

Hawaii Growth Model Frequently Asked Questions (FAQ)

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Growth Model Calculation and Design

1. What is an academic peer? How are academic peer groups created?

Academic peers are defined as students in the same grade with similar HSA score histories for a given content area. The score history examined for each student includes all past HSA scores available from consecutive test administrations. Past HSA performance is the only factor determining a student's academic peer group. So, for a student who has had low HSA scores (consistently at the Approaches level) for the last few years, his or her growth is compared to students who have scored similarly (as measured by the students' scaled scores).

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2. How can we compare test scores when tests and standards are changing to Smarter Balance (SBAC) and Common Core? How do transitions between different types of tests impact the model?

The transition to Common Core aligned assessments developed by the Smarter Balance Assessment Consortium (SBAC) will have little impact on the growth model. The Hawaii Growth Model does not require identical tests or scales from year to year. This is because it does not measure whether students experienced an increase or decrease in test scores from year to year. Student growth percentile (SGP) scores are rankings of how similar students performed.

It will still be fair to use past Hawaii State Assessment (HSA) scores to establish academic peer groups since the change to a new test doesn't change that the students performed similarly in the past. The test given does not matter as long as the test is difficult enough to show differences in how much students with similar academic histories have grown each year. Assuming that students who would have scored higher than their peers on the HSA also generally score higher than their peers on the new SBAC Assessment, the model will still produce useful results.

The Hawaii Growth Model creates what is known as cohort referenced SGP scores. This means that the model compares test scores with the same grade level, subject, and year. SBAC Assessment scores will be compared with other SBAC Assessment scores. SBAC Assessment scores will not be directly compared against HSA scores to determine SGP.

Although the transition to the SBAC Assessment will have little impact SGP scores, the change may impact the usefulness of growth targets and projections that relate growth to proficiency (e.g. the colored "fan" on individual student reports). If there are notable differences in how difficult it is to attain proficiency, predictions of how much growth is necessary to reach proficiency based on past HSA performance may not be very helpful. The full impact of the test transition on student proficiency and growth metrics will be closely monitored to ensure the validity and utility of all testing metrics.

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3. Can high performing students and schools still show growth? Will it be easier for low performing students and schools to show growth?

One of the Department's criteria for selecting a model was that it had to measure growth even at the top and bottom of the HSA performance scale. In the Hawaii Growth Model all students have the opportunity to exhibit growth. The model accounts for this by measuring each child's growth relative other students with similar score histories. Students that start the school year further behind than others will only be compared against similar students across the state that are also behind. Regardless of whether students have high or low prior achievement, they can receive a student growth percentile (SGP) from 1-99 depending how they

rank compared to others in their academic peer group. SGP scores reflect performance relative to similar peers, and are not determined by how much scales scores increased or decreased.

Students can reach a plateau in their proficiency levels because there is no level defined above Exceeds Proficiency. This plateau should not to be confused with the false notion that high achieving students will be unable to receive high SGP scores. If it is difficult for high performing students to increase their score or attain high scale scores multiple years in a row, students may receive a high SGP score even though their HSA scale score doesn't increase. Since the HSA for each year measures progressively advanced content, attaining similar scores two years in a row can still demonstrate growth. If it is easy to make scale score gains as a student that performed poorly in the past, students will only receive a high SGP score if their gains are high relative to other students like them. The same percentage of each academic peer group will receive high, typical, or low SGP scores.

Conceptually, it could be difficult to rank an academic peer group of students if the test instrument was too easy. Differences would be difficult to quantify if groups of students were consistently obtaining perfect HSA scores year after year. Analysis of Hawaii's historical HSA data has shown that this hypothetical problem does not exist.

