

MEASURING UP

Using data to assess student growth is crucial, and different strategies will reveal different aspects of advancement

By Jennifer Bell-Ellwanger





School leaders work to ensure that every student is on the path to success and learning more every year. But to understand how students are progressing, leaders must measure these changes, and growth data can help them get there.

Growth data looks beyond measures of performance at a single moment in time, such as a test score, and uses a student's assessment data over time to evaluate a child's academic progress. Growth data provides critical insight into whether students are making progress year over year.

Not all measures of student growth, however, are created equal. Some states use a sophisticated analysis of multiple data points that evaluate the impact of schools on student learning, while others use simpler measures of change in student assessment results year to year. These different approaches to measurement answer different questions and tell different stories about what's happening in schools and classrooms.

Why Growth Data?

Growth data isn't just important; in most states, it's required. With the exception of California and Kansas, states have included some measure of student growth in their accountability system under the Every Student Succeeds Act (ESSA). Twenty states have also committed to measuring high school student growth, and school leaders are being held accountable for ensuring that growth. School leaders must communicate measurement information to parents and teachers and work with them to ensure student growth.



Measures of student growth can also shine a light on equity, another commitment that states and school leaders have made and included in ESSA plans. As they look at how school systems work for underserved populations, students of color, students from low-income families, and students from rural areas, conversations about equity and growth must go hand in hand. While each growth measure has merits, not all account for students' starting points or consider whether they get the support they need to grow—vital information for school leaders.

Principals' leadership is essential to the use of data in making buildingwide changes that improve learning for all students.

Different Growth Measures

In order to maximize the power of growth measurement information, one must understand what different measurements say about student learning. Some measures demonstrate how adults contribute to student learning. Others detail how student performance on assessments changes from year to year. When used side by side with other student data—including proficiency data—these measures help school leaders understand student progress.

The first and most sophisticated types of growth models use statistical comparisons to demonstrate how adults in a school helped students succeed on annual tests; they do not incorporate state cut scores or benchmarks on assessments. While these measures can't tell you whether or not students mastered grade-level skills, they will help you understand differences in how much adults have helped students improve.

These come in a variety of formats to answer a variety of questions:

- **Value-added** measures can determine whether teachers helped students in a school do better than expected, regardless of whether they met grade-level targets. Value-added measures use sophisticated calculations to measure growth and compare student performance on tests to how they were expected to perform based on learning progress over time. How a student performed—better or worse than expected—demonstrates the impact of adults in the school on a student's learning.

These measures provide a more complete picture of equity for school leaders as they work to close achievement and opportunity gaps. While value-added measures can ultimately be more difficult to understand compared to some other types of measures detailed here, they are the only measures that shine a light on how adults in the school contribute to student learning.

- **Student Growth Percentile (SGP)** reflects whether or not a student does better than his or her peers, regardless of how much they improve or whether they've met a grade-level target. SGP measures demonstrate how students in a school perform compared to a group of other students in the same grade who had similar test scores in the past. Students are then assigned a rank (or percentile) based on how they performed compared to the performance peer group.

This measurement shows differences in how schools serve students at the same proficiency level. For instance, a student in the 60th percentile did better on the test this year than 60 percent of students who got a similar test score last year. SGP measures do not assign a percentile based on the change in a student's test performance, but rather their performance compared to those who performed similarly in the past.

Another group of growth measures reflects whether students in a school are mastering grade-level academic skills over time, demonstrating whether students in a school improve annual test scores. Like a proficiency rate, they use state targets to define success. Instead of a single target score, such as cut scores for proficiency levels,

state leaders set a target for the amount of improvement students should make each year. They are as follows:

■ **Value Table** measures group students in a school by performance level and they track progress by noting whether students are moving between levels. They use changes in test scores on comparable year-to-year assessments and a series of state-determined performance levels to demonstrate how students are progressing relative to proficiency benchmarks.

For value table measures, states create additional performance levels above and below targets such as “proficient” and “advanced” to see whether students did better on a test than they did the year before, even if they didn’t meet a new performance level. Students get “credit” for moving beyond these additional performance targets. Value table measures demonstrate when students are improving, even if they don’t cross a proficiency target—or already have.

■ **Gain Score** measures use year-over-year changes in scores from a comparable assessment to demonstrate how much students have learned in a given time period. States set benchmarks for how much progress students should make in a given year, and they calculate whether and how many students meet that target. Gain scores demonstrate how many students in a school achieved the state target for improving their score.

■ **Growth to Proficiency** measurements tell whether or not students are on track to reach a proficiency benchmark by looking at how much students have or have not improved on annual state tests in the past to predict when students will reach a benchmark in the future. These measures evaluate the distance between a student’s current performance and a grade-level standard, and based on that student’s rate of progress, they estimate how soon the student will meet that standard. They identify schools where more students will reach or maintain proficiency.


Ensuring Educators Use Growth Data

Principals’ leadership is essential to the use of data in making buildingwide changes that improve learning for all students, but to be successful, educators must be data-literate. We’ve spent the last five years talking

to teachers about data, and our opinion research has found that when teachers feel supported by leaders in using data, they are more likely to value and use data to inform instruction and support their students.

In order to enable educators in every school to understand and use growth data, data-literate school leaders should:

- Take the lead in deciphering what data is important and how it is being collected and generated—and ensure that it is valid, reliable, appropriate, and high-quality.
- Demonstrate the value of data for meeting goals by modeling effective data use.
- Embed data use into the jobs of staff at all levels and reinforce goals such as using data to improve student outcomes, regardless of role.
- Gather and use student learning data, administrative data, and other classroom performance data to identify aggregate student needs and set goals for the school or district.
- Use teacher performance data to support classroom practice and improve instruction.
- Use data to foster a culture of collaboration, collective responsibility, and continuous improvement.
- Engage parents and the community in the “story” data tells about the school or district, including both successes and challenges.
- Provide ongoing, quality training on effective data use for teachers and broader school and district staff—including how to recognize valid, reliable, appropriate, and high-quality data.
- Create opportunities for adults in various roles to use data collaboratively to set and meet goals.
- Prioritize the privacy, security, and confidentiality of student and adult data, and ensure that all adults in the school or district understand their responsibility to keep student information safe and use it appropriately.

Growth data is complicated. In order to make it helpful, leaders must understand what they are measuring and ensure that their educators can use it. 

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LEARN MORE

See which growth measures your state uses to hold schools and districts accountable in the Data Quality Campaign’s resource, “Growth Data: It Matters, and It’s Complicated” (dataqualitycampaign.org/resource/growth-data-it-matters-and-its-complicated).