



An Update on Growth Measures

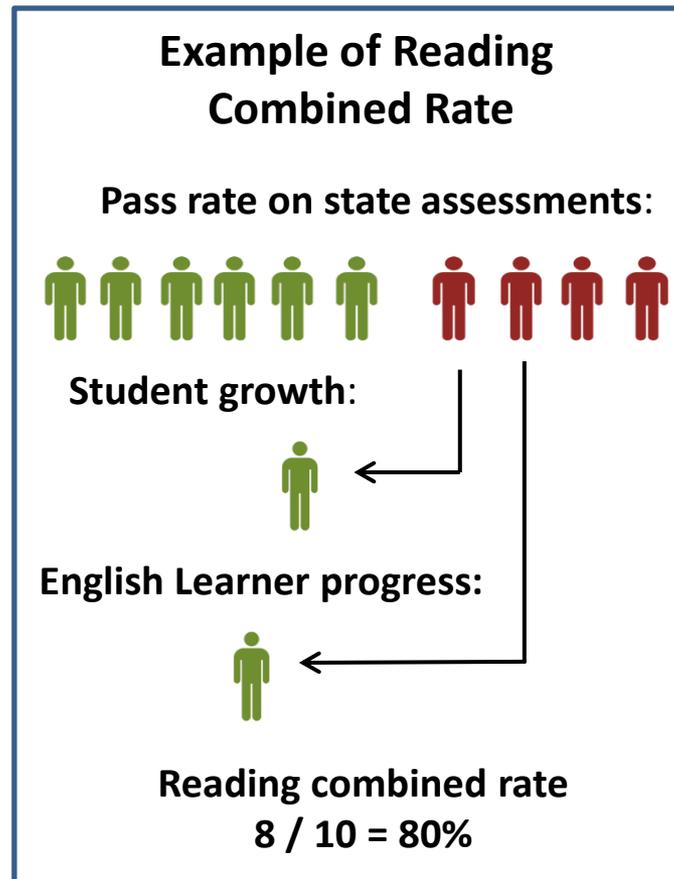
**Virginia Board of Education's
Committee on School and Division Accountability**

November 15, 2017

Use of Progress Tables in Combined Rate for Accountability Calculations for Reading and Mathematics

- Integrates **achievement, growth,** and **progress** for EL students towards gaining proficiency in reading.
- A student will be counted in the numerator of the reading or mathematics combined rate if:
 - The student passes the assessment*; or
 - The student does not pass the assessment but demonstrates growth using the progress tables; or
 - For the reading assessment only, the student does not pass the assessment or demonstrate growth, but is an EL and demonstrates progress as measured by the ACCESS for ELLs 2.0 assessment.

*Includes recovery



2017 Growth Model Pilots

Growth Pilot

- **The 2016 General Assembly directed the Department of Education to conduct a pilot to investigate a student growth model that could be applied for school and division accountability.**
- **Contracts were awarded to:**