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4. [Does the Hawaii Growth Model account for factors that may impact individual student performance? Are differences in student characteristics or the impact of one-time events considered?](#)

The Hawaii Growth Model only considers prior Hawaii State Assessment (HSA) scores when determining a student growth percentile (SGP) score. It does not explicitly account for differences in student characteristics (ELL status, special education status, low incidence disabilities, attendance, etc.) or the impact of one-time events (suspension, divorce, trauma, etc.). Unlike value-added models (VAM) that attempt to account for all demographic and environmental factors to quantify the impact individual teachers or schools had on each student's performance, SGP scores quantify how well individual students performed compared to others who had similar HSA performance in the past. Instead of producing VAM metrics that are only useful in the context of evaluation, the Hawaii Growth Model attempts to produce metrics that are useful for understanding individual and aggregate student progress.

While theoretically possible to account for other factors that can impact growth or performance, doing so would make the model impossible to interpret in a reasonable manner. Due to the diverse range of student ability and prior knowledge within groupings based on student characteristics, it would not be useful, for example, to say that a chronically truant student performed well compared to other truant students. High growth for a student is only notable when it is relative to other students that have had similar performance histories.

The Hawaii Growth Model's purpose is to provide an easy to understand, transparent, and credible growth metric that supports attempts to analyze root causes behind student growth outcomes. Since we are measuring growth, you would expect students who do not show academic growth for whatever reason to have a low SGP score. Similarly, if a student does show high academic growth for whatever reason, you would expect them to have a high SGP score. Investigating why certain students experienced different levels of growth is critical to the process of improving student growth outcomes, but it is not useful to factor in explanatory variables into a growth model that reports performance using SGP.

Grouping based on prior performance naturally tends to account for many factors people want the growth model to incorporate. For example, if a student's performance is low because of a disability, they will be put in an academic peer group of other students who are performing at that level. To the extent that other

students with similar conditions have been impacted in the same way, they will also fall into that same set of academic peers. On the other hand, students with similar profiles who perform at a high level will be grouped with suitable academic peers rather than being automatically grouped with students based on that condition.

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5. [Does the Hawaii Growth Model account for different school characteristics? Are differences in school demographics or conditions directly factored in?](#)

The Hawaii Growth Model does not explicitly account for differences in school demographics or characteristics (ethnic makeup, percentage of students with disabilities, percentage of disadvantaged students, attendance patterns, student and teacher transiency, etc.). Growth is measured at the individual student level based on how students performed compared to other students with similar performance histories. School growth measures are simply aggregations of all individual student growth measures for students that have been at the school for a full school year. Since only certain grades are tested and students will not receive growth scores without valid scores from two consecutive test administrations, school growth measures do not provide aggregate information on all tested students from each school.

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6. [Is the Hawaii State Assessment \(HSA\) the only test used to calculate student growth percentiles? What about other assessments used in our school, complex area, or district? What about alternate assessments?](#)

The Hawaii Growth Model only calculates student growth percentile (SGP) scores using data from the Hawaii State Assessment (HSA) in Reading and Mathematics. Assessments that are only used within a school, complex area, or district cannot be used because the model requires data from students in the entire state. While it is possible to calculate growth percentiles for other assessments that are administered statewide, Hawaii has not yet decided to incorporate any additional assessments. Student scores from the Hawaii State Alternate Assessment (HSA-ALT), Hawaiian Aligned Portfolio Assessment (HAPA), End of Course Exams, ACT Tests, etc. are not currently used to calculate growth scores.

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7. [How do we account for students who don't have historical HSA data? What about students who missed HSA administrations or come from other states?](#)

The Hawaii Growth Model can calculate growth for any student who has had taken the Hawaii State Assessment (HSA) for two consecutive administrations. The first year that a student takes the HSA or resumes taking the HSA, they are not given a growth score. Once a student receives an HSA score for two consecutive administrations, they are given a growth score. The new student's growth score will be based on comparisons with all other students with similar HSA scores for all consecutive administrations available.

