Florida Standards Alternate Assessment

PERFORMANCE TASK

Technical Report
2016–2017

Prepared by Measured Progress for the
Florida Department of Education

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SECTION I OVERVIEW AND BACKGROUND

CHAPTER 1 OVERVIEW OF THE FLORIDA STANDARDS ALTERNATE ASSESSMENT

The Individuals with Disabilities Education Act (IDEA) requires students with disabilities to be included in each state's system of accountability to have access to the general curriculum. The Every Student Succeeds Act (ESSA) signed by President Obama on December 10, 2015 requires that students with disabilities be assessed annually using the statewide assessment system and that alternate assessments be aligned with challenging state academic standards. To provide an option for the participation of all students in the state's accountability system, including those for whom participation in the general statewide assessments is not appropriate, even with accommodations, Florida has developed the Florida Standards Alternate Assessment (FSAA) program. The FSAA program includes two components, the FSAA-Performance Task (FSAA-PT), which was operationally implemented in spring 2016, and the FSAA-Datafolio, which was operationally implemented in spring 2017. The FSAA-PT and FSAA-Datafolio form a continuum of assessment to meet the needs of Florida's students with the most severe cognitive disabilities. Students participate in alternate assessment either through the FSAA-PT or through the FSAA-Datafolio. The majority of students will be assessed through the FSAA-PT as it is the most appropriate assessment of their knowledge, skills, and abilities (KSAs). There are also a small number of students with the greatest significant cognitive disabilities, who typically do not have a formal mode of communication and who are working at pre-academic levels that will be assessed through the FSAA-Datafolio as it is the most appropriate assessment of their KSAs. These two avenues of assessment make up the FSAA program.

The FSAA program is fully aligned to Florida alternate achievement level standards, otherwise known as Access Points. Access Points reflect the key concepts of the Florida Standards and the Next Generation Sunshine State Standards (NGSSS) at reduced levels of complexity. They ensure access to the essence or core intent of the standards that apply to all students in the same grade.

Determining the appropriate curriculum and, subsequently, how a student will participate in the statewide assessment system, is an individualized education program (IEP) team decision. Concluding that the student needs to receive instruction based on alternate achievement standards via access courses and, therefore, be assessed with the FSAA requires signed permission from the parent or guardian. If the IEP team determines that the student will be assessed using the FSAA, the team will also need to decide whether the student should participate in the FSAA-PT or the FSAA-Datafolio.

Students with significant cognitive disabilities who are instructed in access courses will participate in the FSAA via one of the two assessments outlined below.

1. FSAA-Performance Task

The FSAA-PT is a performance-based assessment aligned to the Florida Standards Access Points (FS-AP) for English language arts (ELA) and mathematics and the Next Generation Sunshine State Standards Access Points (NGSSS-AP) for science. The assessment measures student performance based on alternate achievement standards. The FSAA-PT's design is based on the broad range of KSAs of students with significant cognitive disabilities. The test design provides tiered participation within the assessment for students working at various levels of complexity. This design consists of item sets built with three discrete tasks. Each task represents a varying level of cognitive demand— with Task 1 representing the least complex task and Task 3 representing the most complex task. This graduated progression provides students the opportunity to work to their fullest potential and allows for a greater range of access and challenge.

2. FSAA-Datafolio

The FSAA-Datafolio is designed to provide meaningful information about students with the greatest significant cognitive disabilities who typically do not have a formal mode of communication and are working at pre-academic levels. The Datafolio shows student progress on a continuum of access toward academic content rather than mastery of academic content. The intent is that students are working on the prerequisite academic skills needed that will prepare them to move to the Performance Task assessment as appropriate. Student progress is shown through reduced Levels of Assistance and increased accuracy. For students being assessed via Datafolio, teachers submit student work samples across three collection periods throughout the school year. Using predefined Activity Choices, teachers develop typical classroom activities/tasks that are aligned to Essential Understandings and Access Point Standards. Student evidence from all three collection periods is submitted by the teacher via an online system and independently scored to determine the student's progress toward content access within each content area assessed.

1.1 HISTORY

History of Alternate Assessment in Florida

Florida's focus on educational accountability began in 1991 with its school improvement and accountability legislation. The intent of this legislation was to ensure higher levels of achievement for all students and more accountability for schools. In 1996, the State Board of Education adopted the Sunshine State Standards and the Florida Comprehensive Assessment Test (FCAT) was authorized by the legislature. During this same time period, efforts were made to build capacity within school districts to develop and implement local alternate assessment tools for students for whom the FCAT is not appropriate. In 1999, the legislature passed the A+ Plan for Education, which increased standards and accountability for students, schools, and educators. The assessment system included reading and mathematics in grades 3 through 10; writing in grades 4, 8, and 10; and science in grades 5, 8, and 11. The development of a school grading system was implemented in 1999 and a system for calculating individual academic growth over the course of a year commenced in 2000. In 2002, the Florida Alternate Assessment Report (FAAR) was developed to provide

information on the progress of students with disabilities using the Sunshine State Standards for Special Diploma academic standards. Teachers used the FAAR as a reporting mechanism that reflected student progress on the standards based on locally determined assessments. The FAAR was intended to function as a uniform tool for reporting the outcomes of assessment data for students in grades 3 through 11.

In 2005, Florida began the process of revising the Sunshine State Standards. As part of this revision, Access Points for students with significant cognitive disabilities were developed. These Access Points represented the core intent of the standards with reduced levels of complexity. The work of developing Access Points for the expansion of the Sunshine State Standards was funded by the State of Florida (FLDOE Bureau of Exceptional Education and Student Services) and organized by staff from the Accountability and Assessment for Students with Disabilities Project at the Panhandle Area Education Consortium and the Accommodations and Modifications for Students with Disabilities Project at Florida State University. The Access Points writing groups comprised parents/guardians, teachers, and university personnel with special education and content expertise. In conjunction with this activity, in 2007 Florida began to design and develop a statewide alternate assessment based on alternate achievement standards. The intent was to replace the FAAR system of local assessments and state reporting aligned to previous standards with a new statewide assessment aligned to the newly adopted Access Points. An Advisory Committee, representing the perspectives of teachers, parents/guardians, and administrators, provided input during the development of the assessment. A performance-based assessment was then developed: the Florida Alternate Assessment (FAA). Following a field test in 2007, the FAA was administered operationally to Florida's students from 2008 to 2015.

FSAA-PT Developments in 2014–15

New educational standards, the Florida Standards, were adopted by Florida in spring 2014. FS-AP were then developed to target the content of the Florida Standards at a less complex level for students with significant cognitive disabilities. These new Access Points were folded into Florida access courses. A new assessment was required to assess students on the mastery of the new Access Points. Measured Progress and the FLDOE entered into a contractual arrangement for the development of this new assessment in spring 2015.

Measured Progress, in conjunction with the FLDOE, developed new assessment blueprints for ELA grades 3–10 and for mathematics grades 3–8 to reflect the shift to the new Florida Standards. In addition, assessment blueprints were developed for high school end-of-course (EOC) assessments for algebra 1, geometry, and biology 1.

Next, an item bank alignment activity was performed by Measured Progress. Measured Progress content specialists identified which available FAA item sets were aligned to the new FSAA assessment blueprints. The content specialists also assigned each item set with an aligned FS-AP for mathematics and ELA. Areas with gaps in coverage to the new FSAA assessment blueprints, as identified in the results of the item bank alignment study, were then targeted for 2015–16 new development.

Item development for the new FSAA-PT began in January 2015. The new development included 56 item sets for ELA, 64 item sets for mathematics, and 24 item sets for science. In addition to the new development, stylistic improvements were made to previously developed item sets to comply with the new assessment design features.

Also included in this development cycle were 24 text-based writing prompts. Five selected-response tasks and one open-response task were developed for each writing prompt. All text-based writing development, intended to replenish the assessment for up to five administration cycles, was scheduled to be field-tested on the 2016 FSAA-PT. The two levels were developed as a means to provide a variety of students the ability to respond to text with a written product. The five selected-response tasks work together to create the written product through very guided selected response items. The open-response prompt requires the student to create their own written product. Students may use the mode of communication that is most appropriate for them. The teacher follows the script to walk the student through the creation of the written product. The difficulty of the open response items were developed to vary across grade spans in the text complexity the student is responding to and vary in the amount of support that is provided to the student in creation of the written product (e.g., sentence starters on the response template worksheet in the lower grades to just a blank response template worksheet in grades 9 and 10). Because text-based writing was a new component for alternate assessment in Florida, this initial design of the writing prompts was presented to the Access Points Advisory Committee for feedback in June, 2015. The intent of the design initially was for students to either be administered the selected -response prompt (lower complexity) or the open-response prompt (higher complexity).

Major developments to the FSAA Online System also occurred throughout 2015. This included the development of the Administration and Registration Tool (ART), the new FSAA Testing Platform Online System.

Measured Progress, in conjunction with the FLDOE, developed new administration trainings and materials that were presented to Alternate Assessment Coordinators (AACs) and district trainers at the October 2015 Train-the-Trainer. Administration Training Modules were also developed as a means of educating teachers about the new assessment. The *FSAA Online System User Guide* and corresponding tutorials were developed to educate users on how to navigate the FSAA Online System.

FSAA-PT Developments in 2015–16

The operational field test for the FSAA-PT occurred in spring 2016. All students were presented with a core set of 16 item sets per grade/course assessed. Students were also presented with three matrix item sets totaling 19 total sets per grade/course. In addition, ELA included two text-based writing prompts: a selected-response prompt and open-response prompt. The decision to administer the selected -response prompt (lower complexity) and the open-response prompt (higher complexity) to all students was an outcome of the January 2016 Technical Advisory Committee meeting. The TAC members recommended that all students take both levels to allow for maximum access and demonstration of ability.

All students were administered the FSAA-PT using paper-based components. Teachers recorded student responses in the Test Booklet as they were administered, and then entered the responses into the FSAA Online System when administration was complete.

Student results were provided to schools and districts in June 2016. For each academic area assessed, results included raw score information for each level of complexity based on student performance on the first 10 item sets. This was an interim reporting process, as standard setting was not conducted until February 2017; however, FLDOE felt it was important to provide stakeholders with information about student performance. The first 10 item sets were reported on as those were administered following the typical adaptive model that is reflected in the FSAA-PT test design. Informational brochures explaining the design of the assessment, the role of Access Points, and how to interpret the scores, were provided to teachers and parents/guardians along with individual student reports in July 2016. Schools and districts also received School Level Student Roster Reports for each academic area capturing their students' individual performances, including Not Tested participation status codes as applicable. In addition, districts were provided with two data files, Student Test Results Data File and Assessed Summary Data File. The Student Test Results Data File included basic demographic information, test participation status, and item set scores for each student within the district detailed by school. The Assessed Summary Data file included number of students identified as Tested and number of students Not Tested by grade and content area within the district detailed by school.

FSAA-PT Developments in 2016–17

The first truly operational administration for the FSAA-PT occurred in the spring of 2017 for ELA, mathematics and science. All students were presented with a core set of 16 item sets per grade/course assessed. Students were also presented with three matrix items sets totaling 19 total sets per grade/course. In addition, ELA included two text-based writing prompts. Two additional end-of course assessments, Civics and U.S. History, were also operationally field tested in spring 2017.

All students were administered the FSAA-PT using paper-based components. Teachers recorded student responses in the Test Booklet as they were administered, and then entered the responses into the FSAA Online System when administration was complete.

As the FSAA-PT is a new assessment, a standard setting process was required. Standard settings were conducted in February 2017 and July 2017 to establish cut scores for each achievement level in ELA, mathematics, science, and social studies.

Student reports were provided to teachers and parents/guardians in spring 2017. For ELA, mathematics, and science, the reports included the student's scale score, achievement level, complexity level, and student accuracy. The reports also indicated how the student's performance compared to that of other students who took the same test in the same school, in the same district, and in the state. For social studies, the reports included raw score information about each level of complexity due to standard setting occurring after the reports were released. An interpretative guide related to student and school reports, Understanding

the Florida Standards Alternate Assessment Reports, was available for parents/guardians, teachers, and administrators.

1.2 CORE BELIEFS

The mission of the FLDOE is to lead and support schools and communities in ensuring that all students achieve at the high levels needed to lead fulfilling and productive lives, to compete in academic and employment settings, and to contribute to society. The core beliefs of the FLDOE are as follows:

- All students can learn.
- All students should have access to the general curriculum.
- All students should be challenged.
- All students should have opportunities to demonstrate what they know and can do.

1.3 STAKEHOLDERS

Many stakeholders are involved in the development of the FSAA. The Access Points Advisory Committee on Instruction and Alternate Assessment, comprised of teachers, parents/guardians, and administrators, convenes in the spring and fall to provide recommendations for changes to the Florida Standards Alternate Assessment. A Content Advisory Committee meets annually to review FSAA-PT specifications and item development plans. A bias and sensitivity work group, comprising general and special education teachers, specialists, and administrators, gathers in the spring to review passages prior to the start of item development for the reading assessment. Content and bias work groups, comprising general and special education teachers, specialists, and administrators, convene in the summer to review newly developed items for content or bias and sensitivity. Each reading, writing, mathematics, and science content group reviews items for content, alignment to the Access Points, appropriateness for the population of students being assessed, and ratings of item complexity (i.e., Depth of Knowledge [DOK] and Presentation Rubric indices). Separate bias and sensitivity groups review the ELA, science, and mathematics items. Stakeholder lists can be found in Appendix A.

1.4 PURPOSES

The primary purposes of the FSAA-PT are as follows: (1) To assess the annual learning gains of each student toward achieving state standards appropriate for the student's grade level; (2) to provide data for making decisions regarding school accountability and recognition; (3) to assess how well educational goals and curricular standards are met at the school, district, and state levels; (4) to provide information to aid in the evaluation and development of educational programs and policies; and (5) to provide information about the performance of Florida students compared with that of other students across the United States.

1.5 RESULT USES

FSAA-PT results were provided at the student, school, district, and state levels. An interpretative guide related to student and school reports, Understanding the Florida Standards Alternate Assessment Reports, was available on the FSAA Portal and on the FLDOE's website for parents/guardians, teachers, and administrators. Educators, parents/guardians, and students were encouraged to use the reported scores to inform instruction and chart student progress in mastery of Access Points.

Results of the FSAA-PT show educators how students with significant cognitive disabilities are progressing toward learning the knowledge and skills contained in the Access Points. The results can be used to assist IEP teams in developing annual goals and objectives. The IEP team should examine the results in conjunction with other information—such as progress reports, report cards, and parent/guardian and teacher observations—to see what additional instruction, supports, and aids are needed and in what areas.

The results can also be used to improve instructional planning. For example, a student whose performance suggests mastery of Access Points at the lowest level of complexity may be ready for work that is more difficult, and instructional planning will likely focus on Access Points at a higher level of complexity. Students' scores may also indicate a need for adjustments to the curriculum or for the provision of additional student supports and learning opportunities.

1.6 PARTICIPATION

The IDEA requires that students with disabilities be included in each state's system of accountability and that students with disabilities have access to the general curriculum. The ESSA also speaks to the inclusion of all children in a state's accountability system by requiring states to report student achievement for all students as well as for specific groups of students (e.g., students with disabilities, students for whom English is a second language) on a disaggregated basis. These federal laws reflect an ongoing concern about equity. All students should be academically challenged and taught to high standards. The involvement of all students in the educational accountability system provides a means of measuring progress toward that goal.

The IEP teams are responsible for determining whether students with disabilities will be assessed through administration of the general statewide standardized assessment or the FSAA based on criteria outlined in Rule 6A-1.0943(5), Florida Administrative Code (F.A.C.). The IEP team should consider the student's present level of educational performance in reference to the Next Generation Sunshine State Standards and Florida Standards. The IEP team should also be knowledgeable of guidelines and the use of appropriate testing accommodations.

In order to facilitate informed and equitable decision making, IEP teams should answer each of the questions referenced in Figure 1-1 when determining the appropriate assessment.

Figure 1-1. 2016–17 FSAA-PT: Participation Guidelines

Questions to Guide the Decision-Making Process to Determine How a Student with a Disability Will Participate in the Statewide Assessment Program	*YES*	*NO*
1. Does the student have a significant cognitive disability?	_____	_____
2. Even with appropriate and allowable instructional accommodations, assistive technology, or accessible instructional materials, does the student require modifications, as defined in Rule 6A-6.03411(1)(z), F.A.C., to the grade-level general state content standards pursuant to Rule 6A-1.09401, F.A.C.?	_____	_____
3. Does the student require direct instruction in academic areas of English language arts, mathematics, social studies, and science based on Access Points in order to acquire, generalize, and transfer skills across settings?	_____	_____

If the IEP team determines that a "yes" response to all three of the questions accurately characterizes a student's current educational situation, then the FSAA should be used to provide meaningful evaluation of the student's current academic achievement. If "yes" is not checked in all three areas, then the student should participate in the general statewide assessment with accommodations, as appropriate.

Once the IEP team determines that a student will be instructed in Access Points and will therefore participate in the FSAA, the next step is to determine the method in which the student will be assessed—via the FSAA-PT Task or FSAA-Datafolio. Further guidance on how this determination is made is available in the document Assessment Planning Resource Guide for Individual Educational Plan (IEP) Teams.

Furthermore, if the decision of the IEP team is to assess the student through the FSAA, the parents/guardians of the student must be informed that their child's achievement will be measured based on alternate academic achievement standards, and that the decision must be documented on the IEP. The IEP must include a statement of why the alternate assessment is appropriate and why the student cannot participate in the general assessment. A technical assistance paper and assessment participation checklist providing guidance regarding the recent revision of Rule 6A-1.0943(4), Florida Administrative Code, effective July 1, 2010, can be accessed online (https://info.fldoe.org/docushare/dsweb/Get/Document-7301/dps-2014-208.pdf).

A summary of participation rates and the breakdown by demographic category can be found in Appendix B for each content area.

SECTION II TEST DEVELOPMENT, ADMINISTRATION, SCORING, AND REPORTING

CHAPTER 2 TEST CONTENT

2.1 HISTORY OF ALTERNATE ACHIEVEMENT STANDARDS AND ACCESS POINTS

Designed specifically for students with significant cognitive disabilities, the FSAA-PT is a performance-based test that is aligned with the State Standards Access Points for English language arts (ELA; reading and writing), mathematics, and science. The assessment measures student performance based on alternate achievement standards. Access Points represent the essence of the State Standards with reduced levels of complexity.

In 2005, the development of Sunshine State Standards Access Points in reading and language arts and mathematics was funded by the Bureau of Exceptional Education and Student Services and organized by staff from the Accountability and Assessment for Students with Disabilities Project at the Panhandle Area Education Consortium and the Accommodations and Modifications for Students with Disabilities Project at Florida State University. To begin this process, school districts were invited to nominate participants from across the state—including exceptional student education teachers, general education teachers, teachers of English language learners (ELLs), and parents/guardians—to write draft Access Points for three levels of complexity: Participatory, Supported, and Independent. The draft Access Points were aligned to the benchmarks for the 1996 Sunshine State Standards. In December 2005, the Access Points for reading and language arts and mathematics were posted for public review in an online survey. A total of 164 people responded to the reading and language arts survey and 42 people responded to the mathematics survey.

Beginning in January 2006, staff from the Accountability and Assessment for Students with Disabilities Project at the Panhandle Area Educational Consortium and the Accommodations and Modifications for Students with Disabilities Project at Florida State University worked together to align the draft Access Points for reading and language arts to the revised benchmarks of the Sunshine State Standards. Throughout the process, teachers and university personnel with expertise in reading and language arts and those with expertise in curriculum for students with disabilities were consulted, although no formal writing team was established. In April 2006, the Access Points were included in an online survey with the revisions to the reading and language arts Sunshine State Standards and were aligned with further revisions to the general education standards. The final draft of the reading and language arts Access Points was adopted by the State Board of Education on January 25, 2007.

In May 2007, the Office of Mathematics and Science convened a committee of framers to consider the framework for the revision of the Sunshine State Standards for science content. From June 2007 to October 2007, the writers' committee met to write the new standards according to the structure set by the framers. From October 2007 to January 2008, the drafts of the standards were provided to the public via online sources and through public forums in various locations around the state. Online reviewers were able to rate the standards and provide comment. By February 2008, the State Board approved Next Generation Sunshine State Standards in reading and language arts, mathematics, and science.

From 2009 through 2010, Florida educators, content experts, and reviewers took on a leadership role in the development of mathematics and ELA Common Core K–12 State Standards. Throughout this time, Florida staff met face-to-face with both teams of writers prior to the first draft of the K–12 standards. Preliminary and final drafts of the standards were reviewed by staff and key stakeholders across the state.

In August 2013, Governor Rick Scott convened Florida's top education leaders and bipartisan stakeholders to discuss the sustainability and transparency of the state's accountability system. Using input from the summit, Governor Scott signed the Florida Plan for Education Accountability (Executive Order 13-276) in September 2013. At this time, Governor Scott opened three channels for the public to communicate input about Common Core State Standards (CCSS) to policymakers. First, three public meetings were held throughout the state at which attendees had the opportunity to communicate support for the standards as well as concerns about the standards. Second, a website was posted that presented information about the new standards, links to the proposed standards, transcripts of the public meetings, and other resources. A form was provided on the website for public input. Third, an e-mail address was created for individuals to send their comments directly to the FLDOE.

Based on the results of the public comment, in January 2014, the FLDOE recommended that changes be made to the standards adopted in July 2010. The changes were based on the results of public review and comment—at this time the CCSS were renamed Florida Standards. On February 18, 2014, the Mathematics Florida Standards (MAFS) and Language Arts Florida Standards (LAFS) were approved by the Florida State Board of Education. The approved Florida Standards for mathematics and ELA reflected stakeholder input and stressed a broader approach to student learning, including an increased emphasis on analytical thinking.

When the State Board of Education adopted the new Florida Standards in February 2014, it became necessary to develop new Access Points that were appropriate for Florida's students for mathematics and ELA. As is the case with the NGSSS, these new Access Points for students with significant cognitive disabilities fully align with the Florida Standards. Moving forward, access courses for students with significant cognitive disabilities were revised to contain these new Access Points. The new Access Points identify the most salient grade-level, core academic content for students with significant cognitive disabilities. It is important to note that the Access Points are not "extensions" to the standards but rather they illustrate the necessary core content, knowledge, and skills students with significant cognitive disabilities need at each grade to promote success in the next grade. The majority of adopted Access Points also include a series of

Essential Understandings (EUs). EUs are supports that unpack the Access Points to assist in the teaching and learning of the standards. EUs are intended to be "fluid" and will be supplemented as the new standards evolve instructionally.

2.2 ALIGNMENT AND LINKAGES

The FLDOE contracted with the Human Resources Research Organization (HumRRO) to conduct an alignment study of the FSAA-PT and the Access Points for Text-based Writing and Social Studies assessment. HumRRO used the Links for Academic Learning (LAL) alignment method developed by the National Alternate Assessment Center as the basis to conduct the content alignment reviews and analyze the results (Flowers, Wakeman, Browder, & Karvonen, 2007). HumRRO adapted this method to best fit FLDOE's data analysis needs. The criteria are listed below:

- *Criterion 1: Age Appropriate* – The content is referenced to the student's assigned grade-level (based on chronological age).
- *Criterion 2: Standards Fidelity*
- Content Centrality – The target content of the Access Points maintains fidelity with the content of the original grade-level standards.
- Performance Centrality – The focus of achievement of the Access Points maintains fidelity with the specified performance in the grade-level standards.
- *Criterion 3: Content Coverage* – (HumRRO Alignment Method) – Uses three of four HumRRO criteria: Items represent Access Point content, items represent content categories, and Depth of Knowledge (DOK) represents content Access Points.
- *Criterion 4: Content Differentiation* – The level of differentiation of content across grade levels.
- *Criterion 5: Achievement* – The expected achievement provides the students an adequate opportunity to show learning of grade-referenced academic content.
- *Criterion 6: Performance Accuracy* – The potential barriers to demonstrating what students know and can do are minimized in the assessment to increase measurement accuracy of student performance.

The LAL method is appropriate for alignment of the Access Points to the corresponding LAFS, and Next Generation Sunshine State Standards. Criteria 1 through 6 were included in the review of the items; however, only Criteria 1, 2, 4, and 6 were applied to a review of the Access Points. The *Florida Alternate Assessment Alignment Report* is available through the FLDOE.

2.3 ASSESSMENT DESIGN

2.3.1 FSAA-PT Test Design

In 2014, the FLDOE issued ITN 2015-43 to solicit proposals for the development and administration of a new alternate assessment, intended to replace the Florida Alternate Assessment (FAA). This new assessment would be aligned to the Florida Standards Access Points in ELA and mathematics and to the Next Generation Sunshine State Standards Access Points for Science and Social Studies. In spring 2015 a contract was awarded to Measured Progress to develop the FSAA, which included both performance task and datafolio assessments.

The new design of the FSAA-PT is reminiscent of the FAA, meaning that all items are developed as item sets containing three tasks (Task 1-3) ranging in complexity. The labels "Task 1, 2, and 3" replaced the previous labels "participatory, supported, and independent." Scaffolding, which is the process of decreasing a student's response options when he or she responds incorrectly at Task 1, was maintained, although it was reduced to only one level.

For Science and Social Studies, the item sets are aligned to the NGSSS-APs at the three levels of complexity. For Mathematics and ELA the item sets assess the Florida Standards with the Task 3 level aligned the FS-AP, and Task 1 and 2 levels aligned to the Essential Understandings.

The FSAA-PT writing prompt section of the ELA assessment includes two prompts. Writing Prompt 1 consists of five selected-response tasks in response to text. Writing Prompt 2 is an open response format that requires a student to create a writing product. Both Writing Prompts target the Essential Understandings for selected FS-APs.

For administration purposes, each content area of the 2017 FSAA-PT was separated into two or three sessions. Each session required the teacher to follow different administration procedures as outlined below.

Session 1 included the first 16 item sets in ELA, mathematics, and science, and the first 10 item sets in social studies. These item sets were administered adaptively—meaning the teacher continued to administer tasks in an item set only if the student responded correctly without scaffolding. It is important to remember that each item set contains three tasks, all addressing Access Points at varied levels of complexity. All students entered in each item set at the lowest level of complexity. As the student moved up through the tasks in an item set, the level of difficultly increased. This administration procedure is consistent with prior administration of the FAA. The student received a final score for the item set based on the highest-level task at which he or she answered correctly.

Session 2 included three item sets in ELA, mathematics, and science and nine item sets in social studies. Teachers administered these items nonadaptively—meaning the teacher administered all three tasks in an item set, regardless of whether the student answered each task correctly, incorrectly, or provided no response. The student received a final score for the item set based on the highest-level task at which he or she answered correctly.

Session 3 included Writing Prompts 1 and 2. For Writing Prompt 1, each student was read a passage followed by five selected-response questions. The student responded to these questions by selecting from a field of options in the Response Booklet. The five selected-response questions are administered as a series with each one building on the previous question, with the final outcome being a full writing product in response to a passage. For Writing Prompt 2, the second passage was then read to the student. The teacher then administered the open-response writing prompt by guiding the student through a series of scripted tasks. The student responded utilizing his or her primary mode of communication to create a writing product. A student's writing product was submitted in the FSAA Online System and following the administration window was human scored utilizing a rubric. Each student (grades 4–10) was administered both prompts.

All content on the FSAA-PT is fully aligned to Florida Access Points. Table 2-1 displays the grades and courses assessed on the 2017 FSAA-PT.

Table 2-1. 2016–17 FSAA-PT: Grades and Contents Assessed

Grade Level	ELA	Mathematics	Science	Algebra 1 EOC	Biology 1 EOC	Geometry EOC	Civics EOC	U.S. History EOC
3	X	X						
4	X	X						
5	X	X	X					
6	X	X						
7	X	X					X	
8	X	X	X					
9 (ELA I)	X							
10 (ELA II)	X							
High School				X	X	X		X

ELA access courses were assessed in grades 3 through 10, with text-based writing prompts in grades 4–10.

Mathematics access courses were assessed in grades 3 through 8 with algebra 1 and geometry being assessed in high school as end-of-course assessments.

Science access courses were assessed in grades 5 and 8 with biology 1 being assessed in high school as an end-of-course assessment.

Civics access course was assessed in grade 7, and the U.S. history access course was assessed in high school.

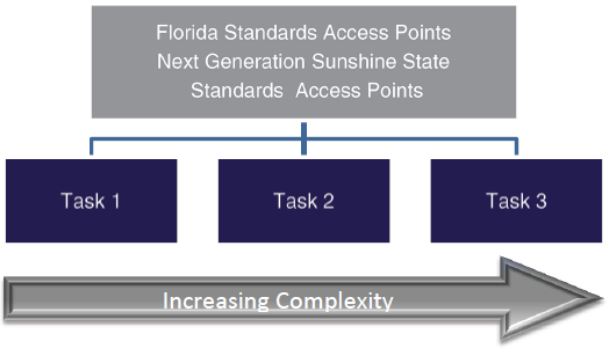
The FLDOE also requested that the new FSAA-PT administration mode be available to students in both paper-based and computer-based testing formats. Although Florida decided to defer the online computer-based administration in 2017, all FSAA-PT item sets have been developed with computer-based presentation in mind.

The FLDOE requested that a vertical scaling study be conducted. Vertical scaling is a technique by which assessment instruments administered at different but adjacent grade levels for a given content area are linked to a common unidimensionally scored (single score) measurement scale that spans all the targeted grade levels. The intent of such a scale is to measure the progress a student achieves in a given content area over an extended period. Such scales may be used for a variety of purposes, ranging from purely academic research to high-stakes student proficiency classification decisions in accordance with federal regulations. For this reason, vertically linked item sets were developed and field-tested in spring 2017.

2.3.2 FSAA-PT Item Set Design

The FSAA-PT design is based on the broad range of knowledge, skills, and abilities of students with significant cognitive disabilities. The test design provides tiered participation within the assessment for students working at various levels of complexity. This design, as shown in Figure 2-1, consists of item sets built with three levels of cognitive demand—a low-level task (Task 1), a medium-level task (Task 2), and a high-level task (Task 3).

Figure 2-1. 2016–17 FSAA-PT: Item Set Tiered Progression



This tiered progression provides students the opportunity to work to their potential and allows for a greater range of access and challenge. A scaffolding structure is in place at the Task 1 level only. Scaffolding is the process of reducing the response options if the student is unable to respond accurately.

The 2017 FSAA-PT also included a text-based writing assessment intended to assess a student's ability to compose a product in response to text. The writing prompts, which were field-tested in 2016, included two levels of cognitive demand:

- The lower-level writing prompt included a series of five selected-response questions in response to text. The series of selected-response questions led a student to a full writing product; for example, the student may have identified the topic, opening sentence, supporting details, and a conclusion. These tasks are not written to increase in complexity, but are intended to lead a student to a full writing product via selecting words/phrases from a field of

options. All five tasks must be administered to the student and there is no scaffolding allowed.

- The higher-level writing prompt included an open-response format where the student was asked to respond to text utilizing his or her primary mode of communication. The teacher read a passage and then presented a series of questions to the student in a standardized, scripted sequence of steps. The student was asked to respond using information from the passage. A writing template and an outline template (gr 8-10 only) were provided to help structure the student's response. The writing prompt is scored polytomously on four traits. For each trait, a student can achieve a score of 0, 1, 2, or 3 (see Table 2-2).

Table 2-2. 2016–17 FSAA-PT: Content by Grade and Course

Grade Span	*Type*	*Traits Scored (0-4)*
Grades 4-5	Informative	• Title • Introduction • Details from the Passage that Support the Topic • Conclusion
Grades 5-8	Persuasive	• Title/Greeting • Introduction • Reasons from the Passage that Support the Claim • Conclusion
Grades 8-10	Informative and Persuasive	• Title/Greeting • Introduction • Details from the Passage that Support the Topic *or* Reasons from the Passage that Support the Claim • Conclusion

2.3.3 Components

The FSAA-PT consists of the following paper-based components: Test Booklet, Response Booklet, Passage Booklet, and Cards Packet and/or Strips Packet.

Accommodated materials were available for all student-facing materials (e.g., Response Booklet, Passage Booklet, cutout cards and/or strips) for students with visual impairments. The accommodated materials were available with uncontracted Braille/tactile graphics, contracted Braille/tactile graphics.

There were four forms (Forms A–D) of the 2017 FSAA-PT. The forms were clearly labeled on the cover of all test components.

The Test Booklet contained Item Set Tables that included all necessary instructions for teachers during administration. Each Item Set Table included three sections:

The *Materials* column outlined for the test administrator which materials will be needed for the item. Both the materials provided for the administrator and the materials the administrator may need to gather from

the classroom were identified. Stimulus and response options were identified for administrators to facilitate administration and standardize labeling of graphics for students with visual impairments.

The *Teacher Script* column consisted of a clear set of directions for administering each task to the student. It outlined directions for the teacher and indicated what text would be read aloud to the student.

The *Student Response* column indicated the response options and the correct response, and provided a location for the teacher to record the student's response.

See an example of an FSAA-PT Item Set Table in Appendix C.

2.3.4 Administration

For administration purposes, each content area of the 2017 FSAA-PT was separated into two or three sessions. Each session required the teacher to follow different administration procedures.

Session 1 included the first 16 item sets in ELA, mathematics, and science and were common across all forms. The Session 1 item sets were administered in an adaptive format—meaning the teacher continued to administer tasks in an item set only if the student responded correctly without scaffolding. It is important to remember that each item set contains three tasks, all addressing an FS-AP at varied levels of complexity. All students entered each item set at the lowest level of complexity. As the student moved up through the tasks in an item set, the level of complexity increased. This administration procedure is consistent with prior administrations of the FAA. The student received a final score for the item set based on the highest level at which he or she answered correctly.

Session 2 included 3 item sets in ELA, mathematics, and science. Teachers administered these items in a non-adaptive manner—meaning the teacher administered all three tasks in an item set, regardless of whether the student answered each task correctly or incorrectly, or provided no response. The student received a final score for the item set based on the highest level at which he or she answered correctly.

Session 3 in the ELA tests (grades 4-10) included Writing Prompts 1 and 2. The writing prompts were common across all forms. For Writing Prompt 1, each student was read a passage followed by five selected-response questions. The student responded to these questions by selecting from a field of options in the Response Booklet. For Writing Prompt 2, the second passage was then read to the student. The teacher then administered the open-response writing prompt by guiding the student through a series of scripted tasks. The student responded utilizing his or her primary mode of communication to create a product.

The administration for the Social Studies tests was slightly different in 2017. Session 1 included 10 item sets in Session 1. These 10 sets were administered in an adaptive manner. Session 2 included 9 items sets which were administered in a non-adaptive manner.

2.4 CONTENT AND BLUEPRINTS

English Language Arts

Measured Progress was asked to develop new assessment blueprints for ELA grades 3–10 in order to fully align the FSAA-PT to the FS-AP for spring 2016. In developing the assessment blueprint for ELA, Measured Progress staff examined the following documents/resources:

- *Florida Standards Assessment Test Design Summary and Blueprint: English Language Arts*
- ELA Access Course descriptions for grades 3–10
- Florida Standards and Florida Standards Access Points

The ELA blueprint design consists of five Reporting Categories from the Florida Standards: Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Language and Editing, and Text-Based Writing. These five categories encompass reading, writing, language, and speaking and listening standards. The genre may vary between informational and literary text as specified in each grade-level blueprint, with text-based writing being the exception, only addressing informational text in grades 4-10. All newly developed item sets for ELA were field-tested and their statistics will be evaluated prior to using the items as common. Special education and content specialists from Measured Progress and FLDOE worked collaboratively together to develop the ELA blueprints. See Appendix D for test blueprints for all content areas.

Mathematics

Measured Progress was also asked to develop new assessment blueprints for mathematics grades 3–8 in order to fully align the FSAA-PT to the FS-AP for spring 2016. In addition, Florida requested that blueprints be developed to assess high school algebra 1 and geometry in an EOC format. All newly developed item sets for mathematics will be field-tested and their statistics will be evaluated prior to using the items as common. Special education and content specialists from Measured Progress and FLDOE worked collaboratively together to develop the mathematics blueprints. Appendix D contains all of the test blueprints.

Grades 3–5 address the five Reporting Categories introduced in elementary mathematics; grades 6–8 address the six Reporting Categories introduced in middle school mathematics; and algebra 1 and geometry address three Reporting Categories each, respective to the high school content introduced in each course.

In developing the assessment blueprints for mathematics, Measured Progress staff examined the following documents/resources:

- *Florida Standards Assessment Test Design Summary and Blueprint: Mathematics*
- Mathematics access course descriptions for grades 3–8

- Geometry and algebra access course descriptions and EOC assessment blueprints
- Florida Standards and Florida Standards Access Points

Science

Measured Progress was also asked to develop new assessment blueprints for biology 1 EOC assessment for spring 2016. The blueprints for grades 5 and 8 science remained unchanged from the previous FAA assessment. Special education and content specialists from Measured Progress and FLDOE worked collaboratively together to develop the biology 1 EOC blueprint. Appendix D contains all of the test blueprints.

All newly developed item sets for science will be field-tested, and their statistics will be evaluated prior to using the items as common.

In developing the FSAA-PT blueprints for science, several documents were examined:

- Alternate Assessment in Science for Students with Disabilities
- Sunshine State Standards with Access Points
- Biology EOC assessment blueprint

The content assessed in alternate assessment reflects the same areas assessed by the Next Generation Sunshine State Standards Assessments. Item sets will focus on the science content assessed by the statewide science assessment at each grade level based on the standards that are addressed.

An emphasis was placed on the Reporting Categories at each grade level based on looking at the Big Ideas to see the range and quantity of benchmarks addressed and the range and quantity of Access Points addressed. The Access Points were then reviewed to see if they are broad or narrow and if the topics within them can support more development and seem more relevant for this population of students. Special attention was paid to the Task 1–level Access Points as these can be very few and narrow, very few and broad, or many.

Social Studies

The social studies blueprint design is based on the Next Generation Sunshine State Standards. Access end-of-course civics addresses the four Reporting Categories' content introduced in the grade 7 course. Access End-of-Course U.S. history addresses the three Reporting Categories' content introduced in the high school course.

As the Access End-of-Course for Civics and U.S. History are new for 2016–17, all items were field-tested on the 2017 FSAA and their statistics will be evaluated prior to using the items on future tests.

In developing the test blueprint for social studies, several documents were examined:

- Sunshine State Standards with Access Points

- Civics End of Course Assessment blueprint
- U.S. History End-of-Course Assessment blueprint
- Civics and U.S. History Access Course descriptions

CHAPTER 3 TEST DEVELOPMENT

3.1 GENERAL PHILOSOPHY

As noted previously, the FSAA-PT is intended to provide students with significant cognitive disabilities the opportunity to participate in a statewide assessment that is both meaningful and academically challenging. Given the wide diversity of this student population, great emphasis is placed on ensuring the FSAA-PT is appropriate and accessible to all students. The assessment design allows students to progress through three levels of complexity in an item set (Task 1, Task 2, and Task 3). Task 1 items demand the lowest level of knowledge and skills and therefore provide students with the greatest access while still maintaining an academic foundation.

To ensure that the assessment items are written in a manner that supports the assessment's design, the item-development process is iterative, which allows multiple opportunities for review of the items by Measured Progress Content, Design & Development (CDD) staff, special education staff, editorial staff, as well as staff from the FLDOE. In addition to the Measured Progress and the FLDOE item-review process, separate committees comprising various Florida stakeholders also evaluate passages and items for content and bias. These committee members serve as advisors during development and represent different school cultures and diverse student populations. The reviews at different stages in the development process help ensure alignment to the Florida Standard Access Points (FS-AP) and the Next Generation Sunshine State Standards Access Points (NGSSS-AP). In addition, this multistage development and review process provides ample opportunity to evaluate items for their accessibility, appropriateness, and adherence to the principles of Universal Design. In this way, accessibility emerges as a primary area of consideration throughout the item-development process. This is critical in developing an assessment that allows for the widest range of student participation, as educators seek to provide access to the general education curriculum and foster higher expectations for students with significant cognitive disabilities.

