Virginia Beach City Public Schools
Validation Study of the Integrated Performance Task
Executive Summary

Background

Staff from the Virginia Beach City Public Schools (VBCPS) Department of Planning, Innovation, and Accountability and the Department of Teaching and Learning have worked collaboratively with select elementary and middle school teachers to develop different versions of the Integrated Performance Task (IPT). The IPT has been administered twice annually to all students in grades 4 and 7 across the division for five consecutive school years. The IPT was created to measure the skills of critical thinking, problem solving, and effective communication, 3 of the 10 student outcomes for success specified in the VBCPS strategic plan, *Compass to 2015*. Each IPT presents students with a real-life situation and related documents they must review and evaluate before answering two to three open-ended questions.

Test Validity

Validity evidence is vital to verify whether an assessment is measuring what it was designed to measure. According to the Standards for Educational and Psychological Testing, "validity is, therefore, the most fundamental consideration in developing tests and evaluating tests."[1] Evidence of content validity is typically obtained through expert judgment. Evidence of criterion validity can be acquired by correlating the scores of a new assessment—such as the IPT—with the scores of an existing assessment that has demonstrated evidence of validity (i.e., the criterion measure).

Method

Data were collected from samples of VBCPS students at 10 elementary and 3 middle schools during spring 2013 and spring 2014. Age-appropriate versions of the IPT and the California Critical Thinking Skills Test (CCTST), the criterion measure, were administered to 207 fourth-grade students and 392 seventh-grade students. The scores were correlated to ascertain the relationship between the tests and determine if they were measuring similar constructs.

Results

The key findings of the IPT validation study are summarized as follows:

- Correlations between IPT element scores and overall scores on the CCTST indicated that the IPT is a valid measure of critical-thinking skills for students in grades 4 and 7. (The correlation coefficients are shown in the table below.)
- Each coefficient except one was at least .30, which indicated moderate correlations[2] between IPT and CCTST scores.
- All of the correlations between IPT element scores and CCTST overall scores were statistically significant at the .01 level of probability, meaning that the likelihood of the relationships occurring by chance was less than 1 percent.
- Correlations of .36 and .37 between the Critical Thinking 1 element score and CCTST overall scores suggest that the ability to detect unbelievable or misleading information and explain why the information is not credible may be an indication of critical thinking among students in grades 4 and 7.
- Correlations of .35 and .42 between Written Communication and CCTST scores imply that there may also be a link between a student's proficiency in writing a persuasive recommendation and critical thinking in grades 4 and 7.

Correlations Between IPT Scores and CCTST Overall Scores

Grade Level	IPT Element			
	Critical Thinking 1	Critical Thinking 2	Problem Solving	Written Communication
Grade 4	**.36***	.29*	**.33***	**.35***
Grade 7	**.37***	**.41***	**.31***	**.42***

Note. Values of .3 or greater are in bold.
*Correlation is significant at the .01 level of probability (2-tailed).

[1] American Educational Research Association, American Psychological Association, National Council on Measurement in Education. (2014). *Standards for educational and psychological testing.* Washington, DC: American Educational Research Association.

[2] Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.