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8. [How are students that skip or repeat grades handled by the Hawaii Growth Model?](#)

Student growth percentile (SGP) scores are not assigned to students that skip or repeat a grade. In order to calculate SGP scores for these students, we would need to find a similar group of students that took the same sequence of assessments to compare them with. In Hawaii's data, there aren't enough students who skip or repeat in any given year for a SGP score to be calculated in these cases.

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9. Does successfully moving from one proficiency level to a higher one necessarily produce a higher growth percentile than moving up within a proficiency level?

No. Student growth percentiles (SGP) are calculated using exact HSA scale scores and are not calculated with reference to proficiency levels. For example, a student that stayed within the Approaching Proficiency level can receive a higher SGP than a student that moved from Approaches Proficiency to Meets Proficiency. Student growth percentiles describe growth movements anywhere along the score scale and do not depend upon whether achievement levels are crossed.

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10. Won't some students always have low growth?

Yes, percentiles will always rank students from 1 to 99, which means that an equal percentage of students will have low, typical, and high growth across different academic peer groups. Those in the academic peer group scoring the lowest on the current year test will have the lowest student growth percentiles, while those scoring highest on the test will have the highest student growth percentiles. The interpretation of a low growth score is not that a student hasn't progressed or learned, but that they are not progressing as quickly as their academic peers.

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11. Must the assessment used for calculating growth be vertically scaled in order for the results to be accurate?

The Hawaii Growth Model does not require a vertical scale as part of its calculations. A vertical scale, which the HSA does not possess, allows for the comparison of student scale scores as students move from grade to grade. One of the primary reasons for choosing the current growth model is its ability to work with or without a vertical scale.

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12. How come we aren't using beginning and end of year data to show growth? How can growth be measured without a pre-test? Why are we using growth percentiles rather than looking at percentage growth?

The Hawaii State Assessment (HSA), like many state assessments, does not have a vertically aligned scale. This means that attaining a score of 300 for two consecutive years does not mean that a student has shown no growth because the content of the HSA get progressively more advanced each year. Even in states where attempts have been made to create vertical scale, percentiles are often used so that growth can be understood in the context of a normative comparison.

Even if using a pre-test and post-test to calculate percentage of growth, the measure would only be a valid measure of growth if the scoring of test items was calibrated using performance norms. Without this calibration a student could show high growth for learning a simple concept that happened to be worth the same amount of points as a question aligned to a much more difficult topic. A student that already knew the simple concept would then be unfairly characterized as growing at the same rate or less compared to the other student when they may have made much more significant progress. Even with perfectly calibrated questions, the shape of most learning curves would result in advanced students showing lower growth because it tends to be easier to show progress from a learning deficit than it is to attain mastery. In short, the student growth percentiles from the Hawaii Growth Model are a much more robust and useful measure of growth than any attempt to measure percentage growth.

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Reporting and Logistics

13. Which students will receive student growth percentile (SGP) scores? What about non-tested grades and subject areas?

Currently, student growth percentile (SGP) scores will be calculated for students in grades 4-8 and 10 that have taken the Hawaii State Assessment (HSA) in Reading and Math for two consecutive administrations. Third grade students and other students without prior HSA data will not receive SGP scores because they cannot be assigned to an academic peer group. Students will not receive SGP scores for non-tested grades and subjects, and will not receive SGP scores based on HSA tests in subjects other than Reading and Math.

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14. Which student growth percentile (SGP) scores are included in a school, complex, and complex area median student growth percentile (MSGP)?

Students are included in a school's MSGP score based on whether they have full school year (FSY) status. Before data for the 2012-13 school year, FSY status was determined by whether students were on the Official Enrollment Count (OEC) roster and actively enrolled at the end of the testing window. After the implementation of the ESEA flexibility waiver application, FSY will be determined by whether a student was present on a school's OEC roster, January 30 roster, and May 1 roster.

Complex and complex area aggregations simply include the SGP scores of all students that took the HSA in a particular complex and complex area. Student scores are not filtered out based on length of enrollment.

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15. How will data from very small schools and groups be reported? Is there an established minimum group size for creating a median growth percentile (MSGP) for a school, disaggregated group, classroom, etc.?

