

## Frequently Asked Questions About

### The Florida Department of Education Value Added Model (VAM)

#### 1. What is VAM?

- The Value Added Model (VAM) is a score that reflects student learning growth for school year 2011-12.
- A value-added model measures the impact a teacher has on student learning and accounts for other factors that may impact the learning process.

#### 2. Who determined the Florida VAM Model?

(<http://www.fldoe.org/committees/pdf/PresentationValue-addedModel.pdf>)

- The Florida Department of Education convened a committee of 27 members comprised of teachers, school-level and district-level administrators, postsecondary teachers, representatives from the business community and parents to identify the type of model and factors that should be accounted for in the Florida VAM.
- To provide technical expertise, FLDOE contracted with the American Institutes for Research to help the Student Growth Implementation Committee (SGIC) develop the recommended model.
- The model selected comes from a class of statistical models called a covariate adjustment model.
- A covariate adjustment model uses factors to control for the amount of expected growth a student should make in a year in order to “level the playing field” given specific characteristics of each student or grouping of students.

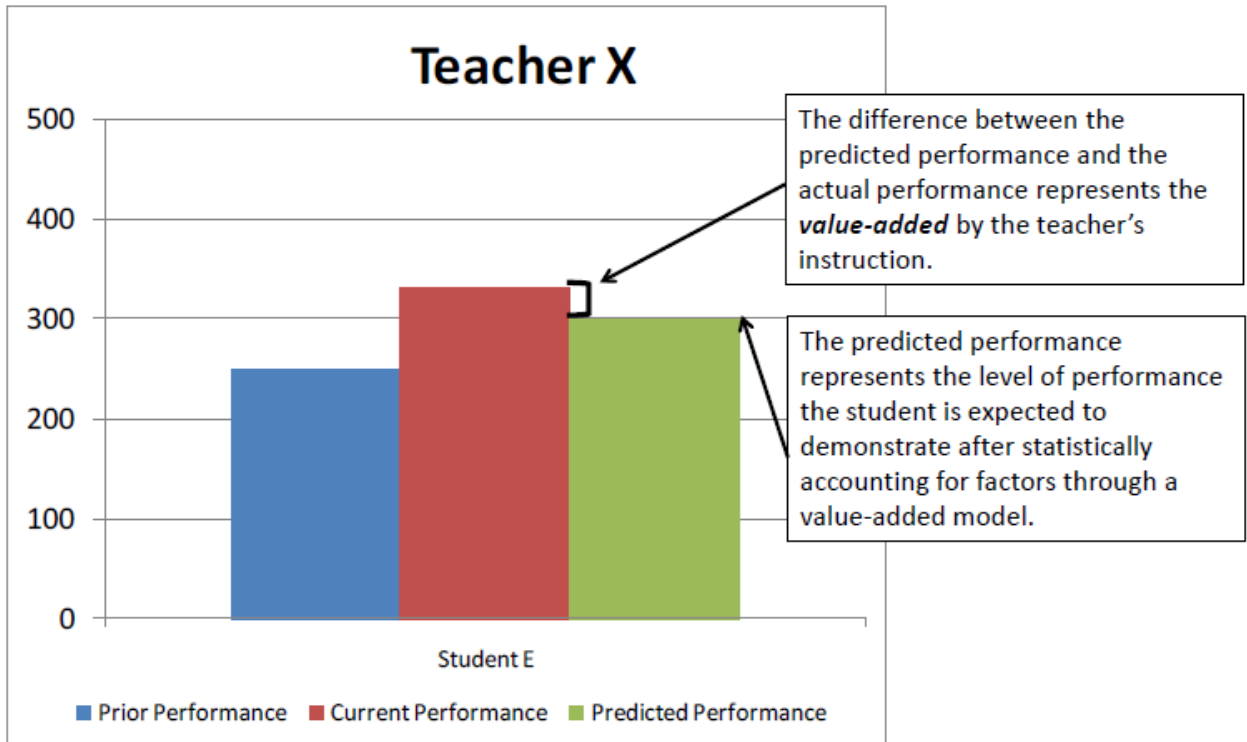
#### 3. What characteristics of students and classrooms are included in the VAM to adjust the expected scores?