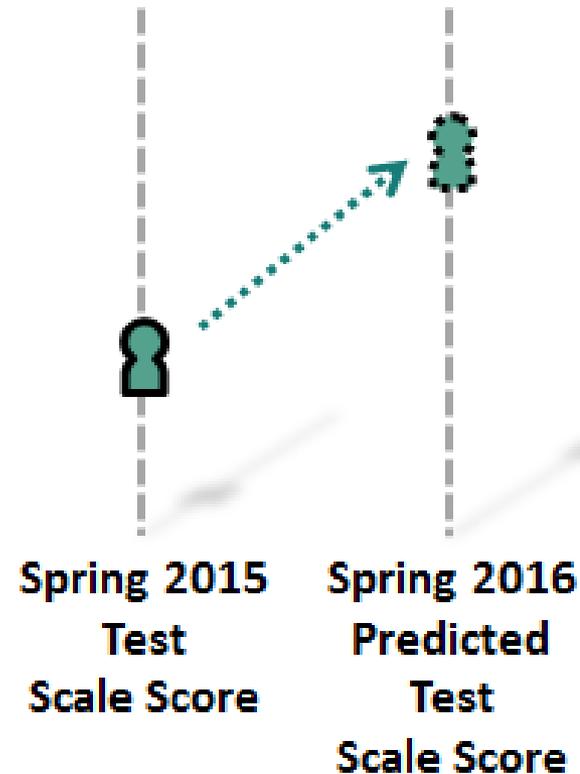


Growth Pilot

- **The proposed growth measures considered students' prior achievement on SOL tests and the performance of similar students**
- **Statistical predictions were developed for how each student would score on the current year's test (predicted score) based on the student's performance on the previous year's test.**
- **A student's growth was then determined by whether the student fell below, met, or exceeded the predicted score and by how much.**

An Example...

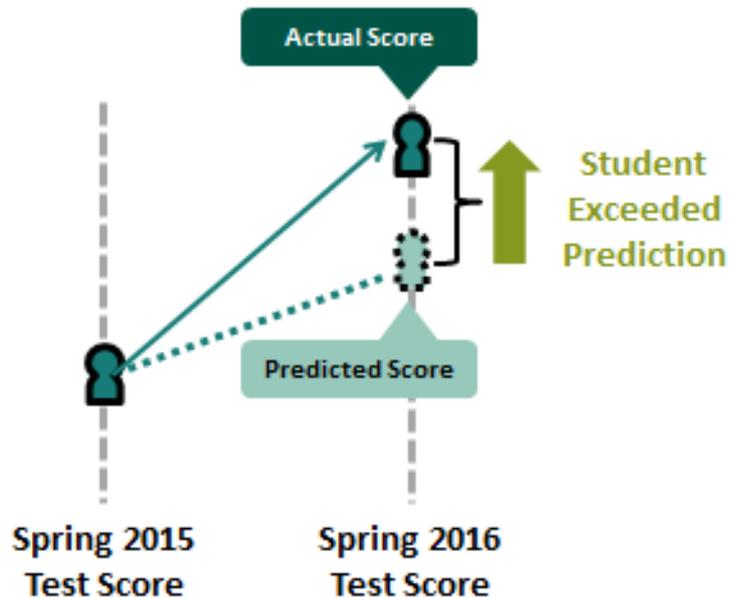
After the statewide assessments are administered, the data are used to calculate a statistical prediction for each student based on his or her characteristics and similar students across Virginia.



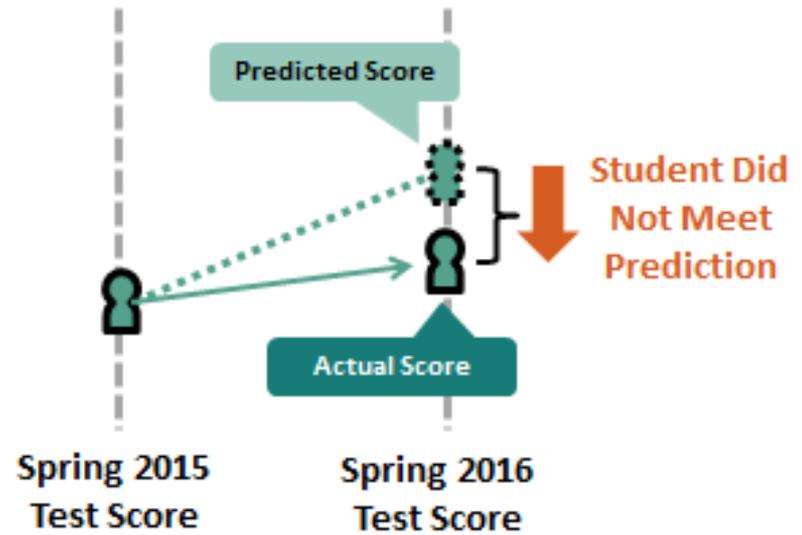
An Example...

Students' actual scores and predicted scores are compared to determine whether each student met or exceeded the prediction and by how much.

