

*This document serves to provide answers to general questions about the value-added model (VAM) used in annual teacher evaluations and school performance score calculations.*

## **BACKGROUND ON THE VALUE-ADDED MODEL (VAM)**

### **1. What is the value-added model?**

The value-added model (VAM) measures students' success compared to similar peers year to year. Value-added is a statistical model that uses student characteristics to determine anticipated student performance in the current year. The VAM anticipates how well students will perform on the test in comparison to their peers with similar prior test scores and background. Once a student has taken state assessments, the model shows the extent to which his or her achievement was on target with what was expected (student expected score). The difference between a student's actual achievement and his or her expected achievement is known as the "value added."

### **2. Why use VAM?**

Value-added data is an objective way of looking at student success, comparing a student's performance to his or her peers. Value-added data is sensitive to an individual student's prior achievement levels and demographics. By including these variables, the model takes into account individual student differences, which allows for a more accurate prediction of student scores.

### **3. Which data are used in VAM?**

The value-added model includes the following student characteristics: prior achievement on assessments for up to three years, special education status and disability category, gifted status, section 504 status, economically disadvantaged status, English language proficiency status, student absences, mobility, and student suspensions. These demographic data are as reported by the districts to the LDOE.

- The special education disability categories are grouped as follows: Emotional Disturbance, Specific Learning Disability, Mild Intellectual Disability, Other Health Impairment, Speech or Language Impairment, and Disability Other.
- Student absences are a count of the days a student is absent from school.
- Student mobility is defined as a student who has attended more than one school during the school year.
- Student suspension is a count of the number of times a student has been suspended from school.

### **4. How is VAM calculated?**

Louisiana's value-added model incorporates students' prior achievement and a number of other variables to determine the expected score for that student (See question 3). The actual score for each student is compared to the expected score to determine if he or she has made more, less, or an expected amount of progress. The following example illustrates how these variables would apply to a student.

- Suzy scored Approaching Basic in ELA each of the past three years with no grade retention. Comparing Suzy to students with the same prior year pattern, her peers, she is expected to score Approaching Basic (719) this year.
- Suzy has a speech/language disability. All students with speech/language disabilities scored, on average, 1.5 points below their peers. Thus, her expected score is reduced to 717.5.
- Suzy missed ten days of school. All students missing ten days of school scored, on average, 1.5 points below their peers. Thus, her expected score is further adjusted to 716.
- No other characteristics listed above apply to Suzy, so they do not impact her expected score.
- Suzy's actual score was 726, thus Suzy exceeded her expected score by ten points.

### 5. How does VAM measure high-performing students?

High-performing students are compared to their peers and are expected to perform as well as their peers. A small minority of students, less than 0.01% of students in grades 4-8 and less than 1.5% in Algebra I or Geometry, score near the ceiling of the assessments. For such students (those whose scores fall between 835 and 850), the VAM model automatically adjusts the expected score to 835 so that growth can still be demonstrated. For example, if a student scores 850, which is the top of the scaled score range, the VAM model adjusts that student's expected score to 835. Therefore, if the student scores between 835 and 850 in the current year, the student has demonstrated growth.

## VAM FOR SCHOOL ACCOUNTABILITY (SCHOOL PERFORMANCE SCORES)

### 6. How is VAM used?

For schools, VAM will be used in the progress index beginning in 2017-2018. Schools can earn up to 150 points per student in the progress index portion of school accountability. See the [2017-2018 Grade 4-8 Progress Index Frequently Asked Questions](#) or [2017-2018 High School Progress Index FAQ](#) for detailed information about the progress index.

### 7. Which students get VAM results?

Beginning in 2017-2018, the [school accountability progress index](#) calculation will include all students who have eligible LEAP or EOC assessment results in both the current and prior school year for the same content area. Student scores will be excluded from the progress index (growth to Mastery and VAM) if any of the following are true:

1. Student did not take the ELA or math assessment, or assessment result was voided in current or prior year.
2. Student has more than one missing prior year score in the available subject tests. For example, if the contents available in the prior year were ELA, math, science, and social studies, a student missing more than one score in those contents would be excluded.
3. Assessment results for current or prior school year are in multiple grade levels in the same year.
4. Current or prior year assessment results could not be matched to a valid student enrollment record needed for student characteristics used in the model.
5. Assessment results for current and prior year are not sequential. For example, a student's prior year assessment record was for a 5th grade test and his/her current year assessment record was for a 4th grade test.
6. Insufficient numbers of comparable students for valid calculations within the value-added model.