- Factors that were used to control for the amount of expected growth are:
  - Student Characteristics
    - Up to two prior years of achievement scores
    - The number of subject-related courses in which the student is enrolled
    - Students with Disabilities status
    - English Language Learners status
    - Gifted status
    - Attendance (daily)
    - Mobility (number of transitions)
    - Difference in modal age in grade (as an indicator of retention)
  - Classroom Characteristics
    - Class size
    - Homogeneity of students’ entering test scores in the class

#### 4. What characteristics of students are not included in the VAM?

- Gender, race, ethnicity, and socio-economic status are not included in the VAM, because the Student Success Act, under Florida law, specifically prohibits their inclusion into the model.

#### 5. How is the VAM score calculated?



- The graphic above illustrates how the actual VAM score results.
  - For each student who has a prior year score (blue bar), a prediction of how well the student should perform on the next FCAT administration is made (green bar).
    - The prediction takes into account the student and classroom characteristics in order to “level the playing field.”
  - Once the FCAT results are available (red bar), a comparison between what the student actually obtained and what they were predicted to obtain occurs.
  - If the student's actual performance is greater than their predicted performance (as seen above), then the student will have a positive VAM number.
  - If the student's actual performance is at the same predicted performance, then the student will have a zero (neither positive nor negative).
  - If a student's actual performance is lower than their predicted performance, then the student will have a negative VAM number.
  - Each student's VAM score is combined together to give the Teacher Effect VAM number.

- In addition to the teacher contribution towards student growth, there is a contribution of the school component. The proportions are full teacher effect and half of the school effect combined to give an overall teacher VAM number.
- The School Effect VAM number is an aggregate of all students' VAM scores at the school.
- VAM numbers are typically decimal numbers.

**6. How is student growth different than student learning gains?**

- VAM measures an adjusted student growth in an attempt to answer the question, "How much value did a teacher add to their student's growth?" Learning gains examines the amount of change in student scores from one year to the next without taking into account any of the student or classroom characteristics. Learning gains are used for the school accountability model, such as school grades.

**7. What are "cut scores"?**

- FLDOE required that each District set the parameters by which the VAM was applied. In Orange County, the Collaborative Bargaining Leadership team negotiated the "cut scores".
- VAM scores that are  $-.7554$  and lower are assigned the category of *Unsatisfactory*.
- VAM scores that are between  $-.7553$  and  $-.3200$  are assigned the category of *Needs Improvement/Developing*.
- VAM scores that are between  $-.3199$  and  $.4041$  are assigned the category of *Effective*.
- VAM scores that are  $.4042$  and higher are assigned the category of *Highly Effective*.

**8. What percentage of the VAM was used in the final summative score?**

- For 2011-12 and 2012-13, the VAM counts for 40% of the final summative score.
- Beginning in 2013-14, the VAM will count for 50% of the final summative score.
  - Florida Statutes, 1012.34(3)(a)1.a.

**9. How is the VAM score included in my summative evaluation score?**

- Those that have VAM scores that fall into the category of *Unsatisfactory* will have a score of **1.49** for the VAM portion (40%).
- Those that have VAM scores that fall into the category of *Needs Improvement/Developing* will have a score of **2.49** for the VAM portion (40%).
- Those that have VAM scores that fall into the category of *Effective* will have a score of **3.49** for the VAM portion (40%).
- Those that have VAM scores that fall into the category of *Highly Effective* will have a score of **4.00** for the VAM portion (40%).

\*\*\*Note that all scores are the highest possible for each category.

## 10. What student scores were used?

- Only students who were present at the same school during surveys 2 and 3 and who had a prior year FCAT score were included in the calculations.
- There are nine areas of instructional personnel in the VAM.
  1. Those who only instructed students in grades prekindergarten through third grade;
  2. Those who only instructed students in grades 11 and 12;
  3. Those who do not have students assigned to them;
  4. Those who had FCAT taking students assigned to them from grades 4-10 in reading or grades 4-8 in math;
    - Students must have had two years of scores to be included.
  5. Those who taught FCAT content areas with students assigned to them from grades 4-10 in reading or 4-8 in math;
    - Students must have had two years of scores to be included.
  6. District resource teachers assigned to schools, with students assigned in grades 4-10 in reading or 4-8 in math;
  7. District resource teachers assigned to schools, without students assigned to them in grades 4-10;
  8. District resource teachers not assigned to schools; and,
  9. Those who had a substantial leave or started employment with OCPS after February 15, 2012 who are classified as Category 4.
    - Those identified as Category 4 personnel will not receive a VAM score.
- Those individuals who are in areas 1, 2, and 3 (listed above) will receive the highest School Effect VAM number.
  - The highest VAM number can be from reading or math.
- Those individuals who are in areas 4 and 5 (listed above) will receive the highest Teacher Effect VAM number.
  - The highest VAM number can be from reading or math.
  - Those who teach FCAT content-area subjects may only have one VAM score, either reading or math, if they only teach one content area.
- Those individuals who are in area 6 (listed above) will receive the highest Teacher Effect VAM number based on all students assigned to them.
- Those individuals who are in area 7 (listed above) will receive 75% of their overall score from the schools that they served and 25% from the district using the School Effect and District Effect VAM numbers. The highest School Effect and District Effect VAM numbers were used in the calculation.
- Those individuals in area 8 (listed above) will receive the highest District Effect VAM number.
- For all categories, except Category 4 personnel, the highest VAM score was used to determine the VAM Category (*Unsatisfactory, Needs Improvement/Developing, Effective, or Highly Effective*).