Regardless of school or class size, individual student growth percentiles (SGP) can be calculated for all students who have two consecutive HSA scores. When aggregating SGP scores to produce a median student growth percentile (MSGP) for a school or disaggregated group, values are only reported when the school or group has at least 20 students. This is done to protect the privacy of individual students and prevent the reporting of numbers that do not fairly characterize the performance of a group.

When there are small numbers of students in a given group, it might be possible to deduce how well individual students performed. Summarizing the SGP scores of a small group can easily produce misleading results. The data for groups that have fewer than 20 members can be better understood by looking at the complete set of numbers, rather than by attempting to capture them in a single summary statistic.

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16. When will SGP data become available and how can it be accessed?

New SGP scores are calculated every July. During the first and second year of the EES pilot, principals and teachers were able to access SGP data in the form of PDF reports available on the PDE3 system. Starting with growth data from the 2012-13 school year, SGP data will be available through a new growth data visualization system created in partnership with the SchoolView Foundation. Going forward, PDE3 will only house the aggregate SGP score and rating used as part of a teacher's evaluation.

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17. Which school-based staff has access to SGP data? What SGP data will teachers have access to?

Principals and teachers will have access to SGP data. Principals will have access to SGP data for all students at their school, and may authorize other school-based staff to view student data. Teachers will have access to SGP data for their past students, based on the data they submitted during the end of year roster verification process using the Battelle for Kids system. Teachers will also see data on the students officially enrolled in classes they teach.

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18. Do parents see the growth data for their child/children?

During the EES pilot, principals or teachers may choose to share the growth data of individual students with their parents. In the future, students may receive individual student growth reports along with a guide to help interpret their results.

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19. What information does the public have access to?

Hawaii has partnered with the SchoolView Foundation to create a visualization tool that will enable parents and other external stakeholders to access growth data as appropriate within the bounds of FERPA. The public facing portions of this tool will show median student growth percentile (MSGP) scores contrasted against percent at/above proficient for complexes, schools, and demographic groups within a school containing at least 20 students.

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20. What growth data is available at the high school level?

High schools will have access to growth data based on how students performed on the Hawaii State Assessment (HSA) in 8th and 10th grade. After students complete 8th grade, their growth distribution projection, indicated by a colored fan on their individual student report, shows projected performance on the 10th grade HSA ("next year" refers to the next tested year). Because students are not tested in the 9th grade, there is a gap between 8th and 10th grade HSA scores. On individual student reports, growth between the 8th and 10th grade is shown by a longer arrow that spans across two years instead of one. No growth projections are calculated after 10th grade because there is no test after 10th grade.

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21. What additional information will the Department provide to teachers, administrators, and other education stakeholders on how growth data is calculated and how to use it effectively? Where can I find this information?

The Department is in the process of developing a resource bank for educators, administrators, and other stakeholders that will provide useful information, guidelines, and tools around all components of Hawaii's Educator Effectiveness System. The latest materials can be found on the EES Pilot Website. For more information on the technical details behind how growth calculations are performed, please reference *The Hawaii Growth Model: A Technical Overview of the Student Growth Percentile Methodology*.

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22. If the HSA is administered multiple times in a year, which administration is used for growth calculations?

Just like Adequate Yearly Progress (AYP) calculations, student growth percentile calculations will use the highest valid HSA score available for each student.

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23. If schools are only having students take the HSA until they meet or exceed proficiency, wouldn't that impact student growth results? What about differences in when schools choose to schedule their test administrations?

Schools that provide students with the opportunity Consistent administration of the HSA to students within and across schools is an issue not just for student growth, but also for current AYP purposes. The Hawaii DOE is looking at patterns of test administration to identify issues tied to inconsistent administration of the test.

