Individual student growth is a measure of students’ academic progress from one year to the next. Depending on how it is measured, growth can tell us how much progress Tony made between the end of fourth grade and the end of fifth grade, or how Tony’s progress compares with that of other students who performed similarly to him in fourth grade. Some — but not all — growth measures can even tell us if Tony is on track to be ready for college or career by the end of high school.

Growth is different from improvement, which looks at changes in assessment results for the whole school or a particular grade — but not the same students — over time. For example, improvement can tell us whether achievement of this year’s fourth-graders has gone up or down compared with last year’s fourth-graders. On the other hand, growth measures the progress of the same students from the end of one grade level to the end of the next.

Growth measures can provide parents, educators, and the public with important information about students’ academic progress, and about how well schools are doing at raising achievement for all kids. Some schools with high proficiency rates on state assessments, for example, show low growth — meaning that they basically took in students who were high performers and hardly made progress with them at all. At the same time, some schools with extremely high growth rates still can have low proficiency rates because their students entered school very far behind.

But the way growth is measured really matters because different growth measures tell us different things.

How is growth measured?

There are two big buckets of growth measures:

1. **Comparative (or “normative”) measures** compare students’ progress with that of other students with similar past performance on state assessments. Two common examples are student growth percentiles (SGPs) and value-added. These measures can tell us whether Tony made more or less progress in fifth grade than other students whose past academic performance was similar to his. A student growth percentile of 70, for example, tells us that Tony made more progress during the academic year than 70 percent of students who had similar past assessment results. Importantly, there are some things that these measures **don’t** tell us. For example:
   - We don’t know whether making more progress than 70 percent of similar students is enough progress to make sure that Tony is on track to be ready for college by the time he leaves high school; and,
   - Even if Tony’s friend Sarah also has an SGP of 70, we don’t know whether Sarah and Tony actually made the same amount of progress. For example, Tony could have improved his assessment results by 20 points, which was more than 70 percent of students whose past results were similar to his, while Sarah improved her results by 50 points, and that was more than 70 percent of students whose past results were similar to hers. Because they started at very different levels of achievement, both students could have an SGP of 70, but that 70 represents very different amounts of progress.

2. **Criterion-referenced measures** compare each student’s progress against a set standard. States can, for example, choose metrics that note the number of points a student gained from one year to the next, and examine whether that progress is enough to get the student to reach or stay at grade level in the near future. This kind of measure also can tell us whether Tony is making enough year-to-year growth to be on track to be college-ready by the time he graduates high school.

   A simpler example of a criterion-referenced growth measure is a value table, which gives schools credit for moving a student from one achievement level to another (e.g., from below basic to basic), or improving his/her results by a certain number of points. A value table can tell us that Tony scored at the basic level in fourth grade, but this year, he scored at the proficient level. A number of states, including Florida and Texas, have used value tables in their
accountability systems, generally giving more credit to schools that advance children to higher levels of performance, and none — or less — to those that maintain the same level or fall backward.

**Using Growth for Accountability — Things to Know and Questions to Ask**

Both normative and criterion-referenced growth measures can be valuable, but it’s important to understand what they do and don’t tell you. Here are a few things you need to know.

- **Comparative measures:** Student growth percentiles (also called median growth percentiles for a school), or value-added, can tell you how the progress of students in a given school compares with the progress of students with similar past performance across the state. This can be especially useful for identifying low-performing schools: If a school has low proficiency rates and is making less progress with its students than others are with similar students, you know there’s a problem.

  **But there are things that normative measures alone CANNOT tell you, including:**

  - **How much** growth students are experiencing or whether they are on track to reach grade-level standards.
  - **How the growth of one group of students — African American students, for example — compares with the growth of another group of students.** Just like an SGP of 70 for Tony didn’t necessarily represent the same amount of growth as an SGP of 70 for Sarah in the earlier example, so, too, the same SGP for two groups of students may not represent the same amount of growth for each group.
  - **Whether the lower achieving groups are making the extra progress they need to catch up.** Watch out for statements like “This school has the same median growth percentile for low-income and higher income students, so it has no achievement gap.” Two problems: 1) The same growth percentile doesn’t mean the same growth, and 2) even if it did, we need schools to show more growth for historically underserved students, because they generally start behind.

- **Criterion-referenced measures:** Measures like the change in a student’s score from year to year, or value tables, can tell you more about how much progress a student is making, and potentially, if he or she is on track to reach grade-level standards in the near future. But the way these measures are designed really matters. If your state is considering using a value table, or a scale score-based measure for growth, here are some questions to ask:

  - **How much progress** does a student need to be making in order for a school to receive credit? (In the past, schools have sometimes received points even for students who fell backward a level.)
  - **Is that progress sufficient** to get (or keep) that student to grade level, or, if your state defines it differently, on a path to college/career-readiness — within a reasonable amount of time? How would a parent know?