3.2 TEST DEVELOPMENT PROCESS

3.2.1 Internal Item Review

Item sets were initially developed by Measured Progress CDD staff. It was the responsibility of the lead developer assigned to each content area to oversee all item development within that area for the FSAA-PT. After an item set was developed and reviewed by the lead developer, the item was further reviewed by a special education specialist. The lead developer was responsible for making sure that the item set stayed true to the content of the Access Points it was assessing, and the special education specialist reviewed the item for the appropriateness of the topics used, materials required, and accessibility of the item for the population of students with significant cognitive disabilities. Item sets were also reviewed to ensure that they met the item

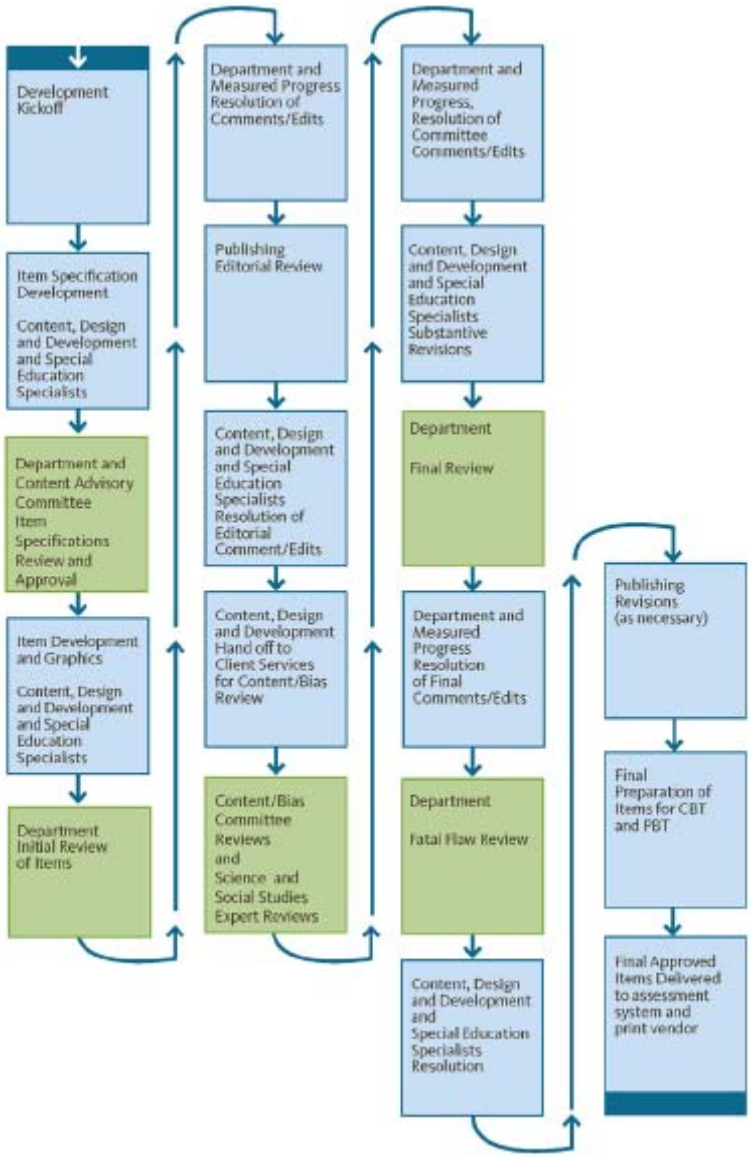
specifications. Item sets were further reviewed by editorial staff to maintain consistency of language across the items and content areas.

Item specifications for the 2017 FSAA-PT were developed and included in the document *Test Design and Blueprint Specifications for English Language Arts, Mathematics, Science, and Social Studies 2016–2017 (Appendix D)*. The blueprint specifications document outlines a variety of item details such as the length and readability of passages for the reading portion of the test, the types of distractors at each level of complexity, parameters for graphics, and the appropriateness of topics for students being assessed through an alternate assessment.

The Depth of Knowledge (DOK) and the Presentation Rubric collectively make up Complexity Indices specific to the FSAA-PT. DOK has been a part of the specifications document since 2008–09. The Presentation Rubric was first developed in 2011–12 and existed as a stand-alone document until the rubric was more solidified. From 2011–12 to 2012–13, the Presentation Rubric was enhanced based on discussions with the FLDOE and feedback received from the Advisory Committee (e.g., sample administration scripts and corresponding stimulus/response options were added to Volume of Information; clarifying examples were added to Vocabulary and Context, respectively).

Figure 3-1 provides a flowchart outlining the item-development process. There were multiple opportunities within the process for CDD and special education staff collaboration on item development, as well as for FLDOE, the Measured Progress Publishing Department, and stakeholder review of items. This iterative process between Measured Progress staff, the FLDOE, and stakeholders ensured that quality items were developed that reflect the standards, specifications, and intentions set forth by the FLDOE.

Figure 3-1. 2016–17 FSAA-PT: Item-Development Process



3.2.2 External Item Review

The FLDOE participated in the review of newly developed item sets at three distinct times: early item development, late item development, and late test production. The FLDOE participated in initial item review from March to June 2016. All newly developed item sets were authored in NTS (Nimble Tools Suite) where the FLDOE had the opportunity to evaluate the content of all new development. FLDOE comments were entered into NTS and submitted to the Measured Progress special education specialist to review in conjunction with the respective content-area specialists from CDD. Measured Progress tracked all resolutions in the item-authoring system.

The second FLDOE review phase occurred after the item content and bias sensitivity review meeting with stakeholders. During this phase, all newly developed item sets were revised (if needed) and made available for FLDOE review from August to October 2016. During this time, the FLDOE had the opportunity to evaluate all new development post-committee review. FLDOE comments were captured in NTS and reviewed by the special education specialist in conjunction with the respective content-area specialist from CDD at Measured Progress. Measured Progress provided a list of resolutions to the FLDOE to confirm the type and extent of changes made to items.

The third phase of FLDOE review occurred during the production process, from September to November 2016. Printed paper copies of all forms of the assessment, including the auxiliary components, were provided to the FLDOE for the purpose of final sign-off on all print-based materials. The FLDOE provided comments to Measured Progress in an electronic format. Comments were reviewed by the special education specialist in conjunction with the respective content-area specialist from CDD at Measured Progress and a list of resolutions was then provided to the FLDOE to confirm the type and extent of changes made to items.

3.2.3 Content Advisory Committee Review

Prior to developing new content for the 2016–17 assessment, a Content Advisory Committee review meeting was held in December 2016. The purpose of this meeting was to (1) provide feedback on the item-level specifications targeting standards for development in 17–18; (2) provide feedback on early concepts/direction for the 17–18 item development; and (3) provide feedback on the content- specific Achievement Level Descriptors (ALDs).

This meeting took place in Orlando, Florida, and included a stakeholder group consisting of Florida educators and content specialists across various grade spans. Each content-specific panel included a group of general educators and Exceptional Student Education (ESE) teachers. (See Appendix A, Tables A-5 to A-9 for the list of panelists.)

Each of the panelists reviewed the item specifications that outlined the parameters and recommended concepts for the new item development for 2016–17. The goal of this early stakeholder review was to ensure that future development would be fully aligned to the Access Points, to ensure an increase in complexity across the item sets, to ensure the recommended setting/scenario/topic is appropriate and familiar to Florida's students, and to ensure that the targeted development is fully accessible to all students. The panelists supplied feedback, which was recorded by the Measured Progress facilitator. This feedback was then presented to the FLDOE for discussion and resolution. Changes were then made to the item-level specifications prior to the item writing and graphic development progress.

3.2.4 Passage Bias and Sensitivity Review

Issues of bias in test materials are of particular concern because an important tenet of assessment is to ensure that all students have an equal opportunity to demonstrate their knowledge and skills. For this reason, all passages are reviewed by a Passage Bias and Sensitivity Review Committee before the item development process begins. The Passage Bias and Sensitivity Review Committee met once via video conference in March 2016. At this meeting, the committee had two tasks: to review the *Bias and Sensitivity Guidelines for the Development of the Florida Alternate Assessment* and to review the initial drafts of reading passages to determine if they were likely to place a particular group of students at an advantage or disadvantage for noneducational reasons. Emphasis was placed on the accessibility of the reading passages for the population of students in alternate assessment.

The Passage Bias and Sensitivity Review Committee consisted of five individuals selected to participate by the FLDOE (see list in Appendix A, Table A-3). They included three special education teachers/coordinators and two general education teachers. Also in attendance was an FLDOE staff member with expertise in teaching students with significant cognitive disabilities and vision impairments. A representative from the FLDOE Bureau of Student Achievement through Language Acquisition also participated on the panel. The Measured Progress special education specialists and lead developers for ELA were also present, along with additional staff from the FLDOE.

Committee members reviewed the reading passages and made recommendations when they believed a particular portion of a passage showed bias toward a certain disability group, such as students with low hearing or low vision. Another area of recommendation involved age appropriateness and a review of whether the majority of students would have exposure to a topic or activity presented in a passage. All information from the bias meeting was compiled and any revisions to passages were noted. All revisions were shared with the FLDOE staff.

3.2.5 Item Content and Bias Sensitivity Reviews

All new development for the 2017 FSAA-PT was reviewed by stakeholders to confirm that assessment content was aligned to Florida Access Points and to ensure all item sets were free of bias or sensitivity concerns. This item review meeting was held in Orlando on June 26–July 2, 2016.

All participants attended a group orientation geared to content review of bias review. Stakeholder recruitment efforts were made to ensure each content and bias panel consisted of special educators and content-area educators from a variety of different grades and backgrounds. (See Appendix A, Tables A-1 through A-11 for the list of panelists.)

Item Content Review panels were facilitated by CDD content specialists for each content area. The Measured Progress special education specialist who had significant involvement in overseeing item development, item review, and writing the administration manual for the Florida Alternate Standards

Assessment was also present to assist as needed. For each task, panelists were asked to ensure that the Access Points were addressed, to review and clarify administration language in the test booklet, to ensure there was only one correct answer, to review the graphics for clarity, and to discuss overall complexity as noted in the DOK and the Presentation Rubrics. Each panelist reviewed the item sets individually and then shared his or her observations, feedback, or concerns with the group. The collective recommendations were recorded by the facilitator.

Item Bias and Sensitivity Review panels were also facilitated by a Measured Progress staff member. Panelists were asked to look at both the content and the graphics related to each task. They were asked to identify any sensitive topics or issues that may impede a student's access to the assessment. They were also asked to identify any issue of bias that may put a student or group of students at an advantage or disadvantage when taking the assessment. Each panelist reviewed the item sets individually and then shared his or her observations, feedback, or concerns with the group. The collective recommendations were recorded by the facilitator.

After the panelists completed their content-area review, Measured Progress staff—including the developers, special education specialist, assistant director of special education, and program manager, along with a consultant with expertise on vision issues—and FLDOE staff met to review the panelists' recommendations and incorporate recommendations, where appropriate, on each of the items. The recommendations centered around both content and bias issues, such as simplifying graphics, changing distractors that might pose issues for students with hearing and/or visual impairments, reducing the complexity of the materials and/or distractors, and making minor changes to DOK and/or the Presentation Rubric ratings initially assigned by the test developer during item development.

3.2.6 Edits and Refinements

Following the item content and bias sensitivity reviews, any revisions as an outcome of the committee meetings and FLDOE decisions were made. The items, once revised, were made available in NTS for final approval by the FLDOE. Items and passage graphic captions then went through an editorial review process in which the keys and item specifications were verified and any issues found were corrected.

CHAPTER 4 ALIGNMENT

4.1 PROMOTING ALIGNMENT THROUGH ACHIEVEMENT LEVEL POLICY DEFINITIONS AND ACHIEVEMENT LEVEL DESCRIPTIONS

For the FSAA-PT the FLDOE developed a set of Achievement Level Policy Definitions that served as the defining descriptions for each achievement level. In addition, grade- and content-specific Achievement Level Descriptions (ALDs) were developed. The descriptions provide more granular information about student performance relative to the content area and grade level. The definitions and the descriptions guided (a) participants during the standard setting process for the FSAA-PT in February 2017 and July 2017, (b) score interpretation on student reports, and (c) teacher understanding of expectations for the progression of student performance at each achievement level.

ACHIEVEMENT LEVEL POLICY DEFINITIONS

The Achievement Level Policy Definitions provide the overarching description of achievement as envisioned by the FLDOE for each achievement level. These definitions are consistent across grades; however, there is an increasing progression of expectation across the four achievement levels. The definitions developed by the FLDOE provide a policy-based claim, which clearly explicates the FLDOE's intended take-away message regarding a student's achievement within each achievement-level.

ACHIEVEMENT LEVEL DESCRIPTIONS, GRADE-CONTENT AS MODIFIER SPECIFIC

For each achievement level on an assessment, ALDs should explicate observable evidence of achievement, demonstrating how the skill changes and becomes more sophisticated across achievement-levels. Schneider, Huff, Egan, Gaines, and Ferrara (2013) wrote that for ALDs to be the foundation of test score interpretation, they should reflect more complex knowledge, skills, and abilities (KSAs) as the achievement-levels increase (e.g., more complex KSAs should be expected for Advanced than for Proficient). The FSAA-PT ALDs provide performance expectations through demonstration of certain KSAs that are expected in a particular achievement level. These are specific to a particular grade and content area. The information in these is tailored to include the Access Point and performance-specific detail within each achievement level. Each achievement level contains some examples of the Access Points that may be assessed within tasks (Task 1, Task 2, Task 3). These are examples and not an exhaustive list. As a whole, the definitions are intended to provide description of student performance expectations that increase across the four achievement levels.

The development of definitions and descriptions occurred in fall 2016 through winter 2017. The definitions and descriptions were drafted by FLDOE and Measured Progress and were then reviewed by panelists as a final activity of the Content Advisory Committee in December 2016. In general, panelists only made minor recommendations to the language in the descriptions. Edits were incorporated and finalized with

FLDOE. During the standard setting in February 2017 and July 2017, the definitions and descriptions for each grade and content area were provided to panelists and served the official description of the KSAs that students are expected to display for each achievement level. The information used within the ALDs provide some parameters and flexibility to allow for a basic picture of student performance without being overly perscriptive. The standard setting panelists were able to come to a consensus with a generalized understanding of the information described in the ALDs due to their extensive knowledge of the FSAA-PT student population combined with understandings of the Access Points.

4.2 Promoting Alignment Through Standard Setting (Reporting the Cutscores)

Standard setting was conducted in February 2017 (English language arts (ELA), mathematics, and science) and July 2017 (Civics and U.S. History) to establish cut scores for each achievement level. To ensure continuity of score reporting across years, the cuts that were established at the standard setting meeting will continue to be used in future years, until it is necessary to reset standards. For further information about standard setting, see the standard setting reports (Measured Progress, 2017a & 2017b).

CHAPTER 5 TRAINING AND ADMINISTRATION

5.1 ADMINISTRATOR TRAINING

5.1.1 Professional Development

Measured Progress, in conjunction with the FLDOE, hosted two one-day FSAA-PT Train-the-Trainer workshops. These trainings were held in Tampa on July 19 and 20, 2016. All Alternate Assessment Coordinators and/or designated district trainers were invited to attend one of the two workshops. The participants who attended the trainings were in turn responsible for training individuals within districts and/or acting as a resource for FSAA-PT administration questions. A total of 95 individuals attended the trainings in addition to FLDOE members and representatives from Project Access.

The FSAA-PT Train-the-Trainer workshops were provided by the Measured Progress special education specialist who was involved in the development, item review, and writing of the administration manual for the FSAA-PT. The assistant director of special education at Measured Progress also participated in the trainings by fielding questions and providing an overview of the FSAA Online System.

The administration training included a 2017 FSAA-PT overview with new training requirements being discussed in detail to ensure all district representatives had a clear understanding of their training expectations. The workshop provided a thorough review of the assessment, assessment components, administration procedures, and test design. A large group discussion was held at the end of each training whereby the Measured Progress special education specialist and FLDOE staff provided answers to questions generated throughout the day. The questions and answers gathered across the two workshops were compiled into one document that was made available to all participants following the meeting. The PowerPoint presentation, a draft 2017 administration manual, and all training activities used for the FSAA-PT Train-the-Trainer workshops were provided to the participants for them to present in their respective districts. All participants were presented with the opportunity to provide feedback on the FSAA-PT Train-the-Trainer workshops at the end of each session.

5.1.2 FSAA-PT Administration Training Modules

Teachers were required to receive FSAA-PT administration training prior to administering the spring 2017 assessment to students. This training was accomplished by participating in district face-to-face training or by completing each of the three administration training modules online. Training requirements were dependent on prior experience with administering the FSAA-PT. Teachers who had NOT been previously trained to administer the FSAA-PT were required to attend a face-to-face training provided at the district level but were also recommended to review the administration training modules. Teachers who had been previously trained to administer the FSAA-PT could meet their training requirement by participating in the

administration training modules. The modules are comprised of PowerPoint slides with a voice-over narrative; closed-captioning was provided for teachers with hearing impairments. The administration training modules were designed to closely follow the information provided in the *FSAA-PT Test Administration Manual 2016–17.* Teachers were encouraged to have a copy of the manual available while completing the modules. At the end of each module, teachers were required to complete a brief quiz consisting of five questions related to the information presented, as well as enter their contact information. At the end of Module 3, teachers were asked to complete a brief online feedback survey on the training. Each module required approximately 25 to 30 minutes to complete. An outline of the information covered in each training module is provided below.

- Module 1: Assessment Overview
  - FSAA Overview
  - Assessment Participation Guidelines
  - Administrator Qualifications
  - Important Dates
  - Highlights and Changes for 2017
  - Assessment Components
  - Item Set Design
- Module 2: Administration Procedures
  - Administration Overview
  - Administration Procedures
  - Content Specific Directions
  - Writing Prompt Administration
  - Writing Prompt: Capturing Student Response
- Module 3: Before, During, and After Administration
  - Before Administration – Preparation
    - Teacher Preparation Before Administration
    - Practice Materials
    - Allowable Adjustments and Accommodations
    - Considerations During Administration
    - After Administration
    - Test Security

The administration training modules were available to teachers 24 hours a day, 7 days a week starting November 4, 2016. In addition to the modules, supplementary administration training resources (e.g., training activities and checklists) were also available on the FSAA Portal for teachers. District-level personnel were

responsible for ensuring that teachers who were scheduled to administer the 2017 FSAA-PT had attended either a face-to-face training or completed all three of the administration training modules.

Measured Progress used the contact information teachers entered after completing each module to send each district a list of teachers who had completed one or more of the three training modules during the online training window for a total of eight participation reports. See table 5-1 for participation report dates.

Table 5-1. 2016–17 FSAA-PT: Participation Report Dates

Date	*Milestone*
December 15, 2016	Participation Report #1 to AACs
January 16, 2017	Participation Report #2 to AACs
February 6, 2017	Participation Report #3 to AACs
February 20, 2017	Participation Report #4 to AACs
March 6, 2017	Participation Report #5 to AACs
March 20, 2017	Participation Report #6 to AACs
April 3, 2017	Participation Report #7 to AACs
April 17, 2017	Participation Report #8 (final report) to AACs

In addition to the three administration training modules, teachers were also required to view a fourth module that provided instructions on how to enter and submit student responses into the FSAA Online System. This module was required for all teachers who were intending to administer the 2016-17 FSAA-PT. Teachers were also required to participate in a short quiz following each module.
District personnel were then required to follow up with any teachers who had not yet completed the required trainings.

Measured Progress provided the FLDOE and each district's alternate assessment coordinator with a final district-level summary report listing teachers who had completed each of the three administration modules. See table 5-2 for teacher participation summary.

Table 5-2. 2016–17 FSAA-PT: Teacher Participation Summary

Module 1	4762 teachers completed
Module 2	4768 teachers completed
Module 3	4752 teachers completed
Module 4	5318 teachers completed

Additionally, Measured Progress provided a state-level summary listing the participation numbers for the modules as well as the results of the feedback survey offered at the end of the third module. A total of 3,901 teachers participated in the feedback survey; results were shared and discussed with the FLDOE in an effort to improve future trainings. Survey results can be found in Appendix E.

5.1.3 Administration Manual

The *2016–17 FSAA-PT Test Administration Manual* was created by Measured Progress, in conjunction with the FLDOE, to partner with the release of the 2017 FSAA-PT. The *2016–17 FSAA-PT Test Administration Manual* includes sections that outline the new assessment and its purpose, the participation criteria for the assessment, the general administration procedures and materials of the assessment, the content-specific directions needed for the assessment, and allowable accommodations for specific sectors of the student population.

The *2016–17 FSAA-PT Test Administration Manual* was available to teachers for download on the FSAA Portal in September 2016 with the printed copies arriving in districts in November 2016.

5.1.4 Practice Materials

Measured Progress provided FSAA-PT practice materials reflecting the new design of the assessment. The practice tasks were selected from the pool of previously developed item sets. All practice tasks were fully aligned to the new FS-APs for English language arts (ELA) and mathematics and to the Next Generation Sunshine State Standards Access Points (NGSSS-APs) for science and social studies. The selected practice tasks included a full representation of materials and presentations to best prepare students for the assessment. Trainers were advised to use practice materials in conjunction with the administration manual when providing face-to-face trainings. In addition, administering the practice materials provided teachers and students the opportunity to become familiar with the assessment materials, administration of the assessment, the type of preparation needed by the teacher, the anticipated student mode of communication for answering selected-response and open-response items, pacing, and administration duration.

FSAA-PT practice materials kits were available in two formats for trainers and teachers: printed kits and PDF versions posted on the FSAA Portal. Measured Progress also provided Braille and tactile graphics practice materials to teachers as needed.

5.2 Operational Field-Test Administration

The FSAA-PT followed two administration windows for 2017; see table 5-3 below for details.

Table 5-3. 2016–17 FSAA-PT: Administration Windows

Elementary and Middle School (Grades 3-8) and Access Civics End of Course Testing Schedule	
Alternate Assessment Materials in Districts	February 17–23, 2017
Student Testing Window	February 27–April 14, 2017
Student Responses Entered into FSAA Online System	No later than 11:59 PM EST on April 14, 2017
Return of Test Materials to Piedra Data Services	No later than May 12, 2017
High School (Access ELA 1 and 2) and Access Algebra 1, Access Geometry, Access Biology 1, and Access U.S. History End of Course Testing Schedule	
Alternate Assessment Materials in Districts	March 13–27, 2017 **or** March 20–24, 2017
Student Testing Window	Upon receipt of materials through April 28, 2017
Student Responses Entered into FSAA Online System	No later than 11:59 PM EST on April 28, 2017
Return of Test Materials to Piedra Data Services	No later than May 12, 2017

The elementary and middle school tests were administered February 27–April 14, 2017. Once the teacher had completed administration, they were instructed to enter the student responses into the FSAA Online System. All elementary and middle school responses were entered into the system by April 14, 2017. All secure assessment materials were returned to Piedra Data Services for storage no later than May 12, 2017.

The high school tests were administered March 13–April 28, 2017. Once the teacher had completed administration, they were instructed to enter the student responses into the FSAA Online System. All high school responses were entered into the system by April 28, 2017. All secure assessment materials were returned to Piedra Data Services for storage no later than May 12, 2017.

5.2.2 Administration Survey Results

An online administration survey was conducted from April 20 through May 5, 2017. It is unclear how many teachers administered the assessment; however, approximately 816 educators who administered the assessment participated in the FSAA-PT Administration Survey. The survey asked educators to provide demographic information such as school district, number of years teaching, and number of years teaching students with significant cognitive disabilities. Teachers were also asked to provide information on the training they had attended and whether they would like any additional information on FSAA-PT topics. Feedback on the administration process, including the number of students administered, the amount of time required to administer a content area, and the ease of the administration process, was also collected. Lastly, teachers were given an opportunity to provide feedback on any general, student-specific, or item-specific considerations in an open-response format. Survey results can be found in Appendix E.

CHAPTER 6 SCORING

6.1 ENGLISH LANGUAGE ARTS, MATHEMATICS, SCIENCE, AND SOCIAL STUDIES

6.1.1 Machine Scoring

The system allowed for teacher entry of student responses to be used for paper-based test delivery. Teachers administer and record student responses into the print-based Test Booklet. The Test Booklet serves as print-based evidence that can be used as a reference tool to double-check, review, and verify student scores. Responses are then entered into the FSAA Online System at a later time. At the completion of the operational test, all test data were exported from the system and provided to the Measured Progress Data and Reporting Services (DRS) Department for analysis.

The FSAA-PT is built on the idea of providing students the opportunity to work to their fullest potential by starting at the lowest level of complexity, Task 1, and working through the remaining levels based on the accuracy of their response. As the student works through the levels, the tasks increase in complexity. Items are designed to be administered as item sets. Each item set includes three tasks that address the Access Point at increasing levels of complexity. All students begin an item set at the Task 1 level and continue to work through each level of complexity until they answer a question incorrectly or complete the item set through the Task 3 level. At the Task 1 level of complexity only, a process called *scaffolding* is implemented if a student responds incorrectly to the initial presentation. The number of response options is then reduced from three to two, and the task is readministered to the student. This scaffolding process is systematically used across all grades and content areas for the Task 1 item sets. All students were presented with 19 item sets. In addition, ELA included two text-based writing prompts. The 19 items sets were machine scored for each content area. The lower level writing prompt was machine scored, while the open response writing prompt was human scored.

Each task in an item set is scored as correct, incorrect, or not attempted. Non-responses are represented by a NULL in the data. Additionally, Task 1 items are indicated as being scaffolded or not scaffolded. A task is scaffolded when the scaffolding indicator is equal to "true." A task is considered not attempted if the final student response is blank or NULL and, when applicable, the scaffold response is blank or NULL. Detailed item set score assignments and the comprehensive data analysis requirements are provided in the *Data and Reporting Services Decision Rules* document, which can be reviewed in Appendix F.

6.2 WRITING PROMPT

6.2.1 Person Scoring

The images of student responses to constructed-response items were hand-scored through the iScore system. Use of iScore minimizes the need for scorers to physically handle answer documents and related scoring materials. Student confidentiality was easily maintained since all scoring was blind (district, school, and student names were not visible to scorers). The iScore system maintained the linkage between the student response images and their associated test.

Through iScore, qualified scorers at computer terminals accessed electronic images of student responses—both computer-generated and teacher-uploaded. Scorers evaluated each response and recorded each score via keypad or mouse entry through the iScore system. When a scorer finished one response, the next response appeared immediately on the computer screen.

The use of iScore also helped ensure that access to student responses were limited to only those who were scoring or working for Measured Progress in a scoring capacity.

6.2.1.1 SCORING LOCATION AND STAFF

Scoring Location

The iScore database, its operation, and its administrative controls are all based in Dover, New Hampshire. Measured Progress has three scoring sites. Table 6-1 presents the locations where FSAA-PT Writing test item responses by content area and grade were scored.

Table 6-1. 2016–17 FSAA-PT: Operational Scoring Locations by Content Area and Grade

Test Administration	*Dover, NH*	*Menands, NY*	*Longmont, CO*
Grades 4–8 & High School Writing Prompts		X	

The iScore system monitored accuracy, reliability, and consistency across all scoring sites.

Staff Positions

The following staff members were involved with scoring the FSAA-PT responses:

- The scoring project manager oversaw communication and coordination of scoring.
- The iScore operational manager coordinated technical aspects of the iScore system.
- The Scoring Content Specialist (writing) ensured consistency of scoring for all grades tested. The Scoring Content Specialist also provided read-behind activities (defined in Section 6.2.1.6) for Scoring Supervisors.

- Several Scoring Supervisors, selected from a pool of experienced Scoring Team Leaders (STLs) for their ability to score accurately and to instruct and train scorers, led the scoring activity. Scoring Supervisors provided read-behind activities for STLs.
- Numerous STLs, selected from a pool of skilled and experienced scorers, provided read-behind activities for the scorers at their scoring tables. (The ratio of STLs to Scorers was approximately 1: 6.)
- Scorers at scoring sites scored operational student responses. Recruitment of scorers is described below.

6.2.1.2 SCORER RECRUITMENT AND QUALIFICATIONS

For scoring the FSAA tests, Measured Progress actively sought a diverse scoring pool. The broad range of scorer backgrounds included scientists, business professionals, authors, teachers, graduate school students, and retired educators. Demographic information (e.g., educational background) about scorers was electronically captured for reporting. Tables 6-2 and 6-3 summarize the demographic survey information.

All scorers were required to have, at a minimum, a four-year college degree with demonstrated coursework related to the content being scored. Preference was given to individuals with degrees in content or education. In all cases, potential scorers were required to submit documentation (e.g., résumé and/or transcripts) of their qualifications. Table 6-4 summarizes the educational qualifications of the FSAA scoring leadership and scorers.

Table 6-2. 2016–17 FSAA-PT: Scorer Demographic Survey—Reader

Education	*Location*		*N*	*Total Responses*
	Albany Day	*Albany Night*		
Less than 48 College Credits	0	0	0	10
48+ College Credits	0	0	0	10
Associate's Degree	0	0	0	10
Bachelor's Degree	4	0	4	10
Master's Degree	5	0	5	10
Doctorate	1	0	1	10

Table 6-3. 2016–17 FSAA-PT: Scorer Demographic Survey—QAC

Education	*Location*	*N*	*Total Responses*
	Albany Day		
Less than 48 College Credits	0	0	3
48+ College Credits	0	0	3
Associate's Degree	0	0	3
Bachelor's Degree	1	1	3
Master's Degree	1	1	3
Doctorate	1	1	3

Table 6-4. 2016–17 FSAA-PT: Qualifications of Scoring Leadership and Scorers

Scoring Responsibility	*Educational Credentials*				*Total*
	Doctorate	*Master's*	*Bachelor's*	*Other*	
Scoring Leadership	0%	50%	50%	0%	100%
Scorers	5%	45%	50%	0%	100%

Scoring Leadership = Scoring Supervisors and Scoring Team Leaders

All scorers were required to sign a nondisclosure/confidentiality agreement.

6.2.1.3 METHODOLOGY FOR SCORING POLYTOMOUS ITEMS

Possible Score Points

The ranges of possible score points for the different polytomous items (items that are scored correct for a multiple number of points) are shown in Table 6-5.

Table 6-5. 2016–17 FSAA-PT: Possible Score Points for Polytomous Item Types

Polytomous Item Type	Possible Score Point Range
Writing Prompt	0–3; 4 traits

Nonscorable Items

Scorers could designate a response as nonscorable for any of the following reasons:

- Response was unreadable (illegible, too faint to see, or only partially legible/visible)—*see following note*.
- Response was written in a language other than English.
- Response requires clarification or adjudication by scoring leadership.
- Response cannot be scored for a reason other than those listed above.

Nonscorable responses do not receive a number score. *Note: "Unreadable" responses were eventually resolved, whenever possible, by researching the actual answer document (electronic copy or hard copy, as needed).* Unreadable responses are rare, since most of the responses are submitted online.

Scoring Procedures

Scorers scored all student responses either from uploaded evidence or computer-generated text. In the instance that both uploaded and computer-generated text was available, the scorers first scored the uploaded evidence and used the computer-generated text for clarification and confirmation of the uploaded student writing evidence. If only computer-generated text was available, that was scored. Twenty percent of student responses were double-blind scored (scored independently by two scorers), whose scores were tracked for "interrater agreement." Table 6-6 demonstrates the levels of exact agreement and exact and adjacent agreement between scorers (the average of all double blind scores for each grade/item) on each trait at each grade level. Exact agreement ranged from 74.2% to 94.2% exact agreement and 96.3% to 99.1% exact and adjacent agreement. Table 6-7 demonstrates the levels of exact agreement by readers to the previously assigned and approved scores of the daily calibration sets. Table 6-8 illustrates the high level of agreement between readers beyond "chance" agreement.

Table 6-6. 2016–17 FSAA-PT: Levels of Agreement – Double Blind Scoring

Trait	Title		Introduction		Supporting Details		Conclusion	
Agreement Rates	*% Exact Agreement*	*% Exact and Adjacent Agreement*	*% Exact Agreement*	*% Exact and Adjacent Agreement*	*% Exact Agreement*	*% Exact and Adjacent Agreement*	*% Exact Agreement*	*% Exact and Adjacent Agreement*
Grade 4	91.8	100.00	84.6	100.00	84.6	99.65	84.1	99.83
Grade 5	93.5	99.51	82.1	99.84	83.1	99.52	81.2	99.83
Grade 6	89.6	99.84	76.6	99.50	74.2	98.68	77.6	99.67
Grade 7	94.2	99.83	82.8	100.00	82.1	99.49	77.3	99.66
Grade 8	88.4	99.83	84.1	99.83	79.0	100.00	77.6	99.66
Grade 9	90.2	99.65	83.3	100.00	85.2	100.00	84.6	99.83
Grade 10	89.7	99.69	80.2	99.53	80.4	99.84	80.4	99.53

Table 6-7. 2016–17 FSAA-PT: Levels of Agreement—Recalibration Data/Validity

Trait	Title		Introduction		Supporting Details		Conclusion	
Agreement Rates	*% Exact Agreement*	*% Exact and Adjacent Agreement*	*% Exact Agreement*	*% Exact and Adjacent Agreement*	*% Exact Agreement*	*% Exact and Adjacent Agreement*	*% Exact Agreement*	*% Exact and Adjacent Agreement*
Grade 4	97	100	95	100	95	100	91	100
Grade 5	96	100	94	100	92	100	95	100
Grade 6	96	100	87	100	92	100	90	99
Grade 7	98	100	91	100	96	100	94	100
Grade 8	97	100	92	100	92	100	96	100
Grade 9	96	100	93	99	89	100	92	100
Grade 10	90	100	92	100	91	100	93	100

Table 6-8. 2016–17 FSAA-PT: Weighted Kappa for the Writing Performance Task

Grade	*Title*	*Introduction*	*Supporting Details*	*Conclusion*
4	0.87	0.80	0.78	0.80
5	0.93	0.81	0.78	0.79
6	0.93	0.74	0.72	0.77
7	0.95	0.79	0.82	0.74
8	0.84	0.78	0.71	0.73
9	0.88	0.77	0.77	0.80
10	0.89	0.77	0.75	0.77

< 0 Less than chance agreement
0.01–0.20 Slight agreement
0.21–0.40 Fair agreement
0.41–0.60 Moderate agreement
0.61–0.80 Substantial agreement
0.81–0.99 Almost perfect agreement

6.2.1.4 SCORER TRAINING

Scorer training began with an introduction of the on-site scoring staff and an overview of the purpose and goals of the project (including discussion about the security, confidentiality, and proprietary nature of testing materials, scoring materials, and procedures).

Next, scorers viewed the training module using the iScore system, using individual headsets on individual monitors. The training module thoroughly reviewed and discussed the rubric for each trait to be scored. Rubrics were developed as part of the item's initial development process.

Following review of the rubric, scorers reviewed and/or scored the particular response set (i.e., anchor sets, practice sets) organized for that training. (These sets are defined in the following paragraphs.)

Anchor Set

The training module presented the anchor set to the scorers. This is a set approved and provided by the FLDOE. Responses in anchor sets are typical, rather than unusual or uncommon; solid, rather than controversial or borderline. The anchor sets serve as exemplars for the variety of possible score points. The anchor is read, the score for each trait is announced, and the rationale for each score is demonstrated through annotations on the screen.

This anchor set continued to serve as a reference for scorers as they went on to calibration, scoring, and recalibration activities for that item.

Practice Set

After viewing the initial training module, the scorers next practiced applying the scoring guide and anchors to responses in the practice set. The practice set is intended to mimic live scoring. As such, scorers assigned scores in each of the traits to each response.

After scorers independently read and scored a training set response, trainers would poll scorers to record their initial range of scores. Trainers then led a group discussion of the responses, directing scorers' attentions to difficult scoring issues (e.g., the borderline between two score points). Throughout the training, trainers modeled how to discuss scores by referring to both the anchor set and the rubric. The overall training process, including training on the rubric, anchor sets, and practice sets, varies from item to item but tends toward 90 minutes of training time per prompt.

6.2.1.5 LEADERSHIP TRAINING

Scoring Supervisors were trained in advance by the Content Specialist. In addition to a discussion of the items and their responses, Scoring Supervisor training included greater detail on the client's rationale behind the score points than that covered with regular scorers to better equip Scoring Supervisors to handle questions from the scorers.

6.2.1.6 MONITORING OF SCORING QUALITY CONTROL

Scorers were constantly monitored by Measured Progress for accuracy during the course of the project. Calibration sets and read-behind statistics were reviewed daily. Scorers who demonstrated inaccurate or inconsistent scoring through these quality-control measures were stopped from scoring. Their work for the day was voided and rescored by other qualified scorers. Scorers were retrained and allowed to resume scoring. However, any scorer whose scoring repeatedly demonstrated inaccuracy and inconsistency below standard was removed from the project.

Scorers were monitored for continued accuracy and consistency throughout the scoring process, using the following methods and tools (which are defined in this section):

- read-behind procedures
- calibration sets

It should be noted that any scorers whose accuracy rate fell below the expected rate for a particular item and monitoring method were retrained on that item. The accuracy rate was viewed across multiple quality-control tools but was based on the threshold of 80% exact agreement and 90% exact plus adjacent agreement. Upon approval by the Scoring Supervisor or Scoring Content Specialist, as appropriate, the scorer was allowed to resume scoring. Scorers who met or exceeded the expected accuracy rates continued scoring. The use of multiple monitoring techniques is critical toward monitoring scorer accuracy during the process of live scoring.

Read-Behind Scoring Procedures

Read-behind scoring refers to scoring leadership (usually an STL) scoring a response after a scorer has already scored the response. The practice was applied to all writing prompts.

Responses placed into the read-behind queue were randomly selected by scoring leadership; scorers were not aware which of their responses would be reviewed by their Team Leader. The iScore system allowed one, two, or three responses per scorer to be placed into the read-behind queue at a time.

The STL entered his or her score into iScore before being allowed to see the scorer's score. Then the STL compared the two scores and the score of record (i.e., the reported score) was determined as follows:

- If there was exact agreement between the scores, no action was necessary; the regular scorer's score remained.
- If the scores were adjacent (i.e., differed by one point), the STL's score became the score of record. (A significant number of adjacent scores for a scorer triggered an individual scoring consultation with the STL, after which the Scoring Supervisor determined whether or when the scorer could resume scoring.)
- If the scores were discrepant (i.e., differed by more than one point), the STL's score became the score of record. (This triggered an individual consultation for the scorer with the STL, after which the Scoring Supervisor determined whether or when the scorer could resume scoring on that item.)

Table 6-9 illustrates how scores were resolved by read-behind.

Table 6-9. 2016–17 FSAA-PT: Examples of Read-Behind Scoring Resolutions[1]

Scorer Score	*Leadership Score*	*Final*
3-3-3-3	3-3-3-3	3-3-3-3
3-2-2-3	2-2-2-3	2-2-2-3
3-2-2-2	1-1-1-2	1-1-1-2

[1] In all cases, the leadership score is the final score of record.

STLs were tasked with conducting read-behinds on as many responses as manageable, with targets to distribute the read-behinds across all the scorers assigned to them. Scorers who hovered at the threshold of acceptable accuracy would have been targeted with more read-behinds than scorers who were consistently demonstrating high levels of accuracy.

Scoring Supervisors and the Scoring Content Specialist conducted reviews of read-behinds performed by STLs. This system allows the senior members of leadership to see a list of all read-behinds conducted by an STL, the score assigned by the scorer and the STL, and the ability to review the response. This process

ensures all STLs are correctly applying the rubric to their read-behinds and ensures consistency in the quality-control process.

Double-Blind Scoring

Double-blind scoring refers to two scorers independently scoring a response without knowing whether the response was to be double-blind scored. Twenty percent of responses were routed for a double-blind score. For FSAA-PT, double-blind scores solely establish the interrater reliability. For all responses scored though the double-blind process, the scores supplied by the first scorer became the score of record unless the response changed during the read-behind process.

Calibration Sets

To determine whether scorers were still calibrated to the scoring standard, they were required to take an online calibration set at the start of each day after the day of training.

Each calibration set consisted of five responses representing the entire range of possible scores.

Any scorer who demonstrated difficulty was retrained before being allowed by the Scoring Supervisor to continue scoring. Once allowed to resume scoring, scoring leadership carefully monitored these scorers by increasing the number of read-behinds.

Scoring Reports

Measured Progress's electronic scoring software, iScore, generated multiple reports that were used by scoring leadership to measure and monitor scorers for scoring accuracy, consistency, and productivity.

CHAPTER 7 REPORTING

7.1 REPORT SHELLS

The existing student reports and school roster reports were completely redesigned during the 2016–17 academic year to support incorporating student scale scores and achievement levels as a result of standard setting activities. Color coding was also integrated in each report to more effectively convey student scale scores and achievement levels. Each report is described in greater detail below.