### 8. How are VAM and Growth to Mastery different?

Growth to Mastery is a simple calculation of the points a student needs to achieve each year to reach Mastery status by the grade 8 or the second high school assessments. It consists of the prior year performance, the distance to Mastery, and the number of years left to grade 8 or the second high school assessments. This measure is known in advance.

VAM provides information about how a student is expected to perform compared to his or her peers. The actual score for each student is compared to the expected score to determine if he or she has made more, less, or an expected amount of progress. Student VAM results are also percentile ranked which gives a good comparison of how students are performing on VAM growth statewide.

### 9. Why can targets be given prior to the start of the school year for Growth to Mastery but for VAM not until after assessment results?

Growth to Mastery is a simple growth target that measures whether students are on track to Mastery by grade 8 or by the second high school assessment. It is the same for every student at the same scaled score in a given grade, regardless of circumstance.

Value-added considers the unique characteristics of each student to compare how well s/he did compared to peers with similar characteristics in the current school year. Therefore, it must include the current year results to be calculated and cannot be provided in advance.

**VAM FOR COMPASS (Teacher Evaluations)**

**10. How is VAM used to measure teachers?**

As described in question 1, the model produces a student’s expected score as well as the difference between the actual and expected score (called a student residual). Those student residuals, which can be positive or negative, are averaged by content in a teacher’s classroom to measure the teacher effect.

The teacher effect shows, on average, how well students met expected scores for a given teacher. A *positive teacher effect* indicates that, on average, students in a teacher’s classroom met or exceeded their expected scores. A *negative teacher effect* indicates that, on average, students in a teacher’s classroom did not meet their expected scores.

Teachers are percentile ranked by content area and overall (combining all content areas). The percentile rank is the teacher performance compared to peers statewide. The overall percentile rank is the teachers’ final VAM score, which is categorized into four effectiveness ratings as shown in the following chart. For example, a teacher ranked as 75 has performed at or better than 75% of the teachers statewide and would receive an effectiveness level of Effective: Proficient.

Teacher Percentile Rank	Compass Effectiveness Levels
1-10	Ineffective
11-49	Effective: Emerging
50-79	Effective: Proficient
80-99	Highly Effective

**11. How has VAM changed in terms of teacher evaluations?**

[State law](#) requires that teacher evaluations are composed of two parts: 50 percent professional practice and 50 percent student growth. For those teachers applicable for VAM, VAM will be 35 percent of a teacher’s student growth score beginning in 2017-2018. Student learning targets make up the remaining 15 percent. If VAM data are not applicable for a teacher, the student growth portion will be comprised of only student learning targets to account for 50 percent of the total evaluation.

**12. What is the difference between VAM and TSG (transitional student growth) data?**

VAM is part of teacher evaluations per state law referenced in question #11. While the state tests have been in transition, VAM has not been available, and TSG data were produced for informational purposes only. The models for VAM and TSG are consistent.

**13. Are VAM results consistent from year to year?**

The value-added results have shown stability year after year since the pilot data in 2009 to the most recent year these data are available. Annually, the value-added data have shown that 90 percent of teachers remained in the same or adjacent effectiveness categories over a two year period.

**14. In the past, VAM scores were not issued for classes with less than 10 students. Will this still be the case when VAM scores are issued?**

For teachers, there must be at least 10 students in the class for VAM scores. For schools, there is no minimum student count for a growth index to be calculated.

### 15. What is CVR (Curriculum Verification and Roster portal)?

CVR was created so that teachers have the opportunity to review and approve their associated courses and students for the purposes of VAM calculations. Teachers are given the opportunity to view, correct, and approve their rosters each year. For example, Suzy was enrolled in Mrs. B's class at the beginning of the school year but in December Suzy transferred to Mr. D's class. Mrs. B can remove Suzy from her class roster during the CVR roster verification period because Suzy wasn't with Mrs. B for the entire school year. Principals also verify teachers' rosters. CVR only applies to teacher VAM for evaluations. For information about this process, please refer to the [CVR User Guide](#).

