

Question: *The focus question for this brief.*

How do districts use median Student Growth Percentiles (SGP) in the evaluation of teachers and administrators?

District Readiness: *Work to be completed before answering the focus question of this brief.*

- Identify the district team responsible for making decisions about the use of median SGPs in educator evaluation.
- Identify individual(s) responsible for managing student SGP data for use in educator evaluation.

Next Steps: *Suggested next steps for districts after reading this brief.*

- Determine the educators for whom median SGPs will be one of the measures used in determining the Student Impact Ratings.
- Determine additional uses of SGPs
- Compute median SGPs and make determinations of high, moderate, and low student growth.

DDM Development

This Implementation Brief is relevant to the highlighted steps:

- **Selecting**
- Administering
- Scoring
- Analyzing
- Adjusting

Student Growth Percentiles (SGPs) are measures of student growth based on the statewide [model of growth](#).ⁱ These measures have been in place since 2008. Massachusetts measures growth for an individual student by comparing the change in his or her achievement on statewide assessments (e.g. MCAS, PARCC) to that of all other students in the state who had similar historical statewide assessment results (the student's "academic peers"). The median Student Growth Percentile (median SGP) for an educator represents the exact middle SGP score for that educator's students. In other words, half of an educator's students performed above (or below) the median SGP score. [This video](#) produced by the Massachusetts Teacher Association explains the process.

The educator evaluation regulations require that statewide growth measures be used in the determination of an educator's Student Impact Rating "where available" ([603 CMR 35.09\(2\)](#)).

These Implementation Briefs are designed to provide targeted guidance focused on timely questions around the implementation of District Determined Measures. These briefs highlight important questions, resources, and approaches for districts to consider, and are not exhaustive resources on the subject. Please continue to share your own examples, suggestions, and questions with us at EducatorEvaluation@doe.mass.edu.

Four Key Messages about Student Impact Ratings

<p>Use Multiple Measures</p>  <p>DDMs and SGP are part of comprehensive evaluation system</p>	<p>Focus on Students</p>  <p>The focus of measuring student impact is improving student learning</p>	<p>Build Capacity</p>  <p>Developing DDMs builds knowledge about assessment and data use.</p>	<p>Engage Educators</p>  <p>Educators have expertise developing and evaluating assessments.</p>
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This brief provides greater detail regarding where median SGPs must be used and where districts have discretion.

Required Use of Median SGPs:

Teachers: A district is required to use median SGPs as one measure to determine a teacher's Student Impact Rating for all teachers who teach **20 or more students**

for which SGPs in the teachers' content areas (ELA or math), are available. For teachers who are responsible for both Math and ELA instruction in tested grades, the district is only *required* to use median SGPs from one subject area in the determination of these teachers' Student Impact Ratings, but may choose to use SGPs from both math and ELA. Districts are discouraged from combining median SGPs from ELA and math into a single measure. Combining SGPs from different subject areas will not permit districts to ascertain how a teacher's impact on student growth differed in each subject area. Districts that do decide to use both ELA and math median SGPs for a set of educators, meaning use ELA median SGPs for one measure and math median SGPs for another, may still supplement these measures with additional DDMs.

4-8th grade math and ELA teachers are required to use median Student Growth Percentiles as a part of their Student Impact Rating.

For teachers, the use of median SGPs is only required when SGPs are based on the previous year's statewide assessment results. As a result, 10th grade SGPs are not required to be used, since students did not participate in statewide testing in 9th grade. However, districts may use these scores in certain situations. For example, if a teacher was responsible for the ELA content in both 9th and 10th grade, then SGP scores from 10th grade would reflect both years of teaching.

ESE recommends districts create a Teacher of Record policy to be transparent about which students' SGPs will be included in an educator's median SGP. A good rule of thumb to guide the policy is that educators who share responsibility for specific students should share full

Teacher of Record

The district's definition of which teachers are responsible for content covered by statewide testing, and the process for including students (e.g. requiring attending 90% of classes).

responsibility for these students' growth. In other words, SGPs for students for whom an educator has primary responsibility should count equally with results from students for whom the educator has shared responsibility. This approach recognizes that teaching is often a collaborative endeavor and team members' efforts to support shared students are inextricably linked, whether the scenario involves team teaching, pull-out

resource supports, or flexible grouping. More information about attribution policies will be included in the Implementation Brief on Attribution & Roster Verification.

Administrators: A district is required to use median SGPs as one of the measures used to determine an administrator's Student Impact Rating for all administrators who supervise educators responsible for ELA or math instruction when there are **20 or more students with SGPs in the content area**. 10th grade SGPs must be used for administrators whose responsibilities include supervising ELA or math instructors in grades 9 and 10 (e.g., a high

school principal). Similar to teachers, districts need to define which administrators are responsible for academic content (i.e., supervise educators who deliver instruction in the content area). The job descriptions for administrators can vary dramatically across districts. However, there are certain educators who must be evaluated using median SGPs (see call out box).

Examples: A tenth grade English teacher with 60 students is not required to use median SGPs because the SGPs in tenth grade are not based on testing from a previous year.

A high school principal (9th grade -12th grade) is required to use either median SGPs from 10th grade ELA or 10th grade math, since there are no problems of attribution for an administrator, since he/she supervises the educational program for both years.

A middle school special education teacher who teaches math classes for 30 students who are pulled out of other classes or grades (10 students in each grade, 6-8 grades) is required to use math median SGPs because he/she has a total of 30 students with math SGPs who meet the district's definition of Teacher of Record. There is no requirement that the students are all in the same class or grade for educators as long as they are in the same subject area.