This year's student report features a new, 11" x 17" centerfold, full-color design for students in grades 3–8 who test in any combination of English language arts (ELA), mathematics, or science. For students who do not test in science, the back page of the report is intentionally left blank; for students in grades 5 or 8 who do test in science, in addition to ELA and mathematics, the back page contains the student's science results. High school students, and those participating in an end-of-course (EOC) assessment, receive a new, 8.5" x 11", two-sided, full-color report for each EOC test they completed. Results page elements are color coded based on the student's earned achievement level. Student report elements that utilize color coding include the achievement level and achievement level badge graphic, the complexity level and student accuracy table, the scale score display, and the school, district, and state achievement level distribution summary table.

The first page of the student report contains information that identifies the assessment and the administration date (e.g., spring 2017), as well as student identifying information, including the student's name, state ID, grade, district, and school. Informational text is also included on the first page that describes the report's contents and the Performance Task assessment, and provides helpful links to additional resources for parents and guardians. Each inner results page indicates the student's overall achievement level and scale score for that content area, as well as detailed information for each set of tasks by complexity level, and a summary of student accuracy for tasks at each complexity level. At the Task 1 level, if scaffolding was applied based on an initial incorrect response, additional data are provided to indicate correct response accuracy for each time response options were reduced from three to two choices. For ELA, additional information is provided specific to the writing task, including overall task accuracy, and writing prompt data by each component, including the raw score points earned for each component, as well as a description of what that score means based on the approved scoring rubric.

Two copies of the student report are generated for each assessed student: one full-color print copy and one full-color electronic copy. The print copies are returned to the student's school for distribution. The electronic copies are grouped by school and are made available to appropriate users via the online reporting application for historical access and to print additional student report copies as needed.

The school roster report retained much of its existing structure and data elements; however, similar to the student report, the school roster report now uses color coding to allow school staff to easily identify

students performing at each level for each content area assessed. The school roster report is generated at the school level, by content area (including EOCs), and is sorted by grade and then by student name, and it contains the following information for each student:

- Student Name
- SID
- Grade
- Score
- Achievement Level (color coded)
- Task 1 Accuracy (*x* out of *y*)
- Task 2 Accuracy (*x* out of *y*)
- Task 3 Accuracy (*x* out of *y*)
- Participation Status

For ELA, additional writing data are provided, similar to the student report, including the raw score points earned on the writing prompt for each dimension, based on the approved scoring rubric. The school roster report also contains a participation status legend for revised participation statuses.

Three grayscale print copies of the school roster report are created and returned to schools. Electronic copies are also created and posted to the online reporting application for historical access and to print additional school roster report copies as needed.

7.2 Decision Rules for Reporting

To ensure that reported results for the FSAA-PT tests are accurate relative to collected data and other pertinent information, a document delineating decision rules is prepared prior to each reporting cycle. The decision rules are observed in the analyses of Florida Alternate Assessment test data and in reporting content-area results. These rules also guide data analysts in identifying students to be excluded from school-, district-, and state-level summary computations. Copies of the decision rules are included in Appendix F.

SECTION III TECHNICAL CHARACTERISTICS OF THE FLORIDA ALTERNATE ASSESSMENT

This section describes the technical characteristics of the FSAA-PT tests. As described in the Assessment Design section, the tests included two or three sessions. For English Language Arts (ELA), mathematics and science, session 1 included the first 16 item sets. These first 16 item sets were administered in an adaptive format—meaning the teacher continued to administer tasks in an item set only if the student responded correctly without scaffolding. Session 2 included 3 field-test item sets in ELA, mathematics, and science. Teachers administered these items in a non-adaptive manner—meaning the teacher administered all three tasks in an item set, regardless of whether the student answered each task correctly, incorrectly, or provides no response. Session 3 included text-based Writing Prompts 1 and 2. Writing Prompt 1 consisted of a series of five selected-response questions. Writing Prompt 2 was an open-response prompt scored polytomously on four traits. For social studies, session 1 included the first 10 item sets. These first 10 item sets were administered in an adaptive format—meaning the teacher continued to administer tasks in an item set only if the student responded correctly without scaffolding. Session 2 included item sets 11–19 in social studies. Teachers administered these items in a non-adaptive manner—meaning the teacher administered all three tasks in an item set, regardless of whether the student answered each task correctly, incorrectly, or provides no response. Social Studies, which included Civics and U.S. History, are two new tests introduced in 2016-17. The same test design and administration used when new tests were introduced were also applied to Social Studies. Student test scores, however, were based on the operational test that consisted of the first 16 item sets, all of which were scored adaptively.

The reporting scale for ELA, mathematics and science was established at the completion of standard setting in February 2017. The reporting scale for social studies was established at the completion of standard setting in July 2017.

CHAPTER 8 CLASSICAL ITEM ANALYSIS

As noted in Brown (1983), "A test is only as good as the items it contains." A complete evaluation of a test's quality must include an evaluation of each item. Both *Standards for Educational and Psychological Testing* (AERA et al., 2014) and *Code of Fair Testing Practices in Education* (Joint Committee on Testing Practices, 2004) include standards for identifying quality items. While the specific statistical criteria identified in these publications were developed primarily for general—not alternate—assessment, the principles and some of the techniques apply within the alternate assessment framework as well.

Both qualitative and quantitative analyses were conducted to ensure that FSAA-PT test items met these standards. Qualitative analyses are described in earlier sections of this report; this section focuses on the quantitative evaluations. The statistical evaluations discussed are difficulty indices and discrimination (item-test correlations); differential item functioning (DIF), which is used to evaluate potential item bias; and dimensionality analyses. The item analyses presented here are based on the statewide administration of the FSAA-PT tests in spring 2017.

8.1 ITEM DIFFICULTY AND DISCRIMINATION

All FSAA-PT test tasks were evaluated in terms of item difficulty according to standard classical test theory practices. "Difficulty" was defined as the average proportion of points achieved on an item and was measured by obtaining the average score on an item and dividing it by the maximum score for the item. All tests consist of multiple-choice (MC) items except for those for English language arts (ELA) grades 4–10, each of which also include a writing prompt scored on four traits. All MC items are dichotomously scored (i.e., a student either gets the item correct or incorrect). For these items, the difficulty index is simply the proportion of students who got the item correct. Writing prompts are scored polytomously on four traits that include Title, Introduction, Supporting Details and Conclusion. For each trait, a student can achieve a score of 0, 1, 2, or 3. By computing the difficulty index (*p*-value) for the polytomous items as the average proportion of points achieved, all items are placed on a scale that ranges from 0.0 to 1.0. This index is traditionally described as a measure of difficulty. Larger values indicate easier items. The *p*-values are used to help ensure that items are of the appropriate difficulty for the assessment level at which they are intended to be used (i.e., Task 1, Task 2, or Task 3).

An index of 0.0 indicates that all students received no credit for the item, and an index of 1.0 indicates that all students received full credit for the item. Items that have either a very high or a very low difficulty index indicate that they are either so difficult that few students get them right or so easy that nearly all students get them right. In either case, such items should be reviewed for appropriateness for inclusion on the assessment. If an assessment were composed entirely of very easy or very hard items, all students would receive nearly the same scores, and the assessment would not be able to differentiate high-ability students from low-ability students. Difficulty indices (i.e., item-level classical statistics are provided for each test in Appendix I by item and in Appendix J by task level. Note that the difficulty values should be interpreted with caution. The FSAA-PT assessments consist of item sets, each of which has 3 tasks that are administered adaptively. Within an item set, students need to answer a task correctly in order to be able to respond to the next one. Therefore, proportions of students responding to each task vary. The difficulty indices cannot be compared. For any comparison of item difficulty, please refer to item parameters described in Chapter 10.

A desirable feature of an item is that the higher-ability students perform better on the item than the lower-ability students. The correlation between student performance on a single item and total test score is a commonly used measure of this characteristic of an item. Within classical test theory, this item-test

correlation is referred to as the item's "discrimination," because it indicates the extent to which successful performance on an item discriminates between high and low scores on the test. The discrimination index used to evaluate the polytomous items (writing prompts) was the Pearson product-moment correlation; the corresponding statistic for the dichotomous items (task levels) is the point-biserial correlation. The theoretical range of the discrimination index is -1.0 to 1.0.

Discrimination indices can be thought of as measures of how closely an item assesses the same knowledge and skills assessed by other items contributing to the criterion total score. That is, the discrimination index can be thought of as a measure of construct consistency. In light of this interpretation, the selection of an appropriate criterion total score is crucial to the interpretation of the discrimination index. For the FSAA-PT test, the test total score, excluding the item being evaluated, was used as the criterion score. In calculating the total score, it was assumed that a student would have scored the non-administered items incorrectly.

A summary of the item difficulty and item discrimination statistics for each grade/content area combination is presented in Table 8-1. Note that the statistics presented in Table 8-1 are based on the 16 core item sets, as those are the items that are used to calculate students' scores. In the operational analysis, the following criteria are used to flag items:

- Flagging on Key
  - P-value <= 0.25
  - Point-biserial <= 0.15
- Flagging on Distractors
  - P-value >= 0.3
  - Point-biserial >= 0.3
- Omit Rate Flagging
  - Blank responses >= 10%

The flagged items are then reviewed by content specialists for content and key accuracy before they can be included for operational scoring.

In addition, the ELA tests for grades 4-10 have two components: Reading and Writing. The Reading form consists of 48 items. The Writing form consists of 9 items: 5 MC items and 1 writing prompt scored on 4 dimensions, resulting in a total of 9 items. Adding the 48 Reading items, the ELA test consists of 57 items for each of the grades 4-10.Because the nature and purpose of the FSAA-PT test are different from those of a general assessment, and proportion of students responding to each task vary, the statistics presented in Table 8-1 should be interpreted with caution. P-values and discrimination indices (i.e., item-total correlations) are provided for each test in Appendix I by item and in Appendix J by task level.

Table 8-1. 2016–17 FSAA-PT: Item Difficulty and Discrimination Statistics—All

Subject	*Grade*	*Number of Items*	*P-value*		*Item-total Correlation*	
			Mean	*SD*	*Mean*	*SD*
ELA	3	48	0.61	0.15	0.40	0.10
	4	57	0.66	0.17	0.42	0.12
	5	57	0.68	0.15	0.43	0.13
	6	57	0.66	0.14	0.43	0.13
	7	57	0.68	0.14	0.45	0.12
	8	57	0.67	0.15	0.44	0.12
	9	57	0.66	0.15	0.42	0.14
	10	57	0.68	0.14	0.44	0.13
Mathematics	3	48	0.66	0.17	0.43	0.12
	4	48	0.62	0.18	0.39	0.12
	5	48	0.62	0.17	0.39	0.12
	6	48	0.68	0.13	0.43	0.11
	7	48	0.63	0.17	0.39	0.10
	8	48	0.72	0.13	0.41	0.10
Science	5	48	0.74	0.14	0.51	0.13
	8	48	0.69	0.16	0.41	0.13
Algebra 1	HS	48	0.65	0.14	0.40	0.11
Biology	HS	48	0.74	0.14	0.45	0.12
Geometry	HS	48	0.72	0.16	0.43	0.11
Civics	7	48	0.70	0.15	0.45	0.13
U.S. History	HS	48	0.73	0.11	0.44	0.14

8.2 BIAS/FAIRNESS

Code of Fair Testing Practices in Education (Joint Committee on Testing Practices, 2004) explicitly states that subgroup differences in performance should be examined when sample sizes permit and that actions should be taken to ensure that differences in performance are because of construct-relevant, rather than irrelevant, factors. *Standards for Educational and Psychological Testing* (AERA et al., 2014) includes similar guidelines. As part of the effort to identify such problems, FSAA-PT test items were evaluated in terms of DIF statistics.

For the FSAA-PT tests, the standardization DIF procedure (Dorans & Kulick, 1986) was employed to evaluate subgroup differences. The standardization DIF procedure is designed to identify items for which subgroups of interest perform differently, beyond the impact of differences in overall achievement. The DIF procedure calculates the difference in item performance for two groups of students (at a time) matched for achievement on the total test. Specifically, average item performance is calculated for students at every total score. Then an overall average is calculated, weighting the total score distribution so that it is the same for the

two groups. In calculating the total score, it was assumed that a student would have scored the non-administered items incorrectly.

When differential performance between two groups occurs on an item (i.e., a DIF index in the "low" or "high" categories, explained below), it may or may not be indicative of item bias. Course-taking patterns or differences in school curricula can lead to DIF, but for construct-relevant reasons. On the other hand, if subgroup differences in performance could be traced to differential experience (such as geographical living conditions or access to technology), the inclusion of such items should be reconsidered. For FSAA-PT, content experts conduct reviews of items flagged for DIF. A DIF item presents a problem when DIF is found to be caused by construct-irrelevant factors that are not related to the knowledge measured by the item. In that case, the item will be removed from the assessment.

Computed DIF indices have a theoretical range from -1.0 to 1.0 for multiple-choice items, and the index is adjusted to the same scale for constructed-response items. Dorans and Holland (1993) suggested that index values between -0.05 and 0.05 should be considered negligible. The preponderance of FSAA-PT test items fell within this range. Dorans and Holland further stated that items with values between -0.10 and -0.05 and between 0.05 and 0.10 (i.e., "low" DIF) should be inspected to ensure that no possible effect is overlooked, and that items with values outside the -0.10 to 0.10 range (i.e., "high" DIF) are more unusual and should be examined very carefully.[1]

For the 2016–17 FSAA-PT tests, the following subgroup comparisons were evaluated for DIF:

- Male versus female
- White versus Black
- White versus Hispanic
- Non-limited English Proficient versus Limited English Proficient

The tables in Appendix K present the number of items classified as either "low" or "high" DIF, overall and by group favored.

8.3 DIMENSIONALITY

The DIF analyses of the previous section were performed to identify items that showed evidence of differences in performance between pairs of subgroups beyond that which would be expected based on the primary construct that underlies total test score (also known as the "primary dimension," e.g., general achievement in mathematics). When items are flagged for DIF, statistical evidence points to their measuring an additional dimension(s) to the primary dimension.

[1] It should be pointed out here that DIF is evaluated initially at the time of field-testing. If an item displays high DIF, it is flagged for review by a Measured Progress content specialist. The content specialist consults with the FLDOE to determine whether to include the flagged item in a future operational test administration.

Because tests are constructed with multiple content-area subcategories, and their associated knowledge and skills, the potential exists for a large number of dimensions being invoked beyond the common primary dimension. Generally, the subcategories are highly correlated with each other; therefore, the primary dimension they share typically explains an overwhelming majority of variance in test scores. In fact, the presence of just such a dominant primary dimension provides the foundation for the reporting and interpretation of a single score for each student taking the FSAA-PT. As noted in the previous section, a statistically significant DIF result does not automatically imply that an item is measuring an irrelevant construct or dimension. An item could be flagged for DIF because it measures one of the construct-relevant dimensions of a subcategory's knowledge and skills.

The purpose of dimensionality analysis is to investigate whether violation of the assumption of test unidimensionality is statistically detectable and, if so, (a) the degree to which unidimensionality is violated and (b) the nature of the multidimensionality.

The dimensionality analyses were conducted using the nonparametric methods DIMTEST (Stout, 1987; Stout, Froelich, & Gao, 2001) and DETECT (Zhang & Stout, 1999). Both of these methods use as their basic statistical building block the estimated average conditional covariances for item pairs. A conditional covariance is the covariance between two items conditioned on expected total score for the rest of the test, and the average conditional covariance is obtained by averaging over all possible conditioning scores. When a test is strictly unidimensional, all conditional covariances are expected to take on values within random noise of zero, indicating statistically independent item responses for examinees with equal expected scores. Nonzero conditional covariances are essentially violations of the principle of local independence, and local dependence implies multidimensionality. Thus, nonrandom patterns of positive and negative conditional covariances are indicative of multidimensionality.

DIMTEST is a hypothesis-testing procedure for detecting violations of local independence. The data are first divided into a training sample and a cross-validation sample. Then an exploratory analysis of the conditional covariances is conducted on the training sample data to find the cluster of items that displays the greatest evidence of local dependence. The cross-validation sample is then used to test whether the conditional covariances of the selected cluster of items display local dependence, conditioning on total score on the nonclustered items. The DIMTEST statistic follows a standard normal distribution under the null hypothesis of unidimensionality.

DETECT is an effect-size measure of multidimensionality. As with DIMTEST, the data are first divided into a training sample and a cross-validation sample. The training sample is used to find a set of mutually exclusive and collectively exhaustive clusters of items that best fit a systematic pattern of positive conditional covariances for pairs of items from the same cluster and negative conditional covariances from different clusters. Next, the clusters from the training sample are used with the cross-validation sample data to average the conditional covariances: Within-cluster conditional covariances are summed; from this sum the between-cluster conditional covariances are subtracted; this difference is divided by the total number of item

pairs; and this average is multiplied by 100 to yield an index of the average violation of local independence for an item pair. DETECT values less than 0.2 indicate very weak multidimensionality (or near unidimensionality); values of 0.2 to 0.4, weak to moderate multidimensionality; values of 0.4 to 1.0, moderate to strong multidimensionality; and values greater than 1.0, very strong multidimensionality (Roussos & Ozbek, 2006).

The use of a training sample and a cross-validation sample is required for exploratory DIMTEST hypothesis testing analyses in order to have proper control of the type 1 error rate. For DETECT, the use of a training sample and a cross-validation sample is implemented to decrease the risk of an inflated DETECT index in the case of unidimensionality. In this case, the signs of the conditional covariances will exhibit random patterns; but DETECT will still find the cluster that best exemplifies the systematic pattern associated with multidimensionality by capitalizing on chance. Such random patterns, however, are unlikely to repeat themselves in a new independently chosen sample, thus resulting in an appropriately small DETECT index in the cross-validation sample in the case of unidimensionality. The disadvantage of using training and cross-validation samples is that the DETECT index is estimated using a smaller sample size, which, of course, increases the noise in the estimator. When the total sample size is large (for example, 2000 or more) for an analysis, the increase in noise is negligible; however, when the total sample size is small, it may sometimes be helpful to implement DETECT without using training and cross-validation samples. We refer to this as using DETECT with no cross validation. In this case, the entire sample is used to select the clusters; and the entire sample is used to estimate the DETECT index.

When a DETECT analysis is conducted with no cross validation, extra caution is called for in the interpretation of the results. The critical focus in this case is on the interpretation of the clusters and the sign pattern matrix. In the case of unidimensionality with a small sample size, the items will have been assigned to clusters in a random fashion; and there will be evidence of substantial noise in the sign pattern matrix. Hence, if the clusters are found to be uninterpretable with substantial noise in the sign pattern matrix, the conclusion should be that there is no evidence of substantial multidimensionality, regardless of the size of the DETECT index. On the other hand, in the case of moderate to strong multidimensionality with a small sample size, the use of the total sample result in the clusters being more interpretable and less noise in the sign pattern matrix as compared to when the sample is split into a training sample and a cross-validation sample. The interpretation of the DETECT index must still be conducted with caution. In general, if it is determined that a DETECT analysis without cross validation would be helpful, a run with training and cross-validation samples should also be conducted to aid in the interpretation of the results.

DIMTEST and DETECT require that data sets have full responses without any missing values. DIMTEST and DETECT were applied to the 2016–17 assessments for grade 7 civics and high school U.S. history where Session 2 (consisting of 9 item sets) was administered non-adaptively to all the test takers. The 9 item sets consist of 6 operational item sets that all the students took plus 3 item sets that were unique to each of four field-test forms. The sample sizes for the 6 item sets that were in common across the field-test forms

were approximately 2500 students for civics and approximately 3800 for U.S. history. The sample sizes for the field-test forms were approximately 650 for civics and 950 for U.S. history. The 18 points associated with 6 operational item sets are below the 20 points generally recommended as the minimum to be used with DETECT to avoid undesirable inflation of the DETECT index. While the field-test forms easily meet this criterion (26 or 27 points each), the sample sizes are smaller than recommended for use with cross validation, especially for civics. Thus, the decision was made to conduct two sets of analyses: (1) DIMTEST and DETECT analyses of the common item sets to get as large a sample size as possible, using training and cross-validation samples, and (2) analyses of the field-test forms conducted with cross-validation for DIMTEST, but conducted both with and without cross-validation for DETECT. For each dataset, DIMTEST was applied to each test using training and cross-validation samples. For the datasets for which the DIMTEST null hypothesis was rejected, DETECT was then conducted in order to estimate the effect size of multidimensionality.

For the DIMTEST analyses, the null hypothesis of unidimensionality was rejected at a significance level of 0.05 for every dataset. Thus, for every dataset DETECT was used to estimate the effect size of the violations of local independence found by DIMTEST. Table 8-2 displays the multidimensional effect size estimates from DETECT.

Before discussing the results, note that the number of items on field-test forms C and D for U.S. history was 26, instead of the expected 27, because each form had one field-test item that was determined to be flawed and, thus, was not scored. Scanning the results, as expected the DETECT indices for the analyses using cross validation are lower than the results that did not use cross validation. The former are probably negatively biased, while the latter are probably positively biased. The results for the common operational items, while containing less noise, will also be positively biased because of the short test length. According to Roussos and Ozbek (2006), the bias would be expected to be at least 0.20.

Table 8-2. 2016–17 FSAA-PT: DETECT Results by Content Area—With and Without Cross Validation

Content	Form	Number of Items	Number of Examinees Analyzed	DETECT with Cross Validation	DETECT with No Cross Validation
Civics (Grade 7)	A[1]	27	694	0.46	0.82
	B[1]	27	651	1.18	1.41
	C[1]	27	645	0.82	1.08
	D[1]	27	577	0.45	0.90
	Common[2]	18	2,567	0.89	

continued

Content	Form	Number of Items	Number of Examinees Analyzed	DETECT with Cross Validation	DETECT with No Cross Validation
U.S. History (High School)	A[1]	27	1,026	0.56	0.78
	B[1]	27	972	0.65	0.72
	C[1]	26	961	0.49	0.73
	D[1]	26	873	0.54	0.64
	Common[2]	18	3,832	0.89	

[1] field test item forms
[2] items common to all field test forms

For civics, all of the results indicate moderate to strong (0.4 to 1.0) violations of local independence. Even with cross validation, the average was about 0.70, about halfway between moderate and strong. Thus, we can conclude that the DETECT effect size can be categorized as moderate for civics. For U.S. history, all the DETECT indices indicate a moderate effect size, with the largest being the value for the 18 common items, which is expected to be inflated. Thus, as for civics, the results indicate a moderate amount of multidimensionality.

In addition to an estimate of the size of violation, DETECT also produces a listing of how the items cluster into different dimensions. The patterns were investigated for all the results, both with and without cross validation, and a consistent pattern emerged across those results. Because the analyses of the 18 common items for each test had the largest sample sizes and were only conducted with cross validation, their results are the most statistically reliable. For these analyses, for both civics and history, the Task 2 and Task 3 items that had a key of "C" always formed a cluster separate from the items that had a key of "A." For the Task 1 items with a key of "C," the history test had no such items among its18 common items; and the civics test, the Task 1 "C" items showed evidence of being attracted to both the "A" items as well as to the other "C" items. For the items with a key of "B," the civics test had only two such items, so that no conclusion could be drawn; but for the history test, the "B" items clearly clustered with the "A" items.

The clustering results for the field-test forms, both with and without cross validation, were also examined. As expected, the results without cross validation, because of their larger sample sizes, produced less noisy results in terms of the regularity in the sign-pattern matrices. These results showed a very high degree of similarity with the results for the common items. In particular, in all cases, the Task 2 and Task 3 "C" items clustered separately from the remaining items. Where Task 1 "C" items existed, they tended to cluster together with the other "C" items; and the "B" items tended to cluster together with the "A" items.

These results indicate that the violations of local independence are related to the placement of the correct response options. This phenomenon requires further study. The nature of these results indicate that there are students who tend to give correct responses to "C" items (at least for Task 2 and Task 3 items) while giving incorrect responses to the other items. Such hypotheses about these types of results have been confirmed in other testing programs and, thus, warrant further investigation here. Until further investigation is conducted, no conclusion can yet be drawn on the implications of these results.

CHAPTER 9 ITEM RESPONSE THEORY SCALING AND EQUATING

This chapter describes the procedures used to calibrate, equate, and scale the FSAA-PT tests. During the course of these psychometric analyses, a number of quality-control procedures and checks on the processes were implemented. These procedures included evaluation of item parameters and their standard errors for reasonableness, evaluation of model fit, and evaluation of the scaling and equating results.

9.1 ITEM RESPONSE THEORY

All FSAA-PT items were calibrated using item response theory (IRT). IRT uses mathematical models to define a relationship between an unobserved measure of student performance, usually referred to as theta (θ) and the probability (p) of getting a dichotomous item correct. In the IRT literature, θ is commonly referred to as the "ability parameter" or the "person parameter"; thus, the term "ability" is sometimes used to refer to θ in this chapter. In IRT, all items are assumed to be independent measures of the same construct (i.e., of the same θ). Another way to think of θ is as a mathematical representation of the latent trait of interest. Several common IRT models are used to specify the relationship between θ and p (Hambleton & Swaminathan, 1985; Hambleton & van der Linden, 1997). The process of determining the specific mathematical relationship between θ and p is called *item calibration*. After items are calibrated, they are defined by a set of parameters that specify a nonlinear, monotonically increasing relationship between θ and p. Once the item parameters are known, an estimate of θ for each student can be calculated based on the student's observed responses to the items. This estimate, $\hat{\theta}$, is considered to be an estimate of the student's true score or a general representation of student performance.

The two-parameter logistic (2PL) model was used for dichotomous items. The 2PL model for dichotomous items can be defined as:

$$P_i(\theta_j) = \frac{\exp[Da_i(\theta_j - b_i)]}{1+\exp[Da_i(\theta_j - b_i)]},$$

where
i indexes the items,
j indexes students,
α represents item discrimination,
b represents item difficulty, and
D is a normalizing constant equal to 1.701.

For polytomous items or the writing prompts, the generalized partial credit model (GPCM; Muraki, 1992) was used. The GPCM model is defined as:

$$P_{ik}(\theta_j) = \frac{\exp[\mathrm{D}\, a_{ik}\left(\theta - b_i + d_{ik}\right)]}{\sum_{h=0}^{m} \exp[\mathrm{D}\, a_{ik}\left(\theta - b_i + d_{ik}\right)]},$$

where
i indexes the items,
k indexes score categories (1, …, m),
j indexes students,
α represents item discrimination,
b represents item difficulty,
d represents category parameter, and
D is a normalizing constant equal to 1.701.

For more information about item calibration, the reader is referred to Lord and Novick (1968), Hambleton and Swaminathan (1985), or Baker and Kim (2004) for the 2PL model and Muraki (1992) for GPCM.

9.2 Calibration Results

In the calibration of the FSAA-PT tests, a number of quality-control procedures and checks are conducted. They include evaluation of the calibration process (e.g., checking the number of Newton cycles required for convergence for reasonableness), checking item parameters and their standard errors for reasonableness, and evaluation of model fit. After the initial item calibration in PARSCALE, each and every item is carefully examined for model fit. In particular, visual inspection of item fit plots is conducted. The empirical proportions of correct responses at given ability levels are evaluated against the model-based expectations. The graphs are examined for any systematic bias in the estimation, or poorly performing items. In addition, the item parameters are also inspected using the criteria listed below for *a* and *b* parameters, with standard error of the difficulty parameters being generally less than 0.3. The tables in Appendix L provide IRT item parameters for each of the core items on the 2016–17 FSAA-PT tests by grade and content area. The summary statistics are presented in Table 9-1 at the test level and Table 9-2 at the task level. The mean item parameter estimates shown in the tables below are within generally acceptable and expected ranges. The generally acceptable range is between 0 and 2 for the *a* parameter and from -3 to +3 for the *b* parameter. For FSAA-PT, the acceptable range for the *a* parameter is .2 and above. If the *a* parameter of an item falls below .2 (but greater than 0) and the item is needed for blueprint coverage, the item will be included in scoring. For easy reference, these tables display the means and standard deviations of the *a* and *b* parameters for each grade and content area.

Table 9-1. 2016–17 FSAA-PT: IRT Summary Statistics –Overall

Content Area	*Grade*	*Number of Items*	*a*		*b*	
			Mean	*SD*	*Mean*	*SD*
ELA	3	48	0.77	0.37	0.04	0.91
	4	48	0.95	0.52	-0.28	0.88
	5	48	0.99	0.54	-0.35	0.77
	6	48	0.94	0.49	-0.26	0.72
	7	48	0.99	0.49	-0.43	0.72
	8	48	1.01	0.49	-0.33	0.72
	9	48	0.91	0.55	-0.28	0.87
	10	48	0.92	0.49	-0.38	0.80
Mathematics	3	48	1.01	0.48	-0.12	0.95
	4	48	0.91	0.52	-0.05	0.98
	5	48	0.83	0.42	-0.09	0.97
	6	48	0.94	0.41	-0.27	0.66
	7	48	0.83	0.43	-0.19	0.97
	8	48	1.02	0.51	-0.52	0.72
Science	5	48	1.34	0.58	-0.49	0.67
	8	48	1.04	0.60	-0.36	0.77
Algebra 1	HS	48	0.83	0.36	-0.20	0.78
Biology	HS	48	1.26	0.75	-0.76	0.76
Geometry	HS	48	1.04	0.52	-0.55	0.81
Civics	7	48	1.14	0.56	-0.47	0.68
U.S. History	HS	48	1.14	0.60	-0.65	0.57

Because the items were developed to correspond to different task levels, the item statistics are also summarized by task for each content area/grade in Table 9-2.

Table 9-2. 2016–17 FSAA-PT: IRT Summary Statistics by Grade and Task

Content Area	Grade	Task Level	Number of Items	*a*		*b*	
				Mean	*SD*	*Mean*	*SD*
ELA	3	1	16	1.07	0.4	-0.55	0.67
		2	16	0.70	0.28	0.30	1.07
		3	16	0.55	0.19	0.37	0.64
	4	1	16	1.37	0.62	-0.77	0.53
		2	16	0.82	0.32	-0.32	0.66
		3	16	0.68	0.28	0.25	1.08
	5	1	16	1.57	0.41	-1.04	0.14
		2	16	0.81	0.38	-0.25	0.53
		3	16	0.59	0.19	0.23	0.83
	6	1	16	1.42	0.42	-0.94	0.32
		2	16	0.74	0.34	-0.29	0.34
		3	16	0.65	0.31	0.44	0.64
	7	1	16	1.48	0.42	-1.08	0.28
		2	16	0.85	0.35	-0.23	0.49
		3	16	0.65	0.22	0.04	0.76

continued

Content Area	Grade	Task Level	Number of Items	*a*		*b*	
				Mean	*SD*	*Mean*	*SD*
ELA	8	1	16	1.46	0.40	-0.95	0.40
		2	16	0.92	0.42	-0.35	0.57
		3	16	0.63	0.15	0.30	0.56
	9	1	16	1.47	0.52	-1.05	0.20
		2	16	0.67	0.28	-0.15	0.78
		3	16	0.60	0.31	0.36	0.80
	10	1	16	1.45	0.43	-1.06	0.22
		2	16	0.71	0.26	-0.30	0.80
		3	16	0.61	0.21	0.21	0.65
Mathematics	3	1	16	1.03	0.48	-0.12	0.96
		2	16	1.01	0.83	-0.11	0.97
		3	16	0.99	0.48	-0.06	0.96
	4	1	16	1.42	0.47	-0.86	0.62
		2	16	0.71	0.32	-0.01	0.63
		3	16	0.61	0.32	0.72	0.94
	5	1	16	1.23	0.40	-0.85	0.57
		2	16	0.73	0.28	0.03	0.76
		3	16	0.53	0.23	0.55	0.99
	6	1	16	1.21	0.40	-0.72	0.42
		2	16	0.97	0.38	-0.30	0.54
		3	16	0.63	0.21	0.22	0.66
	7	1	16	1.25	0.43	-1.06	0.33
		2	16	0.66	0.20	-0.06	0.64
		3	16	0.56	0.23	0.55	1.02
	8	1	16	1.44	0.59	-1.04	0.27
		2	16	0.88	0.33	-0.63	0.45
		3	16	0.72	0.25	0.10	0.79
Science	5	1	16	1.66	0.48	-1.05	0.24
		2	16	1.39	0.67	-0.50	0.54
		3	16	0.97	0.33	0.08	0.60
	8	1	16	1.55	0.57	-1.03	0.33
		2	16	1.02	0.43	-0.48	0.41
		3	16	0.55	0.28	0.43	0.64
Algebra 1	HS	1	16	1.21	0.27	-1.03	0.26
		2	16	0.71	0.25	0.07	0.62
		3	16	0.56	0.18	0.37	0.55
Biology	HS	1	16	2.08	0.57	-1.28	0.22
		2	16	0.96	0.53	-0.85	0.88
		3	16	0.75	0.23	-0.14	0.51
Geometry	HS	1	16	1.38	0.55	-1.16	0.50
		2	16	1.03	0.45	-0.57	0.52
		3	16	0.71	0.32	0.09	0.84
Civics	7	1	16	1.77	0.27	-1.11	0.13
		2	16	1.01	0.36	-0.64	0.41
		3	16	0.62	0.19	0.34	0.34
U.S. History	HS	1	16	1.77	0.40	-1.12	0.19
		2	16	0.92	0.39	-0.63	0.44
		3	16	0.74	0.39	-0.21	0.59

Table 9-2 shows that the IRT item difficulty, as shown by the *b* parameter, tends to have a positive relationship with task level as intended. As the task level increases, the average b values tend to increase, indicating that, on average, the items tend to be more difficult. On the other hand, item discrimination, as

shown by the *a* parameter, indicates that items tend to become less discriminating with the increase of task level. No overall reversal of average difficulty (between Tasks 1 and 2 or Tasks 2 and 3) is found. However, average *a* and *b* parameters of the three task levels for grade 3 mathematics are very similar, indicating less differentiation than anticipated. Further investigation may be warranted to examine why this occurred.

9.3 EQUATING

The purpose of equating is to ensure that scores obtained from different forms of a test are equivalent to each other. Equating may be used if multiple test forms are administered in the same year, as well as to equate one year's forms to those given in the previous year. Equating ensures that students are not given an unfair advantage or disadvantage because the test form they took is easier or harder than those taken by other students. Equating also makes it possible to compare scores across test forms or across years.

The FSAA-PT tests used an equating procedure in which test forms were equated to the theta scale established on the reference form (i.e., the form used in the most recent standard setting). This is accomplished through the chained linking design, in which every new form is equated back to the theta scale of the previous year's test form through the use of common items. It can therefore be assumed that the theta scale of every new test form is the same as the theta scale of the reference form since this is where the chain originated.

The groups of students who took the equating items on the 2016–17 FSAA-PT tests are not equivalent to the groups who took them in the reference years. IRT is particularly useful for equating scenarios that involve nonequivalent groups (Allen & Yen, 1979). Equating for FSAA-PT uses the anchor-test-nonequivalent-groups design described by Petersen, Kolen, and Hoover (1989). In this equating design, no assumption is made about the equivalence of the examinee groups taking different test forms (i.e., naturally occurring groups are assumed). Comparability is instead evaluated by utilizing a set of anchor items (also called common or equating items). However, the equating items are designed to mirror the common test in terms of item types and distribution of emphasis. Since a maximum of two item sets of the 2015–16 test forms were replaced and used as the 2016–17 test forms, all the common items between 2015–16 and 2016–17 were used as equating items.

Item parameter estimates for the 2016–17 FSAA-PT tests were placed on the 2015–16 scale by using the method of Stocking and Lord (1983), which is based on the IRT principle of item parameter invariance. According to this principle, the equating items for both the 2015–16 and 2016–17 FSAA-PT tests should have the same item parameters. After the item parameters for each 2016–17 test were estimated using PARSCALE (Muraki & Bock, 2003), the Stocking and Lord method was employed to find the linear transformation (slope and intercept) that adjusted the equating items' parameter estimates such that the 2016–17 FSAA-PT tests' test characteristic curve (TCC) for the equating items was as close as possible to that of the 2015–16 FSAA-PT tests. Note for the FSAA-PT English language arts (ELA) tests that include the writing prompt, equating is

performed using multiple-choice items. After the completion of equating, the writing prompt is scaled to the operational scale with all the multiple-choice items fixed on the equated item parameters.

9.4 EQUATING RESULTS

Prior to calculating the Stocking and Lord (1983) transformation constants, evaluations of the equating items were conducted. The delta procedure was used to evaluate adequacy of equating items and identify items with *p*-value change much greater than that for other equating items. IRT parameters for 2016–17 were also plotted against the values for 2015–16 to produce α-plots and *b*-plots. These plots were used to detect items that appeared as outliers and were evaluated in terms of suitability for use as equating items.

Once all evaluations of the equating items were complete, the Stocking and Lord (1983) method of equating was used to place the item parameters onto the previous year's scale, as described above, with the exception of grade 3 ELA. The Stocking and Lord transformation constants are presented in Table 9-3.

Table 9-3. 2016–17 FSAA-PT: Stocking and Lord Transformation Constants

Content Area	*Grade*	α-*slope*	b-*intercept*
ELA	4	0.99	0.06
	5	0.99	0.07
	6	1.01	0.06
	7	1.05	0.00
	8	1.01	0.04
	9	1.05	0.07
	10	1.06	0.05
Mathematics	3	1.04	0.09
	4	0.99	0.06
	5	1.05	0.06
	6	1.03	0.12
	7	1.02	0.00
	8	0.96	0.07
Science	5	1.03	0.07
	8	0.99	0.06
Algebra 1	HS	1.03	0.11
Biology	HS	1.01	0.00
Geometry	HS	1.06	0.05

The grade 3 ELA operational form consisted of all the items used for 2015–16 and, therefore, all items were essentially equating items. The 2016–17 form was placed on the 2015–16 scale using the Fixed Common Item Parameter method (FCIP; Kim, 2006). After the item parameters for 2016–17 were estimated, they were checked against those from 2015–16 and only one item was identified as an outlier or having

parameter drift. The FCIP method was performed by fixing the parameters of all the items with the exclusion of the outlier to their 2015–16 values and then calibrating to place the outlier on scale.

9.5 PATTERN SCORING

For FSAA-PT tests, pattern scoring is used to generate student ability estimates. That is, student ability, θ, is estimated based on the pattern of correct and incorrect responses, not based on the number of correct responses. Therefore, students who answer the same number of items correctly or have the same raw scores will not likely have the same theta estimates unless they have the same pattern of correct and incorrect responses or answer exactly the same items correctly. Because FSAA-PT tests consist of item sets, each of which consists of three tasks that are adaptively administered, the particular tasks a student responds to and the number of tasks a student responds to can vary greatly across students. Thus, the number of tasks a student correctly responds to does not automatically result in a particular ability estimate—it depends on which tasks that are correctly responded to. Pattern scoring provides more accurate estimates of student ability.

Two methods are typically employed in pattern scoring: One method is based on the maximum likelihood and the other is based on Bayesian theory (Baker, 1992). Maximum likelihood estimation has a limitation in that it cannot provide a reasonable estimate for perfect score patterns. If a student has incorrect or correct responses on all items, the maximum likelihood estimate is negative or positive infinity. In comparison, due to the use of a prior distribution, the Bayesian method could provide a more reasonable estimate for perfect score patterns. Based on research findings, the Bayesian method is used for FSAA-PT tests.

According to Bayes's rule, the posterior distribution of θ given a student's response pattern $\boldsymbol{y}$ is

$$p(\theta|\boldsymbol{y}) = \frac{p(\theta)p(\boldsymbol{y}|\theta)}{\int p(\theta)p(\boldsymbol{y}|\theta)d\theta},$$

where $p(\theta)$ is the prior distribution of θ, and $p(\boldsymbol{y}|\theta)$ is the likelihood of the response pattern $\boldsymbol{y}$. By the conditional independence property in IRT, $p(\boldsymbol{y}|\theta)$ can be calculated by the product of response probability on each item conditional on θ, which is computed based on the 2PLM for dichotomous items and the GPCM for polytomous items. As $p(\theta|\boldsymbol{y})$ is the posterior distribution of θ, the Expected A Posteriori (EAP) method is used to summarize the posterior distribution and provide a point estimate for ability. The EAP estimate calculates the expected value of the posterior distribution, which can be formulated as

$$E(\theta|\boldsymbol{y}) = \int \theta p(\theta|\boldsymbol{y})d\theta.$$

Due to the difficulty of deriving the integration analytically, quadrature approximation (Baker, 1992, p.211) is used to calculate EAP. Specifically, $p(\theta|y)$ is calculated at a discrete set of θ values, and $E(\theta|y)$ is calculated as

$$E(\theta|y) = \frac{\sum_q \theta_q p(\theta_q)p(y|\theta_q)}{\sum_q p(\theta_q)p(y|\theta_q)},$$

where q is the index for each quadrature θ point.

