



**COMMONWEALTH of VIRGINIA**  
**Department of Education**

June 21, 2013

TO: Division Superintendents

FROM: Patricia I. Wright, Superintendent of Public Instruction

**SUBJECT: Computer Adaptive Testing Pilot**

At the Board of Education's April 2013 planning meeting, Virginia Department of Education (VDOE) staff presented information on plans to conduct a pilot of Computer Adaptive Testing (CAT) for grade 7 mathematics and grade 8 reading during the 2013-2014 school year. Following this presentation, the Board authorized the Department to move forward with the pilot as the first step in changing the design of the Standards of Learning (SOL) tests to a computer adaptive model.

Currently, Virginia students taking the SOL tests are administered one of several different versions of a test (e.g., grade 7 mathematics) that are developed by Virginia's testing contractor and reviewed by VDOE staff and committees of educators. In the current system, all students must demonstrate the same level of achievement to be considered proficient or advanced regardless of the particular version of the test they take. In the CAT model, all students must still demonstrate the same level of achievement to be considered proficient or advanced. However, in CAT, instead of students taking a particular test form, the computer customizes the items administered to the individual students. CAT customizes the items administered by scoring the student's response to a test item and selecting the next item based on the student's response. CAT is iterative in that the process of choosing test items, scoring the responses, and selecting the next items to be administered is repeated throughout the test.

Some of the potential advantages of moving to CAT are:

- Improved test security as students in the same test session are responding to different test items;
- May allow for shorter testing times;
- May improve student motivation because content is administered at a more engaging level of difficulty, particularly for low performing students; and
- Well-suited for measuring growth.

Currently, VDOE is planning to conduct a CAT pilot with grade 7 mathematics in late fall 2013 and with grade 8 reading in late spring 2014. The results of this pilot will be used to inform the re-design of the state assessment program to incorporate a CAT design. The Department will be seeking divisions from each region for participation in these pilots at a later date. If you have questions about the CAT pilot, please contact the student assessment staff by e-mail at [student\\_assessment@doe.virginia.gov](mailto:student_assessment@doe.virginia.gov) or by telephone at (804) 225-2102.

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