A fourth grade elementary classroom teacher with 15 students is not required to use median SGPs since he/she has fewer than 20 SGPs in any specific tested area. However, districts may choose to use median SGP for educators even with less than 20 students. See the next section for more information about this use.

Other use of median SGPs

Fewer than 20 students: Districts are not required to use median SGPs for teachers with fewer than 20 students. However, districts may use median SGPs in an educator's evaluation, even when the teacher has fewer than 20 students with SGPs. ESE has confidence that SGPs are a high quality measure of student growth. While the precision of a median SGP decreases with fewer students, median SGP based on 8-19 students still provides quality information that can be included in making a determination of a teacher's impact on students.

Districts are strongly encouraged to use median SGPs for all teachers with the same job description. For example, if there is one fourth grade teacher in the district who has 22 students with SGPs and is therefore required to use median SGPs and three

Administrators required to use median SGPs

- Superintendent of Schools/Charter School Leader/ Collaborative Director
- Principal/Headmaster/Headmistress/Head of School
- Supervisor/Director/Coordinator of Curriculum
- Supervisor/Director/Coordinator: Mathematics
- Supervisor/Director/Coordinator: English
- Supervisor/Director/Coordinator: Reading

Why 20 students?

There are many factors that determine student's median SGPs. One of those factors is the impact of the teacher on the student. The greater the number of students included in a median SGP, the greater the chance that differences in median SGPs reflects differences in teacher impact. When there are at least 20 students, ESE requires the use of median SGP. Although median SGPs with between 8-19 students has more error, ESE has confidence that the measure provides meaningful information about a teacher's impact. However, given the increased chance of error, districts have been given the flexibility to choose other measures.

other fourth grade teachers who teach only 18 students with SGPs, the district is strongly encouraged to use the median SGP for all of the fourth grade teachers to promote fairness.

Small number of students: Districts may use student's median SGP scores when a teacher has 7 or fewer students. However, ESE recommends that SGP be used in combination with other information and not used as a stand-alone measure. Student's SGPs can be combined with other measures of student growth. For example, a teacher may work with a small group of 5 students in mathematics. A DDM may take the average growth of using a pre-post test from class and have these results combined with growth measured using SGPs for a DDM focused on growth in mathematics. This added information is necessary because of the small number of students.

SGPs and Special Education Students: Since SGPs are based on student growth, they provide a more fair assessment of an educator's impact compared to measures of student achievement. One challenging area is around the use of median SGP with teachers who work with special education students. Based on analyses of historical SGP data, students with disabilities tend to have lower SGPs as a group, regardless of teacher, as compared to students who are not receiving special education services. A special education teacher can still demonstrate both high and moderate impact on student learning, but educators who are responsible for students with disabilities will have an increased chance of identifying a special education teacher as having a low impact. ESE advises against changing the definition of high, moderate, low growth for these educators because this could be misinterpreted as a message that it is acceptable for teachers to set lower standards for growth with students with disabilities. ESE's recommendation is that evaluators and educators address this potential concern by using professional judgment in making a determination of student impact.

Timing of release of SGPs

ESE expects that SGPs will be released to districts late in the summer. Districts should complete the Summative Performance Rating prior to the release of SGP results. Educators with Summative Ratings of Needs Improvement or Unsatisfactory should complete Directed growth plans or Improvement Plans immediately. Determination of the length of growth plan for educators using median SGPs and with Summative Ratings of Proficient or Exemplary may be delayed until the following Fall. Districts will report final Student Impact Ratings to ESE in October, giving them enough time to use SGP results.

Using median SGP to make a determination of growth

Procedures: The process for computing median SGPs is the following: First, districts create student rosters for all educators for whom median SGPs will be used as a measure of student growth. These rosters can be created using resources such as Edwin Analytics through ESE's website. Districts should determine a clear procedure to allow educators a chance to verify rosters. Next, districts will receive student SGP scores from ESE when they are available. Since districts are responsible for generating and verifying rosters, districts will compute median SGPs. This can be computed by using the median (or middle) SGP score. If an educator has an even number of students, the median SGP will be the average of the two middle scores. For example, if an educator had students with SGP scores of 33, 52, 61, 63, 73, and 85, the

educators median SGP would be 62. ESE will be conducting a webinar on this topic to coach districts on computing median SGPs.

Making a Determination: To determine student growth for an educator based on median SGP scores districts should use the chart below. For the purposes of [school and district accountability](#), a median SGP of 60 points or higher has been above target, while a median SGP of 40 or below has been below target. As a result, cut scores for administrators for Impact Rating match these determinations. Since teachers work with fewer students, the cut scores for teachers reflect the need for additional evidence to make a determination of high or low student growth. Internal analysis by ESE has determined that these cut scores should identify a comparable percentage of teachers and administrators from across the state into each category.

Determination of Growth for Teachers and Administrators based on Median SGP

	Low	Moderate	High
Teachers	35 or lower	Greater than 35, but less than 65	65 or higher
Administrators	40 or lower	Greater than 40, but less than 60	60 or higher

Frequently Asked Questions

Are teachers required to use 10th grade SGPs? No. The use of median SGP is only required for educators of 4-8th grade ELA or math. The use of median SGP is only required when students' median SGPs are based on results from the previous year.

Can more than one educator be responsible for the same student's SGP? Yes. Students who receive instruction from multiple teachers may be included in multiple teachers' median SGP. For example, a student who attends both a regular Language Arts class and participates in a pull-out program focused on supporting learning those same skills could have his or her SGP score included in both the regular education and pull-out teacher's median SGP.

Which administrators are required to use median SGPs? Principals and other administrators directly responsible for academic content are required to use median SGPs. Districts should clearly define which administrators will use median SGPs.

ⁱ <http://www.doe.mass.edu/mcas/growth/>