The EAP calculation was implemented in PARSCALE for FSAA-PT. The standard normal density was used as the prior distribution, and 40 equally spaced quadrature points from -4 to 4 were used for quadrature approximation in PARSCALE. To facilitate score interpretation, the EAP scores were further transformed to the reported scale scores during the scaling process.

In addition to providing the point estimate of ability, the variance of the posterior distribution is also calculated as a measure of error in ability estimates. A smaller posterior distribution variance implies that if this student takes the same test repeatedly, the ability estimates from each test administration will be similar to each other. Thus, the posterior variance provides a measure of the conditional reliability at each ability level. Smaller posterior variance implies better conditional reliability. The posterior variance is defined as

$$Var(\theta|\boldsymbol{y}) = \int (\theta - E(\theta|y))^2 p(\theta|\boldsymbol{y}) d\theta.$$

It is also calculated by quadrature approximation as

$$\widetilde{Var}(\theta|\boldsymbol{y}) = \frac{\sum_q (\theta_q - \tilde{E}(\theta|y))^2 p(\theta_q) p(y|\theta_q)}{\sum_q p(\theta_q) p(y|\theta_q)}.$$

9.6 ACHIEVEMENT STANDARDS

Standard setting for FSAA-PT tests was conducted in two stages. As described in Table 9-4, standard setting for the majority of the tests was performed in February 2017 using the 2015–16 data. Two new tests, U.S. History and Civics, were introduced in 2016–17. Standard setting for these two content areas was performed in July 2017.

Table 9-4. 2016–17 FSAA-PT: Summary of Standard Setting Activities

Stage	*Tests*	*Date*
1	ELA: 3–10 Mathematics: 3–8 Science: 5 & 8 EOC: Algebra I, Geometry, & Biology I	February 14–16, 2017 Orlando, FL
2	U.S. History and Civics	July 13–14, 2017 Orlando, FL

Details of the standard setting procedures can be found in the standard setting reports (Measured Progress, 2017a & 2017b). At the completion of the Stage 1 standard setting, the reporting scale was established and theta cuts were transformed to the reporting scale. As described in the standard setting report (Measured Progress, 2017a), policy adjustments were made to the cut scores on the scale score metric and made available for public review. These Stage 1 cut scores were approved in May 2017 by the Florida State

Board of Education following the 90-day public review. Cut scores for the Stage 2 standard setting tests were approved on February 20, 2018 following the same procedure. The scale score cuts for all the Stage 1 and Stage 2 tests are presented in the next section.

9.7 Reported Scaled Scores

Because the θ scale used in IRT calibrations is not readily understood by most stakeholders, reporting scales were developed for FSAA-PT. The reporting scales are simple linear transformations of the underlying θ scale.

By providing information that is more specific about the position of a student's results, scale scores supplement achievement level designations. Students' EAP proficiency estimates on the 2016–17 FSAA-PT tests were translated to scale scores using a data analysis process called *scaling*, which simply converts from one scale to another scale. In the same way that a given temperature can be expressed on either Fahrenheit or Celsius scales, or the same distance can be expressed in either miles or kilometers, student scores on the 2016–17 FSAA-PT tests can be expressed in scale scores.

It is important to note that converting from EAP theta scores to scale scores does not change students' achievement level classifications. Scale scores make for more consistent reporting of results. The psychometric advantage of scale scores comes from their being linear transformations of θ. Equating is a statistical procedure that is used to adjust for differences in form difficulty so that scores on alternate forms can be used interchangeably (Kolen & Brennan, 2014). Since the θ scale is used for equating, scale scores are comparable from one year to the next.

The scale scores are obtained by a simple translation of ability estimates ($\hat{\theta}$) using the linear relationship between threshold values on the θ metric and their equivalent values on the scale score metric. Scale scores are calculated using the linear equation

$$SS = m\hat{\theta} + b,$$

where
m is the slope and
b is the intercept.

For FSAA-PT operational scaling, a reporting scale was established, following the completion of the Stage 1 standard setting, for ELA, mathematics, and science assessments with a mean of 600 and a standard deviation of 20 and the scale score ranges between 540 and 660. A reporting scale for EOC assessments was established with a mean of 800 and standard deviation of 25, and the scale score ranges between 725 and 875.

Table 9-5 shows the transformation constants –the slope and intercept– used to calculate the scale scores for each content area and grade. Note that the values in the table will not change unless the standards

are reset. Also, in a given year it may not be possible to attain a particular scale score, but the scale score cuts will remain the same.

Table 9-5. 2016—17 FSAA-PT: Theta-to-Scale Score Transformation Constants by Content Area and Grade

Subject	*Grade*	*Slope*	*Intercept*
ELA	3	20	600
	4	20	600
	5	20	600
	6	20	600
	7	20	600
	8	20	600
	9	20	600
	10	20	600
Mathematics	3	20	600
	4	20	600
	5	20	600
	6	20	600
	7	20	600
	8	20	600
Science	5	20	600
	8	20	600
Algebra 1	HS	25	800
Biology	HS	25	800
Geometry	HS	25	800
Civics	7	25	800
U.S. History	HS	25	800

Table 9-6 presents all the cut scores in the scale score metric. They were used for producing the data for this technical report. As alluded to in the previous discussion of equating, the scale was established during the base year and the forms serve as the reference forms for subsequent equating. The cut scores will remain fixed throughout the assessment program unless standards are reset for any reason. Also shown in the table are the minimum and maximum of the scale scores.

Table 9-6. 2016–17 FSAA-PT: Cut Scores on the Reporting Scale

Subject	*Grade*	*Scale Score*				
		Minimum	*Cut1*	*Cut2*	*Cut3*	*Maximum*
ELA	3	540	583	599	618	660
	4	540	582	597	618	660
	5	540	583	599	618	660
	6	540	583	599	618	660
	7	540	583	599	618	660
	8	540	582	598	614	660
	9	540	582	598	620	660
	10	540	584	598	617	660
Mathematics	3	540	586	600	617	660
	4	540	587	599	618	660
	5	540	586	600	617	660
	6	540	586	600	617	660
	7	540	587	600	617	660
	8	540	586	598	615	660
Science	5	540	580	599	616	660
	8	540	580	600	619	660
Algebra 1	HS	725	774	797	823	875
Biology	HS	725	773	795	823	875
Geometry	HS	725	777	799	827	875
Civics	7	725	773	796	818	875
U.S. History	HS	725	778	792	818	875

Table 9-7 shows the standard errors in scale score metric at the cut scores.

Table 9-7. 2016–17 FSAA-PT: Standard Errors at the Cut Scores

Subject	*Grade*	*Standard Error*		
		Cut1	*Cut2*	*Cut3*
ELA	3	5	5	7
	4	3	4	7
	5	3	4	7
	6	3	5	7
	7	3	5	7
	8	3	4	6
	9	3	5	7
	10	3	5	7
Mathematics	3	4	5	7
	4	4	5	8
	5	4	6	7
	6	4	5	7

continued

Subject	Grade	Standard Error		
		Cut1	Cut2	Cut3
Mathematics	7	5	6	8
	8	4	5	7
Science	5	3	4	7
	8	3	5	8
Algebra 1	HS	6	6	9
Biology	HS	4	6	11
Geometry	HS	5	7	11
Civics	7	4	6	9
U.S. History	HS	4	5	9

Table 9-8 shows the percentage of students by achievement levels along with the average and standard deviation of the scale scores for each grade/content-area combination. The combined percentages of Levels 3 and 4 students within each grade and content area are also provided in the table.

Table 9-8. 2016–17 FSAA-PT: Percentage of Students by Performance-Level Categories

Content Area	Grade	Number of Students	Levels					Average Scale Score	SD of Scale Score
			Level 1	Level 2	Level 3	Level 4	Levels 3 & 4		
ELA	3	2,933	15.99	29.63	34.50	19.88	54.38	601.62	19.45
	4	2,930	16.04	25.70	39.18	19.08	58.26	601.21	18.59
	5	3,114	18.27	25.11	36.38	20.23	56.61	601.59	18.45
	6	3,009	19.41	24.03	37.16	19.41	56.57	601.22	18.86
	7	2,988	21.59	24.87	34.00	19.54	53.54	600.12	19.72
	8	2,992	17.38	26.70	30.28	25.64	55.92	600.96	18.91
	11	3,010	18.41	23.39	40.03	18.17	58.20	601.37	19.24
Mathematics	3	3,294	21.98	21.04	34.18	22.80	56.98	600.94	19.42
	4	2,928	22.64	23.91	30.57	22.88	53.45	601.74	19.89
	5	2,935	22.76	21.40	37.14	18.71	55.85	601.35	18.85
	6	3,124	21.80	27.50	30.41	20.29	50.70	601.21	19.62
	7	3,015	21.63	23.71	31.97	22.69	54.66	602.34	19.76
	8	2,987	25.04	25.44	29.76	19.75	49.51	600.11	19.17
Science	5	3,115	16.34	27.32	31.30	25.04	56.34	602.08	20.70
	8	2,989	14.08	31.45	36.57	17.90	54.47	601.40	18.70
Algebra 1	HS	3,641	12.22	28.34	39.85	19.58	59.43	802.54	24.18
Biology	HS	4,305	14.87	26.74	39.42	18.98	58.40	800.51	24.78
Geometry	HS	3,117	17.97	27.88	38.24	15.91	54.15	801.31	24.98
Civics	7	2,567	15.08	27.04	34.20	23.69	57.89	800.39	24.29
U.S. History	HS	3,832	20.09	19.08	35.91	24.92	60.83	800.73	24.82

9.8 COMPARABILITY OF SCORES ACROSS YEARS

Comparability of scores across years is maintained through equating via the use of common items. As described in detail in the IRT scaling and equating procedures implemented for FSAA-PT tests earlier in this chapter, equating allows scores on different test forms across years to be compared. Achievement standards were established in the standard setting conducted in 2017. Details of the standard setting procedures can be found in related standard setting reports. To ensure continuity of score reporting, including achievement levels, across years, the cuts that were established at the standard setting meetings are used to report test results and will continue to be used in future years.

To further examine score comparability, multiyear graphs of cumulative scale score distributions are provided in Appendix M. It can be seen that the cumulative scale score distributions for 2015–16 and 2016–17 are very similar. Note that Civics and U.S. History are two new tests introduced in 2016–17. Therefore, the graphs included only one year's scale score distribution. To provide means for further examination of comparability across years in terms of standards, Tables N-1 through N-8 in Appendix N show achievement level distributions for both 2015–16 and 2016–17 by grade for each content area. The results show that the percentages of students at each achievement-level across two years are either very similar or slightly increased for 2016–17.

CHAPTER 10 RELIABILITY

10.1 RELIABILITY (OVERALL AND SUBGROUP)

Although individual item performance is an important focus for evaluation, a complete evaluation of an assessment must also address the way in which items function together and complement one another. Any measurement includes some amount of measurement error. No academic assessment can measure student performance with perfect accuracy; some students will receive scores that underestimate their true ability, and other students will receive scores that overestimate their true ability. Items that function well together produce assessments that have less measurement error (i.e., the error is small on average). Such assessments are described as "reliable."

There are a number of ways to estimate an assessment's reliability. One approach is to split all test items into two groups and then correlate students' scores on the two half-tests. This is known as a split-half estimate of reliability. If the two half-test scores correlate highly, the items on them likely measure very similar knowledge or skills. It suggests that measurement error will be minimal.

The split-half method requires psychometricians to select items that contribute to each half-test score. This decision may have an impact on the resulting correlation, since each different possible split of the test into halves will result in a different correlation. Another problem with the split-half method of calculating reliability is that it underestimates reliability, because test length is cut in half. All else being equal, a shorter test is less reliable than a longer test. Cronbach (1951) provided a statistic, alpha (α), that avoids the shortcomings of the split-half method by comparing individual item variances to total test variance. Cronbach's α was used to assess the reliability of the FSAA-PT tests. The missing responses due to adaptive administration of item sets were treated as incorrect in calculating Cronbach's α. The formula is as follows:

$$\alpha \equiv \frac{n}{n-1}\left[1 - \frac{\sum_{i=1}^{n} \sigma^2_{(Y_i)}}{\sigma^2_x}\right],$$

where
i indexes the item,
n is the number of items,
$\sigma^2_{(Y_i)}$ represents individual item variance, and
σ^2_x represents the total test variance.

Table 10-1 presents Cronbach's α coefficient for each content area and grade.

Table 10-1. 2016–17 FSAA-PT: Classical Reliability Summary

Subject	*Grade*	*Number of Students*	*Cronbach's Alpha*
ELA	3	2,933	0.94
	4	2,930	0.95
	5	3,114	0.95
	6	3,009	0.95
	7	2,988	0.96
	8	2,992	0.96
	9	3,010	0.95
	10	3,294	0.96
Mathematics	3	2,928	0.95
	4	2,935	0.94
	5	3,124	0.94
	6	3,015	0.95
	7	2,987	0.94
	8	2,998	0.95
Science	5	3,115	0.97
	8	2,989	0.95
Algebra 1	HS	3,641	0.95
Biology	HS	4,305	0.95
Geometry	HS	3,117	0.95
Civics	7	2,567	0.96
U.S. History	HS	3,832	0.96

An alpha coefficient toward the high end is taken to mean that the items are likely measuring very similar knowledge or skills (i.e., that they complement one another and suggest a reliable assessment). Please note that these numbers are undoubtedly inflated due to the adaptive administration of the assessment. More specifically, if a student was not administered an item, for purposes of the above reliability calculations it was assumed that the student would have scored incorrectly. To correct for that, item response theory (IRT) marginal reliability, which is analogous to the reliability definition under the Classical Test Theory (CTT) true score model, was also calculated. IRT marginal reliability provides an estimate of the overall test reliability based on the variance of ability estimates and the average of conditional error variance associated with each ability estimate. Using IRT, the ability estimate for each student is obtained using a Bayesian approach, namely, the Expected A Posteriori (EAP) estimate of θ is found for each student. The Bayesian posterior standard deviation of θ provides the standard error estimate for this θ estimate. Using this Bayesian estimation approach, the IRT marginal reliability is calculated using the following formula:

$$IRT\ Marginal\ Reliability = 1 - \frac{\overline{SE(\theta)^2}}{Var(\hat{\theta})},$$

where

$\overline{SE(\theta)^2}$ represents average error variance and

$Var(\hat{\theta})$ represents total variance of observed θ estimates.

Table 10-2 presents IRT marginal reliability estimates for all tests. It can be seen that these reliability estimates, as expected, are slightly lower but very close to Cronbach's alpha. The table also includes the square root of the average error variance for each test.

Table 10-2. 2016–17 FSAA-PT: IRT Reliability Summary

Subject	*Grade*	*Number of Students*	*IRT Marginal Reliability*	*SEM*
ELA	3	2,933	0.8944	0.3108
	4	2,930	0.9185	0.2647
	5	3,114	0.9172	0.2648
	6	3,009	0.9209	0.2647
	7	2,988	0.9289	0.2624
	8	2,992	0.9272	0.2546
	9	3,010	0.9194	0.2730
	10	3,294	0.9208	0.2730
Mathematics	3	2,928	0.9104	0.2923
	4	2,935	0.8973	0.2984
	5	3,124	0.9009	0.3062
	6	3,015	0.9065	0.2954
	7	2,987	0.8911	0.3142
	8	2,998	0.8893	0.3031
Science	5	3,115	0.9119	0.2888
	8	2,989	0.8942	0.3014
Algebra 1	HS	3,641	0.8982	0.3056
Biology	HS	4,305	0.8984	0.3036
Geometry	HS	3,117	0.8960	0.3155
Civics	7	2,567	0.9078	0.2886
U.S. History	HS	3,832	0.9014	0.2974

Subgroup Reliability

The reliability coefficients discussed in the previous section were based on the overall population of students who took the 2016–17 FSAA-PT test. Cronbach's α coefficients and IRT marginal reliability estimates for subgroups were also calculated using the procedures defined above, but, in this case, only the members of the subgroup in consideration were used in the computations. The results are reported in Appendix O. Note that statistics are reported only for subgroups with at least 10 students.

For several reasons, the results of this section should be interpreted with caution. First, inherent differences between grades and content areas preclude making valid inferences about the quality of a test based on statistical comparisons with other tests. Second, reliabilities are dependent not only on the measurement properties of a test but on the statistical distribution of the studied subgroup. For example, it can be readily seen in Appendix O that subgroup sample sizes may vary considerably, which results in natural variation in reliability coefficients. Alternatively, α, which is a type of correlation coefficient, may be artificially depressed for subgroups with little variability (Draper & Smith, 1998). Finally, there is no industry standard to interpret the strength of a reliability coefficient when the population of interest is a single subgroup.

10.2 INTERRATER CONSISTENCY

Chapter 6 of this report describes the processes that were implemented to monitor the quality of the hand-scoring of student responses for open-response items. One of these processes was double-blind scoring of 20% of student responses to the writing prompt for English language arts (ELA) grades 4–10 that was scored on four dimensions. Results of the double-blind scoring, used during the scoring process to identify scorers who required retraining or other intervention, are presented here as evidence of the reliability of the FSAA-PT tests for ELA. A summary of the interrater consistency results is presented in Table 10-3. Results in the table are averaged across the four dimensions of the writing prompt by grade. The table shows the number of score categories, number of included scores, percent exact agreement, percent adjacent agreement, correlation between the first two sets of scores, and percentage of responses that required a third score. This same information is provided at the item level in Appendix P.

Table 10-3. 2016–17 FSAA-PT: Summary Interrater Consistency Statistics by Grade—ELA

Grade	*Number of Score Categories*	*Number of Included Scores*	*Percent Exact*	*Percent Adjacent*	*Percent Third Score*	*Correlation*
4	4	2,300	84.70	15.17	8.87	0.87
5	4	2,460	82.93	16.75	7.97	0.90
6	4	2,424	80.07	19.35	11.88	0.87
7	4	2,352	82.61	17.13	11.73	0.90
8	4	2,356	80.39	19.44	9.00	0.84
9	4	2,332	83.66	16.21	11.49	0.88
10	4	2,552	79.90	19.75	11.44	0.87

10.3 DECISION ACCURACY AND CONSISTENCY

While related to reliability, the accuracy and consistency of classifying students into performance categories is an even more important issue in a standards-based reporting framework (Livingston & Lewis, 1995). Decision accuracy and consistency (DAC) can usually be computed with the data currently available

for most alternate assessments. For every 2016–17 FSAA-PT test grade and content area, each student was classified into one of the following achievement levels: Level 1, Level 2, Level 3, and Level 4. This section of the report explains the methodologies used to assess the reliability of classification decisions and presents the results.

Accuracy refers to the extent to which decisions based on test scores match decisions that would have been made if the scores did not contain any measurement error. Accuracy must be estimated, because errorless test scores do not exist. Consistency measures the extent to which classification decisions based on test scores match the decisions based on scores from a second, parallel form of the same test. Consistency can be evaluated directly from actual responses to test items if two complete and parallel forms of the test are given to the same group of students. In operational test programs, however, such a design is usually impractical. Instead, techniques have been developed to estimate both the accuracy and the consistency of classification decisions based on a single administration of a test. The Livingston and Lewis (1995) technique is used for FSAA-PT tests because it is easily adaptable to all types of testing formats, including mixed-format tests.

The accuracy and consistency estimates make use of "true scores" in the classical test theory sense. A true score is the score that would be obtained if a test had no measurement error. Of course, true scores cannot be observed and so must be estimated. In the Livingston and Lewis (1995) method, estimated true scores are used to categorize students into their "true" classifications. Because of missing responses due to adaptive design of the FSAA-PT tests, scale scores, instead of raw scores, were used in estimating accuracy and consistency indices reported in Appendix Q.

For the 2016–17 FSAA-PT assessments, after various technical adjustments (described in Livingston & Lewis, 1995), a four-by-four contingency table of accuracy was created for each content area and grade, where cell [*i*, *j*] represented the estimated proportion of students whose true score fell into classification *i* (where *i* = 1 to 4) and observed score fell into classification *j* (where *j* = 1 to 4). The sum of the diagonal entries (i.e., the proportion of students whose true and observed classifications matched) signified overall accuracy.

To calculate consistency, true scores were used to estimate the joint distribution of classifications on two independent, parallel test forms. Following statistical adjustments per Livingston and Lewis (1995), a new three-by-three contingency table was created for each content area and grade and populated by the proportion of students who would be categorized into each combination of classifications according to the two (hypothetical) parallel test forms. Cell [*i*, *j*] of this table represented the estimated proportion of students whose observed score on the first form would fall into classification *i* (where *i* = 1 to 4) and whose observed score on the second form would fall into classification *j* (where *j* = 1 to 4). The sum of the diagonal entries (i.e., the proportion of students categorized by the two forms into exactly the same classification) signified overall consistency.

Another way to measure consistency is to use Cohen's (1960) coefficient κ (kappa), which assesses the proportion of consistent classifications after removing the proportion of consistent classifications that would be expected by chance. It is calculated using the following formula:

$$\kappa = \frac{(\text{Observed agreement}) - (\text{Chance agreement})}{1 - (\text{Chance agreement})} = \frac{\sum_i C_{ii} - \sum_i C_{i.} C_{.i}}{1 - \sum_i C_{i.} C_{.i}},$$

where

$C_{i.}$ is the proportion of students whose observed achievement-level would be Level i (where $i = 1 - 4$) on the first hypothetical parallel form of the test;

$C_{.i}$ is the proportion of students whose observed achievement-level would be Level i (where $i = 1 - 4$) on the second hypothetical parallel form of the test; and

C_{ii} is the proportion of students whose observed achievement-level would be Level i (where $i = 1 - 4$) on both hypothetical parallel forms of the test.

Because κ is corrected for chance, its values are lower than are other consistency estimates.

The accuracy and consistency analyses described above are provided in Appendix Q. The table includes overall accuracy and consistency indices, including kappa. Accuracy and consistency values conditional upon achievement-level are also given. For these calculations, the denominator is the proportion of students associated with a given achievement-level. For example, the conditional accuracy value is 0.87 for Level 1 and Level 4 for grade 7 ELA. This figure indicates that among the students whose true scores placed them in this classification, 87% would be expected to be in this classification when categorized according to their observed scores. Similarly, a consistency value of 0.79 indicates that 79% of students with observed scores in these levels would be expected to score in this classification again if a second, parallel test form were used.

For some testing situations, of greatest concern may be decisions around level thresholds. For the 2016–17 FSAA-PT test, Table P-2 in Appendix Q provides accuracy and consistency estimates at each cutpoint, as well as false positive and false negative decision rates. (A false positive is the proportion of students whose observed scores were above the cut and whose true scores were below the cut. A false negative is the proportion of students whose observed scores were below the cut and whose true scores were above the cut.)

The above indices are derived from Livingston and Lewis's (1995) method of estimating the accuracy and consistency of classifications. It should be noted that Livingston and Lewis discuss two versions of the accuracy and consistency tables. A standard version performs calculations for forms parallel to the form taken. An "adjusted" version adjusts the results of one form to match the observed score distribution obtained in the data. Table Q-1 in Appendix Q uses the standard version for two reasons: (1) This "unadjusted" version can be considered a smoothing of the data, thereby decreasing the variability of the results; and (2) for results dealing with the consistency of two parallel forms, the unadjusted tables are symmetrical, indicating that the two parallel forms have the same statistical properties. This second reason is consistent with the notion of

forms that are parallel; that is, it is more intuitive and interpretable for two parallel forms to have the same statistical distribution.

Note that, as with other methods of evaluating reliability, DAC statistics calculated based on small groups can be expected to be lower than those calculated based on larger groups. For this reason, the values presented in Appendix Q should be interpreted with caution. Note also that, in the absence of research on DAC statistics in the alternate assessment arena, no guidelines are available for how to interpret the strength of the values. Finally, it is important to remember that it is inappropriate to compare DAC statistics between grades and content areas.

CHAPTER 11 VALIDITY

11.1 VALIDITY

One purpose of this report is to describe the technical aspects of the FSAA-PT to support valid score interpretations. It presents documentation to substantiate intended interpretations of test scores (AERA et al., 2014). Each of the chapters in this report contributes important information to the validity argument from one or more of the following perspectives: test development, test administration, scoring, item analyses, scaling and equating, reliability, comparability, and score reporting.

The FSAA-PT test is based on, and aligned to, the Next Generation Sunshine State Standards Access Points in reading, mathematics, writing, science, and social studies. The results are intended to enable inferences about student achievement on Next Generation Sunshine State Standards Access Points, and these achievement inferences are meant to be useful for program and instructional improvement and as a component of school accountability.

Standards for Educational and Psychological Testing (AERA et al., 2014) provides a framework for describing sources of evidence that should be considered when constructing a validity argument. These sources include evidence based on the following five general areas: test content, response processes, internal structure, relationship to other variables, and consequences of testing. Although each of these sources may speak to a different aspect of validity, they are not distinct *types* of validity. Instead, each contributes to a body of evidence about the comprehensive validity of score interpretations.

A measure of evidence on test content validity is meant to determine how well the assessment tasks represent the curriculum and standards for each content area and grade level. This is informed by the item development process, including how the test items align to the curriculum and standards. Viewed through the lens provided by the content standards, evidence based on test content was extensively described in Chapters 3 and 4. Item alignment with Next Generation Sunshine State Standards; item bias, sensitivity, and content appropriateness review processes; and adherence to the test blueprint are all components of validity evidence based on test content. As discussed earlier, all FSAA-PT test questions are aligned by Florida educators to specific Next Generation Sunshine State Standards and undergo several rounds of review for content fidelity and appropriateness.

Evidence based on internal structure is presented in detail in the discussions of item analyses, scaling and equating, and reliability in Chapters 8–10. Technical characteristics of the internal structure of the assessments are presented in terms of classical item statistics (item difficulty, item-test correlation), differential item functioning (DIF) analyses, dimensionality analyses, item response theory (IRT) calibration, equating, and pattern scoring, reliability, and standard errors of measurement (SEM). Each test is equated to the same grade and content-area test from the prior year to preserve the meaning of scores over time. In

general, item difficulty and discrimination indices were in acceptable and expected ranges. Very few items were answered correctly at near-chance or near-perfect rates. Similarly, the positive discrimination indices indicate that most items were assessing consistent constructs, and students who performed well on individual items tended to perform well overall. The training and administration information, detailed in Chapter 6, describes the steps taken to train the teachers/test administrators on administration and scoring procedures. Tests are administered according to state-mandated standardized procedures, as described in the administration manual. These efforts to provide thorough training opportunities and materials help maximize consistency of administration and scoring across teachers, which enhances the quality of test scores and, in turn, contributes to validity. While results of the study indicated that scoring and administration procedures were being followed to a high degree overall, there were also some areas identified for improvement to enhance the validity of the assessment.

Evidence based on the consequences of testing is addressed in the scaled score information in Chapter 9. Scaled scores offer the advantage of simplifying the reporting of results across content areas, grade levels, and subsequent years. Achievement levels provide users with reference points for mastery at each grade and content area, which is another useful and simple way to interpret scores. Several different standard reports are provided to stakeholders. Additional evidence of the consequences of testing could be supplemented with broader investigation of the effect of testing on student learning.

To further support the validation of the assessment program, additional studies might be considered to provide evidence regarding the relationship of FSAA-PT test results to other variables, including the extent to which scores converge with other measures of similar constructs and the extent to which they diverge from measures of different constructs. Relationships among measures of the same or similar constructs can sharpen the meaning of scores and appropriate interpretations by refining the definition of the construct.

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APPENDICES

APPENDIX A—FLORIDA STAKEHOLDER LISTS

Table A-1. 2016–17 FSAA-PT: Technical Advisory Committee

Name	*Position*	*Function*
Dr. Claudia Flowers	Professor, Department of Educational Administration, Research, and Technology, the University of North Carolina at Charlotte	Member
Dr. Marianne Perie	Co-director, Center for Educational Testing and Evaluation, the University of Kansas at Lawrence	Member
Dr. Stephen Sireci	Professor of Education and Co-Chairperson of the Research and Evaluation Methods Program and Director of the Center for Educational Assessment in the School of Education, the University of Massachusetts at Amherst	Member

Table A-2. 2016–17 FSAA-PT: Advisory Committee

Name	*Position*	*Function*
Dr. Carol Allman	Consultant	Member
Dr. Drew Andrews	Alternate Assessment Coordinator	Member
Janet Carmello	Chief Executive Officer Down Syndrome Association of Central Florida	Member
Jackie Choo	Alternate Assessment Coordinator	Member
Susan Clark	Mathematics Specialist for the Deaf and Hard of Hearing; Florida School for the Deaf and Blind (FSDB)	Member
Sue Davis-Killian	Parent	Member
Karen Denbroeder	Facilitator	Member
Dr. Rosalind Hall	Director of Exceptional Student Education (ESE) and Student Services	Member
Dr. Katie Hawley	ESE Teacher	Member
Michelle Metheny	ESE Teacher	Member
Robin Meyers	Principal	Member
Robin Morrison	Executive Director Department of Exceptional Student Education	Member
Rebecca Nance	ESE Teacher	Member
Sandra Olivia	ESE Teacher	Member
Teresa Pinder	ESE Teacher	Member
Betsy Pittinger	ESE Teacher	Member
Sheryl Sandovos	Florida State University	Member
June Sellers	Alternate Assessment Coordinator	Member
Dr. Stacie Whinnery	Professor; School of Education; University of West Florida	Member
Catherine Zenko	Florida State University	Member

Table A-3. 2016–17 FSAA-PT: Passage Bias Review Committee

Name	*District*	*Position*	*Gender*	*Ethnicity*
Ryan Burkhalter	Flagler	General Education Teacher	Male	White, non-Hispanic
Nathan Guteras	Polk	Special Education Teacher	Male	White, non-Hispanic
Laurester Kelly	Palm Beach	General Education Teacher	Female	Black, non-Hispanic
Elizabeth Lewis	Sarasota	Alternate Assessment Coordinator	Female	White, non-Hispanic
J. Elizabeth Shumate	Pinellas	Special Education Teacher	Female	Hispanic or Latino

Table A-4. 2016–17 FSAA-PT: Standard Setting Committee

First Name	*Last Name*	*District*	*Position*	*Group*
Leo	Booth	Flagler	General Education Teacher	Civics
Krishna	Chandra Das	Dade	General Education Teacher	Civics
Robin	Harwell	F.S.D.B.	Educational Diagnostician	Civics
Amy	Jacobson	Broward	General Education Teacher	Civics
Tara	Logiudice	Collier	Special Education Teacher	Civics
Rebecca	Marquez	Orange	Special Education Teacher	Civics
Christopher	Salamone	Pinellas	High School ESE Instructional Specialist	Civics
Katherine	Shattuck	Putnam	Special Education Teacher	Civics
Jacquelyn	Stokes-Taylor	Washington	General Education Teacher	Civics
Devin	Watson	Osceola	General Education Teacher	Civics
Melissa	Franklin	Okaloosa	General Education Teacher	U.S. History
Laurester	Kelly	Palm Beach	Special Education Teacher	U.S. History
Martha	Leslie	Washington	Special Education Teacher	U.S. History
Justine	Micalizzi	FDLRS/NEFEC	FDLRS, Human Resources Development Specialist	U.S. History
Jennifer	Middleswart	Putnam	Special Education Teacher	U.S. History
Kenneth	Sparkman	Taylor	General Education Teacher	U.S. History
Sally	Walden	Bay	General Education Teacher	U.S. History

Table A-5. 2016–17 FSAA-PT: Content Review Committee—Mathematics Grades 3-8

Name	*District*	*Grade*	*Position*	*Gender*	*Ethnicity*
Rosemary Christy	Alachua	All Grades	Exceptional Student Education Teacher	Female	Black, non-Hispanic
Matthew Elixson	Union	Middle & High	Administrator	Male	White, non-Hispanic
Tim Erwin	Orange	Middle	Exceptional Student Education Teacher	Male	White, non-Hispanic
Jennifer Greco	Marion	All Grades	Alternate Assessment Coordinator	Female	White, non-Hispanic
Rhonda Griffin	Wakulla	Middle	General Education Teacher	Female	White, non-Hispanic
Jeanette Herring	Charlotte	Middle	General Education Teacher	Female	Hispanic
Tim Ruddy	Flagler	Elementary	General Education Teacher	Male	White, non-Hispanic
Kelly Stevenson-Crews	Collier	High	Exceptional Student Education Teacher	Female	White, non-Hispanic

Table A-6. 2016-17 FSAA-PT: Content Review Committee—Geometry & Algebra

Name	*District*	*Grade*	*Position*	*Gender*	*Ethnicity*
Cynthia Carrig	Volusia	High	Exceptional Student Education Teacher	Female	White, non-Hispanic
Abbey Cooke	Flagler	Elementary & Middle	General Education Teacher	Female	White, non-Hispanic
Debra Garlick	Charlotte	Middle & High	Instructional Coach	Female	White, non-Hispanic
Amy Hagerty	Charlotte	High	General Education Teacher	Female	White, non-Hispanic
Elizabeth Kraus	Citrus	High	Exceptional Student Education Teacher	Female	White, non-Hispanic
Megan Slowik	Seminole	Middle	Exceptional Student Education Teacher	Female	White, non-Hispanic
Amy Summers	Charlotte	High	General Education Teacher	Female	White, non-Hispanic
Tracey Swart	Manatee	High	Exceptional Student Education Teacher	Female	White, non-Hispanic
Sally Walden	Bay	High	Exceptional Student Education Teacher	Female	White, non-Hispanic

Table A-7. 2016–17 FSAA-PT: Content Review Committee—English Language Arts

Name	*District*	*Grade*	*Position*	*Gender*	*Ethnicity*
Thomas Allard	Volusia	Middle	Exceptional Student Education Teacher	Male	White, non-Hispanic
Whitney Bryant	Lee	High	Exceptional Student Education Teacher	Female	White, non-Hispanic
Jeris Burns	Duval	Elementary	Exceptional Student Education Teacher	Female	Black, non-Hispanic
Amy Jordan	Calhoun	Middle & High	ESE/Gen Ed teacher	Female	White, non-Hispanic
Georgina Mederos	Dade	All Grades	ESE Curriculum Coordinator	Female	White, non-Hispanic
Justine Micalizzi	Charlotte	High	Exceptional Student Education Teacher	Female	
Jennifer Middleswart	Putnam	All Grades	Human Resources Development Specialist, FDLRS/NEFEC (Trainer for FSAA)	Female	White, non-Hispanic
Jennifer Pyott	Sarasota	Middle	General Education Teacher	Female	White, non-Hispanic
Megan Ring (Abbott)	Palm Beach	Elementary	General Education Teacher	Female	White, non-Hispanic
Jenny Stricklan d	Washington	Middle	General Education Teacher	Female	White, non-Hispanic

Table A-8. 2016–17 FSAA-PT: Content Review Committee—Science

Name	*District*	*Grade*	*Position*	*Gender*	*Ethnicity*
Ryan Burkhalter	Flagler		General Education Teacher	Male	White, non-Hispanic
Nathan Hafner	Duval	High	Exceptional Student Education Teacher	Male	White, non-Hispanic
Tabetha Harrison	Citrus	Elementary	General Education Teacher	Female	White, non-Hispanic
Elizabeth Lewis	Sarasota	High	Alternate Assessment Coordinator	Female	White, non-Hispanic
Tavia Marez	Okaloosa	High	General Education Teacher	Female	White, non-Hispanic
Laura Olds	Pasco	Elementary	General Education Teacher	Female	White, non-Hispanic
Kathy Russ	Walton	Middle	Exceptional Student Education Teacher	Female	White, non-Hispanic
Lizzie Willis	Brevard	Elementary	Exceptional Student Education Teacher	Female	White, non-Hispanic
Monica Wright	Nassau	All Grades	Science Curriculum Resource Teacher	Female	White, non-Hispanic

Table A-9. 2016–17 FSAA-PT: Content Review Committee—Civics

Name	*District*	*Grade*	*Position*	*Gender*	*Ethnicity*
Teresa Collins	Levy	Middle	Exceptional Student Education Teacher	Female	White, non-Hispanic
Melissa Franklin	Okaloosa	Middle	General Education Teacher	Female	White, non-Hispanic
Debra LaFountaine	Osceola	Middle	General Education Teacher	Female	White, non-Hispanic
Tara LoGiudice	Collier	Middle	Exceptional Student Education Teacher	Female	White, non-Hispanic
Sheila "Renea" McKenzie	Washingt on	Elementary	General Education Teacher	Female	American Indian or Alaskan Native
Bruce McVae	Citrus	Elementary & High	Exceptional Student Education Teacher	Male	White, non-Hispanic
Paul Ouellette	Marion	Middle	General Education Teacher	Male	White, non-Hispanic
Lisbeth Velez	Dade	All Grades	ESE Curriculum Coordinator	Female	Hispanic
Richard Werling	Pinellas	High	Exceptional Student Education Teacher	Male	White, non-Hispanic

Table A-10. *2016–17 FSAA-PT: Content Review Committee—US History*

Name	*District*	*Grade*	*Position*	*Gender*	*Ethnicity*
Mary Caupp	Santa Rosa	Middle & High	Exceptional Student Education Teacher	Female	White, non-Hispanic
Samelia Davis	Polk	High	School Based Instructional Coach/District Level Curriculum Planner	Female	Black, non-Hispanic
Catherine Giles	Broward	Middle & High	Exceptional Student Education Teacher	Female	Black, non-Hispanic
Dr. Kenneth Hodges	Polk	High	Exceptional Student Education Teacher	Male	White, non-Hispanic
Laurester Kelly	Palm Beach	High	General Education Teacher	Female	Black, non-Hispanic
Luann Reel	Flagler	High	Exceptional Student Education Teacher	Female	White, non-Hispanic
Cade Resnick	Seminole	High	General Education Teacher	Male	White, non-Hispanic
Kenneth Sparkman	Taylor	Middle	District Assessment Coordinator	Male	White, non-Hispanic
Devin Watson	Osceola	High	General Education Teacher	Female	White, non-Hispanic

Table A-11. 2016–17 FSAA-PT: Bias Review Committee—ELA & Social Studies

Name	*District*	*Grade*	*Position*	*Gender*	*Ethnicity*
Julia Bentley	Calhoun	Elementary	General Education Teacher	Female	White, non-Hispanic
Marcelino de la Portilla	Hillsborough	High	General Education Teacher	Male	Hispanic
Ardee Harris	Nassau	High	General Education Teacher	Female	Black, non-Hispanic
Pierre Hilaire	Desoto	All Grades	District Assessment Coordinator	Male	Black, non-Hispanic
Cassandra Richards	Polk	Elementary	Exceptional Student Education Teacher	Female	Black, non-Hispanic
Carey Roberts	F.S.D.B.	Elementary	Exceptional Student Education Teacher	Female	White, non-Hispanic
Frank Santa Maria	Charlotte	Middle	General Education Teacher	Male	White, non-Hispanic
Denisse Santos	Polk	All Grades	Alternate Assessment Coordinator	Female	Hispanic
Maria White	Hillsborough	High	Exceptional Student Education Teacher	Female	Hispanic

Table A-12. 2016–17 FSAA-PT: Bias Review Committee—Mathematics & Science

Name	*District*	*Grade*	*Position*	*Gender*	*Ethnicity*
Brittany Aponte	Broward	Elementary	General Education Teacher	Female	Hispanic
Kathleen Bussendorf	Brevard	Middle & High	General Education Teacher	Female	White, non-Hispanic
Dwanette Dilworth	Marion	All Grades	Exceptional Student Education Teacher	Female	Black, non-Hispanic
Stacie Gause	Orange	Elementary	Exceptional Student Education Teacher	Female	Black, non-Hispanic
Tracy Harris	Orange	Middle	ESE Curriculum Coordinator	Female	White, non-Hispanic
Robin Harwell	F.S.D.B.	Middle	Educational Diagnostician	Female	White, non-Hispanic
David Hass	Lake	All Grades	ESE Curriculum Coordinator	Male	White, non-Hispanic
Michael Rosen	Volusia	Elementary	Exceptional Student Education Teacher	Male	White, non-Hispanic
Jennifer Schmitt	Santa Rosa	Middle	General Education Teacher	Female	White, non-Hispanic

APPENDIX B—STUDENT PARTICIPATION RATES

Table B-1. 2016–17 FSAA-PT: Summary of Participation by Demographic Category—ELA*

Description	*Number Enrolled*	*Percent Tested*
All Students	24,270	97.50
Male	13,842	97.93
Female	6,656	97.30
Asian	457	96.82
Pacific Islander	32	100.00
Black non-Hispanic	6,183	97.75
Hispanic	6,199	97.41
American Indian or Alaskan Native	61	100.00
Multiracial	648	97.74
White non-Hispanic	6,918	98.00
Not Economically Disadvantaged	24,270	97.50
Limited English Proficient	1,708	98.16
Non Limited English Proficient	22,562	97.45

* Data source: Florida Department of Education

Table B-2. 2016–17 FSAA-PT: Summary of Participation by Demographic Category—Mathematics*

Description	*Number Enrolled*	*Percent Tested*
All Students	17,987	98.14
Male	10,322	98.67
Female	4,856	97.77
Asian	347	97.75
Pacific Islander	30	100.00
Black Non-Hispanic	4,586	98.37
Hispanic	4,745	98.12
American Indian or Alaskan Native	41	100.00
Multiracial	491	97.81
White Non-Hispanic	4,938	98.72
Not Economically Disadvantaged	17,987	98.14
Limited English Proficient	1,440	98.77
Non Limited English Proficient	16,547	98.09

* Data source: Florida Department of Education

Table B-3. 2016–17 FSAA-PT: Summary of Participation by Demographic Category—Science*

Description	*Number Enrolled*	*Percent Tested*
All Students	6,104	98.09
Male	3,661	98.55
Female	1,731	97.91
Asian	136	97.84
Pacific Islander	16	100.00
Black Non-Hispanic	1,608	98.11
Hispanic	1,568	98.43
American Indian or Alaskan Native	10	100.00
Multiracial	171	97.16
White Non-Hispanic	1,883	98.59
Not Economically Disadvantaged	6,104	98.09
Limited English Proficient	422	98.60
Non Limited English Proficient	5,682	98.05

* Data source: Florida Department of Education

Table B-4. 2016–17 FSAA-PT: Summary of Participation by Demographic Category—Algebra 1*

Description	*Number Enrolled*	*Percent Tested*
All Students	3,641	97.17
Male	1,208	97.42
Female	632	98.29
Asian	35	100.00
Pacific Islander	1	100.00
Black Non-Hispanic	562	98.25
Hispanic	505	96.93
American Indian or Alaskan Native	7	100.00
Multiracial	47	100.00
White Non-Hispanic	683	97.57
Not Economically Disadvantaged	3,641	97.17
Limited English Proficient	80	95.24
Non Limited English Proficient	3,561	97.22

* Data source: Florida Department of Education

Table B-5. 2016–17 FSAA-PT: Summary of Participation by Demographic Category—Biology*

Description	*Number Enrolled*	*Percent Tested*
All Students	4,305	97.57
Male	1,608	97.69
Female	789	98.26
Asian	39	95.12
Pacific Islander	1	100.00
Black Non-Hispanic	703	98.32
Hispanic	677	97.27
American Indian or Alaskan Native	10	100.00
Multiracial	74	98.67
White Non-Hispanic	893	98.02
Not Economically Disadvantaged	4,305	97.57
Limited English Proficient	137	97.86
Non Limited English Proficient	4,168	97.57

* Data source: Florida Department of Education

Table B-6. 2016–17 FSAA-PT: Summary of Participation by Demographic Category—Geometry*

Description	*Number Enrolled*	*Percent Tested*
All Students	3,117	97.41
Male	560	98.07
Female	285	96.28
Asian	18	100.00
Pacific Islander	1	100.00
Black Non-Hispanic	223	98.67
Hispanic	269	96.42
American Indian or Alaskan Native	2	100.00
Multiracial	25	96.15
White Non-Hispanic	307	97.46
Not Economically Disadvantaged	3,117	97.41
Limited English Proficient	73	97.33
Non Limited English Proficient	3,044	97.41

* Data source: Florida Department of Education

Table B-7. 2016–17 FSAA-PT: Summary of Participation by Demographic Category—Civics*

Description	*Number Enrolled*	*Percent Tested*
All Students	2,567	98.39
Male	1,589	98.39
Female	747	98.81
Asian	38	97.44
Pacific Islander	4	80.00
Black Non-Hispanic	709	98.47
Hispanic	707	98.47
American Indian or Alaskan Native	10	100.00
Multiracial	73	98.65
White Non-Hispanic	795	98.76
Not Economically Disadvantaged	2,567	98.39
Limited English Proficient	174	98.86
Non Limited English Proficient	2,393	98.36

* Data source: Florida Department of Education

Table B-8. 2016–17 FSAA-PT: Summary of Participation by Demographic Category—U.S. History*

Description	*Number Enrolled*	*Percent Tested*
All Students	3,832	97.71
Male	1,121	98.33
Female	550	98.92
Asian	37	100.00
Black Non-Hispanic	488	98.39
Hispanic	449	98.46
American Indian or Alaskan Native	7	100.00
Multiracial	49	98.00
White Non-Hispanic	641	98.62
Not Economically Disadvantaged	3,832	97.71
Limited English Proficient	67	100.00
Non Limited English Proficient	3,765	97.67

* Data source: Florida Department of Education

APPENDIX C—SAMPLE ITEM SET

Sample Item Set Table

Florida Standards Access Point: Use ratios and reasoning to solve real-world mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).