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Data Use and Interpretation

24. What is growth? What do student growth percentiles (SGP) in the Hawaii Growth Model measure?

For an individual student, growth is a measure of progress in academic achievement. For some states, this measure might be defined as a change (a gain or a loss) in test scores from one administration to the next. Hawaii does not use this system because it is inherently unfair to students that are high performers. Students with high scores would find it much harder to show growth compared to students that were low performers.

Additionally, it would be impossible to measure growth that way without HSA pre-tests or a vertically scaled assessment. For instance, it would be incorrect to conclude that a student that scored 300 on the HSA for two consecutive years did not show growth because the second score would have been attained on a version of the HSA aligned with higher level benchmarks.

For Hawaii and many other states, growth is expressed using a normative measure called a **student growth percentile** (SGP). SGPs rank individual students on a scale of 1 to 99 relative to others with similar achievement histories. The SGP calculation uses all available consecutive test scores to create these comparison groups [1]. A student's SGP tells us how a student's current achievement [2] compares with that of other students across the state whose previous test scores were similar. For example, a student receiving a growth percentile of 60 did better than approximately 60% of students with similar achievement histories.

SGPs produced by the Hawaii Growth Model can help us understand whether a student's growth was low, typical, or high relative to others who started at the same "starting point" based on what they have shown mastery of on previous HSA administrations. In this way, the growth model allows parents and teachers to understand whether their child's current achievement is surprisingly high or low given their prior achievement and how other students with similar academic histories performed.

[1] Students with similar achievement histories are sometimes referred to as a student's **academic peers**. For a more technical introduction to the SGP calculation see *The Hawaii Growth Model: A Technical Overview of the Student Growth Percentile Methodology*.

[2] Current achievement means the latest HSA test score available for a student. For example, for all students enrolled in the 2012-2013 school year, the test scores from the 2011-2012 school year represent the most current achievement scores available.

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25. What is considered low, typical, or high growth?

Individual student reports categorize student growth percentile (SGP) scores into low, typical, and high categories. The three growth levels in Hawaii's model roughly split up academic peer groups into thirds. Scores below the 35th percentile are categorized as low, scores at or between the 35th and 65th percentiles are categorized as typical, and scores above the 65th percentile are categorized as high. These categories currently have no special meaning other than to help see where student scores fall at a glance. When interpreting reports, it is important to remember that these are categories for individual student results, not for evaluating educators or schools.

The statewide median student growth percentile (MSGP) in each subject and grade is the 50th percentile. When examining MSGP for schools, grades, subjects or groups, it is useful to look for differences from 50 when investigating growth. A MSGP that is above the 50th percentile generally indicates that a majority of the students in the group performed better than a majority of students with similar achievement histories throughout the state. Similarly, a MSGP that is below the 50th percentile generally indicates that a majority of the students in the group performed worse than a majority of the students with similar achievement histories throughout the state.

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26. What questions can the Hawaii Growth Model help answer?

Different stakeholders will have different types of questions when it comes to understanding what student growth data can tell them. The Hawaii Growth Model can be used to address a wide variety of questions.

For example, if you are a School or Complex Area Administrator in Hawaii, you might ask:

- Did the students in our complex area schools grow as much on average as other students in the state?
- Are our students making sufficient growth toward meeting Hawaii state standards?
- Do students in a particular classroom/school/program show as much growth as other classrooms/schools/programs?
- Do students in certain demographic subgroups show as much growth as other demographic subgroups?
- Are our students growing consistently over multiple years?

If you are a Teacher in Hawaii, you might ask:

- Did my students make sufficient growth toward meeting state standards?
- Did my students make as much progress as students in other classrooms within my school or across schools within the complex area and state?
- Did my students learn as much in mathematics as they did in reading?
- Are there students with unusually low growth who need special attention?
- Do these growth results generally appear consistent with or differ from what I already know about how my students have progressed during the school year?

If you are a Parent with children in the Hawaii school system, you might ask:

- Is my child making sufficient growth toward meeting state standards?
- Is my child growing at the same rate in mathematics and reading or is she/he experiencing lower or higher growth in one subject area compared to the other?
- Did my child grow as much this year as last year?