**11. What is the aggregate VAM score?**

- If you taught FCAT-taking students but not a specific reading or mathematics course, as defined by FLDOE, you will have three scores: reading VAM, mathematics VAM, and aggregate VAM. The aggregate VAM is a combination of the reading and mathematics VAM scores.

**12. Are any other scores, besides FCAT scores, used in the VAM calculations?**

- No, only FCAT scores are included in the calculations for the 2011-12 school year.

**13. How did the adjustment from FCAT to FCAT 2.0 impact VAM calculations?**

- The 2010-11 test was FCAT 2.0 but on the previous scale scores. The 2010-11 test results were converted to the new scales that were used in 2011-12 before VAM calculations occurred.

**14. Were there a minimum number of students with VAM scores expected before a Teacher Effect VAM score was assigned to a teacher?**

- Yes, instructional personnel had to have taught the following minimum number of students who had a VAM score to have a Teacher Effect VAM score assigned to them.

School Level	Minimum Cell Size
Elementary	8 students min
Middle	22 students min
High	25 students min
ESE- Self-Contained	8 students min

- Teachers who taught students who took the FCAT but did not meet the above minimum cell size were assigned the highest School Effect VAM score.

**15. Were scores from all the teacher’s students used?**

- No, scores used were from students present for both the October FTE count and the February FTE count at the school and those who had a prior year FCAT score.
- Scores from all students that were taught by a teacher during Survey 2 or Survey 3 were included in the Teacher Effect VAM score, if they had a prior year score and were present at the school for both surveys.

Example: Teacher A taught 15 FCAT-taking students in October and a separate group of 15 FCAT-taking students in February. All 30 students were enrolled at the school during surveys 2 and 3 and have a prior year FCAT score. All 30 students were used in Teacher A’s Teacher Effect VAM score.

**16. If I want to see a roster of the students that were used in the VAM calculation, where do I find this information?**

- If you received a Teacher Effect VAM score, your principal can print a copy of the students that were used in the calculation of your score.

**17. How do I know what type of score was used, Teacher Effect, School Effect, or District Effect?**

- Your principal can advise you which type of score was used.

**18. How can I find out what my raw VAM score was?**

- Your principal can provide you with your raw VAM score.

*Conversion Table from Raw VAM Score to VAM Category and VAM Category Score*

<b>Raw VAM Score</b>	<b>VAM Category</b>	<b>VAM Category Score</b>
-.7554 and Lower	Unsatisfactory	1.49
Between -.7553 and -.3200	Needs Improvement/ Developing	2.49
Between -.3199 and .4041	Effective	3.49
.4042 and Higher	Highly Effective	4.00

**19. Can I know what my students expected scores are at the beginning of the school year?**

- Statisticians use the terms “expected” and “predicted” in ways that are different from the way others do. The Florida VAM model does not predict into the future, but rather explains the past. Because statisticians need both the “before” and “after” test scores for each student to calculate each student’s predicted/expected score, the score cannot be determined at the start of the school year. Predicted/expected scores for each individual student are calculated after the scores of all other students in the State of Florida are known.

**20. Are other value-added models going to be developed?**

- Yes, there will be other value-added models developed. Currently, a value-added model for the Algebra End-of-Course (EOC) exam is currently being reviewed. In the future, VAM models for other EOC courses, i.e. Biology, Geometry, U.S. History, and Civics, may be developed.

**21. Is there a place where I can obtain more technical information?**

- Located on the Accountability, Research, and Assessment website, a draft, technical paper from the American Institutes for Research (AIR) has been posted under Quick Links.

**If you have further questions about VAM, please contact:**

Accountability, Research and Assessment: 407-317-3201

Planning, Governmental and Labor Relations: 407-317-3337, option 4