Task 1

Materials	Teacher Script	Student Response
Response Booklet: page 21 Stimulus picture card: 3 erasers Picture cards: (quarters) (rulers) (books)	***Here is a picture of three erasers.*** ***Which group has a different number of objects than the number of erasers?***	○ **A: quarters** ○ B: rulers ○ C: books ○ D: No Response **Scaffolded Response *(when applicable)*** ○ **A: quarters** ○ B: rulers ○ C: books ○ D: No Response

Task 2

Materials	Teacher Script	Student Response
Response Booklet: page 23 Stimulus picture card: package of 2 paintbrushes Number cards: 2 10 50	***Here is a package of two paintbrushes.*** ***Ms. Tandy bought five of these packages.*** ***How many paintbrushes did Ms. Tandy buy in all?*** Read the number cards to the student.	○ A: 2 ○ **B: 10** ○ C: 50 ○ D: No Response

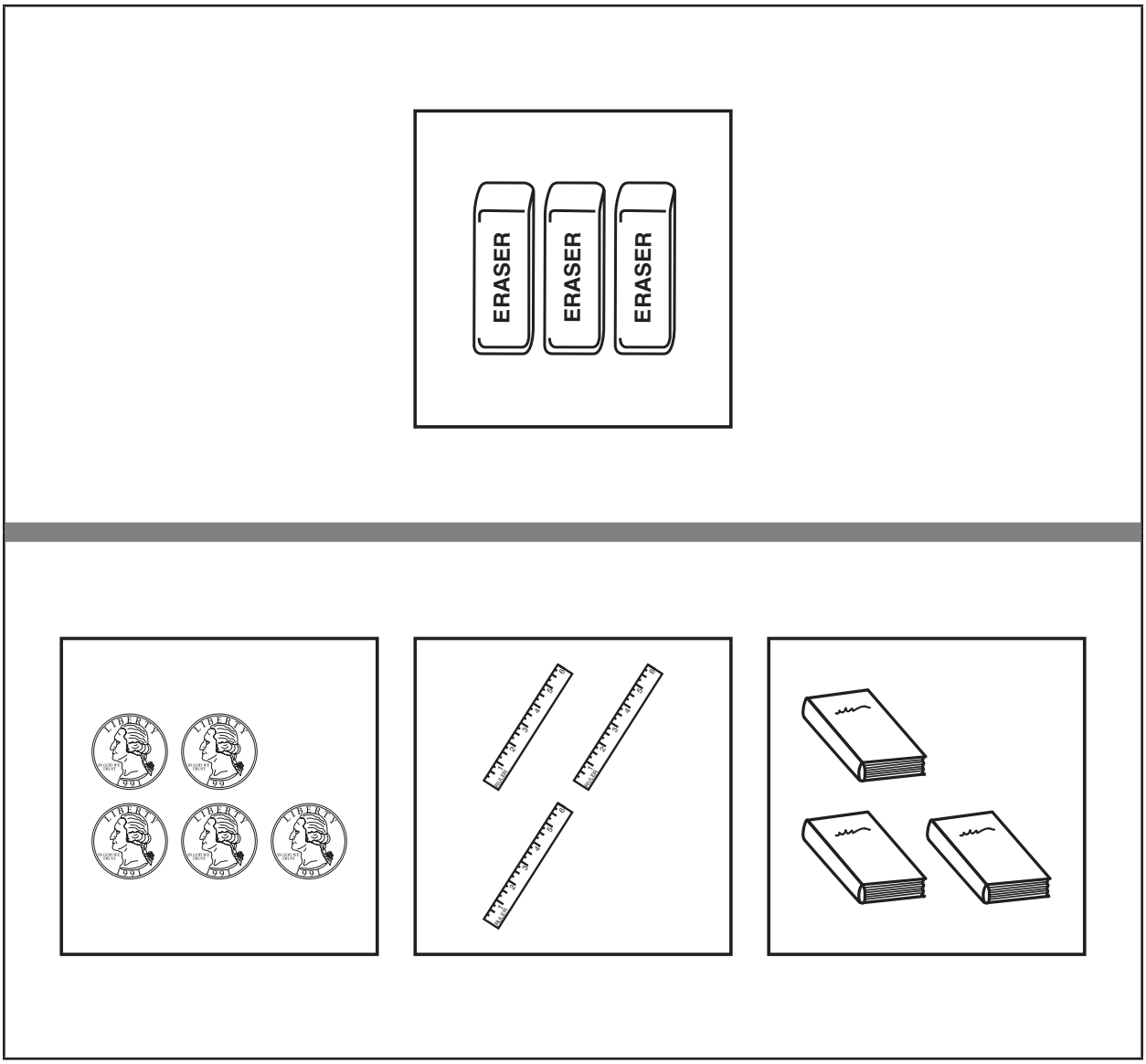
Task 3

Materials	Teacher Script	Student Response
Response Booklet: page 25 Stimulus picture card: 3 jars of paint Number cards: 3 15 20	***Here is a picture of three jars of paint.*** ***Ms. Tandy has twenty students in her class. She puts the students into groups of four. She gives each group three jars of paint.*** ***How many jars of paint does Ms. Tandy need for her class?*** Read the number cards to the student.	○ A: 3 ○ **B: 15** ○ C: 20 ○ D: No Response

Sample Student Response Booklet

Task 1 Stimulus and Response Options

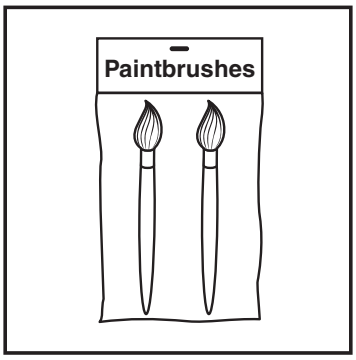
NOTE: Student uses daily mode of communication to select a response option.



Sample Student Response Booklet (cont.)

Task 2 Stimulus and Response Options

NOTE: Student uses daily mode of communication to select a response option.

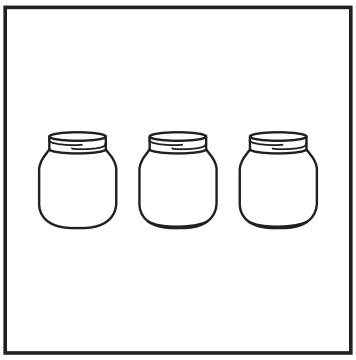


2	10	50

Sample Student Response Booklet (cont.)

Task 3 Stimulus and Response Options

NOTE: Student uses daily mode of communication to select a response option.



3

15

20

APPENDIX D—TEST DESIGN AND BLUEPRINT SPECIFICATIONS

Florida Standards Alternate Assessment

PERFORMANCE TASK

Test Design and Blueprint Specifications for English Language Arts, Mathematics, Science, and Social Studies

2016–2017 Development

Prepared by Measured Progress for the Florida Department of Education

Contents

Introduction

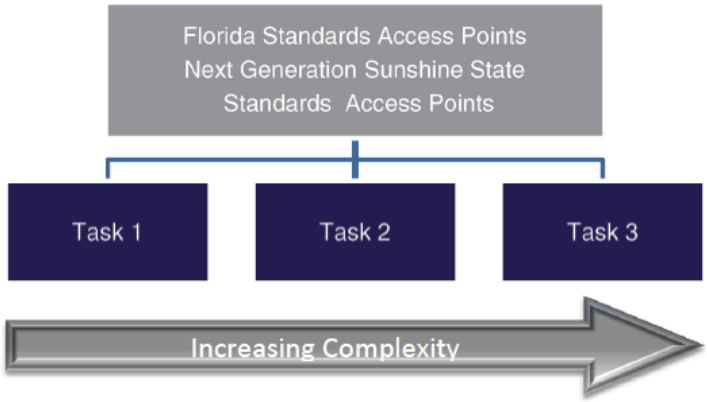
The Florida Standards Alternate Assessment - Performance Task (FSAA-PT) is based on the Florida Standards Access Points and the Florida Course Descriptions as provided in CPALMs. The Test Design and Blueprint Specifications are a resource that defines the content and format of the assessment.

Purpose of the Test Design and Blueprint Specifications

The Test Design and Blueprint Specifications define the expectations for content, standards alignment, and format of assessment items for the FSAA-PT. The Item Specifications are intended to be used by item writers and reviewers during the development process to ensure the production of high-quality assessment items.

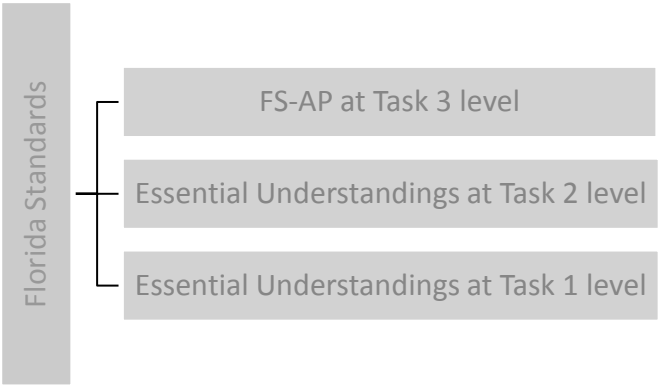
Design Overview

The FSAA-PT is designed specifically for students with significant cognitive disabilities. The FSAA-PT is a performance-based assessment aligned to the Florida Standards Access Points (FS-AP) for English Language Arts (ELA) and Mathematics and the Next Generation Sunshine State Standards Access Points (NGSSS-AP) for Science and Social Studies. The assessment measures student performance based on alternate achievement standards. The FSAA-PT's design is based on the broad range of knowledge, skills, and abilities of students with significant cognitive disabilities. The test design provides tiered participation within the assessment for students working at various levels of complexity. This design consists of item sets built with three levels of cognitive demand— with Task 1 representing the least complex task and Task 3 representing the most complex task.

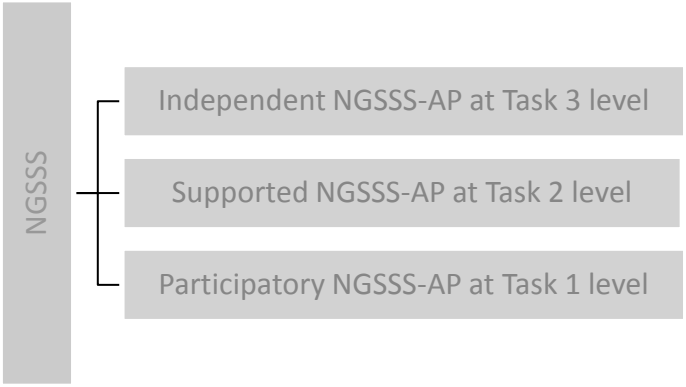


This tiered progression provides students the opportunity to work to their potential and allows for a greater range of access and challenge. A scaffolding structure is in place at the Task 1 level only. Scaffolding is the process of reducing the number of response options if the student is unable to respond accurately (see page 9).

For mathematics and ELA item sets, Task 3 is written directly to the FS-AP whereas Tasks 1 and 2 are written to Essential Understandings associated with the selected FS-AP.



For Science and Social Studies item sets, Task 3 is written directly to the Independent level NGSSS-AP, Task 2 is written directly to the Supported level NGSSS-AP, and Task 1 is written directly to the Participatory NGSSS-AP.



Writing Design

The 2017 FSAA also includes a writing design intended to assess a student's ability to compose a product in response to text. The writing prompts are written at grade spans; e.g., 4-5, 5-6, or 6-7. The writing prompts include two levels of cognitive demand:

- Writing Prompt 1 includes a series of five selected-response questions in reference to text. The series of selected-response questions will lead a student to a full writing product; for example, the student will identify the topic, introduction, supporting details, and a conclusion.
- Writing Prompt 2 includes an open-response format in which the student is asked to respond to text utilizing his or her primary mode of communication.

2017 Format for Administration

All students will be administered the assessment with print-based components. Teachers will capture student responses in the Test Booklet as they administer the assessment. Teachers will then enter student responses into the FSAA Online System for electronic scoring. Teachers will submit student writing products for Writing Prompt 2 using the following methods:

1. Teachers may type the student's response verbatim into the system.
2. Teachers may upload a scanned version of the student response template into the system.

Number of Forms

There will be four forms of the 2017 FSAA–PT. The form will be clearly labeled on the cover of all test components.

Grades and Content Areas Assessed

Standards selected for the FSAA-PT directly align to standards introduced in each corresponding grade-level/content area access course.

- ELA access courses are assessed in grades 3–10.
- Mathematics access courses are assessed in grades 3–8.
- Science access courses are assessed in grades 5 and 8.
- Algebra 1, geometry, and biology 1 are assessed in high school upon completion of the course.
- Social Studies end-of-course assessments are being field-tested in 2017. The Civics access course will be assessed in grade 7, and the U.S. History access course will be assessed in high school upon completion of the course.

Grades and Content Areas Assessed

Grade Level	ELA	Math	Science	Algebra 1 End of Course	Geometry End of Course	Biology 1 End of Course	Civics End of Course	US History End of Course
3	X	X						
4	X	X						
5	X	X	X					
6	X	X						
7	X	X					X	
8	X	X	X					
9 (ELA I)	X							
10 (ELA II)	X							
High School				X	X	X		X

2016–2017 Field-Test Development

ELA and Mathematics

All field-test items for ELA and mathematics are aligned to Florida Standards Access Points. This development will be produced in two formats:

1. Grade-specific item sets: These item sets will be written to specific FS-AP at grade level.
2. Linking item sets: This new development has been written to grade spans and is intended to provide information for a vertical scale. The process involved selecting similar standards in neighboring grades and "linking" them with a common Essence Statement that addresses both grade-level skills. ELA will have linking item sets in grades 3 through 10. Mathematics will have linking item sets in grades 3 through 8.

Please see Appendix A (ELA) and Appendix B (Mathematics) for a list of standards targeted for 2016–17 development.

2016–17 New Development for ELA and Mathematics

ELA	
Grade	# Item sets
3	7
3–4	5
4	2
4–5	5
5	2
5–6	5
6	2
6–7	5
7	2
7–8	5
8	2
8–9	5
9	2
9–10	5
10	7
total:	61

Mathematics	
Grade/EOC	# Item sets
3	7
3–-4	5
4	2
4–5	5
5	2
5–6	5
6	2
6–7	5
7	2
7–8	5
8	7
Geometry	12
Algebra 1	12
total:	71

Science and Social Studies

All field-test items for science and social studies are aligned to Next Generation Sunshine State Standards Access Points. Civics and U.S.history are new content areas for the FSAA. All social studies content is being field-tested in spring 2017.

Please see Appendix C (Science) and Appendix D (Social Studies) for a list of standards targeted for 2016-17 development.

2016–17 New Development for Science and Social Studies

Science	
Grade/EOC	# Item sets
5	12
8	12
Biology 1	12
total:	36

Social Studies	
Grade/EOC	# Item sets
Civics	30*
U.S. History	30*
total:	60

* *Two sets developed for practice tests*

Administration

The 2017 FSAA will be separated into three sessions. Each session will require the teacher to follow administration procedures as indicated below (with the exception of social studies – see page 8).

Session 1

- Item Sets 1-16
- Adaptive: Each student is administered Task 1. Task 2 and Task 3 are administered **only** if the student continues to respond correctly without scaffolding.

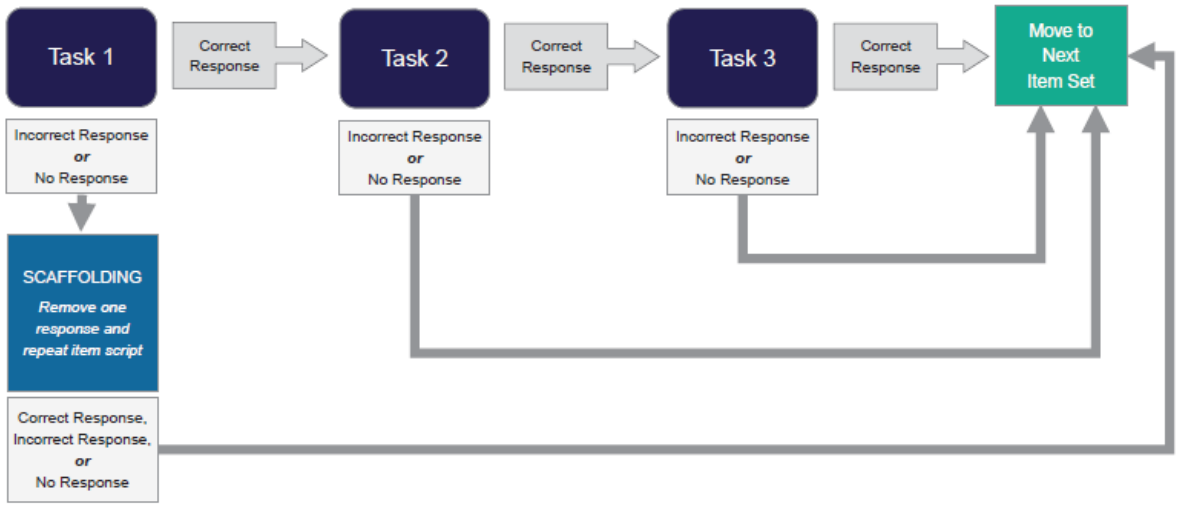
Session 2

- Item Sets 1-3
- Nonadaptive: Each student is administered Task 1, Task 2, and Task 3 in each item set.
- Administration of each task is **not** dependent upon performance on the previous task.

Session 3

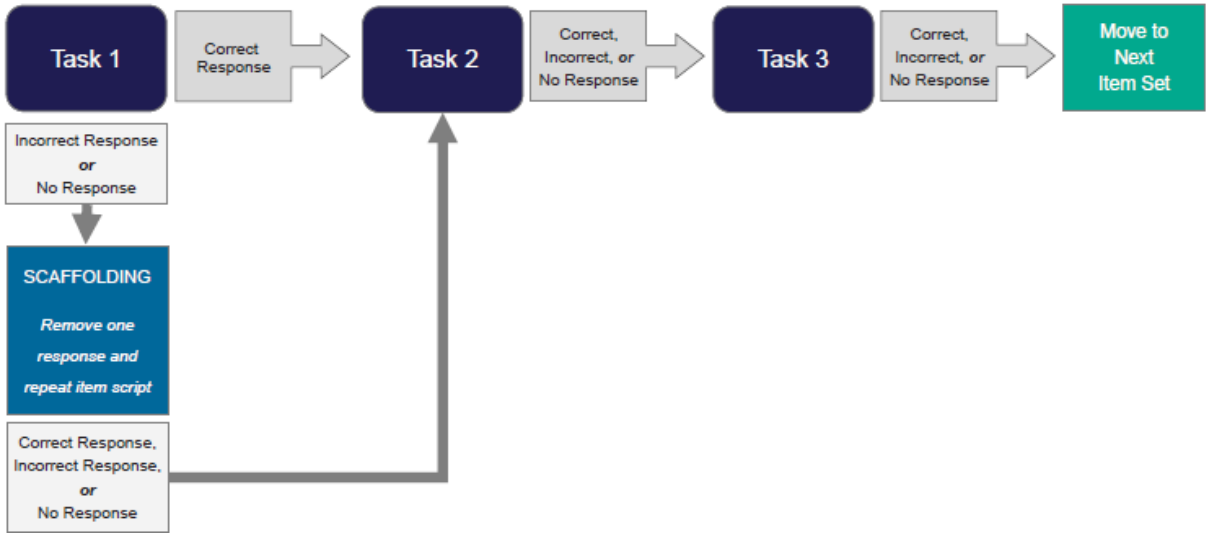
- Writing Prompts 1 and 2
- Each student is administered all five questions and the open-response writing prompt.
- Administration of each task is not dependent upon performance on the previous task.

Session 1: Items sets 1–16



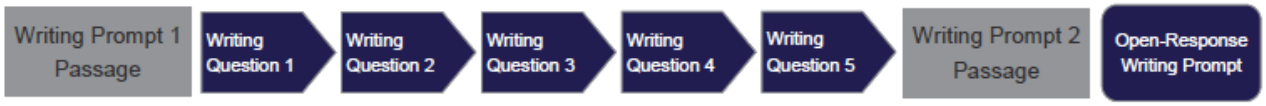
The graphic above depicts the Session 1 administration process. Session 1 will include the first 16 item sets in ELA, mathematics, and science. These first 16 item sets will be administered in an adaptive format—the teacher will continue to administer tasks in an item set only if the student responds correctly without scaffolding. It is important to remember that each item set contains three tasks, all addressing a FS-AP/NGSSS-AP at varied levels of complexity. The student enters the item set at the lowest level of complexity. As the student moves up through the tasks in an item set, the level of difficultly increases. The student receives a final score for the item set based on the highest level at which he or she answered correctly.

Session 2: Item sets 1–3



The graphic above depicts the Session 2 administration process. Session 2 will include item sets 1–3 in ELA, mathematics, and science. Teachers will administer these items in a nonadaptive manner—the teacher will administer all three tasks in an item set, regardless of whether the student answers each task correctly, incorrectly, or provides no response. The teacher will next move on to Task 2 of the same item set. The student receives a final score for the item set based on the highest level at which he or she answered correctly.

Session 3: Writing Prompt 1 and 2



The graphic above depicts the Session 3 administration process. Teachers will administer both Writing Prompts 1 and 2 to all students. Each student will be read a passage followed by five selected-response questions. The student will respond to these questions by selecting from a field of options in the Response Booklet. The second passage will be read to the student. The teacher will then administer the open-response writing prompt. The student will respond utilizing his or her primary mode of communication. Scaffolding procedures do not apply to writing questions in Session 3.

Social Studies Operational Field-Test Design

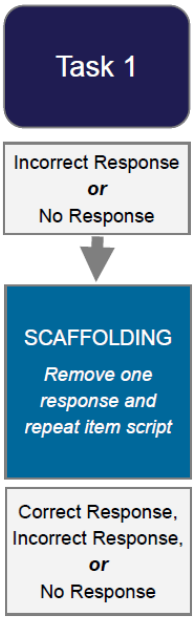
Both Civics and U.S. History are being field-tested in spring 2017 and will, therefore, require different administration procedures. Ten item sets (Session 1, 1–10) will be administered in an adaptive format, and nine item sets (Session 2, 1–9) will be administered in a nonadaptive format.

Scaffolding Procedure at Task 1

The FSAA-PT is built on the concept of allowing students to perform to their fullest potential by starting at the lowest level of complexity, Task 1, and working through the remaining levels based on the accuracy of the student's response.

As the student works through the levels, the tasks increase in complexity.

Scaffolding is the process of reducing the response options for a student who is unable to respond accurately at the Task 1 level only. The complexity of the assessment task is reduced by covering or removing one of the response options. This scaffolding process must be used systematically within each assessment item for Session 1 and Session 2.



English Language Arts

Blueprint Design

The ELA design consists of five Reporting Categories from the Florida Standards: Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Language and Editing, and Text-Based Writing. These five categories encompass reading, writing, language, and speaking and listening standards. The genre may vary between informational and literary text as specified in each grade-level blueprint, with text-based writing being the exception, only addressing informational text. The assessment consists of a total of 16 common items.

All newly developed items for ELA will be field-tested and their statistics will be evaluated prior to using the items as common.

Updated assessment blueprints for ELA grades 3–10 were developed for spring 2017. The updated assessment blueprint includes standards for the linking items.

In developing the assessment blueprint for ELA, Measured Progress staff examined the following documents/resources:

- Florida Standards Assessment Test Design Summary and Blueprint: English Language Arts
- ELA Access Course descriptions for grades 3–10
- Florida Standards and Florida Standards Access Points

The FSAA 2016–17 ELA item development standards can be found in Appendix A.

Grades 3–8:

Key Ideas and Details

- All three standards (1.1, 1.2, and 1.3) will be assessed at each grade level. These are basic skills necessary for responding to literary text as well as informational text. There is a heavier emphasis on literary text in grades 3–5. It is important for students to be exposed and instructed on these skills as building blocks for the more complex skills at grades 6–8 of finding support in identifying a theme, identifying central ideas, stating an opinion and supporting it, and recognizing the basis for argument. The ability to distinguish between a detail and the central idea is a more difficult skill for students. Identifying the relationships between ideas in a text is also a more difficult skill for students.
- Alternating the testing of Key Ideas and Details for literary text and informational text each year in successive grade levels provides for heavier emphasis on literary text in grades 3–5 and heavier emphasis on informational text in grades 6–8. This model allows for teachers to focus on one type of text but not ignore the other.

Craft and Structure

- Grades 3 and 4 focus on decoding literary text and point of view in literary text.
- Grades 3 and 4 focus on text structures in informational text where text structures are more concrete.
- Grades 5–7 will transition to more involved literary texts having more complex plots, multiple characters, and less familiar settings.
- Grade 8 will provide paired informational passages with concrete text and differing viewpoints.

Integration of Knowledge and Ideas

- Grades 3 and 4 focus on use of illustrations, connections in text, and compare and contrast in informational text where the use of illustrations and the connections between the illustrations and the text are clearer and literal, making it easier for students to compare and contrast them.
- Grade 5 will transition from concrete to abstract thinking in literary text. This coincides with L.3.4 and L.3.5, which require abstract thinking.

Language and Editing

- Both standards (1.1 and 1.2) can be assessed at each grade level.
- Alternate literary and informational text at each grade, opposite to Key Ideas and Details. In order to use language correctly and to improve it by editing, students must understand what they are trying to say or what the statement being edited is supposed to mean (i.e., reading for a different purpose).

Text-Based Writing

- Writing will be in response to informational text based on the informational emphasis in the Access Points. The writing items will be in the form of a writing prompt.
- For grades 4 and 5 the response will be explanatory, and in grades 6–8 the response will be argument. The focus will be on conveying a message and not on the writing conventions. Conventions are tested in Language and Editing.

Independent Reading Items Across <u>All Grades</u>:

- Items that require independent reading passages will be double-coded to either LAFS._.RL.4.10 (literary) or LAFS._.RI.4.10 (informational).

Grades 3–8 ELA Assessment Blueprints

FSAA-PT Grade 3 ELA Assessment

Reporting Category	Genre	Standard	Number of Items
Key Ideas and Details	Literary	LAFS.3.RL.1.1 LAFS.3.RL.1.2 LAFS.3.RL.1.3	3
Craft and Structure	Literary	LAFS.3.RL.2.4 Also assesses LAFS.3.RF.3.3 and LAFS.3.RF.4.4 LAFS.3.RL.2.6	2 or 3
	Informational	LAFS.3.L.2.3.a LAFS.3.L.3.4 LAFS.3.L.3.5 LAFS.3.RI.2.5	2 or 3
Integration of Knowledge and Ideas	Literary	LAFS.3.SL.1.2 LAFS.3.SL.1.3	2 or 3
	Informational	LAFS.3.RI.3.7 LAFS.3.RI.3.8 LAFS.3.RI.3.9	2 or 3
Language and Editing	Informational	LAFS.3.L1.1 LAFS.3.L.1.2	3

FSAA-PT Grade 4 ELA Assessment

Reporting Category	Genre	Standard	Number of Items
Key Ideas and Details	Informational	LAFS.4.RI.1.1 LAFS.4.RI.1.2 LAFS.4.RI.1.3	3
Craft and Structure	Literary	LAFS.4.RL.2.4 Also assesses LAFS.4.RF.3.3 LAFS.4.RF.4.4 LAFS.4.RL.2.6	2 or 3
	Informational	LAFS.4.L.3.4 LAFS.4.L.3.5 LAFS.4.RI.2.5	2 or 3
Integration of Knowledge and Ideas	Literary	LAFS.4.RL.3.7 Also assesses LAFS.4.SL.1.2	2 or 3
	Informational	LAFS.4.RI.3.7 LAFS.4.RI.3.8 LAFS.4.RI.3.9	2 or 3
Language and Editing	Literary	LAFS.4.L.1.1 LAFS.4.L.1.2	3
Text-Based Writing	Informational	LAFS.4.W.1.2 LAFS.4.W.2.4	2

FSAA-PT Grade 5 ELA Assessment

Reporting Category	Genre	Standard	Number of Items
Key Ideas and Details	Literary	LAFS.5.RL.1.1 LAFS.5.RL.1.2 LAFS.5.RL.1.3	3
Craft and Structure	Literary	LAFS.5.L.3.4 LAFS.5.L.3.5 LAFS.5.RL.2.5	2 or 3
	Informational	LAFS.5.RI.2.4 Also assesses LAFS.5.RF.3.3 and LAFS.5.RF.4.4 LAFS.5.RI.2.6	2 or 3
Integration of Knowledge and Ideas	Literary	LAFS.5.RL.3.7 LAFS.5.RL.3.9	2 or 3
	Informational	LAFS.5.SL.1.2 LAFS.5.SL.1.3	2 or 3
Language and Editing	Informational	LAFS.5.L.1.1 LAFS.5.L.1.2	3
Text-Based Writing	Informational	LAFS.5.W.1.2 LAFS.5.W.2.4 LAFS.5.W.1.1	2

FSAA-PT Grade 6 ELA Assessment

Reporting Category	Genre	Standard	Number of Items
Key Ideas and Details	Informational	LAFS.6.RI.1.1 LAFS.6.RI.1.2 LAFS.6.RI.1.3	3
Craft and Structure	Literary	LAFS.6.RL.2.4 LAFS.6.L.3.4 LAFS.6.L.3.5	2 or 3
	Informational	LAFS.6.RI.2.5 LAFS.6.RI.2.6	2 or 3
Integration of Knowledge and Ideas	Literary	LAFS.6.RL.3.9	2 or 3
	Informational	LAFS.6.SL.1.2 LAFS.6.SL.1.3	2 or 3
Language and Editing	Literary	LAFS.6.L.1.1 LAFS.6.L.1.2	3
Text-Based Writing	Informational	LAFS.6.W.1.1 LAFS.6.W.2.4 LAFS.6.W.1.2	2

FSAA-PT Grade 7 ELA Assessment

Reporting Category	Genre	Standard	Number of Items
Key Ideas and Details	Literary	LAFS.7.RL.1.1 LAFS.7.RL.1.2 LAFS.7.RL.1.3	3
Craft and Structure	Literary	LAFS.7.RL.2.5 LAFS.7.RL.2.6	2 or 3
	Informational	LAFS.7.RI.2.4 LAFS.7.L.3.4 LAFS.7.L.3.5	2 or 3
Integration of Knowledge and Ideas	Literary	LAFS.7.SL.1.2	2 or 3
	Informational	LAFS.7.RI.3.8 LAFS.7.RI.3.9	2 or 3
Language and Editing	Informational	LAFS.7.L.1.1 LAFS.7.L.1.2	3
Text-Based Writing	Informational	LAFS.7.W.1.1 LAFS.7.W.2.4	2

FSAA-PT Grade 8 ELA Assessment

Reporting Category	Genre	Standard	Number of Items
Key Ideas and Details	Informational	LAFS.8.RI.1.1 LAFS.8.RI.1.2 LAFS.8.RI.1.3	3
Craft and Structure	Literary	LAFS.8.RL.2.4 LAFS.8.L.3.4 LAFS.8.L.3.5	2 or 3
	Informational	LAFS.8.RI.2.5 LAFS.8.RI.2.6	2 or 3
Integration of Knowledge and Ideas	Literary	LAFS.8.SL.1.2	2 or 3
	Informational	LAFS.8.RI.3.8 LAFS.8.RI.3.9	2 or 3
Language and Editing	Literary	LAFS.8.L.1.1 LAFS.8.L.1.2	3 or 4
Text-Based Writing	Informational	LAFS.8.W.1.1 LAFS.8.W.2.4 LAFS.8.W.1.2	2

Grades 9–10 (ELA 1 and ELA 2)

Key Ideas and Details

- All three standards (1.1, 1.2, and 1.3) will be assessed at each grade level.
- Alternating literary and informational text each year provides for heavier emphasis on informational text in grades 9–10.

Craft and Structure

- Grade 9 will focus on balancing skills across the standards using informational text in which text structures are concrete.
- Grade 10 will transition to more abstract literary text with more challenging organization and nuances in language as well as more complex literary elements.

Integration of Knowledge and Ideas

- Grades 9 and 10 are a mix of informational and literary text assessing the most concrete skills.

Language and Editing

- Both standards (1.1 and 1.2) can be assessed at each grade level.
- In each successive grade the genre will alternate between literary and informational text, opposite to Key Ideas and Details.

Text-Based Writing

- Writing will be in response to text. The writing items will be in the form of a writing prompt. For high school the writing response will alternate between explanatory and argument. Grade 9 will be an explanatory response, and grade 10 will be an argument as a response.
    - Student could be given an outline with separate phrases/clauses on a familiar debatable topic (some suitable, some not); student would fill in the outline with the phrases/clauses, showing order, acknowledgment, reasons, etc.
- The focus will be on conveying a message and not on the writing conventions. Conventions are tested in Language and Editing.

Grades 9–10 (ELA 1 and ELA 2) Assessment Blueprints

FSAA-PT Grade 9 (ELA 1) Assessment

Reporting Category	Genre	Standard	Number of Items
Key Ideas and Details	Informational	LAFS.910.RI.1.1 LAFS.910.RI.1.2 LAFS.910.RI.1.3	2 or 3
Craft and Structure	Informational	LAFS.910.RI.2.4 LAFS910.L.3.4 LAFS.910.RI.2.5 LAFS.910.RI.2.6	3 or 4
Integration of Knowledge and Ideas	Literary	LAFS.910.SL.1.2	2 or 3
	Informational	LAFS.910.RI.3.7 LAFS.910.SL.1.2 LAFS.910.RI.3.8	2 or 3
Language and Editing	Literary	LAFS.910.L.1.1 LAFS.910.L.1.2	3 or 4
Text-Based Writing	Informational	LAFS.910.W.1.2 LAFS.910.W.2.4 LAFS.910.W.1.1	2

FSAA-PT Grade 10 (ELA 2) Assessment

Reporting Category	Genre	Standard	Number of Items
Key Ideas and Details	Literary	LAFS.910.RL.1.1 LAFS.910.RL.1.2 LAFS.910.RL.1.3	2 or 3
Craft and Structure	Literary	LAFS.910.RL.2.4 LAFS910.L.3.4 LAFS.910.L.3.5 LAFS.910.RL.2.5	3 or 4
Integration of Knowledge and Ideas	Literary	LAFS.910.SL.1.2	2 or 3
	Informational	LAFS.910.RI.3.7 LAFS.910.SL.1.3 LAFS.910.RI.3.8	2 or 3
Language and Editing	Informational	LAFS.910.L.1.1 LAFS.910.L.1.2	3 or 4
Text-Based Writing	Informational	LAFS.910.W.1.1 LAFS.910.W.2.4	2

ELA Linking Item Blueprints

Linking item sets have been written to grade spans (grades 3-10) and are intended to provide information for a vertical scale. The process involved selecting similar standards in neighboring grades and "linking" them with a common Essence Statement that addresses both grade-level skills

All linking content is being field-tested in 2017 and is not reflected in the current grade-level blueprints. The table below indicates the standards that have been addressed across grade spans.

3/4	4/5	5/6	6/7	7/8	8/9	9/10
LAFS.3/4.RL.1.1	LAFS.4/5.RL.1.1	LAFS.5/6.RL.1.1	LAFS.6/7.RL.1.1	LAFS.7/8.RL.1.1	LAFS.8/9.RL.1.1	LAFS.9/10.RL.1.1
LAFS.3/4.RI.1.3	LAFS.4/5.RI.1.3	LAFS.5/6.RI.1.1	LAFS.6/7.RI.1.2	LAFS.7/8.RI.1.1	LAFS.8/9.RI.1.1	LAFS.9/10.RI.1.2
LAFS.3/4.RL.2.5	LAFS.4/5.RI.2.4	LAFS.5/6.RL2.6	LAFS.6/7.RL.2.4	LAFS.7/8.RL.2.4	LAFS.8/9.RL.2.4	LAFS.9/10.RL.2.6
LAFS.3/4.RL.2.6	LAFS.4/5.RI.3.8	LAFS.5/6.RI.3.8	LAFS.6/7.RI.3.8	LAFS.7/8.RI.3.8	LAFS.8/9.RI.3.8	LAFS.9/10.RI.3.8
LAFS.3/4.L.3.4	LAFS.4/5.L.3.4	LAFS.5/6.L.3.4	LAFS.6/7.L.3.4	LAFS.7/8.L.3.4	LAFS.8/9.L.3.4	LAFS.9/10.L.3.4

ELA Passage Specifications

Topics

All passages are written specifically for the FSAA-PT. They are engaging and high quality, free from bias and stereotyping, and age-appropriate for the students. Passages present a variety of points of view and opinions as well as universal themes. The subject matter of the passages reflects the variety of interests of Florida's student population. Informational passages provide accurate, fact-checked information with the sources noted for the developer's use.

