What causes fluctuation in test scores?

Test scores offer an estimate of a student’s ability. It’s normal to see a student’s test scores go up and down. Each test score is just one data point at one moment in time and susceptible to a host of factors that impact test performance. A student may score differently on two or more assessments taken just days apart. Just as measurements like weight and blood pressure can fluctuate based on a variety of circumstances, so too can test scores. And, currently, Lexile® and Quantile® measures are available from more than 75 assessments. So, you might encounter fluctuation in test scores across assessments.

How do home and student factors influence test score fluctuation?

Home and student factors influence test score fluctuation in several ways. Factors such as whether the student had a good night’s sleep or if they had breakfast that morning can impact how the student performs. The student’s mental state can also be a factor. If they went through something traumatic, such as a personal loss, or simply weren’t motivated, this can also affect how they perform on the assessment.

How do test factors influence test score fluctuation?

Test factors influence test fluctuation in several ways. Different purposes and types of assessments can produce different results. Students often perform differently on a 20-minute interim assessment compared to an end-of-grade or other high-stakes test. In fact, research shows that there is generally less measurement error associated with the results of high-stakes assessments than that associated with the results of interim assessments. High-stakes (summative) tests cover a broad range of curriculum, allowing students of all abilities to answer at least some questions. Interim assessments tend to be shorter in length, cover only portions of the curriculum and may restrict scores for students at the higher and lower ends of the spectrum.

How a test is administered can also affect student performance. If a proctor is encouraging students to focus and guarding against distractions, it can allow the students to stay motivated and focused.

How can I diminish test score fluctuation?

Educators can help diminish test score fluctuation when they:

- Communicate upcoming assessment dates in advance with parents and caregivers.
- Encourage parents to help their child get a good night’s rest and a healthy breakfast.
- Motivate students through praise and encouragement. Highly motivated students perform better and see less variation in their test scores. Studies show that students achieve at higher levels when:
  - They feel competent.
  - They see a direct link between their actions and an outcome.

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When a student has multiple measures, which measure should I use?

Sometimes multiple interim and/or summative assessments (that both report out Lexile and Quantile measures and are administered within 30 days of each other) show significant and unexpected differences. The Lexile® Measures Manager tool and the Quantile® Measures Manager tool helps educators determine a student’s optimal reading range and math readiness.

To access these tools, visit:

Do the stakes associated with a test matter for score fluctuation?

Research shows that there is less measurement error in scores from high-stakes assessments than from low-stakes assessments. Students and educators are more motivated to “do their best” since there are generally specific consequences of the test results for students and often educators. But, there are many other factors that can affect test scores (e.g., targeting of the test to match the abilities of the students, length of the test, personalization/differentiation of the test items).

What can I give parents to help them better understand this issue?

We offer an Interpreting Test Results resource center for both Lexile and Quantile measures that aims to help parents understand their child’s test scores and test score fluctuation. With this resource center, you can access our:

- Interpreting Test Results Parent Explainer to help them understand why scores fluctuate and what they can do to help their child perform at their best on a test.
- Lexile & Quantile Parent Guides to provide an overview of the measures and what they can do with them.

To learn more, visit these resource centers:

- Lexile Interpreting Test Results at www.lexile.com/test-results.
- Quantile Interpreting Test Results at www.quantiles.com/test-results.

What suggestions can I offer parents to help students perform at their best?

Parents play an important role in motivating their children to succeed academically and, as an educator, you can provide parents with information to support students. Be sure to communicate testing dates to parents in advance and provide the following tips for their child’s success:

- Help your child get a good night’s sleep before the test.
- Make sure your child eats a healthy breakfast the morning before the test.
- Talk to your child about the importance of doing their best on a test to show what they know and have learned.