Georgia Milestones is successful?

The GaDOE will implement a transition plan, in consultation with our nationally-recognized technical advisors, to ensure the transition of the growth model to Georgia Milestones yields valid and reliable SGPs. This plan includes a series of analyses and reviews by technical experts.

Where can I learn more about the GSGM?

More information about the GSGM, including an introductory video and other tutorials, can be found at gsgm.gadoe.org.