Students participating in alternate assessment may have limited life experiences and exposure to topics; therefore, the following guidelines are recommended for passage development:

- Elementary School: classroom, school, family, and familiar activities
- Middle School: classroom, school, family, familiar activities, and community
- High School: classroom, school, family, familiar activities, community, and vocational and transitional opportunities.

In addition to the guidelines listed above, science, social studies, and health curriculum topics will be used as part of the passage topic lists for all new development. This ensures students will have the greatest possible exposure to grade-level, cross-curricular content in a variety of educational settings.

Texts/passages may be presented in a variety of different formats and points of view based on the requirements in the standard being assessed. Some examples are included in the following table:

Forms of Informational Text	Forms of Literary Text
• Subject-area text (e.g., science, history) • Magazine and newspaper articles • Diaries • Editorials • Informational essays • Biographies and autobiographies • Primary sources (e.g., Bill of Rights) • Consumer materials • How-to articles • Advertisements • Tables and graphics (e.g., illustrations, photographs, and captions) • Website excerpts • Social media references (e.g., blogs) • Literary essays (e.g., critiques, personal narratives)	• Short stories • Excerpts from literary work • Poems • Historical fiction • Fables and folk tales • Plays

Passage topics and characters are carefully selected to ensure that students experience a balance of high-interest topics with topics containing familiar knowledge. Characters' names in some of the passages reflect the diverse populations of Florida (e.g., Haitian-Creoles, Hispanics, or other ethnic groups). Simplicity and familiarity are important so that students taking the test are not distracted by details unrelated to the standard being assessed. The names should be simple, of one or two syllables, and familiar to most students. Names used in the previous assessment are best avoided in the current test form. Stereotypes based on gender are avoided, as all stereotypes are.

Passage Presentation

Passages are read aloud to the student unless the item also tests fluency, in which case the items are double-coded: fluency and comprehension. Passages are written so that the first sentence or two or the first paragraph (or stanza of a poem) can stand on its own. Passages are developed with the intent that a Task 1 question can be asked and correctly answered directly from the information found in the beginning sentences of the passage. No inference is required of the student in order to respond correctly at the Task 1 level unless specifically required by the Access Point.

Word Count and Readability

Passage length varies from the specifications for general education tests. Because of the needs of this particular population, the number of words in the passages is about 50 percent fewer than the lowest range at a particular grade level. For example, at grade 3 the range of number of words is 100–700 for the general education population. For this test, the range is 50–75 for grade 3. The chart below shows the range of the number of words per grade level. Some items may require the student to compare or contrast elements from two different passages. For "paired passage" items, each individual passage will follow the grade-level specifications. For

example, at grade 5, two passages may be provided each between 100 and150 words in length. However, efforts will be made to keep the word length of paired passages as short as possible while still maintaining the integrity of the passage set.

Grade	Range of Number of Words
3	50–75
4	50–75
5	100–150
6	100–150
7	150–200
8	150–200
9	200–250
10	200–250

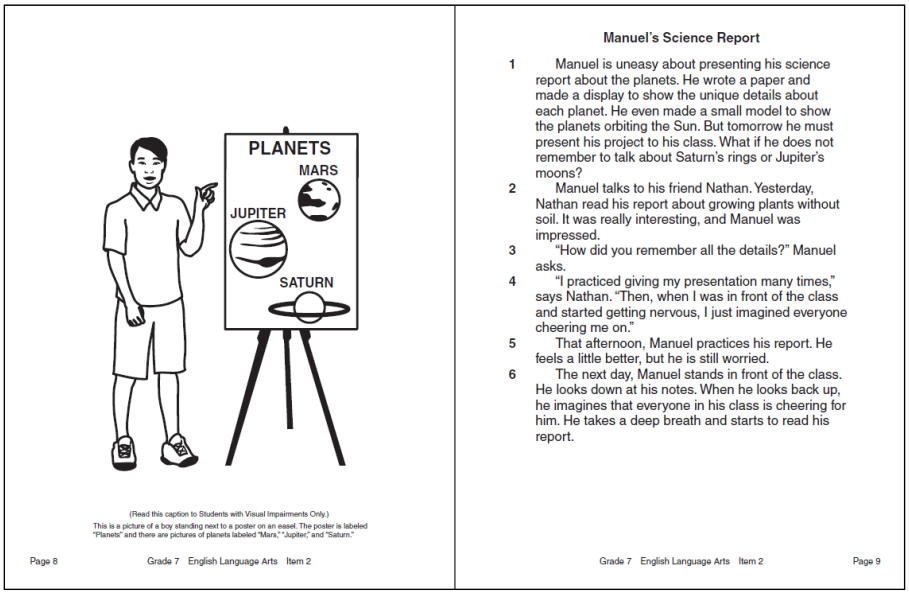
Passage readabilities vary by grade level. The readability level for each grade-level test does not exceed three grade levels below the tested grade, with the exception that grade 10 does not exceed grade 6 readability. For grades 3, 4, and 5, the readability levels are determined using the Spache Scale. For grades 6 through high school, the levels are determined by using Powers.

No readability formula is perfect; we recognize readabilities may become somewhat skewed for those passages at grades 3 through 6 that are required to have less than 75 or 150 words total. For passages with fewer total word counts, one or two uncommon words easily increase readability beyond the ideal ranges. We strive to develop passages that are the appropriate length and readability, while containing enough vocabulary and content that allows the assessment of reading skills. For these reasons, we rely heavily on the Passage Bias and Review Committee to ensure passages are appropriate for the student population, while making the test an experience that measures what a student knows and is able to do.

Grade	Readability Grade Level
3	0.5
4	1
5	1–2
6	2–3
7	3–4
8	4–4.5
9	4.6–4.8
10	5–6

Passage Graphics

Graphics, for both passages and response options, provide access to students so that they can show what they know and are able to do. Graphics are black-and-white line drawings with grayscale limited to use only when necessary to define the graphic areas more clearly for students. Each passage includes one graphic that sets the scene/event of the story. The graphic provides an illustrated concept of the main idea/essence of the passage. The graphic leaves out all extraneous information. Each passage graphic includes a caption describing the passage graphic in detail. These captions are read to students with visual impairments only. Neither the graphic nor the caption keys any part of the item. The standards may call for specific text features that are not illustrations as previously described. In these cases, an additional feature (e.g., tables, charts) will also accompany the passage.



Mathematics

Blueprint Design

The mathematics design is based on the Florida Standards and consists of a total of 16 core item sets. Grades 3–5 address the five Reporting Categories introduced in elementary mathematics; Grades 6–8 address the six Reporting Categories introduced in middle school mathematics; and algebra 1 and geometry address three Reporting Categories each, respective to the high school content introduced in each course.

All newly developed items for mathematics will be field-tested and their statistics will be evaluated prior to using the items as common.

Updated assessment blueprints for mathematics grades 3–8 were developed for spring 2017. The updated assessment blueprint includes standards for the linking items. The assessment blueprints Access EOCs Algebra 1 and Geometry are unchanged from 2015–16.

In developing the assessment blueprint for mathematics, Measured Progress staff examined the following documents/resources:

- Florida Standards Assessment Test Design Summary and Blueprint
- Mathematics Access Course descriptions for grades 3–8; Access EOCs Algebra 1 and Geometry
- Florida Standards and Florida Standards Access Points

The FSAA 2016–17 mathematics item development standards can be found in Appendix B.

Grades 3–5 Reporting Categories:

- Operations and Algebraic Thinking
- Numbers in Base Ten
- Numbers and Operations Fractions
- Measurement and Data
- Geometry

Grades 6–8 Reporting Categories:

- Ratio and Proportional Relationships
- Functions
- Expressions and Equations
- Geometry
- Statistics and Probability
- The Number System

The aforementioned Reporting Categories and each category's level of emphasis were selected to mirror the Florida Standards Assessment.

Grades 3–8 Mathematics Blueprints

FSAA-PT Grade 3 Mathematics Assessment

Reporting Category	Standards	Number of Items
Operations, Algebraic Thinking, and Numbers in Base Ten	MAFS.3.OA.1.1 MAFS.3.OA.2.5 MAFS.3.OA.2.6 MAFS.3.OA.4.8 MAFS.3.NBT.1.1 MAFS.3.NBT.1.3	7
Numbers and Operations-Fractions	MAFS.3.NF.1.1 MAFS.3.NF.1.3	3
Measurement, Data, and Geometry	MAFS.3.MD.1.1 MAFS.3.MD.2.3 MAFS.3.MD.2.4 MAFS.3.MD.3.6 MAFS.3.MD.4.8 MAFS.3.G.1.1	6

FSAA-PT Grade 4 Mathematics Assessment

Reporting Category	Standards	Number of Items
Operations and Algebraic Thinking	MAFS.4.OA.1.1 MAFS.4.OA.2.4 MAFS.4.OA.3.5	3
Numbers and Operations in Base Ten	MAFS.4.NBT.1.2 MAFS.4.NBT.1.3 MAFS.4.NBT.2.5	3
Numbers and Operations-Fractions	MAFS.4.NF.1.1 MAFS.4.NF.1.2 MAFS.4.NF.2.3 MAFS.4.NF.3.7	4
Measurement, Data, and Geometry	MAFS.4.MD.1.3 MAFS.4.MD.2.4 MAFS.4.G.1.2 MAFS.4.G.1.3	6

FSAA-PT Grade 5 Mathematics Assessment

Reporting Category	Standards	Number of Items
Operations, Algebraic Thinking, and Fractions	MAFS.5.OA.1.2 MAFS.5.OA.2.3 MAFS.5.NF.1.2 MAFS.5.NF.2.5 MAFS.5.NF.2.6	6
Numbers and Operations in Base Ten	MAFS.5.NBT.1.3 MAFS.5.NBT.1.4 MAFS.5.NBT.2.6 MAFS.5.NBT.2.7	5
Measurement, Data, and Geometry	MAFS.5.MD.1.1 MAFS.5.MD.2.2 MAFS.5.MD.3.3 MAFS.5.MD.3.4 MAFS.5.G.1.1 MAFS.5.G.2.4	5

FSAA-PT Grade 6 Mathematics Assessment

Reporting Category	Standards	Number of Items
Ratio and Proportional Relationships	MAFS.6.RP.1.1 MAFS.6.RP.1.3	2 or 3
Expressions and Equations	MAFS.6.EE.1.1 MAFS.6.EE.1.4 MAFS.6.EE.2.5 MAFS.6.EE.3.9	5
Geometry	MAFS.6.G.1.1 MAFS.6.G.1.4	2 or 3
Statistics and Probability	MAFS.6.SP.1.2 MAFS.6.SP.2.4	3
The Number System	MAFS.6.NS.2.4 MAFS.6.NS.3.6 MAFS.6.NS.3.8	3

FSAA-PT Grade 7 Mathematics Assessment

Reporting Category	Standards	Number of Items
Ratio and Proportional Relationships	MAFS.7.RP.1.1 MAFS.7.RP.1.2 MAFS.7.RP.1.3	4
Expressions and Equations	MAFS.7.EE.2.3 MAFS.7.EE.2.4	3
Geometry	MAFS.7.G.1.1 MAFS.7.G.2.4 MAFS.7.G.2.5 MAFS.7.G.2.6	4
Statistics and Probability	MAFS.7.SP.2.3 MAFS.7.SP.3.5 MAFS.7.SP.3.8	2 or 3
The Number System	MAFS.7.NS.1.1 MAFS.7.NS.1.2 MAFS.7.NS.1.3	2 or 3

FSAA-PT Grade 8 Mathematics Assessment

Reporting Category	Standards	Number of Items
Expressions and Equations	MAFS.8.EE.1.2 MAFS.8.EE.1.3 MAFS.8.EE.2.5 MAFS.8.EE.3.8	5
Functions	MAFS.8.F.1.1 MAFS.8.F.1.3	4
Geometry	MAFS.8.G.1.1 MAFS.8.G.1.4 MAFS.8.G.3.9	4
Statistics and Probability and The Number System	MAFS.8.SP.1.4 MAFS.8.NS.1.1 MAFS.8.NS.1.2	3

Access Algebra 1 End-of-Course Reporting Categories:

- Statistics and the Number System
- Algebra and Modeling
- Functions and Modeling

Most standards on the Algebra 1 blueprint overlap between Access Algebra 1A, Access Algebra 1B, and Access Liberal Arts Mathematics.

FSAA-PT Algebra 1 End-of-Course Assessment

Reporting Category	Standards	Number of Items
Statistics and the Number System	MAFS.912.S-ID.1.2 MAFS.912.S-ID.3.9	3
Algebra and Modeling	MAFS.912.A-CED.1.1 MAFS.912.A-CED.1.2 MAFS.912.A-CED.1.3	7
Functions and Modeling	MAFS.912.F-IF.2.4 MAFS.912.F-IF.2.5 MAFS.912.F-IF.2.6	6

Access Geometry End-of-Course Reporting Categories:

- Congruence, Similarity, Right Triangles, and Trigonometry
- Circles, Geometric Measurement, and Geometric Properties with Equations
- Modeling with Geometry

Most standards on the Geometry blueprint overlap between Access Geometry, Access Informal Geometry, and Access Liberal Arts Mathematics.

FSAA-PT Geometry End-of-Course Assessment

Reporting Category	Standards	Number of Items
Congruence, Similarity, Right Triangles, and Trigonometry	MAFS.912.G-CO.1.1 MAFS.912.G-CO.1.3 MAFS.912.G-CO.1.4 MAFS.912.G-SRT.1.2 MAFS.912.G-SRT.1.3 MAFS.912.G-SRT.2.5	7
Circles, Geometric Measurement, and Geometric Properties with Equations	MAFS.912.G-C.1.1 MAFS.912.G-GMD.1.3 MAFS.912.G-GMD.2.4 MAFS.912.G-GPE.2.7	6
Modeling with Geometry	MAFS.912.G-MG.1.1 MAFS.912.G-MG.1.2 MAFS.912.G-MG.1.3	3

Math Linking Item Blueprints

Linking item sets have been written to grade spans (grades 3-8) and are intended to provide information for a vertical scale. The process involved selecting similar standards in neighboring grades and "linking" them with a common Essence Statement that addresses both grade-level skills

All linking content is being field-tested in 2017 and is not reflected in the current grade-level blueprints. The table below indicates the standards that have been addressed across grade spans.

3/4	4/5	5/6	6/7	7/8
MAFS.3.OA.1.1 MAFS.4.OA.1.1	MAFS.4.OA.1.3 MAFS.5.OA.1.1	MAFS.5.OA.1.2 MAFS.6.EE.1.3	MAFS.6.RP.1.3 MAFS.7.RP.1.3	MAFS.7.EE.2.4 MAFS.8.EE.3.7
MAFS.3.OA.1.2 MAFS.4.OA.1.2	MAFS.4.NBT.1.1 MAFS.5.NBT.1.1	MAFS.5.NBT.2.7 MAFS.6.NS.2.3	MAFS.6.EE.2.7 MAFS.7.EE.2.3	MAFS.7.G.2.6 MAFS.8.G.1.4
MAFS.3.NBT.1.1 MAFS.4.NBT.1.3	MAFS.4.NBT.2.5 MAFS.5.NBT.2.5	MAFS.5.NF.2.3 MAFS.6.NS.1.1	MAFS.6.G.1.4 MAFS.7.G.2.6	MAFS.7.SP.2.4 MAFS.8.SP.1.4
MAFS.3.NF.1.3 MAFS.4.NF.1.1	MAFS.4.NF.2.3 MAFS.5.NF.1.1	MAFS.5.MD.3.4 MAFS.6.G.1.2	MAFS.6.SP.2.5 MAFS.7.SP.2.4	MAFS.7.NS.1.3 MAFS.8.EE.1.1
MAFS.3.MD.3.6 MAFS.4.MD.1.3	MAFS.4.MD.1.1 MAFS.5.MD.1.1	MAFS.5.G.1.1 MAFS.NS.3.8	MAFS.6.NS.2.3 MAFS.7.NS.1.3	

Science

Blueprint Design

The science design consists of the four Bodies of Knowledge from the Next Generation Sunshine State Standards. Each of the Bodies of Knowledge assesses three to seven items. The assessment consists of a total of 16 common items.

All newly developed items for science will be field-tested and their statistics will be evaluated prior to using the items as common.

The assessment blueprints for science grades 5 and 8 and biology 1 were unchanged from the previous assessment administration.

In developing the test blueprint for science, several documents were examined:

- Alternate Assessment in Science for Students with Disabilities
- Sunshine State Standards with Access Points
- Biology End-of-Course Assessment blueprint

The FSAA 2016–17 science item development standards can be found in Appendix C.

The content assessed in alternate assessment should generally reflect the same areas assessed by the FCAT: Nature of Science, Earth and Space Science, Physical Science, and Life Science. In order to meet this criterion, the blueprint distributes the assessment items across the four science Bodies of Knowledge covered in FCAT. Items will focus on the science content assessed by the FCAT at each grade level based on the Big Ideas that are addressed.

Therefore, the science blueprint chart involves:

1. Distribution of major science Bodies of Knowledge across each grade level.
2. Assessment of the majority of Big Ideas that are addressed at each of the grade levels.

An emphasis was placed on the Bodies of Knowledge at each grade level based on looking at the Big Ideas to see the range and quantity of benchmarks addressed and the range and quantity of Access Points addressed. The Access Points were then reviewed to see if they are broad or narrow and if the topics within them can support more items and seem more relevant for this population of students. Special attention was paid to the Task 1 level Access Points as these can be very few and narrow, very few and broad, or many. Based on the review of the Access Points, not all Big Ideas that are addressed at each grade level for instruction will be assessed at each grade level. However, all of the Big Ideas are assessed at least once throughout a student's school years.

Grade 5

- Only two of the four Big Ideas in Nature of Science are addressed leading to less emphasis and the recommendation for three items. The Big Idea: The Practice of Science is the constant across all grade levels for assessment.
- Five Big Ideas in Physical Science are introduced leading to more emphasis. Three of the five Big Ideas are assessed at this grade level for a total of five items.
- Life Science and Earth and Space Science remain at four items each.

FSAA-PT Grade 5 Science Assessment Blueprint

Reporting Category	Standards (Big Ideas)	Course Standards	Number of Items
Nature of Science	Big Idea 1: The Practice of Science	SC.5.N.1.1 SC.5.N.1.2 SC.5.N.1.3 SC.5.N.1.4 SC.5.N.1.5 SC.5.N.1.6	3
	Big Idea 2: The Characteristics of Scientific Knowledge	SC.5.N.2.1 SC.5.N.2.2	
Earth and Space Science	Big Idea 7: Earth Systems and Patterns	SC.5.E.7.1 SC.5.E.7.2 SC.5.E.7.3 SC.5.E.7.4 SC.5.E.7.5 SC.5.E.7.6 SC.5.E.7.7	4
Physical Science	Big Idea 10: Forms of Energy	SC.5.P.10.1 SC.5.P.10.2 SC.5.P.10.3 SC.5.P.10.4	5
	Big Idea 11: Energy Transfer and Transformations	SC.5.P.11.1 SC.5.P.11.2	
	Big Idea 13: Forces and Changes in Motion	SC.5.P.13.1 SC.5.P.13.2 SC.5.P.13.3 SC.5.P.13.4	
Life Science	Big Idea 14: Organization and Development of Living Organisms	SC.5.L.14.1 SC.5.L.14.2	4
	Big Idea 17: Interdependence	SC.5.L.17.1	

Grade 8

- The four Big Ideas in Nature of Science are addressed. Two of the four Big Ideas are assessed at this grade level for a total of three items. The Big Idea: The Practice of Science is the constant across all grade levels for assessment.
- Physical Science addresses two Big Ideas, which is more emphasis than Earth and Space Science and Life Science; therefore, the recommendation is to include seven items for assessment.
- Earth and Space Science and Life Science have fewer Access Points to address for a recommendation of three items each for assessment.

FSAA-PT Grade 8 Science Assessment Blueprint

Reporting Category	Standards (Big Ideas)	Course Standards	Number of Items
Nature of Science	Big Idea 1: The Practice of Science	SC.8.N.1.1 SC.8.N.1.2 SC.8.N.1.3 SC.8.N.1.4 SC.8.N.1.5 SC.8.N.1.6	3
	Big Idea 4: Science and Society	SC.8.N.4.1 SC.8.N.4.2	
Earth and Space Science	Big Idea 5: Earth in Space and Time	SC.8.E.5.1 SC.8.E.5.7 SC.8.E.5.2 SC.8.E.5.8 SC.8.E.5.3 SC.8.E.5.9 SC.8.E.5.4 SC.8.E.5.10 SC.8.E.5.5 SC.8.E.5.11 SC.8.E.5.6 SC.8.E.5.12	3
Physical Science	Big Idea 8: Properties of Matter	SC.8.P.8.1 SC.8.P.8.6 SC.8.P.8.2 SC.8.P.8.7 SC.8.P.8.3 SC.8.P.8.8 SC.8.P.8.4 SC.8.P.8.9 SC.8.P.8.5	7
	Big Idea 9: Changes in Matter	SC.8.P.9.1 SC.8.P.9.2 SC.8.P.9.3	
Life Science	Big Idea 18: Matter and Energy Transformations	SC.8.L.18.1 SC.8.L.18.2 SC.8.L.18.3 SC.8.L.18.4	3

Access Biology 1 End-of-Course:

- Two Big Ideas are addressed in the biology end-of-course exam: Life Science and Nature of Science.
- Life Science is heavily introduced on this assessment. In keeping with the general education end-of-course exam, the Life Science standards are broken down into separate Reporting Categories:
    - Molecular and Cellular Biology – seven standards are addressed for a total of five items.
    - Classification, Heredity, and Evolution – four standards are addressed for a total of four items.
    - Organisms, Populations, and Ecosystems – six standards are addressed for a total of six items.
- Nature of Science is addressed with one standard (N.1.1) for one item. The topic or scenario of this item will rotate through the three reporting categories in each development cycle.

FSAA-PT Biology 1 End-of-Course Assessment

Reporting Category	Standard	Number of Items
Molecular and Cellular Biology	SC.912.L.14.1 SC.912.L.14.3 SC.912.L.16.3 SC.912.L.18.1 SC.912.L.18.12 SC.912.L.18.9 SC.912.L.16.17	5
Classification, Heredity, and Evolution	SC.912.L.15.1 SC.912.L.15.13 SC.912.L.15.6 SC.912.L.16.1	4
Organisms, Populations, and Ecosystems	SC.912.L.14.7 SC.912.L.16.10 SC.912.L.16.13 SC.912.L.17.5 SC.912.L.17.9 SC.912.L.17.20	6
Introduced in all Reporting Categories	SC.912.N.1.1	1

Social Studies

Blueprint Design

The social studies design is based on the Next Generation Sunshine State Standards and consists of a total of 16 common items. Access end-of-course civics addresses the four Reporting Categories' content introduced in the grade 7 course. Access End-of-Course U.S. history addresses the three Reporting Categories' content introduced in the high school course.

As the Access End-of-Course for Civics and U.S. History are new for 2016–17, all items will be field-tested and their statistics will be evaluated prior to using the items as common in 2017–18. Further details have yet to be determined at this time.

In developing the test blueprint for social studies, several documents were examined:

- Sunshine State Standards with Access Points
- Civics End of Course Assessment blueprint
- U.S. History End-of-Course Assessment blueprint

The FSAA 2016–17 social studies item development standards can be found in Appendix D.

Access Civics End-of-Course

- The four Reporting Categories for the civics end-of-course exam are as follows:
  - Origin and Purposes of Law and Government
  - Roles, Rights, and Responsibilities of Citizens
  - Government Policies and Political Processes
  - Organization and Function of Government
- The emphasis of each Reporting Category is similar to the civics end-of-course assessment where it is evenly divided across the four reporting categories.

FSAA-PT Civics End-of-Course Assessment

Reporting Category	Standard	Number of Items
Origin and Purposes of Law and Government	SS.7.C.1.2 SS.7.C.1.4 SS.7.C.1.7 SS.7.C.1.8 SS.7.C.1.9 SS.7.C.3.10	4
Roles, Rights, and Responsibilities of Citizens	SS.7.C.2.1 SS.7.C.2.2 SS.7.C.2.4 SS.7.C.3.7 SS.7.C.3.12	4
Government Policies and Political Processes	SS.7.C.2.8 SS.7.C.2.10 SS.7.C.2.12 SS.7.C.2.13 SS.7.C.4.1 SS.7.C.4.2	4
Organization and Function of Government	SS.7.C.3.3 SS.7.C.3.4 SS.7.C.3.5 SS.7.C.3.11 SS.7.C.3.13 SS.7.C.3.14	4

Access U.S. History End-of-Course

- The three Reporting Categories for the U.S. History End-of-Course exam are as follows:
  - Late Nineteenth and Early Twentieth Century, 1860–1910
  - Global Military Political, and Economic Challenges, 1890–1940
  - The United States and the Defense of the International Peace, 1940–present
- The emphasis of each Reporting Category is similar to the U.S. history end-of-course assessment where Global Military, Political, and Economic Challenges, 1890–1940 has the strongest emphasis with Late Nineteenth and Early Twentieth Century, 1860–1910 having the least emphasis.
- The standard SS.912.A.1.1 is introduced in all three Reporting Categories. Each year there will be one item that addresses this standard. The topic or scenario of this item will rotate through the three Reporting Categories each development cycle.

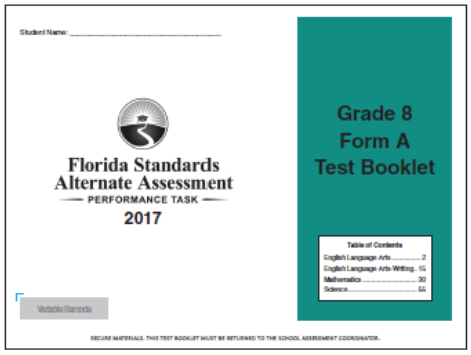
FSAA-PT U.S. History End-of-Course Assessment

Reporting Category	Standard	Number of Items
Late Nineteenth and Early Twentieth Century, 1860–1910	SS.912.A.2.1 SS.912.A.2.7 SS.912.A.3.1 SS.912.A.3.2 SS.912.A.3.13	4
Global Military, Political, and Economic Challenges, 1890–1940	SS.912.A.4.1 SS.912.A.4.5 SS.912.A.4.11 SS.912.A.5.3 SS.912.A.5.5 SS.912.A.5.10 SS.912.A.5.11 SS.912.A.5.12	6
The United States and the Defense of the International Peace, 1940–present	SS.912.A.6.1 SS.912.A.6.10 SS.912.A.6.13 SS.912.A.6.15 SS.912.A.7.1 SS.912.A.7.4 SS.912.A.7.6 SS.912.A.7.8 SS.912.A.7.11 SS.912.A.7.12 SS.912.A.7.17	5
Introduced in all Reporting Categories	SS.912.A.1.1*	1

* SS.912.A.1.1: Topic/scenario of the A.1.1 item will rotate through all three Reporting Categories.

Paper-Based Component Design

Test Booklet



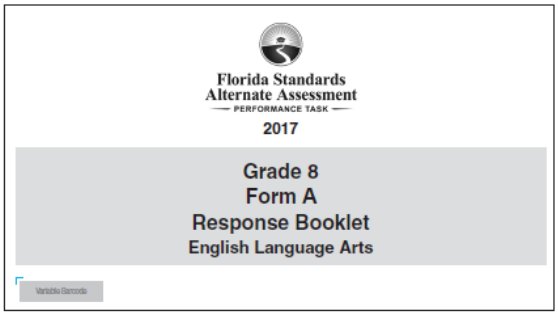
The first page of each content area in the Test Booklet includes a list of the standards that are being assessed and a list of any teacher-gathered materials that will be needed for administration. In addition, sessions are separated by pages that outline administration procedures within each content area.

The pages that follow in the Test Booklet contain the assessment items for each content area. Each item set includes the following information:

- The Access Point that the item set is targeting
- The materials that are needed for the task
- The directions for setting up the task and the script for what the teacher should say to the student
- The response options and the correct response

The Test Booklet was designed with the test administrators in mind, understanding that teachers need to easily refer to the Test Booklets during administration.

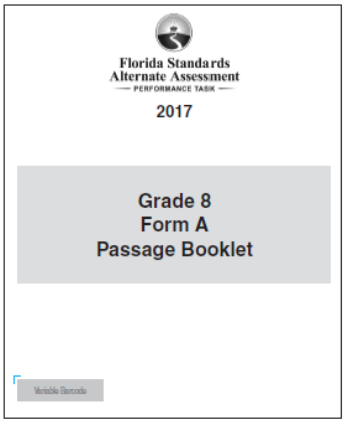
Response Booklet



Response Booklets are provided for ELA, mathematics, science, and social studies and contain stimuli and response options. Response Booklets are legal-size (8.5" x 14") paper with spiral binding at the top. If there is a stimulus associated with an item, it will appear on the upper

facing page of the booklet. Response options always appear on the lower facing page of the booklet. Response options for each task are positioned on the page either horizontally or vertically.

Passage Booklet



All passages are included in a Passage Booklet for ELA, including items used to assess writing in response to text. A passage graphic appears on the left page of the open booklet and its related passage appears on the right page. There is one graphic for each passage with the exception of some paired passages. Passages are read aloud to the student by the teacher unless the directions require the student to read independently. Students may be asked to read in length from one sentence to multiple paragraphs, depending on the grade level and level of complexity of the task.

Cards Packets and/or Strips Packets

Most stimulus and response materials for ELA, mathematics, science, and social studies are included in the Response Booklet; however, a minimal number of tasks have cutout cards and/or strips. Cutouts may be needed for items that require the student to manipulate the response options by sorting, matching, or sequencing.

Item Table

Item 2

Florida Standards Access Point: Use ratios and reasoning to solve real-world mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).

Task 1

Materials	Teacher Script	Student Response
Response Booklet: page 21 Stimulus picture card: 3 erasers Picture cards: (quarters) (rulers) (books)	*Here is a picture of three erasers.* *Which group has a different number of objects than the number of erasers?*	○ **A: quarters** ○ B: rulers ○ C: books ○ D: No Response **Scaffolded Response** *(when applicable)* ○ **A: quarters** ○ B: rulers ○ C: books ○ D: No Response

Task 2

Materials	Teacher Script	Student Response
Response Booklet: page 23 Stimulus picture card: package of 2 paintbrushes Number cards: 2 10 50	*Here is a package of two paintbrushes.* *Ms. Tandy bought five of these packages.* *How many paintbrushes did Ms. Tandy buy in all?* Read the number cards to the student.	○ A: 2 ○ **B: 10** ○ C: 50 ○ D: No Response

Task 3

Materials	Teacher Script	Student Response
Response Booklet: page 25 Stimulus picture card: 3 jars of paint Number cards: 3 15 20	*Here is a picture of three jars of paint.* *Ms. Tandy has twenty students in her class. She puts the students into groups of four. She gives each group three jars of paint.* *How many jars of paint does Ms. Tandy need for her class?* Read the number cards to the student.	○ A: 3 ○ **B: 15** ○ C: 20 ○ D: No Response

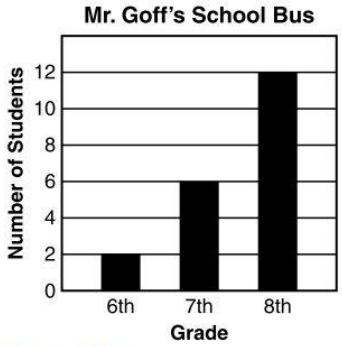
- The *Materials* column outlines for the test administrator which materials will be needed for the item. Both the materials that are provided for the administrator and materials the administrator may need to gather from the classroom are identified. Stimulus and response options will be identified for administrators to facilitate administration and standardize labeling of graphics for students with visual impairments. It is important that the graphics be carefully and appropriately named in order to provide students with visual impairments the most access to an item.
- The *Teacher Script* column consists of a clear set of directions for setting up the item and scripting for what the test administrator should ask the student.
- The *Student Response* column indicates the response options and the correct response, and allows a location for the teacher to record the student's response.

Presentation in The FSAA Online System

All forms of the 2017 FSAA will be available in the FSAA Online System to allow teachers to enter student responses. The Online System will display all item content with the exception of teacher-gathered materials.

The online system will display the stimulus or passage, the question presented to the student, and the response options. All response options will be listed in the same order as in the print-based Response Booklet.

Mr. Goff asked the students on his bus their grade. He put the data in this bar graph.



Which sentence is true according to Mr. Goff's bar graph?

More 6th graders ride the bus than 7th graders.

More 7th graders ride the bus than 8th graders.

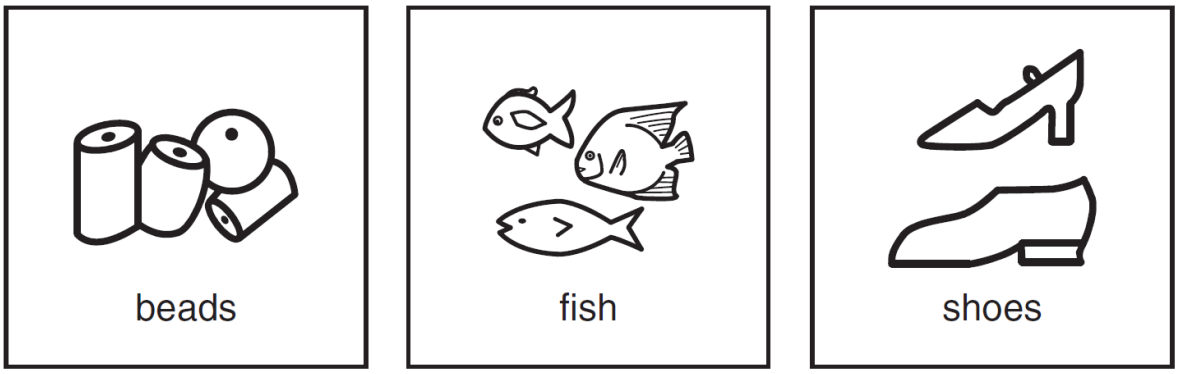
More 8th graders ride the bus than 6th graders.

Item Writing Guidelines

Universal Design

Students who use communication supports are assessed more accurately when they are provided with structured-response options within a performance task. Students who have greater access to verbal or written communication modes will be able to respond to open- or constructed-response items. For example, when a nonverbal student with mobility challenges is asked a question and presented with the choices for the answer, that student may use eye gaze to indicate the preferred choice, hit a switch from among several preprogrammed switches, point to one choice, and so on.

Items that require a constructed-response or multistep performance, such as organizing pictures to show the order of events in a story, are often more challenging for this population of students. Therefore, we have incorporated an element of Universal Design in the development of the alternate performance tasks to build a test on which all students, even those with the most significant communication challenges, have the opportunity to respond accurately. We typically present three options to students when multiple choice options are required (see example below).



This limits the cognitive load of the item and adheres to recommendations of Haladyna and Downing,[1] who contend that more than three acceptably performing distractors are rarely found.

[1] Haladyna, T.M., & Downing, S.M. (1993). How many options is enough for a multiple-choice test item? *Educational and Psychological Measurement*, *53*(4), 999–1010. DOI 10.1177/0013164493053004013.

Item-Writing Guidelines Followed by Developers

- Items are aligned to the particular standard and appropriate level of difficulty.
- Items and tasks are clear, concise, and easy to read.
- Items will have one and only one answer for multiple-choice.
- Unintentional clues to the correct answer are avoided.
- Most items will be positively worded.
- Distractors should be written as grammatically correct in response to the question presented.
- Response options will have similar length—if not they will be presented in a graduated fashion from longest to shortest OR from shortest to longest.
- All response options will be similar in grammatical structure and form.
- Do not use "*All/None of the above"* response option presentation.

Accommodated Versions

Elements of Universal Design are considered during development to ensure equal access to items for all students. Flexible administration modes are available for students who may benefit from accommodated versions of the FSAA. These accommodated versions include:

- Braille/tactile Response Booklets and Passage Booklets (contracted and uncontracted)
- One-sided Response Booklets for students who may benefit from response option being cut out

Response Option Guidelines

All response options should be presented in a parallel fashion to avoid one response standing out more than another.

- Response options should be *all* singular or *all* plural within a task.
- If response options are phrases/sentences, all responses should be of similar length.
- If response options are single words, the words should share the same number of syllables.
- If response options are single words, the words should all begin with a different letter.

Complexity Rubrics

Complexity rubrics have been developed to ensure increasing complexity within an item from the Task 1 level to the Task 2 level and from the Task 2 level to the Task 3 level. All items should be developed using the Depth of Knowledge (DOK) and the Presentation Rubric found in Appendix F. Items should increase by at least one rating level, whether it is in the DOK or within one of the three components of the Presentation Rubric (Volume of Information, Vocabulary, and Context). There are some instances where the increase in complexity is not captured by the rubric's rating system. On these occasions, stakeholder feedback will be the primary determinant.

The attached DOK and Presentation Rubric were revised for the spring 2017 assessment and include examples of social studies tasks.

Tasks are not written to DOK level 1. Likewise, no tasks are written to the DOK 6 level because of the investigative nature of this level. DOK content clarification examples are not exhaustive,

and general performance verbs are not the defining criteria for classification. Similarly, examples throughout the Presentation Rubric are also not exhaustive nor should they be used as the defining criteria for classification.

Tasks should clearly address the concept and/or skill described in the Access Point for each level of complexity within an item set. To the extent possible, the tasks for each of the Access Points within a given item should be related (i.e., Task 3 should assess the same concept and/or skill as the task for the Task 1 level but at a higher level of cognitive demand). This is also true from grade-level to grade-level test.

Where not otherwise specified in the standard being assessed, numbers and other elements of tasks should be kept as simple as possible.

To the extent possible, tasks should involve situations or contexts that can be expected to be familiar to most students and that are age-appropriate. In particular, tasks for the secondary grades should involve situations, contexts, and objects that are of interest to older students, that are as concrete as possible, and that relate to real-life activities.

Tasks will be developed with real-world contexts in mind. Tasks will be kept at as concrete a level as possible.

Response Options at Task Level

Task 1 Level
Response options will primarily be word/picture cards and number cards. If the Access Point indicates "words paired with pictures," word picture cards will definitely be provided. The two incorrect options will not relate to the item stimulus. This "not related to the item stimulus" will be a mix of tasks where the incorrect responses are not at all related (cat, pencil, cup—cat being correct response) and incorrect responses that are within the same larger category (cat, dog, horse—cat being correct). On some occasions the Access Point may require qualitative identification or comparison of stimulus components (more/less, identify data point on graph, etc.). If this is the case, two response options *may* relate to the stimulus at the Task 1 level.

Task 2 Level
Response options will primarily be picture cards, word/picture cards, sentence/picture strips, and number cards. Pictures will not be on response cards/strips where the Access Point requires the student to read. At least one of the two incorrect options will relate to the item stimulus.

Task 3 Level
Response options will primarily be picture cards, word/picture cards, sentence/picture strips, and number cards. Pictures will not be on response cards/strips where the Access Point requires the student to read. Both of the incorrect options will *relate to the item stimulus* or

include information from the stimulus. In writing, there may also be open-ended questions where the student will be expected to independently construct a response.

Fluency Task Considerations for Deaf/Hard of Hearing Students

For students who are deaf or hard of hearing, responses to fluency tasks cannot be read or signed. Keeping this in mind, developers want to use words in the questions that have a sign and do not require the administrator to finger spell.

Object Exchange

Teachers may substitute graphics with real objects for those students who may benefit from concrete objects or manipulatives. For this reason, response items should be composed of familiar, appropriately sized objects that may be easily accessed in the classroom whenever possible. For example, developers will use objects like erasers, markers, and pencils instead of cars, dogs, and houses.

Number of Response Options

Where students are asked to select a single choice from a set of response options, there should be three options provided. Some items may require the student to match, sort, or categorize. These items may require up to six response options for the student to interact with (e.g., sorting by category).