### 16. What happens if a teacher doesn't verify rosters in CVR?

If the teacher and/or the principal fail to verify the rosters in CVR, the data will be used as originally submitted to the LDOE by the school district through the Professional Education Personnel (PEP) and Curriculum (CUR) systems.

### 17. Is a VAM score calculated based upon all students on the teacher's roster who are enrolled in the same subject in that school year?

In the calculation for VAM for teacher evaluations in Compass, the students enrolled in the teacher's classes are included in the VAM score by subject. If the teacher teaches more than one class in the same subject, those students from all classes in that subject are part of a teacher's VAM score.

## VAM AVAILABILITY

### 18. When will VAM be produced for 2017-2018?

VAM will be produced in summer 2018 to be used for planning and reflection and in final teacher evaluations. Districts will receive student level VAM results in the summer of 2018, as the same expected scores will be used for the purposes of school accountability as well.

19. Which grades and subjects receive VAM in 2017-2018?

Assessments	Can teachers set SLTs based on these assessments?	Will teachers be provided VAM results for these subjects?
Grade 3: ELA, Math, Social Studies	Yes	No
Grade 3: Science	No, field test	No
Grades 4-8: ELA, Math, Social Studies	Yes	Yes
Grades 4-8: Science	No, field test	No, field test; VAM results will be available in 2019-2020
English I (5 levels)	Yes	No, only transitional student growth data is available (TSG); VAM will be available in 2018-2019
English II (5 levels)	Yes	No, VAM will be available in 2018-2019
English III (4 levels)	Yes	No
Algebra I and Geometry (5 levels)	Yes	No, only transitional student growth data is available (TSG); VAM will be available in 2018-2019
US History (5 levels)	Yes	No
Biology (4 levels)	Yes	No

20. Why isn't VAM produced for the 3rd grade?

While students in grade 3 take the LEAP assessments, there must be a prior year state assessment for VAM to be calculated. There is not a statewide assessment for grade 2.

21. What if a student takes Algebra I prior to the 9th grade?

As long as there is a prior year state assessment available, students taking Algebra I will receive a VAM score in the teacher and school growth models.

22. What if a student doesn't take Geometry until the 11th grade?

In the school growth model, as long as the student has a prior year state assessment, even if it was the second prior year, the student will be included in the school growth model.

For the teacher VAM model, students must have state assessment scores in consecutive years (cannot skip a school year without a state assessment). VAM produces a student expected score. The difference between what a student is expected to score and what a student actually scores is considered the "value added" by the teacher in a single school year. If a student has experienced multiple teachers in the same content over more than one year, the value added will not be attributed to a single teacher.

**23. Why isn't VAM produced for the other high school LEAP 2025 subjects (Biology and US History)?**

Unlike ELA and math, Biology and US History do not have a prior year statewide assessment. For teacher VAM, there must be a prior year state assessment available in the same content for VAM to be produced.

**24. Why isn't VAM being produced for grades 4-8 science in the 2017-2018 and 2018-2019 school years?**

To align with new state content standards, the state science test is a field test for grades 3-8 in the 2017-2018 school year, with full statewide implementation in the 2018-2019 school year. VAM will be produced in science again in the 2019-2020 school year as at least one prior year of test data in the same content is needed for VAM results.

**25. When will social studies VAM be produced?**

LEAP 2025 social studies was field tested in grades 3-8 in the 2015-2016 school year with full implementation in the 2016-2017 school year. VAM will be produced in social studies in the 2017-2018 school year.

**26. Will students with disabilities who qualify for an alternate assessment be included on a teacher's VAM score?**

Students with disabilities taking the regular statewide assessments will be included in VAM for applicable grades and subjects. Students taking alternate assessments (i.e., LEAP Connect) are currently not included in the VAM analytics as the population is too small for comparison purposes.