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27. Does the Hawaii Growth Model tell us why certain students or groups of students are growing more or less than others?

No. The Hawaii Growth Model helps to identify groups of students (e.g., schools, grades, classrooms, demographic subgroups) that demonstrate lower or higher growth. Why students in these groups demonstrate lower or higher growth requires further investigation to identify the root causes or the sources that are likely contributing to the observed growth of students (e.g. higher or lower growth might be attributed to a particular program/intervention or the quality of instruction).

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28. How can classroom teachers use growth data?

After receiving growth data for students they taught, teachers can use growth data in a reflective manner to see how effectively their instruction helped students to grow compared to the progress students with similar academic histories made statewide. By analyzing trends within the growth data, teachers can identify if there are any particular types of students or groups of students that performed exceptionally well or poorly. This information can be particularly useful when evaluating the effectiveness of differentiation efforts and interventions targeted towards certain classes or groups of students.

When starting a new year, teachers can view the growth histories of their new students, to better understand the level of growth each student will need in order to maintain proficiency or catch up, and plan the appropriate interventions and supports they can provide to help their students achieve. Where appropriate, growth information can be discussed with students to help motivate them to continue on a positive trajectory or bring attention to the need to change course.

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29. What is a median growth percentile (MGP) or median student growth percentile (MSGP)?

Hawaii uses medians to summarize and report student growth percentiles for groups of interest, like complex areas, complexes, schools, grade levels, etc. This metric is simply called a median student growth percentile (MSGP) or shortened to median growth percentile (MGP). A median is calculated by taking the individual student growth percentiles of all the students in a group, ordering them from lowest to highest, and identifying the middle score. When a group is made up of an even number of data points, the two middle numbers are averaged to determine the median.

Conceptually, medians are more appropriate than averages (arithmetic means) when summarizing percentiles because the performance difference for a specific percentile interval is not constant at different points on the percentile scale. For example, a student at the 50th percentile will likely be much closer in ability to a student at the 55th percentile than a student at 90th percentile would be to a student at the 95th percentile. This tends to happen because the bulk of students tend to perform similarly, causing percentile rankings to increase faster within score ranges that a lot of students fall into. Since the process for calculating an average involves combining all numbers together, it could potentially lead to problematic conclusions. A well-known weakness of using averages is that a small group of students that are significantly higher or lower than most other students (outliers) can have a disproportionate impact on the average.

In addition to a coping with outliers better than means, medians tend to do a better job of describing how data is distributed relative to score cut-offs. For example, if a class had a MSGP of 55, you could interpret this to mean that at least half of the class did better than the state median (50 is the state median for each grade and content area within the Hawaii Growth Model). Knowing just a few more data points in addition to the median would allow you to conclude with certainty that the majority of the students in a class received a SGP score that was higher or lower than a certain number. In contrast, knowing that a class had an average SGP score of 55 could give you more stable summary metric, but could not be used to pinpoint how the majority of the class performed with certainty.

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30. Are student growth percentiles a better measure of student performance than HSA proficiency levels?

Growth measures are not necessarily better or worse than proficiency/achievement measures. Each type of metric simply provides different information that is used to answer different questions about how well a student is performing. If you want to know how well a student has mastered content matter for a particular grade, the scaled score and proficiency level for the corresponding HSA test are the best indicators. If you are trying to determine how well a student is progressing from one test administration to the next, the student growth percentile provided by the Hawaii Growth Model is the best indicator. A complete understanding of overall performance can be obtained by using both measures together.

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31. Can the student growth percentile be interpreted the same way regardless of grade level or test content area?

Regardless of grade or test content area, student growth percentiles (SGP) can be interpreted to mean that a student did better than a corresponding percentage of students with similar score histories on the HSA test for a specific grade and content area. For example, a student with a SGP score of 60 in sixth grade mathematics, received a higher score on the sixth grade HSA in Mathematics than 60% of students with similar score histories for the HSA in Mathematics up to that point. If the student were in a different grade or content area, the content area and grade would be the only parts of the preceding interpretation that would change.