ELA Response Options

In reading, response options do not have to match the passage exactly. At the Task 1 and Task 2 levels item responses may come directly from the passage; at the Task 3 level, however, they should not come directly from the passage to ensure increased complexity.

Response Options and Mode of Communication

At all Access Point levels of complexity (Task 1, Task 2, and Task 3), students may respond with the mode of communication that they most commonly use, such as yes/no cards, picture cards, word cards, sentence strips, verbal or written responses, eye gaze, assistive technology, and/or signing. Typically, response options will be provided in a three-selection format from which the student can choose.

Graphics

Graphics will focus on the essence of the idea and leave out extraneous information. Graphics should be provided at all levels of complexity to allow students who function at the early symbolic level to access the tasks. Graphics may be excluded when the use of pictures complicates the item. If at all possible, tasks should be written that can be depicted with a picture.

Illustrations

Illustrations are to be as clean and clear as possible. As long as the drawing can be easily identifiable then extra detail can be eliminated. The style needed for the FSAA-PT is very similar to pictures in coloring books.

- Do not leave white fill between lines that are under 1/16" –1/8".
- Omit unnecessary elements and embellishment.
- Use a strong contrast of black and white.
- Select a less complex object to draw. Example: For a “flower” draw a tulip instead of a geranium.

Graphics for Civics and U.S. History Tasks

Because civics and U.S history tasks reference real-life events, locations, and people, the use of simple black-and-white photographs as stimulus and/or response options is permitted. Copyrighted photographs will be considered. If photographs are too complicated, poorly represented, or difficult to describe to students with visual impairment in the print-based format, line drawings will be utilized instead.

Avoiding Distractions

Any options that “stick out" in an item set that a student may find attractive or distracting need to be avoided. Often, the solution is to have all three options similar, or have each option different.

Object Exchange

Graphics, whenever possible, should be of pictures of objects that can be easily replaced with the real objects. These objects need to be easily accessible in a school setting. When considering manipulatives, real objects must be able to be substituted for the graphic (i.e., no miniatures or replicas). If manipulatives are not appropriate (e.g., for some science tasks), the graphic labels in the Materials column must be detailed enough to give a clear description of the graphic. Some tasks are developed that will require the substitution of graphics for real objects if the student is visually impaired and not using the Braille version of the assessment.

Picture Communication Symbols (PCS) or Line Art

Graphics should be consistent within a stimulus set or within a response set. If there are two stimulus cards, both will either be PCS or line art.

Graphics, whenever possible, will be PCS at grades 3 through 5, a mix of PCS (especially at the Task 1 level) and line art at grades 6 through 8, and only line art in high school.

- PCS will not be customized. They shall remain as they appear in the Mayer-Johnson library.
- PCS may be with or without hair. All responses to an item level will be consistent, one or the other.

Line art for both passages and item responses will be black-and-white drawings using a heavyweight line (2–2.5 point). Grayscale will be used only if necessary. For example, in a glass or pitcher showing a liquid, the liquid will be shaded.

Other Considerations

- Graphics should avoid foods or dangerous objects as much as possible.
- Graphics should use the entire space provided on a card or strip to be as large as possible.
- All coin graphics will show coins at actual size.
- All graphics including bills need to depict the bills as large as possible.
- Clock graphics will include minute marks only if the item requires them (8:17, 4:12).
- All default emotions of characters will be happy unless the item or passage specifies otherwise.
- Graphics of objects will be as “real” as possible and will not be interpretive. At grades 3 through 5 it may be appropriate for graphics to be somewhat cartoon-like or similar to PCS (suns, clouds, raindrops); but starting at grade 6, the graphics need to be more realistic.
- Graphics that include bodies should provide context/detail when applicable. For example, if an ear is the target response, a whole head will be drawn with an arrow pointing to the ear; if a leg is required, a whole body will be drawn with an arrow pointing to the leg. Graphics solely of isolated body parts may be used for occasional items, when appropriate, per discretion of developer.
- All charts, graphs, and words or numbers in a graphic will be a minimum of 18-point font.
- All tables and charts must have titles and keys as appropriate. All keys should be placed so that they stand out.
- All counting objects for item graphics will avoid complex graphics. For example, a pattern of a circle, square, and triangle is more appropriate than a car, dog, and horse pattern.

Item Text and Terminology

Word Appropriateness

To determine whether a word is appropriate to use in an item, a variety of sources will be used: Dolch Basic Sight Word List, Revised Dolch List, the work of Chall and Popp described in *Teaching and Assessing Phonics: Why, What, When, How* (Educators Publishing Service, Inc., 1996), *EDL Core Vocabularies in Reading, Mathematics, Science, and Social Studies,*(Steck-Vaughn Company, 1989), and *The Living Word* by Dale and O'Rourke (World Book-Childcraft International, Inc., 1981). Again, test developers will rely on the Review Committee of Practitioners to help make the word choices appropriate for the student population and make the test an experience that measures what a student knows and is able to do.

Terminology

All tasks will be written as simply as possible, avoiding wordiness.

Simple content terminology will be used in grades 3 through 5 and at the Task 1 level at all grades, with more accurate content terminology usage at grades 6 through high school. For example, in grades 3 through 5 the question may be "What is the story mostly about?" and at grades 6 through high school the question would be "What is the main idea?"

It is important to keep in mind that it is the concept that is being assessed and not the vocabulary in most instances.

Stimulus cards may be identified in the Teacher Script column; for example, "Here is a girl" vs. "Here is a picture." This may be used as long as identifying the picture does not give away the answer.

Alternative Text

Embedded alternative text will be written to describe all text features such as tables, charts, or diagrams. This text is read aloud to all students. A secondary layer of alternative text is written to describe pictures/graphics to students with visual impairments. This text will be embedded into the Teacher Script column.

Teacher-Gathered Materials

All students will have calculators, number lines, and counting blocks available to them for all mathematics tasks as determined appropriate by the teacher. Tasks will indicate if these tools are required as teacher-gathered materials in the Materials column.

Tasks may presume the use of some readily available classroom materials, such as counters. However, most tasks should include all necessary materials (e.g., shapes), and other manipulatives (e.g., picture cards) will be provided as graphics on regular paper.

Tasks will refrain from referring to the color of objects; mathematics tasks can refer to shapes that can be readily felt instead.

Mathematics

Mathematics tasks will include definitions of terminology and formulas as needed. For example, an item will not ask “Which one is the isosceles triangle?” Rather, it will ask “Which triangle is isosceles–two of the three sides is the same length?” or “Which triangle has two of the three sides the same length?”

There should be a mix of tasks in mathematics, some with context and some without context. It is important not to introduce context into an item that is confusing or too language heavy.

If response options include numbers, the numbers will be presented in ascending or descending order.

All numbers that are four digits or more will include commas.

Mathematics computation tasks should be presented as a mix of horizontal and vertical presentations.

Measurement labels will be provided in the response option text (e.g., 3 inches, 5 inches, and 10 inches).

Appendix A - 2017 ELA Standards for Item Development

2017 ELA Field-Test Item Development

Grade 3

Reporting Category	Standard	# of Field Test Sets Developed
Key Ideas and Details	LAFS.3.RL.1.3 (Literary)	1
Craft and Structure	LAFS.3.RF.4.4 (Literary) LAFS.3.RL.2.6 (Literary)	2 1
Integration of Knowledge and Ideas	LAFS.3.SL.1.3 (Literary) LAFS.3.RI.3.9 (Informational)	1 1
Language & Editing	LAFS.3.L.1.2	1

Grade 4

Reporting Category	Standard	# of Field Test Sets Developed
Key Ideas and Details	LAFS.4.RI.1.2 (Informational)	1
Craft and Structure	LAFS.4.RL.2.4 (Literary)	1

Grade 5

Reporting Category	Standard	# of Field Test Sets Developed
Craft and Structure	LAFS.5.RL.2.5 (Literary)	1
Integration of Knowledge and Ideas	LAFS.5.SL.1.2 (Informational)	1

Grade 6

Reporting Category	Standard	# of Field Test Sets Developed
Key Ideas and Details	LAFS.6.RI.1.3 (Informational)	1
Craft and Structure	LAFS.6.L.3.5 (Literary)	1

Grade 7

Reporting Category	Standard	# of Field Test Sets Developed
Key Ideas and Details	LAFS.7.RL.1.2 (Literary)	1
Craft and Structure	LAFS.7.L.3.5 (Informational)	1

Grade 8

Reporting Category	Standard	# of Field Test Sets Developed
Key Ideas and Details	LAFS.8.RI.1.3 (Informational)	1
Craft and Structure	LAFS.8.L.3.5 (Literary)	1

Grade 9 (ELA 1)

Reporting Category	Standard	# of Field Test Sets Developed
Key Ideas and Details	LAFS.910.RI.1.3 (Informational)	1
Integration of Knowledge & Ideas	LAFS.910.SL.1.2 (Informational)	1

Grade 10 (ELA 2)

Reporting Category	Standard	# of Field Test Sets Developed
Key Ideas and Details	LAFS.910.RL.1.2 (Literary) LAFS.910.RL.1.3 (Literary) LAFS.910.RL.1.3 (Literary)	1 1 1
Craft and Structure	LAFS.910.RL.2.5 (Literary)	1
Integration of Knowledge and Ideas	LAFS.910.RI.3.7 (Informational) LAFS.910.SL.1.3 (Informational)	1 1
Language and Editing	LAFS.910.L.1.1	1

2017 ELA Linking Item Sets

Standards Targeted for Field-Test Item development

3/4	4/5	5/6	6/7	7/8	8/9	9/10
LAFS.3/4.RL.1.1	LAFS.4/5.RL.1.1	LAFS.5/6.RL.1.1	LAFS.6/7.RL.1.1	LAFS.7/8.RL.1.1	LAFS.8/9.RL.1.1	LAFS.9/10.RL.1.1
LAFS.3/4.RI.1.3	LAFS.4/5.RI.1.3	LAFS.5/6.RI.1.1	LAFS.6/7.RI.1.2	LAFS.7/8.RI.1.1	LAFS.8/9.RI.1.1	LAFS.9/10.RI.1.2
LAFS.3/4.RL.2.5	LAFS.4/5.RI.2.4	LAFS.5/6.RL2.6	LAFS.6/7.RL.2.4	LAFS.7/8.RL.2.4	LAFS.8/9.RL.2.4	LAFS.9/10.RL.2.6
LAFS.3/4.RL.2.6	LAFS.4/5.RI.3.8	LAFS.5/6.RI.3.8	LAFS.6/7.RI.3.8	LAFS.7/8.RI.3.8	LAFS.8/9.RI.3.8	LAFS.9/10.RI.3.8
LAFS.3/4.L.3.4	LAFS.4/5.L.3.4	LAFS.5/6.L.3.4	LAFS.6/7.L.3.4	LAFS.7/8.L.3.4	LAFS.8/9.L.3.4	LAFS.9/10.L.3.4

Linked Standards	Essence Statements
Grades 3/4	
LAFS.3/4.RL.1.1	Answer questions related to details in a text that are relevant to explaining what the text says explicitly.
LAFS.3/4.RI.1.3	Identify specific causes and effects that relate to events, procedures, ideas, or concepts in informational texts
LAFS.3/4.RL.2.5	Describe the differences in structural elements of a story and plays.
LAFS.3/4.RL.2.6	Match the point of view to each character in a story.
LAFS.3/4.L.3.4	Use context to determine the correct meaning of a word or words with multiple meanings or shades of meaning.
Grades 4/5	
LAFS.4/5.RL.1.1	Refer to details and examples in a text when explaining what the text says explicitly.
LAFS.4/5.RI.1.3	Identify the relationships or interactions between individuals and specific events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
LAFS.4/5.RI.2.4	Define an unknown general academic or domain-specific word by using common roots/affixes.
LAFS.4/5.RI.3.8	Identify how reasons and evidence an author uses can support particular points in a text.
LAFS.4/5.L.3.4	Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position in a sentence) to determine the correct meaning of multiple-meaning words.

Grade 5/6	
LAFS.5/6.RL.1.1	Refer to details and examples in a text when explaining what the text says explicitly.
LAFS.5/6.RI.1.1	Use textual evidence to support inferences.
LAFS.5/6.RL2.6	Identify an example from the text where the narrative point of view influences the reader's interpretation.
LAFS.5/6.RI.3.8	Distinguish claims or arguments of those that are supported by evidence from those that are not.
LAFS.5/6.L.3.4	Use common grade-appropriate roots and affixes as clues to the meaning of a word.
Grades 6/7	
LAFS.6/7.RL.1.1	Use two pieces of textual evidence to support conclusions or inferences about the characters from text.
LAFS.6/7.RI.1.2	Summarize the text based on details from the text.
LAFS.6/7.RL.2.4	Determine the meaning of figurative words and phrases (metaphors and similes).
LAFS.6/7.RI.3.8	Evaluate the claim or argument to determine if it is supported by evidence.
LAFS.6/7.L.3.4	Find the precise meaning of a word by using context help to decide which definition (from a list of definitions) is the most appropriate choice.
Grade 7/8	
LAFS.7/8.RL.1.1	Use two pieces of evidence to support summaries of text.
LAFS.7/8.RI.1.1	Use two pieces of evidence to support conclusions about text.
LAFS.7/8.RL.2.4	Determine the meaning of words and phrases as they are used in a text, including figurative (e.g., metaphors, similes).
LAFS.7/8.RI.3.8	Evaluate the claim to determine if it is supported by evidence.
LAFS.7/8.L.3.4	Use context as a clue to the meaning of a grade-appropriate word or phrase.
Grade 8/9	
LAFS.8/9.RL.1.1	Use two or more pieces of evidence to support conclusions from text.
LAFS.8/9.RI.1.1	Use two or more pieces of evidence to support the summaries.
LAFS.8/9.RL.2.4	Determine the meaning of words and phrases as they are used in a text, including phrases with personification.
LAFS.8/9.RI.3.8	List/highlight one or more sentences that support the claim.
LAFS.8/9.L.3.4	Use the context to help decide which definition (from a list of definitions) is the most precise meaning of a word.
	Grade 9/10
LAFS.9/10.RL.1.1	Use two pieces of textual evidence to support conclusions.
LAFS.9/10.RI.1.2	Identify how the key details support the main idea.
LAFS.9/10.RL.2.6	Analyze the point of view reflected in a work of literature.
LAFS.9/10.RI.3.8	List/highlight two sentences that support a claim.
LAFS.9/10.L.3.4	Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position in a sentence) as a clue to the meaning of a word or phrase.

Appendix B - 2017 Mathematics Standards for Item Development

Mathematics - 2017 Field-Test Item Development

Grade 3

Reporting Category	Standard	# of Field-Test Sets Developed
Operations, Algebraic Thinking, and Numbers in Base Ten	MAFS.3.OA.2.5 MAFS.3.OA.2.6 MAFS.3.NBT.1.3	1 1 1
Numbers and Operations-Fractions	MAFS.3.NF.1.1	1
Measurement, Data, and Geometry	MAFS.3.MD.1.1 MAFS.3.MD.4.8 MAFS.3.G.1.1	1 1 1

Grade 4

Reporting Category	Standard	# of Field-Test Sets Developed
Numbers and Operations-Fractions	MAFS.4.NF.3.7	1
Measurement, Data, and Geometry	MAFS.4.G.1.2	1

Grade 5

Reporting Category	Standard	# of Field-Test Sets Developed
Operations, Algebraic Thinking, and Fractions	MAFS.5.OA.2.3	1
Measurement, Data, and Geometry	MAFS.5.MD.2.2	1

Grade 6

Reporting Category	Standard	# of Field Test Sets Developed
Statistics and Probability	MAFS.6.SP.2.4	1
The Number System	MAFS.6.NS.2.4	1

Grade 7

Reporting Category	Standard	# of Field-Test Sets Developed
Geometry	MAFS.7.G.2.4	1
Statistics and Probability	MAFS.7.SP.2.3	1

Grade 8

Reporting Category	Standard	# of Field-Test Sets Developed
Expressions and Equations	MAFS.8.EE.1.3 MAFS.8.EE.3.8	1 1
Functions	MAFS.8.F.1.1 MAFS.8.F.1.3	1 1
Geometry	MAFS.8.G.1.1	1
Statistics and Probability and The Number System	MAFS.8.SP.1.2 MAFS.8.NS.1.2	1 1

Algebra 1 EOC

Reporting Category	Standard	# of Field-Test Sets Developed
Statistics and The Number System	MAFS.910.S-ID.1.2 MAFS.910.S-ID.3.9	1 1
Algebra and Modeling	MAFS.910.A-CED.1.2 MAFS.910.A-CED.1.3	3 1
Functions and Modeling	MAFS.910.F-IF.2.4 MAFS.910.F-IF.2.5 MAFS.910.F-IF.2.6	2 2 2

Geometry EOC

Reporting Category	Standard	# of Field-Test Sets Developed
Congruence, Similarity, Right Triangles, and Trigonometry	MAFS.910.G-CO.1.1 MAFS.910.G-CO.1.3 MAFS.910.G-CO.1.4 MAFS.910.G-SRT.1.2 MAFS.910.G-SRT.1.3 MAFS.910.G-SRT.2.5	1 1 1 1 1 1
Circles, Geometric Measurement, and Geometric Properties with Equations	MAFS.910.G-C.1.1 MAFS.910.G-GMD.2.4 MAFS.910.G-GPE.2.7	1 1 1
Modeling with Geometry	MAFS.910.G-MG.1.1 MAFS.910.G-MG.1.2 MAFS.910.G-MG.1.3	1 1 1

2017 Mathematics Linking Item Sets

Standards Targeted for Field-Test Item Development

3/4	4/5	5/6	6/7	7/8*
MAFS.3.OA.1.1 MAFS.4.OA.1.1	MAFS.4.OA.1.3 MAFS.5.OA.1.1	MAFS.5.OA.1.2 MAFS.6.EE.1.3	MAFS.6.RP.1.3 MAFS.7.RP.1.3	MAFS.7.EE.2.4 MAFS.8.EE.3.7
MAFS.3.OA.1.2 MAFS.4.OA.1.2	MAFS.4.NBT.1.1 MAFS.5.NBT.1.1	MAFS.5.NBT.2.7 MAFS.6.NS.2.3	MAFS.6.EE.2.7 MAFS.7.EE.2.3	MAFS.7.G.2.6 MAFS.8.G.1.4
MAFS.3.NBT.1.1 MAFS.4.NBT.1.3	MAFS.4.NBT.2.5 MAFS.5.NBT.2.5	MAFS.5.NF.2.3 MAFS.6.NS.1.1	MAFS.6.G.1.4 MAFS.7.G.2.6	MAFS.7.SP.2.4 MAFS.8.SP.1.4
MAFS.3.NF.1.3 MAFS.4.NF.1.1	MAFS.4.NF.2.3 MAFS.5.NF.1.1	MAFS.5.MD.3.4 MAFS.6.G.1.2	MAFS.6.SP.2.5 MAFS.7.SP.2.4	MAFS.7.NS.1.3 MAFS.8.EE.1.1
MAFS.3.MD.3.6 MAFS.4.MD.1.3	MAFS.4.MD.1.1 MAFS.5.MD.1.1	MAFS.5.G.1.1 MAFS.NS.3.8	MAFS.6.NS.2.3 MAFS.7.NS.1.3	

*One of the linking sets will have two items written to it.

Linked Standards	Essence Statements
Grade 3/4	
MAFS.3.OA.1.1 MAFS.4.OA.1.1	Model multiplication involving up to five groups with up to five objects in each.
MAFS.3.OA.1.2 MAFS.4.OA.1.2	Determine the number of sets of whole numbers, five or fewer, which equal a dividend.
MAFS.3.NBT.1.1 MAFS.4.NBT.1.3	Using a number line, round to the nearest 10 or 100.
MAFS.3.NF.1.3 MAFS.4.NF.1.1	Identify equivalent fractions (fourths and halves) shown on a number line(s).
MAFS.3.MD.3.6 MAFS.4.MD.1.3	Determine the area of rectangles by counting unit squares.
Grade 4/5	
MAFS.4.OA.1.3 MAFS.5.OA.1.1	Solve a one- or two-step word problem requiring the four operations within 100.
MAFS.4.NBT.1.1 MAFS.5.NBT.1.1	Compare the value of a digit when it is represented in different place values of two three-digit numbers.
MAFS.4.NBT.2.5 MAFS.5.NBT.2.5	Solve a two-digit by one-digit whole number multiplication problem.
MAFS.4.NF.2.3 MAFS.5.NF.1.1	Add and subtract fractions with like denominators (2, 3, 4, 8) using visual representation.
MAFS.4.MD.1.1 MAFS.5.MD.1.1	Complete a conversion table for length and/or mass within a single system.

Grade 5/6	
MAFS.5.OA.1.2 MAFS.6.EE.1.3	Identify a simple expression, or an equivalent expression for a calculation.
MAFS.5.NBT.2.7 MAFS.6.NS.2.3	Solve a one-step addition, subtraction, multiplication, or division problem involving decimals.
MAFS.5.NF.2.3 MAFS.6.NS.1.1	Divide whole numbers by a unit fraction using visual fraction models.
MAFS.5.MD.3.4 MAFS.6.G.1.2	Determine the volume of a rectangular prism built by unit cubes.
MAFS.5.G.1.1 MAFS.NS.3.8	Identify ordered pairs on a coordinate plane.
Grade 6/7	
MAFS.6.RP.1.3 MAFS.7.RP.1.3	Use ratios and reasoning to solve real-world mathematical problems.
MAFS.6.EE.2.7 MAFS.7.EE.2.3	Solve real-world word problems using equations in which the quantities are positive rational numbers.
MAFS.6.G.1.4 MAFS.7.G.2.6	Find the surface area of a three-dimensional figure by adding the areas of each face of the figure.
MAFS.6.SP.2.5 MAFS.7.SP.2.4	Identify the mean, mode, or range of a set of data.
MAFS.6.NS.2.3 MAFS.7.NS.1.3	Solve one-step, real-world and mathematical problems involving one of the four operations with decimals.
Grade 7/8	
MAFS.7.EE.2.4 MAFS.8.EE.3.7	Write and solve a linear equation with one variable.
MAFS.7.G.2.6 MAFS.8.G.1.4	Solve one-step, real-world measurement problems involving area and volume.
MAFS.7.SP.2.4 MAFS.8.SP.1.4	Select an appropriate statement/claim about two different data sets.
MAFS.7.NS.1.3 MAFS.8.EE.1.1	Solve real-world and mathematical problems involving equivalent expressions and the four operations with rational numbers.

Appendix C - 2017 Science Standards for Item Development

Science - 2017 Field-Test Item Development

Grade 5 Science

Body of Knowledge	Big Idea	# of Field-Test Sets Developed
Nature of Science	Big Idea 1: The Practice of Science	1
Physical Science	Big Idea 10: Forms of Energy	1
Life Science	Big Idea 14: Organization and Development of Living Organisms	2
	Big Idea 17: Interdependence	2

Grade 8 Science

Body of Knowledge	Big Idea	# of Field-Test Sets Developed
Earth and Space Science	Big Idea 5: Earth in Space and Time	2
Physical Science	Big Idea 8: Properties of Matter	2
Life Science	Big Idea 18: Matter and Energy Transformations	2

High School Biology 1

Reporting Category	Standards	# of Field-Test Sets Developed
Molecular and Cellular Biology	SC.912.L.14.1	2
	SC.912.L.14.3	1
	SC.912.L.16.3	2
	SC.912.L.18.9	1
Classification, Heredity, and Evolution	SC.912.L.15.1	1
Organisms, Populations, and Ecosystems	SC.912.L.16.10	1
	SC.912.L.17.5	2
	SC.912.L.17.20	1
Nature of Science*	SC.912.N.1.1	1

* SC.912.N.1.1: Topic/scenario of the N.1.1 item will rotate through all three reporting categories.

Appendix D - 2017 Social Studies Standards for Item Development

Civics – 2017 Field-Test Item Development

Reporting Category	Standards	# of Field-Test Sets Developed
Origin and Purposes of Law and Government	SS.7.C.1.2	1
	SS.7.C.1.4	1
	SS.7.C.1.7	1
	SS.7.C.1.8	1
	SS.7.C.1.9	2
	SS.7.C.3.10	1
Roles, Rights, and Responsibilities of Citizens	SS.7.C.2.1	1
	SS.7.C.2.2	1
	SS.7.C.2.4	2
	SS.7.C.3.7	1
	SS.7.C.3.12	2
Government Policies and Political Processes	SS.7.C.2.8	1
	SS.7.C.2.10	1
	SS.7.C.2.12	2
	SS.7.C.2.13	1
	SS.7.C.4.1	1
	SS.7.C.4.2	1
Organization and Function of Government	SS.7.C.3.3	2
	SS.7.C.3.4	1
	SS.7.C.3.5	1
	SS.7.C.3.11	1
	SS.7.C.3.13	1
	SS.7.C.3.14	1

U.S. History – 2017 Field-Test Item Development

Reporting Category	Standards	# of Field-Test Sets Developed
Late Nineteenth and Early Twentieth Century, 1860–1910	SS.912.A.2.1	2
	SS.912.A.2.7	1
	SS.912.A.3.1	2
	SS.912.A.3.2	2
	SS.912.A.3.13	1
Global Military, Political, and Economic Challenges, 1890–1940	SS.912.A.4.1	2
	SS.912.A.4.5	2
	SS.912.A.4.11	1
	SS.912.A.5.3	1
	SS.912.A.5.5	1
	SS.912.A.5.10	1
	SS.912.A.5.11	1
	SS.912.A.5.12	1
The United States and the Defense of the International Peace, 1940–present	SS.912.A.6.1	1
	SS.912.A.6.10	1
	SS.912.A.6.15	1
	SS.912.A.7.1	1
	SS.912.A.7.4	1
	SS.912.A.7.6	1
	SS.912.A.7.8	1
	SS.912.A.7.12	1
	SS.912.A.7.17	1
Introduced in all Reporting Categories	SS.912.A.1.1*	1 (The United States and Defense of the International Peace, 1940–present)

* SS.912.A.1.1: Topic/scenario of the A.1.1 item will rotate through all three reporting categories.

Appendix E - 2016–2017 Complexity Rubrics

Depth of Knowledge Rubric ***revised 6/20/16***

All items should be assigned a Depth of Knowledge level based on the information presented in the table below. Content clarification examples are not exhaustive and general performance verbs are not the defining criteria for Depth of Knowledge classification.

DOK 1	**Attention**	
General Performance Verbs: touch look vocalize repeat attend	• Simple commands that require no answer—only require doing the command. • Generally not assessed as a skill. Used to focus the student on a task.	Examples: Look at me. Listen while I read this story.

DOK 2	**Rote Knowledge, Memorize& Recall**	
General Performance Verbs: list identify state label recognize record match recall retell	• Habitual response—recalls previously heard or learned information. • Practiced, rote behavior. • No inferences are required for correct answer. • Habitual response of common day to day activities or objects.	
	English Language Arts	
	• Matches picture/word to picture/word. • Identifies rhyming words. • Identifies letters by phonics/sounds or sight. • Identifies detail of text of 2-3 simple sentences using verbatim wording. • Identifies correct spelling of misspelled word. • Identifies misspelled common words. • Identifies letters and phonetically regular, high frequency words (self-read).	Examples: …which can you drink from? (book, cup, pen) …what do you read? (book, desk, stapler) …which pair of words rhyme?
	Mathematics	
	• Identifies characteristics (e.g., shape, face, side, corner, angle, etc.) of common objects or shapes. • Tells time on a digital clock. • Recognizes familiar object added to group of objects. • Identifies shapes presented in the same orientation and not a direct match situation. • Matches values/numbers on a number line. • Recognize expressions with decimal points, exponents, etc.	Examples: …which shape is round? (circle, square, triangle) …the height of this cylinder. … which number Point R is on the number line? … another expression with a decimal point/ an exponent (given an example).

DOK 2 cont.	Science	
	• Identifies object from picture or manipulative choices. • Identifies common object when function is described. • Recalls function of basic body parts.	Examples: …what kind of weather is wet? …what object gives light? …what body part can taste food?
	Social Studies	
	• Matches pictures and/or words. • Identifies details from text (1-2 simple sentences) using verbatim wording. • Identifies familiar characteristics of time periods or situations. • Recognizes simple definitions of social studies related terms when definition is provided.	Examples …what is something else that is built by people? (ship, rock, leaf) …what is a manufactured good? (cats, shoes, trees) What is a [law, rule, right, constitution, amendment]?

DOK 3	Use of Knowledge and Information	
General Performance Verbs: perform tell demonstrate follow count locate name read describe define spell	• Engagement of some mental processing beyond habitual response. • Simple inferences may be needed. • Uses information from a chart or graph to make simple inferences in order to correctly respond. • Chooses what comes next in a sequence.	
	English Language Arts	
	• Indicates comprehension of basic/common words or two to three word sentences. • Identifies main idea by applying information gained from text. • Identifies detail by making simple inferences. • Identifies a relevant or best sentence to add to passage. • Self-reads materials/passages. • Identifies best word to complete sentence. • Identifies initial word in sentence in need of capitalization. • Identifies the correct spelling of grade appropriate words presented in sentence. • Identifies prefixes/suffixes in words. • Identifies incorrectly used common punctuation. • Identifies basic punctuation including periods, comma, colon, semicolon, and question mark.	Examples: …what is the main idea? …who is this story about? …what fits in the blank of this sentence? …what happens next in the story? …which word in this sentence is misspelled? …which word uses the pre-fix….. …which group of words has a comma? …which word describes sound? …which piece of evidence supports this clam?

<table>
<tr><td>DOK 3 cont.</td><td colspan="2"><u>Mathematics</u></td></tr>
<tr><td></td><td>• Tells time on analog clock.
• Identifies number sentence/equation that reflects number relationships (no comp.).
• Tells measurement with ruler placed on stimulus.
• Performs basic computation (counting may be a strategy).
• Identifies # of angles and angle type.
• Identifies parts of objects or # of objects in group representing simple fractions (1/2, 1/3, 1/4).
• Matches congruent shapes.
• Identifies information from a graph.
• Matches number to picture model.
• Identifies similar shapes when picture cues are rotated, reflected, or translated.
• Uses place value to round to any place.
• Locates positive and negative numbers on a number line.
• Identifies the y-intercept of a line.</td><td>Examples:
… which number sentence can be used to find the circumference of this circle (given dimensions and formula).
…how many cookies are needed for 5 children to have 2 cookies each? (picture cues of five students holding two cookies each are provided)
…what is the length of the longest side (hypotenuse) of the triangle? (picture of triangle with a ruler alongside it)
…what is half of the number of blocks shown?
…which picture is a model of two cubed?
… which number line shows the point negative four?
… which point is the y -intercept of this line.</td></tr>
<tr><td></td><td colspan="2"><u>Science</u></td></tr>
<tr><td></td><td>• Identifies additional attribute from common experience/knowledge (e.g., weather, animals).</td><td>Examples:
…what other animals live in the desert?
…how does someone move a mower?
…an element is a substance that cannot be broken down into…which of these is an element?</td></tr>
<tr><td></td><td colspan="2"><u>Social Studies</u></td></tr>
<tr><td></td><td>• Identifies detail of text with 2-4 sentences requiring a slight inference or connection of ideas.
• Indicates comprehension of common social studies content words or concepts.
• Identifies the how, who, what, and/or why of governmental processes.
• Identifies reasons or importance of events and/or actions.</td><td>Examples:
Why did (name of person) build a (name of structure or invention)?
What was one reason why the (name of event or situation) take place?
What is the process for making a (law, rule, constitutional amendment)?
Why is (law, rule, right, constitution, amendment) important?</td></tr>
</table>

<table>
<tr><th>DOK 4</th><th colspan="2">Comprehension</th></tr>
<tr><td rowspan="3">General Performance Verbs:
explain
conclude
group
categorize
restate
review
translate
describe
paraphrase
infer
summarize
illustrate
compute
classify
solve</td><td colspan="2">• Strategic thinking—requires reasoning, planning a sequence of steps.
• Answer choices summarize and are not verbatim from passage.</td></tr>
<tr><td colspan="2"><u>English Language Arts</u></td></tr>
<tr><td>• Identifies theme or message of a story.
• Identifies main <u>idea</u> by drawing conclusions or making inferences.
• Identifies elements of a story without definition of the element.
• Identifies purpose of writing passage.
• Selects best sentence(s) for middle or end of passage (correct order required).
• Orders three or more sentences to communicate logical sequence of events.
• Sorts or groups words or items with categories given.
• Identifies sentence that best supports topic.
• Identifies two or more sentences to complete a composition.
• Identifies correct meaning of words from context sentence.
• Edits for correct use of subject and verb agreement.
• Edits for correct use of singular and plural nouns.
• Identifies proper nouns and pronouns within sentences, and book titles in need of capitalization.
• Identifies correct usage of punctuation.</td><td>Examples:
…what is the main idea?
…who is this story about?
…what is the “plot” of this story?
…which of these is found inside a house and which are found outside a house? (bed, swing set, trees, car, computer)
Bed becomes a plural (more than one bed) by adding an “s”.
…what would more than one tree be? (tree, treeses, trees)
…which sentence shows commas used correctly?
…which sentence provides the best conclusion by stating why the claim is significant?</td></tr>
</table>

<table>
<tr><td rowspan="3">DOK 4 cont.</td><td colspan="2"><u>Mathematics</u></td></tr>
<tr><td>

- Computes math operations with equation, formula, or organizer given. (Requires computation and not one to one counting.)
- Identifies objects, letters, or objects with line symmetry.
- Computes area, perimeter, and volume when dimensions are labeled.
- Identifies patterns with more than two repetitions.
- Groups objects into three or more groups.
- Uses information from a graph/number line to make a comparison or claim, or to answer a question.
- Makes predictions of random selection process.
- Identifies faces of more than one 3 dimensional object with only one object presented as stimulus.
- Computes prices of items with tax.
- Identifies correct number sentence/equation from a group of three viable choices (requires computation).
- Uses ruler to measure.
- Reduces fractions.
- Simplifies expressions that include exponents.
- Identifies the slope and y-intercept from graphs.
- Plots or recognizes ordered pairs on a graph.
- Recognizes similar figures (given information or example of similarity).
- Identify multiples of…

</td><td>

Examples:

…what is the area of a triangle that measures 5 inches in height (h) and 3 inches at the base (b)? (area of triangle is ½ bh)

…what is the perimeter of a square that is 4 inches on each side?

…how many apples are needed for six students if each student gets two apples? (provide picture cue of 2 apples only)

…which sentence is true according to Mr. Goff's bar

graph?

…which histogram correctly shows the data in the data table?

… what two squared times two cubed equals?

</td></tr>
<tr><td colspan="2"><u>Science</u></td></tr>
<tr><td>

- Identifies components of a scientific process.
- Draws conclusions based on provided information.
- Generalizes body part functions/processes across species by making inferences.

</td><td>

Examples:

…where does snow fall most?

…which object is the hardest to move?

…why do the two plants look different?

…which layer (of Earth) is the thickest?

…what caused the paper to become damp?

…what caused the box to stop moving?

…which part pumps blood through the dog's body?

</td></tr>
</table>

DOK 4 cont.	Social Studies	
	• Draws conclusions based on information provided in a chart, table, or diagram. • Uses information to complete a chart. • Identifies trends and/or changes in processes or in ways of life. • Identifies reasons and/or consequences of changes.	Examples: Based on information in the chart, how has (process, occupation, way of living, law, constitution) changed over the years? Which sentence best completes the chart? What was one result of the change in (event, people living in area, law, economic situation, invention)?

DOK 5	Application	
General Performance Verbs: organize collect apply construct use develop generate interact with text implement compare contrast	• Extended thinking—making connections within and between subject domains, non routine problem solving. • Student generates answer without cues.	
	English Language Arts	
	• Makes connections between multiple sources. • Compares events in two passages. • Generates response. • Implements a plan.	Examples: …how the poem and the story are the same. …how the structure of both passages is the same. …how to revise this sentence using fewer words. (no response options)
	Mathematics	
	• Computes with no equation and limited numbers presented (i.e., for perimeter, numbers are given on only 2 sides of 4 sided figures). • Constructs complex new shape from given shapes. • Computes by translating word problems into number problems. • Solves real-world problems involving units of measurement. • Selects appropriate graphical representations of real-world events.	Examples: …what is the perimeter of a rectangle with one side measuring 8 inches and another side measuring 3 inches? Jill types 10 words per minute….how long will it take Jill to type fifty words? Mr. Patel gives each person one cup of soup. 1 gallon = 8 pints 1 pint = 2 cups … how many cups Mr. Patel needs to serve two gallons of soup? …which graph shows a rate of four miles per hour?

DOK 5 cont.	Science	
	• Explains cause and effect relationships. • Orders three or more components of a scientific process. • Describes processes of production or reproduction by ordering sentences.	Examples: …how does the weather help the kite stay up in the sky? …the order that energy moves through this food chain. …which part of the pine tree makes food by using the sunlight?
	Social Studies	
	• Explains cause and effect relationships. • Explain similarities. • Explain differences.	Examples: Based on the agreements, what would have happened if. . . ? In what way are these two (people, organizations, laws, events, governmental programs) alike? What is one difference between. . . ?

DOK 6	Analysis Evaluation	
General Performance Verbs: pattern analyze compose predict extend plan judge evaluate interpret cause/effect investigate examine distinguish differentiate generate	• Requires investigation. • Student predicts based on information given. • Student creates possible alternative outcomes. • Student uses multiple sources to answer question without cues/supports. • Generally, DOK levels of 6 will not be found on the assessment unless open response items that require investigation using two or more texts are assessed.	Examples: …tell me another possible ending to the story (no options provided). …what kind of science experiment can you do to find out how many hours of sun a seed needs to sprout?

Presentation Rubric

revised 6/20/16

	1	2	3	4
Volume of Information (VI)	**No Scenario Presented:** – 1 simple sentence stating stimulus, "Here is a ...." (when applicable) – Little to no additional info or instruction beyond standard item template language – Minimal response options (no complete sentences or equations) – No passage *Which one holds water?* (no stimulus, 3 word/pic cards) *Here are four paper clips.* *Which number shows half of the paper clips?* *(*stimulus pic strip, 3 number cards)	**Limited Scenario Presented:** – 1 sentence describing stimulus/materials or scenario – Minimal information provided in 1 simple format (pictograph, organizer, formula) – ELA passage items: simple sentence or short paragraph – No scenario, but complete sentences or equations for response options *Carlos needs to read a book for his science project at school.* *Where Carlos would most likely find a book?* (no stimulus, 3 word/pic cards) *Here is a table that shows the cost of fruit.* *Which amount shows the cost of 3 oranges?* (stimulus table, 3 number cards) *Food grown by Florida farmers was sent to American soldiers fighting in World War 1.* *What did Florida farmers provide soldiers during World War I?* (stimulus, 3 picture/word cards)	**Moderate Scenario Presented:** – 2 sentences describing stimulus/materials or scenario – Moderate information provided in 1 format (graph, organizer, formula) – ELA passage items: 2 or more short paragraphs (moderate info/plot development) *This is a toy car. I can push it to make it roll across the table. If nothing stops it when it reaches the edge of the table it will fall.* *What causes the car to fall to the ground?* (stimulus, 3 word/pic cards) *Hector put four beads on a necklace. He wants to make 3 more necklaces.* *How many more beads Hector does need?* (2 stimulus pic cards, 3 number cards) *The legislative branch has the responsibility of writing bills. The executive branch has the responsibility of deciding if a bill should become a law.* *How do the legislative and executive branches work together to create new laws?* *(stimulus, 3 sentence strips)*	**Complex Scenario Presented:** – 3 or more sentences describing stimulus/materials or scenario – Extensive information provided in 1 or more format (graph, chart, organizer, formula) – ELA passage items: 4 or more paragraphs (extensive info/plot development) or paired passage *This is a picture of a steak. Steak is meat from a cow. This meat is part of a food chain. You're going to put these sentences in order to show what happens 1st, 2nd, and 3rd.* *What order is energy used to make meat?* (stimulus sent. strip, 3 sentences) *In the 1960s, the United States government created programs to help people. The chart describes some of these programs.* *In what ways are these government programs alike?* *(chart as stimulus, 3 sentence strips)*

Presentation Rubric

revised 6/20/16

	1	2	3	
Vocabulary (V)	**Familiar Vocabulary Presented:** – Everyday words and single digit numbers (e.g., round shape, which is a boy, what is one more, which is wet) presented in item – No content words used	**Somewhat Familiar Vocabulary Presented:** – Everyday words and minimal basic content words used – Examples include units of measure, fractions, conversion formulas, place value, data tables, graphs, pictographs, decimals, equation	**Familiar & Unfamiliar Vocabulary Presented:** – Mix of everyday words and unfamiliar words – Basic content words used – Examples include positive/negative, proportional relationship, fraction bar, hundredths, perimeter, volume, distance, y-intercept, slope, congruent, variable	
	No Content Words →	**Basic Content Words** (familiar, used with high frequency) story, sentence, add, square, claim, hundreds place, whole, half, force, heat, light, electricity, gravity, cause, result, consequence, government, law, Constitution, federal, citizens →		
Context (C)	**Familiar Context & Immediate Setting** (home and school) family, class, schedule, media center, lunch, recess, counting objects, kitchen, weather, basic body parts, gravity on everyday objects → *no context provided	**Familiar Context & Extended Setting** (community) town library/museum, grocery store, volunteering, Florida related animals/facts, Florida history and laws →	**Unfamiliar Context & Extended Setting** (global community) animals/facts beyond FL (US/other countries), life cycle, respiratory system, environmental/global issues, internal functions of organs United States history and laws →	

APPENDIX E—SURVEYS AND RESULTS

Table E-1. 2016–17 FSAA-PT: July 19, 2016 Train-the-Trainer Survey

Survey Question	*Strongly Disagree*	*Disagree*	*Neither Agree nor Disagree*	*Agree*	*Strongly Agree*	*No Response*
1. Overall, the training worked well.	0.0%	0.0%	0.0%	41.9%	58.1%	0.0%
2. The high-level overview of the FSAA-Performance Task program was helpful.	0.0%	0.0%	0.0%	37.2%	60.5%	2.3%
3. The overview of the FSAA-Performance Task administration procedures was clear.	0.0%	0.0%	0.0%	32.6%	65.1%	2.3%
4. The overview of AAC/trainer roles and responsibilities was helpful.	0.0%	0.0%	0.0%	37.2%	62.8%	0.0%
5. The Open-Response Writing Prompt Activity was helpful.	0.0%	0.0%	4.7%	37.2%	58.1%	0.0%
6. The Administration Activity was helpful.	2.3%	0.0%	2.3%	32.6%	58.1%	4.7%
7. The questions I had about the 2017 FSAA were answered.	0.0%	2.3%	11.6%	27.9%	53.5%	4.7%

PERCENTAGES IN TABLE E-1 ARE BASED ON FEEDBACK FROM 43 ATTENDEES.