Student 1:



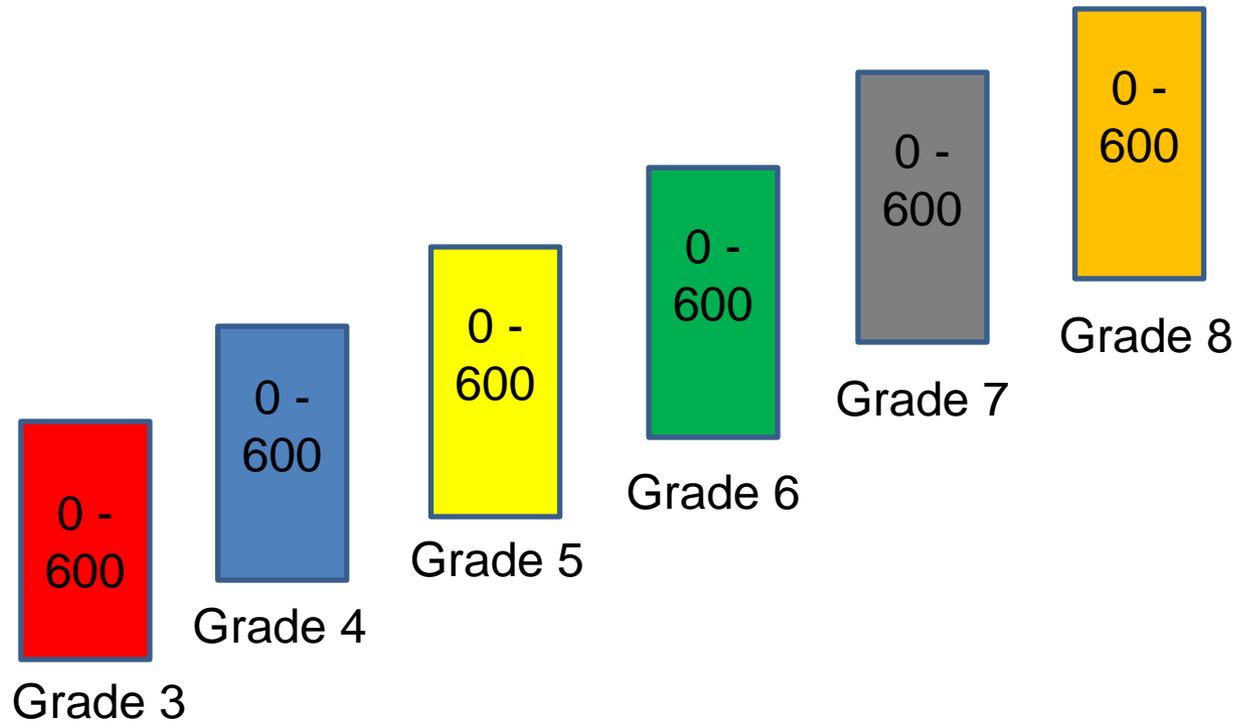
Student 2:



Vertical Scale

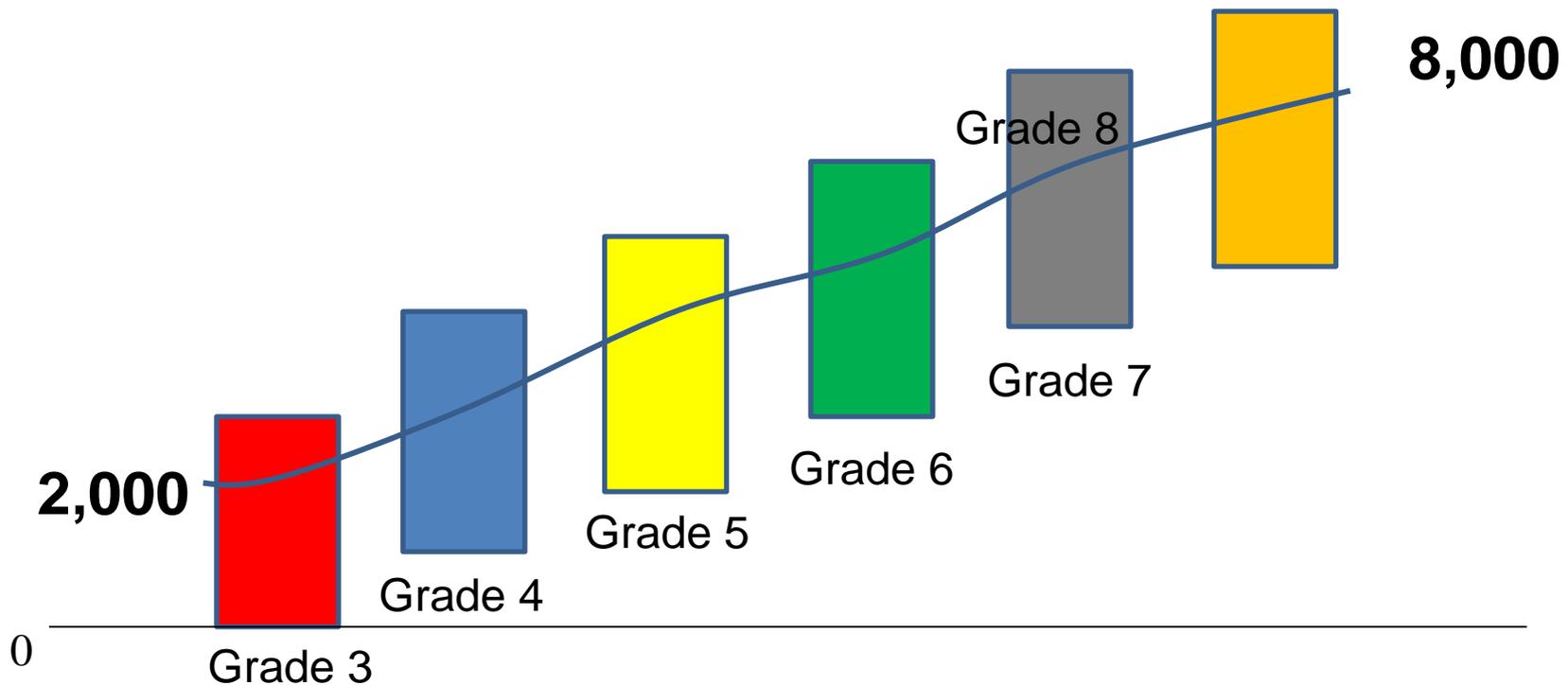
Current SOL Scale

Scores on each SOL test are currently reported on a 0 - 600 scale that is specific to that test.



Sample Vertical Scale

A vertical scale would allow for the reporting of scores across SOL tests.



Vertical Scaling Study

- **Creating a vertical scale requires that we “link” the tests together.**
- **In spring 2016 a study was conducted to “link” the content of the reading tests for grades 3-8 and the mathematics tests for grade 3 –Algebra I together so that a vertical scale could be created.**
- **Results are promising but must be re-evaluated based on the change in the mathematics SOL.**

Excerpt from ESSA

(J) ADAPTIVE ASSESSMENTS.— (i) IN GENERAL.—Subject to clause (ii), a State retains the right to develop and administer computer adaptive assessments as the assessments described in this paragraph, provided the computer adaptive assessments meet the requirements of this paragraph, except that—

- (I) subparagraph (B)(i) shall not be interpreted to require that all students taking the computer adaptive assessment be administered the same assessment items; and
- (II) such assessment—

- (aa) shall measure, at a minimum, **each student's academic proficiency based on the challenging State academic standards for the student's grade level** and growth toward such standards; and

- (bb) may measure the **student's level of academic proficiency and growth using items above or below the student's grade level**, including for use as part of a State's accountability system under subsection (c).

Timeline for Implementation of Vertical Scales

- **Mathematics**

- 2018-2019
- Additional linking studies will be needed in spring 2018 because of content changes in mathematics SOL. Preparation for spring 2018 studies underway.

- **Reading**

- Once curriculum framework is approved, content changes in SOL will be evaluated so that a timeline can be determined.

Questions?