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32. How is growth data being used other than as part of a teacher evaluation system? Is growth data going to impact school accountability or AYP?

The Hawaii Growth Model can be used to answer a variety of questions beyond those posed by the teacher evaluation system. Median student growth percentiles for schools are being incorporated into the new principal evaluation system (CESSA) and the new Academic Performance Index (API) used to evaluate schools under the new Strive HI Performance System.

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School Accountability and Teacher Evaluation

33. How will growth data be used in teacher performance evaluations? How much weight will student growth percentile (SGP) data have in determining a final rating?

Beginning in the 2014-15 school year, teachers will be evaluated against Hawaii's Teaching Quality Standards using multiple measures of performance. Measures of Standards I-IV, covering professional practice and responsibility, will determine no more than 50% of a teacher's overall evaluation rating. Measures of Standard V, covering student growth and learning, will determine at least 50% of a teacher's overall evaluation rating. Student growth percentiles (SGP) from the Hawaii Growth Model and student learning objectives (SLOs) are the two metrics that will measure student growth and learning in the new Educator Effectiveness System (EES).

To determine a rating based on SGP, a median student growth percentile (MSGP) will be derived from a group of students associated with each teacher. Performance bands and corresponding MSGP ranges will be defined, against which each teacher's MSGP will be scored. This score will then be combined with SLO data to determine the rating for the portion of a teacher's evaluation associated with student growth and learning. Due to the time needed to finalize growth calculations, the growth score teachers receive will lag by at least one year. This will give teachers a year to bolster their performance in other areas to ameliorate a low growth rating. For teachers that do not have a valid MSGP, SLO data will comprise a larger percentage of their overall evaluation.

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34. When will growth data be used in teacher performance evaluations?

Growth data calculated for school years prior to 2013-14 will be used for informational purposes only. Starting in the 2013-14 school year, growth data will be used along with other Educator Effectiveness System (EES) metrics to produce sample ratings of record. Ratings that impact personnel decisions will not be made from growth data or overall EES ratings until the 2014-15 school year.

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35. How can I help my school get a higher median growth percentile?

For a school to have a higher median growth percentile, the students in the school need to have higher individual student growth percentiles (SGP). No single student or group of students can be singled out or ignored. One of the overall goals of designing and implementing the Hawaii Growth Model was to focus attention on the improvement of all students, not just "bubble" students near achievement level boundaries.

Teachers can help their schools get higher median growth percentiles by holding all students to high expectations and delivering differentiated instructional experiences that are appropriately aligned to content and grade level standards. Student bubble plots showing the growth and achievement of the roster of students taught by each teacher can be used to help guide teachers in their efforts to improve student growth outcomes.

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36. How can I be sure that I will only be held responsible for student growth that can fairly be attributed to me?

The Department is in the process of developing policies for associating student growth percentile (SGP) scores to teachers. Given the collaborative nature of many schools, this includes exploring shared teacher



contributions to student growth, among other critical policy decisions about attributing student growth to educators.

For teachers in tested grades and subjects, the Department has created a roster verification process using specialized software provided by Battelle for Kids. Roster verification allows teachers to have direct input into the process of ensuring that student-teacher links are accurate and reflective of the diverse instructional models present in our schools.

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37. Will tested grades/subject teachers receive extra pay for high growth?

At this time, the Department is not considering performance-based compensation to teachers based on SGP scores of their students.

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38. Some principals group advanced or challenging groups of students under one teacher. Is there some way to account for this?

This is already accounted for to some extent through the use of academic peer groups. All educators are accountable for helping their assigned students grow each year, regardless of where students start. It is just as important to help high achieving students continue to grow and maintain high proficiency, as it is to help low achieving students catch up to reach grade level proficiency.

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