Three things I liked the best about this experience…

- Accommodations; trainer; getting questions answered.
- New features in PowerPoint; new Administration Activity; Q&A activity.
- Appreciate the Administration handout; Q&A at the end; updated PowerPoint slides and Q&A document e-mailed to us.
- Colored flow chart for each session; directions for practice sessions
- Interactive Q&A; evidence that FLDOE and MP are listening and responding to input.
- Excellent training.
- Practice with practice materials; writing activity prompt for use with teachers; Q&A part 1 and part 2.
- Summary and update method instead of full training for those who have been trained previously.
- Very organized as usual.
- Activities; possible changes to online tool; sharing information/answers to questions.
- Easy to ask questions; good flow of information; taking our suggestions seriously.
- Meeting with other districts/location/meals/new changes from MP/trainers positive.
- Structure, setting, presenters; Measured Progress staff was very positive and understanding and tried to be open to information.
- An overview of upcoming (needed) changes to the FSAA Administration and Online System; the new graphics explaining testing administration; Q&A activity at the end of the day.
- Question/answer period; practice materials activity.
- Being able to hear input from other districts.
- Staff; information; hotel.
- Smaller group; more specific.

- Sitting with colleagues who could help me learn more about the FSAA. Time taken to answer questions; timelines were announced; patience with individuals who wanted to be spoon fed information.
- Q&A activity; practice activity; dates and deadline scheduling (materials).
- Opportunity to have questions/answers.
- Working/attending with a co-worker.
- Update information; chance to discuss issues; realizing everyone had some of the same issues we had this past year.
- Having the TAM as a bound book.
- Answering the questions – thanks! Various professionals answering the questions. Confirmed that our county's training rocked!
- The amount of expertise and support between MP and DOE; location.

Three things I would change about this experience…

- Would be nice to do a shorter version for those who have already been trained. More examples and VIDEOS. More practice items.
- More time; more accurate/official times; different hotel.
- Videos of the assessment in action to use during training. Questions were acknowledged but couldn't be answered at this time.
- Excellent for what it was!
- Have consistent answers between DOE and Measured Progress.
- Could you please provide concrete dates and have a realistic plan to train teachers in a manner that is not last minute and hap-hazard? Have training materials available when you indicate they will be and not one, two, three weeks later….or never. Practice testing materials given to us now.
- Add a practice administration activity for writing.
- Physical location; breakfast choices (suggest fruit/banana); sweet tea (sugar already added).
- More activities.
- Somehow make this day more engaging for such dry content.
- Handouts didn't match the PowerPoint – they need to be the same.
- Not so cold in the conference room.
- More review of data – opportunity for discussion.
- Separate AACs and trainers – lots of time spent on information needed for AACs only—brand new trainer would probably need much more concentration on administrative procedures.
- Match the PowerPoint to handouts.
- Make sure PowerPoints match.

Questions I still have…

- I am hoping that all of the issues that have been brought up & MP says "we're working on it" actually take place.
- What trainings will [school level coordinator] SLC receive?
- You don't want to burden us – so we spent over $1000 to print practice materials – not included in our IDEA budget!
- Cut scores!
- Oh, so many….
- I hope to have Measured Progress updates in a timely manner; amounts of practice materials to districts are sufficient.
- Will the top issues really be addressed?
- Why can't the grade-level vocabulary list be made available before it is?

Table E-2. 2016–17 FSAA-PT: July 20, 2016 Train-the-Trainer Survey

Survey Question	*Strongly Disagree*	*Disagree*	*Neither Agree nor Disagree*	*Agree*	*Strongly Agree*	*No Response*
1. Overall, the training worked well.	0.0%	0.0%	0.0%	29.7%	67.6%	2.7%
2. The high-level overview of the FSAA-Performance Task program was helpful.	2.7%	0.0%	2.7%	24.3%	70.3%	0.0%
3. The overview of the FSAA-Performance Task administration procedures was clear.	0.0%	0.0%	0.0%	21.6%	78.4%	0.0%
4. The overview of AAC/trainer roles and responsibilities was helpful.	0.0%	0.0%	2.7%	21.6%	75.7%	0.0%
5. The Open-Response Writing Prompt Activity was helpful.	0.0%	0.0%	5.4%	40.5%	54.1%	0.0%
6. The Administration Activity was helpful.	0.0%	2.7%	8.1%	18.9%	67.6%	2.7%
7. The questions I had about the 2017 FSAA were answered.	0.0%	0.0%	8.1%	29.7%	56.8%	5.4%

PERCENTAGES IN TABLE E-2 ARE BASED ON FEEDBACK FROM 37 ATTENDEES.

Three things I liked the best about this experience…

- Informal nature of presentation; availability of MP and DOE staff to answer questions.
- Hands-on components; new updates.
- The discussions.
- Updates; behind-the-scenes information related to intention/rationale that goes into procedures and design of FSAA.
- Refresher and updates.
- Angie's ability to answer questions alongside Jennifer; didn't have to do the Scavenger Hunt activity.
- Friendly staff and patient; organized; opportunity for Q&A; definitely need to practice the administration of scaffolding items and manipulating materials.
- New tutorials available – short in length and no quiz; 100% paper format for 2016-2017 school year; reduced from six to four forms for 2016-2017.
- Questions were repeated prior to providing an answer.
- Please provide a "tech training" for AACs: uploading a CSV file, accessing web sites, retrieving scores in May, assigning students to teachers, verification of students in December.
- Steady pace.
- Face-to-face; meeting new people; trainers/questions asked.
- Materials, pacing of presenters, and opportunities to speak with other AACs. Q&A session was fantastic so we don't think we're crazy.
- Trainer reading the population—spent more time on newer items and asked for familiarity to not spend time on information the group already knew. Highlights of the online scoring system.
- Additional slides since last year; training resources.
- There was not a waste of my time; all presented information was helpful.

- This time of year was much better than last year. After next week, the schedule is so busy this training would have been harder to attend.
- Hands-on experience.
- Organized; good materials.
- Activities were helpful; information was clear.
- Always a very organized training -- thanks!

Three things I would change about this experience…

- Too many things are still unknown or "in progress".
- Get up and move.
- Hotel
- Second microphone for questions and answers.
- Too late in the day; temperature in the room was cold; "breakfast" was not breakfast.
- Handout did not exactly match slides on the screen.
- Breakfast was not healthy or substantial; more interaction with others.
- Demo of the online scoring site would be helpful. Vocabulary for writing provided with visuals like the other performance tasks.
- This was a repeat of last year. Maybe a short update meeting can be scheduled instead of repeating everything.
- Add a review of [prior year] testing results.
- I miss the Orlando location.

Questions I still have…

- Uploading writing.
- How to make the student and teacher course assignments uploaded more efficiently? The template was time-consuming. Teacher ID # change? Too much time spent on discussion regarding student rosters.
- Consider a "hands-on" technology time for FSAA Alternate Assessment Coordinators (focused on uploading and matching students to teachers).
- Schedule for when things will happen. How does the waiver work? Will visually impaired materials arrive in a timely manner this year?
- How do we upload writing prompts/scores? Wait for FSAA-named scores in January 2017?
- When will we get a district data file?
- What do the scores mean? When will standard setting be done?
- I really feel like the writing prompt piece needs to be looked at more carefully for students using a communication device – as far as access to vocabulary.

APPENDIX F—DECISION RULES

Florida Standards Alternate Assessment Performance Task 16-17

This document details business requirements for FSAA Performance Task assessment reporting and data file deliverables created by Data and Reporting Services (DRS). The final student level data used for analysis and reporting is described in the "Data Processing Specifications." This document is considered a draft until the Florida Department of Education (DOE) signs off. If there are rules that need to be added or modified after said sign-off, DOE sign-off will be obtained for each such rule.

I. Data and Reporting Services Deliverables

The tables below outlines the various PDF reports and data file deliverables prepared by DRS for reporting of FSAA performance task student results.

A. Reports

Type of Report	Number and Method (Electronic, Printed, or Both) Report is Provided		Brief Description of Contents
	Provided to State	Provided to District	
School Report	Online	Three Print Copies; Online	Roster of students in a school by assessment Basic student demographic information, Number of items correct by task level , scaled score and achievement level
Student Report	Online	One Print Color Copy; Color Online	Basic student demographic information, Number and percent of items correct by task level for tested assessments, Scaled Score and Achievement Level, Longitudinal Achievement Levels

B. Data files

Type of Data file	Number and Method (Electronic, Printed, or Both) Data are Provided		Brief Description of Contents
	Provided to State	Provided to District	
State Student Data File	FTP	N/A	Basic student demographic information and test results
District Student Results	Online	Online	Basic student demographic information and test results
State Assessed Summary Data File	FTP	N/A	Number of Assessed and Not Assessed students, achievement level , level 3 or above number and percent by tested grade, tested subject, school and district

Type of Data file	Number and Method (Electronic, Printed, or Both) Data are Provided		Brief Description of Contents
District Assessed Summary Data File	Online	Online	Number of Assessed and Not Assessed students, achievement level , level 3 or above number and percent by tested grade, tested subject, school and district

II. Assessment Information

A. Student Assessments

The table below outlines the FSAA assessments students are eligible to participate based on enrolled grade. For grades 03-10, a student is expected to participate in all content area tests required at a student's enrolled grade. Students enrolled in grades 06-12 have the option to participate in the EOC assessment Civics. Students enrolled in High School have the option to participate in the EOC assessments Algebra I, Geometry, US History and Biology 1. To fulfill educational requirements, students enrolled in high school may submit a grade 09 or 10 ELA assessment. Only eligible tests identified as 'Required' or 'Optional' based on a student's enrolled grade will be included in analysis and reporting.

Student Enrolled Grade	Test Grade Level	Test Content Area							
		ELA	Math	Science	Civics EOC	US History EOC	Algebra 1 EOC	Geometry EOC	Biology 1 EOC
03	03	R	R						
04	04	R	R						
05	05	R	R	R					
06	06	R	R						
07	07	R	R						
08	08	R	R	R					
09	09	R							
10	09	O							
10	10	R*							
06,07,08, 09, 10, 11, 12	07				O				
11, 12	09	O							
11, 12	10	O							
09, 10, 11, 12	High School					O	O	O	O
		*Students enrolled in grade 10 who submit a grade 09 ELA test are not required to submit a grade 10 ELA test R = Required O = Optional							

B. Student Test Administration

1. General Item Task Types

a. Selected Response: Student selects one option

b. Multi-Select: Student selects more than one option

c. Match/Sort/Merge/Sequence: Correct/Incorrect

d. Writing Prompt

2. Scaffolding

a. Task 1 items in session 1 & 2 Item Sets

b. If a student is unable to answer the Task 1 question correctly, scaffolding will be administered by removing one response option. The task is then presented to the student again with only two options.

3. Session 1

a. Math, ELA, Science, Algebra 1, Biology 1, and Geometry Item Sets 1-16

b. Civics and US History Item Sets 1-10

c. Adaptive: Each student is administered Task 1. Task 2 is administered only if the student responds correctly, without scaffolding, to Task 1. Task 3 is administered only if the student responds correctly to Task 2.

4. Session 2

a. Math, ELA, Science, Algebra 1, Biology 1, and Geometry Field Test Item Sets 17-19

b. Civics and US History Item Sets 11-16 Field Test Item Sets 17-19

c. Non-Adaptive: Each student is administered Task 1, Task 2, and Task 3 in each item set.

d. Administration of each task is not dependent upon performance on the previous task.

5. Session 3 (ELA-Writing only)

a. Writing Stimulus/Prompts 1(SR) and 2(OR)

b. Each student is administered all 5 selected response questions and the open-response writing prompt.

c. Administration of each task is not dependent upon performance on the previous task.

III. Student Assessment Data

A. Item Set Score

Student responses are collected using the online testing platform. The format of the response depends on the type of task. Non-responses are typically represented by a NULL in the data.

1. Task Student Response

a. Select One Option: {<final student response>; <scaffolded indicator>; < if scaffolded indicator=true then scaffolded response>;<student response 1>; …<student response n-1> ; <student response n>} (note scaffolded response refers to the incorrect response prior to scaffolding being applied)

b. Multi-Select: [<list of all responses selected by student separated by ;>]

2. Task Student Score

a. Each task is scored as correct, incorrect, or not attempted

b. Additionally, task 1 items are indicated as being scaffolded or not scaffolded. A task is scaffolded when the scaffolding indicator is equal to 'true'. Otherwise, it is not scaffolded.

c. A task is not attempted if the final student response is blank or NULL and, when applicable, the scaffold student response is blank or NULL

ITEM SET SCORE ASSIGNMENT

Hierarchy	Item Set Score	Score Assignment Rule	Student Attempted Item Set
1	blank	Item set task 1 is not attempted	No
2	A	Task 1 Incorrect	Yes
3	B	Task 1 Correct with Scaffolding	Yes
4	C	Task 1 Correct without Scaffolding and Task 2 Incorrect	Yes
5	D	Task 1 Correct without Scaffolding and Task 2 Correct and Task 3 Incorrect	Yes
6	E	Task 1,2, and 3 Correct	Yes

3. **Task 1 Accuracy Scores**

   a. Numerator: Number of Included Item Sets scored a C, D, or E

   b. Denominator: 16

   c. Percent

      i If denominator = 0, then do not calculate

      ii Otherwise, [numerator]/[denominator] rounded to nearest whole number

4. **Task 2 Accuracy Scores**

   a. Numerator: Number of Included Item Sets scored a D or E

   b. Denominator: Number of Included Item Sets scored a C, D, or E

   c. Percent

      i If denominator = 0, then do not calculate

      ii Otherwise, [numerator]/[denominator] rounded to nearest whole number

5. **Task 3 Accuracy Scores**

   a. Numerator: Number of Included Item Sets scored a E

   b. Denominator: Number of Included Item Sets scored a D or E

   c. Percent

      i If denominator = 0, then do not calculate

      ii Otherwise, [numerator]/[denominator] rounded to nearest whole number

6. **Task 1 Accuracy Scores Scaffolded**

   a. Numerator: Number of Included Item Sets scored a B

   b. Denominator: Number of Included Item Sets scored a A or B

   c. Percent

      i If denominator = 0, then do not calculate

      ii Otherwise, [numerator]/[denominator] rounded to nearest whole number

B. Writing Scores

1. Selected Response Items

a. A student attempts the item if the data collected for the student response is not NULL or blank.

b. The item is not attempted if the student response is NULL or blank.

2. Writing Prompt

a. The writing prompt is scored on 4 dimensions: Title, Introduction, Supporting Details, and Conclusion.

b. Each raw dimension score can be B (blank), N (No Score), or F (non-English) or 0-3 rubric score.

c. A student attempts the writing prompt if at least one raw dimension score is N,F, or 0-3.

d. Rubric scores of B,N, and F are translated to 0 for analysis and reporting.

Rubric Score	Score Description
3	Complete
2	Partial
1	Insufficient
0	No

3. Writing Task Accuracy Scores

a. Numerator: Number of Writing Selected Response items answered correctly

b. Denominator: 5

c. Percent

i If denominator = 0, then do not calculate

ii Otherwise, [numerator]/5 rounded to nearest whole number

C. Student Test Participation Status

For each assessment required based on student eligibility and for each optional assessment submitted in the testing platform, a student participation status will be assigned to support analysis and reporting of student results. An assessment is considered submitted if a form or test report code is assigned in the test reporting platform. The participation status will be based on criteria for meeting attemptedness requirements as well as test data provided in the testing platform

1. Test Attemptedness

a. Meet Test Attemptedness (M)

i Non-ELA attemptedness requirements

(a) A student who attempts 2 or more item sets

ii ELA attemptedness requirements

(a) A student who attempts both Reading and Writing

(i) Reading: a student who attempts 2 or more item sets

(ii) Writing: a student who attempts 1 or more of selected response questions or has a nonblank response to the prompt

b. A student who attempts at least one item on the test, but does not meet the attemptedness criteria is considered "Did Not Meet Attemptedness" (D)

c. A student who does not attempt any items is considered "Not Tested" (N)

2. **The table below summarizes the participation status assignment rules.**

TEST PARTICIPATION STATUS SUMMARY

Test Attemptedness Rule	Testing Platform Not Tested Reason	Participation Status	Assign Scaled Score and Achievement Level
M	Ignore all Not Tested Reasons provided, except for "Deceased" or "Test Administration Violation", in the testing platform	Tested	Yes
D,N	Absent	Absent	No
M,D,N	Deceased	Excluded from analysis and reporting – Not assigned a test participation status	No
D,N	EOC Deferred	EOC Deferred	No
D,N	Extraordinary Exemption	Extraordinary Exemption	No
D,N	Homeschool	Homeschool	No
D,N	Hospitalized	Hospitalized	No
D,N	LY<1 yr—ELA ONLY	LY<1 yr—ELA ONLY	No
D,N	McKay Scholarship	McKay Scholarship	No
D,N	Medical Complexity	Medical Complexity	No
D,N	Not in Tested Grade	Not in Tested Grade	No
D,N	Participating in Datafolio	Participating in Datafolio	No
D,N	Participating in FSA ELA/MATH/SCIENCE	Participating in FSA ELA/MATH/SCIENCE	No
M,D,N	Test Administration Violation	Test Administration Violation	No
D,N	Withdrew	Withdrew	No
D	No reason provided in the testing platform	Did Not Meet Attemptedness	No
N	No reason provided in the testing platform or Not Tested	Not Tested Unspecified	No

D. Student Scaled Score and Achievement Level Assignment

1. Students with a test participation status of Tested will be assigned a test level scaled score and achievement level

2. Pattern scoring will be used to assign scaled scores.

3. Operational items will be used to assign scaled scores and achievement level.

4. Item scores used to calculate scaled score will be different than the task score calculate described earlier in this document. The table below describes how to calculate each item score that contributes to the scaled score calculation.

5. Student scaled score and achievement levels will not be assigned for Civics and US History for reporting.

Level	Item Score – For Scaled Score Calculation Only
Task 1	Task 1 item is always administered. If the student gets task 1 correct on first attempt then Task 1 Score = 1. Otherwise Task 1 Score = 0.
Task 2	A Task 2 item is administered if the student gets Task 1 correct on first attempt If the student is not administered the Task 2 item, then Task 2 Score = . (which indicates "missing") Else if the student gets task 2 correct then Task 2 Score = 1; otherwise Task 2 Score =0
Task 3	A Task 3 item is administered if the student gets Task 2 correct on first attempt If the student is not administered the Task 3 item, then Task 3 Score = . (which indicates "missing") Else if the student gets task 3 correct then Task 3 Score = 1; otherwise Task 3 Score =0
ELA Writing Session 3 SR	Final Score: 0 =incorrect , 1 =correct
ELA Writing Session 3 WP	Treat each dimension score as an item. Add "A","B","C","D" to item number to differentiate dimension scores. Final Dimension Score: 0,1,2, or 3 (Rubric score) Scores of B(Blank), N(No Score), F(Non-English) are Scored a 0

6. Psychometrics will use student item scores to calculate the EAP estimate and will assign a scaled score, scaled score lower bound, scaled score upper bound for each tested student.

7. The approved scaled score cut scores will be used to assign students an achievement level based on the scaled score provided by psychometrics.

Achievement Level	Achievement Level Label
1	Level 1
2	Level 2
3	Level 3
4	Level 4

E. Student Longitudinal Achievement Level

1. All Test Grades 03-08 ELA, ELA 1, ELA 2, and Grades 03-8 Math tests are eligible for longitudinal data reporting.

2. Starting with 1516 administration, **up to 3 academic year achievement levels will be provided for each student who were assessed within the last 3 assessment years regardless of the grade level.**

3. Match previous assessment results by Student ID across all grade levels within subject.

a.

IV. School Type

Every student is assigned a school type based on the school provided by the testing platform and school organization data provided by the DOE. The table below summarizes the school type analysis and reporting impact.

SCHOOL TYPE: ASSIGNMENT AND IMPACT

School TypeID	School SubTypeID	School Type Description	Analysis Abbreviation	Impact on Analysis and Reporting
1	1	Public	PUB	No Impact
1	11	Charter	CHA	No Impact
1	14	Vocational-Tech Program	VOC	No Impact
1	15	Special Education Program	SEP	No Impact
1	17	Alternative Program	ALT	No Impact
1	18	Other	OTH	No Impact

School TypeID	School SubTypeID	School Type Description	Analysis Abbreviation	Impact on Analysis and Reporting
1	24	Adult	ADT	No Impact
1	26	Correctional	COR	No Impact
1	27	Hospital Home bound (District Responsible)	HOM	No Impact
3	3	Private	PRI	Students identified as Tested at private schools receive a student report only. Students are excluded from all other reports and data file deliverables, except State Student Results data file deliverable. Students are excluded from all aggregations (school, district, and state level).

V. Aggregate Data Calculations (School, District, State)

A. Aggregation School: Student's District Code concatenated with School Code identifies School

B. Aggregation District: Student's District Code identifies District

C. Aggregation State: All students in the FSAA Performance Task assessment data is identified as "FL" for the State aggregations

D. Number of Students Assessed: Number of Students with a Tested participation status meeting school type inclusion rules.

E. Number of Students Not Assessed: Number of Students with a participation status of Not Tested, Did Not Meet Requirements, Absent, Test Administration Violation, or Hospitalized meeting school type inclusion rules.

F. Number of Students At each Achievement Level: Number of Students with a Tested participation status earning the achievement level meeting school type inclusion rules

G. Percent of Students At each Achievement Level: 100 times Number of Students at each Achievement Level divided by Number of Students with a Tested participation status meeting school type inclusion rules rounded to the nearest whole number

H. Number of Students at Achievement Level 3 or 4: Number of Students with a Tested participation status earning achievement level 3 or 4 meeting school type inclusion rules

I. Percent of Students at Achievement Level 3 or 4: 100 times Number of Students at Achievement Level 3 or 4 divided by Number of Students with a Tested participation status meeting school type inclusion rules rounded to the nearest whole number

VI. Aggregate Data Suppression Rules

A. Do not suppress number of students assessed and number of students not assessed

B. Suppress Achievement Level Aggregations by State, District, or School

1. If the total tested count is less than 10, suppress the number and percent at each achievement level and number and percent of students at achievement level 3 or above

2. If all students have the same achievement level and total tested count is greater than or equal to 10, suppress the number and percent at each achievement level and do not suppress the number and percent of students at achievement level 3 or above

VII. Report Deliverables Decision Rules

A. General Information

1. Format Data

a. Test Subject

FORMAT TEST SUBJECT

Report Subject Order	Test Subject Label*	Assessment
1	ELA	Grades 03-08 ELA
2	MATHEMATICS	Grades 03-08 Math
3	SCIENCE	Grades 05 & 08 Science
1	ACCESS ELA 1	Grade 09 ELA
1	ACCESS ELA 2	Grade 10 ELA
2	ACCESS ALGEBRA 1	High School Algebra 1 EOC
3	ACCESS BIOLOGY 1	High School Biology 1 EOC
4	ACCESS GEOMETRY	High School Geometry EOC
5	ACCESS CIVICS	Grades 06-12 Civics EOC
6	ACCESS US HISTORY	High School US History EOC
*For ELA and HS ELA assessments, replace “ELA” with “ENGLISH LANGUAGE ARTS” for roster headers		

b. Student Name

i Format student name so it is prints upper case
ii Print [Last name], [First Name]

c. Enrolled Grade

i Sort order: If a report PDF file contains results for more than one enrolled grade, then order the grade results as identified in the Format Grade table in this document

ii Always print enrolled grade with leading 0’s when grade is less than 10

d. Enrolled District: [district code]-District Name

e. Enrolled School: [school code]-School Name

B. Student Report Specific Rules

1. Only students with at least one "Tested" participation status will receive a student report.

2. Grade 03-08 ELA, Math, and Science will be included in 1 report with cover letter.

a. If a student has a participation status other than "Tested" for a given subject then that subject's report page will have all test result content suppressed and will state "Student score not available; if you have any questions, please contact your student's teacher.".

3. EOC and High School content areas will receive a single page report with a cover letter on front and content report on the back.

4. Each content page/report will have test content specific header

Grade	Subject	Report Page Header
03-08	ELA	Your Student's Performance on the Grade *X* English Language Arts Assessment
03-08	Math	Your Student's Performance on the Grade *X* Mathematics Assessment
05, 08	Science	Your Student's Performance on the Grade *X* Science Assessment
09-12	ELA 1	Your Student's Performance on the English Language Arts 1 Assessment
09-12	ELA 2	Your Student's Performance on the English Language Arts 2 Assessment
09-12	Algebra 1	Your Student's Performance on the Algebra 1 End of Course Assessment
09-12	Biology 1	Your Student's Performance on the Biology 1 End of Course Assessment
09-12	Geometry	Your Student's Performance on the Geometry End of Course Assessment
06-12	Civics	Your Student's Performance on the Civics End of Course Assessment
09-12	US History	Your Student's Performance on the US History End of Course Assessment

5. Your Student's Achievement Level

a. Print the achievement level description associated with the student's earned achievement level

b. For Civics and US History, leave blank.

6. Student Accuracy

a. Task 1 Unscaffold

i Always print number of items answered correctly, total number of items with a response, and percent.

b. Task 1 Scaffold

i Print number of items answered correctly that required scaffolding, total number of items with a response that required scaffolding

ii If no task 1 items used scaffolding then leave blank

c. Task 2 and Task 3

i Per task print number and percent of items answered correctly, total number of items with a response, and percent.

ii If no items within corresponding task had a response then print "NA"

d. Writing Tasks

i Always print number of items answered correctly and total number of items with a response

ii For grade 3, print a symbol and the footnote "Writing is not assessed in grade 3."

e. Writing Prompt

i Always print the Rubric score for each dimension component

ii For grade 3, print a symbol in each score and the footnote "Writing is not assessed in grade 3."

7. Your Student's Score

a. Print the student's earned scaled score centered in the appropriate range.

b. Print the Test Specific Scaled Score Cuts

c. Print the Achievement Level Descriptions

d. For Civics and US History, leave blank

8. Your Student's Achievement Levels Overtime

a. For Tests where longitudinal achievement is reported

i Academic Year: 2015-2016

ii Achievement Level: If the student earned an achievement level for the academic year, print earned achievement level. Otherwise print "*" and the footnote "Student achievement level not available, please contact your student's teacher."

b. For tests where longitudinal data are not reported print

i "Your Student's Achievement Levels Over Time in the [Content Area] Assessment" where [Content Area] is indicated in the table below

ii The explanation sentence indicated in the table below

FORMAT OVERTIME ACHIEMVEMENT

Assessment	Content Area	Report Longitudinal Achievement	ExplanationSentence
Grades 03-08 ELA	English Language Arts	Yes	
Grades 03-08 Math	Mathematics	Yes	
Grades 05 & 08 Science	Science	No	Science is only assessed in grades 5 and 8. Therefore, only current year scores and achievement levels are reported.
Grade 09 ELA	English Language Arts 1	Yes	
Grade 10 ELA	English Language Arts 2	Yes	
High School Algebra 1 EOC	High School Algebra 1	No	This assessment is administered when the course is completed.

			Therefore, only current year scores and achievement levels are reported.
High School Biology 1 EOC	High School Biology 1	No	This assessment is administered when the course is completed. Therefore, only current year scores and achievement levels are reported.
High School Geometry EOC	High School Geometry	No	This assessment is administered when the course is completed. Therefore, only current year scores and achievement levels are reported.
Grades 06-12 Civics EOC	Civics	Not Applicable in 16-17	Not Applicable in 16-17
High School US History EOC	High School US History	Not Applicable in 16-17	Not Applicable in 16-17

9. Your Student's Performance on the FSAA Compared to School, District, and State

a. Print percent based on school type rules and suppression rules

b. Private school students will only receive state level aggregations. School and district aggregations will be left blank.

c. Civics and US History, leave blank

10. Online Release

a. A PDF for each school and test grade level will be generated when there is at least one tested student enrolled in the school at that grade level

b. ELA, Math, and Science grades (03-08) will be grouped in one PDF for a school with science page (last page) will be blank for grades 3, 4, 6, and 7.

i FlAltPerformance1617StudentSchool[grade]Admin[#]_ [discode||schcode].pdf

c. Civics (06-12) will be grouped in one PDF for a school

i FlAltPerformance1617StudentSchoolCIVAdmin[#]_ [discode||schcode].pdf

d. High School grades (09, 10, 11, 12) will be grouped by subject PDFs for a school

i FlAltPerformance1617StudentSchoolELA1Admin[#]_ [discode||schcode].pdf

ii FlAltPerformance1617StudentSchoolELA2Admin[#]_ [discode||schcode].pdf

iii FlAltPerformance1617StudentSchoolAl1Admin[#]_ [discode||schcode].pdf

iv FlAltPerformance1617StudentSchoolBIOAdmin[#]_ [discode||schcode].pdf

v FlAltPerformance1617StudentSchoolGEOAdmin[#]_ [discode||schcode].pdf

vi FlAltPerformance1617StudentSchoolUSHAdmin[#]_ [discode||schcode].pdf

e. Students will be sorted in the PDF by Enrolled Grade, Last Name, First Name, Student ID

11. Only scores from the item sets 01-16 for a test, Writing Selected Response (SR), and Writing Prompt Open Response-rubric score - are included.

a. Writing Prompt Rubric 0-3 scores and description per dimension

Rubric Score	Description
3	Complete

Rubric Score	Description
2	Partial
1	Insufficient
0	No

C. School Report Specific Rules: Roster of Students

1. Test results will be included for all student tests except for private school students and students assigned "Homeschool" participation status.

a. Students with a test participation status of Tested will be listed on the roster with the same scores printed on the student report

b. Students with a test participation status other than Tested will be listed on the roster with the participation status code. Student score section will be blank.

2. Scaled Score and Achievement Level

a. Only populated for student with participation status of "Tested"

b. Civics and US History, leave blank

3. Test Accuracy

a. Students with participation status of "Tested"

i Task 1,2,3, Writing Task Print "[Numerator] out of [Denominator]"

ii If [Denominator] = 0, then print "NA"

4. Writing Rubric Dimension scores (0-3) will always be printed

5. For grade ELA, print "NA" in writing task and prompt columns since writing is not assessed at grade 3.

6. Online Release

a. A PDF for each school will be generated when there is at least one student enrolled in the school with a test participation status assigned

b. Student data will be listed on the roster by Test, Enrolled Grade, Last Name, First Name, Student ID. Each Test will start on its own page.

VIII. Data Deliverables Decision Rules

A. State Student Test Results

1. Layout: FLAlt1617PerformanceTaskStudentTestResultsLayout.xls

2. File Name: FLAlt1617PerformanceTaskStudentTestResults.csv

3. File Type: CSV

4. First row will be a header row containing variable names. Remaining rows will contain student test results following the layout.

5. Students will be sorted by district code, school code, enrolled grade, tested grade, tested subject, last name, first name, student id

6. Remove commas from variable values.

7. Included Students/Tests: All student tests are included, regardless of assigned participation status or school type.

B. District Student Test Results

1. Layout: FLAlt1617PerformanceTaskStudentTestResultsLayout.xls

2. File Name: FLAlt1617PerformanceTaskStudentTestResults[district code].csv

3. File Type: CSV

4. First row will be a header row containing variable names. Remaining rows will contain student test results following the layout.

5. Students will be sorted by school code, enrolled grade, tested grade, tested subject, last name, first name, student id

6. Remove commas from variable values.

7. Included Students/Tests: All student tests are included for students enrolled in the district, except student tests assigned a participation status of “Homeschool” and private school students are excluded.

C. District Assessed Summary

1. Layout: FLAlt1617PerformanceTaskAssessedSummaryLayout.xls

2. File Name: FLAlt1617PerformanceTaskAssessedSummary[district code].csv

3. File Type: CSV

4. First row will be a header row containing variable names. Remaining rows will contain student test results following the layout.

5. Remove commas from variable values.

6. Schools will be listed for an assessment if at least one student enrolled to the school is assigned a test participation status for the assessment and included in aggregations defined in the test participation status table.

7. Private school students are excluded.

8. District data will be included (only the district receiving the data file)

9. School data will be listed in Alpha order by school name, test grade, test subject

10. Apply achievement level aggregation suppression rules outlined earlier in this document.

D. State Assessed Summary

1. Layout: FLAlt1617PerformanceTaskAssessedSummaryLayout.xls

2. File Name: FLAlt1617PerformanceTaskAssessedSummary.csv

3. File Type: CSV

4. First row will be a header row containing variable names. Remaining rows will contain student test results following the layout.

5. Remove commas from variable values.

6. Districts will be listed for an assessment if at least one student enrolled to the District is assigned a test participation status for the assessment and included in aggregations defined in the test participation status table.

7. Schools will be listed for an assessment if at least one student enrolled to the school is assigned a test participation status for the assessment and included in aggregations defined in the test participation status table.

8. District data will be listed in Alpha order by District name, SchoolName, test grade, test subject

9. Apply achievement level aggregation suppression rules outlined earlier in this document.

IX. Late Test Administration Process

A. All submissions during the test submission extension timeframe will be included in the re-run. Additionally, appeals submitted until mid-September which result in a score change will be included.

1. Student reports will be delivered online and print in fall (exact date TBD). Only new student reports or student reports that contain a student level test score change will be printed.

2. Percent of students at each achievement level will not be updated or recalculated. The aggregations printed will be based on round 1 reporting.

3. Update State Student Test Results data

4. Update State Assessed Summary data

APPENDIX G—REPORT SHELLS

Florida Standards Alternate Assessment
PERFORMANCE TASK

THE FLORIDA STANDARDS ALTERNATE ASSESSMENT PERFORMANCE TASK STUDENT AND PARENT REPORT

Name: HEIN, SHEENA	**Spring 2017**
SID: D000000002	**District: DA-Demonstration District A**
Grade: 05	**School: DEM1-Demonstration School 1**

Dear Parents and/or Guardians,

This report is a summary of your student's performance on the Florida Standards Alternate Assessment–Performance Task (FSAA–Performance Task). The Florida Standards Alternate Assessment is designed to measure the academic skills your student knows and is able to demonstrate with respect to the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science and Social Studies. The FSAA–Performance Task Assessment is designed to provide tiered participation within the assessment for students working on Access Points at various levels of complexity. Each item set is built with three levels of cognitive demand—with Task 1 representing the least complex tasks and Task 3 representing the most complex tasks.

At the Task 1 level of complexity, a process called "scaffolding" occurs if a student is unable to respond correctly to the initial presentation. The number of response options is then reduced from three to two, and the task is re-administered to the student. If your student utilized this supplementary support, the number of times your student was successful is indicated within the Task 1 Student Accuracy section of each content area. This information can be used to help support discussions about your student's current academic abilities and can support and inform instructional planning with your student's teacher.

For more information about the Access Points and Access Courses, visit the Curriculum Planning and Learning Management System (CPALMS) website at http://www.cpalms.org. For additional resources, visit the Project Access website at http://accesstofls.weebly.com and the Department of Education FSAA website at http://fldoe.org/accountability/assessments/k-12-student-assessment/fl-alternate-assessment.stml.

Your Student's Performance on the Grade 5 English Language Arts Assessment

Your Student's Achievement Level

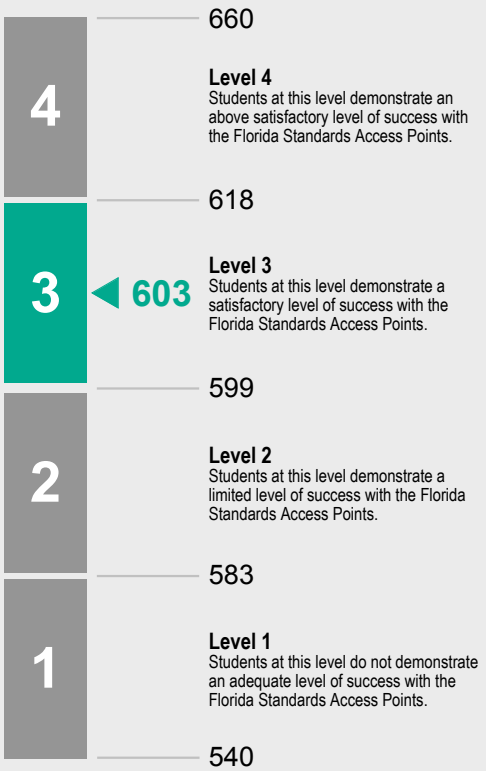
This category represents satisfactory academic achievement. Students scoring in this category have developed basic academic concepts, frequently relate to abstract material, and are able to more closely discriminate specific academic skills derived from instruction and practice.

Complexity Level	Student Accuracy
TASK 1 • Tasks at this level generally require the student to recall previously learned information or pull words or phrases directly from the stimulus. • The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed. • The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., sentence, topic, syllable, basic punctuation).	Your student correctly answered **16** out of **16** questions. Your student's accuracy is **100%**.
TASK 2 • Tasks at this level generally require the student to make some level of inference beyond recall. • The student may be asked to: demonstrate, follow, select, locate, read, spell, describe, or define information related to the skill being assessed. • The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., main idea, claim, noun, prefix).	Your student correctly answered **10** out of **16** questions. Your student's accuracy is **63%**.
TASK 3 • Tasks at this level generally require the student to reason, plan, or sequence steps to formulate a response. Some tasks may also require the student to make connections between texts, topics, or media. • The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, or predict information related to the skill being assessed. • The setting may reference home, school, community, and/or global community with a combination of familiar/unfamiliar words and content specific/complex content specific words (e.g., adjective phrase, point of view, detail, personification).	Your student correctly answered **4** out of **10** questions. Your student's accuracy is **40%**.
WRITING TASK Writing tasks and prompt require students to identify title, introduction, supporting details, and conclusion in response to text.	Your student correctly answered **4** out of **5** questions. Your student's accuracy is **80%**.

Writing Prompt Component	Score†	Description
Title	3	Your student's response provided a **complete** title.
Introduction	2	Your student's response provided a **partial** introduction.
Supporting Details	2	Your student's response provided **partial** supporting details.
Conclusion	1	Your student's response provided an **insufficient** conclusion.

† Scores for each component range from zero to three points earned.

Your Student's Score



Your Student's Performance on the FSAA Compared to School, District, and State

Percentage of students in each Achievement Level in your student's school, district, and state.

	School	District	State
Level 4		12%	20%
Level 3		**40%**	**36%**
Level 2		40%	25%
Level 1		8%	18%

SID: D000000002 **Name:** HEIN,SHEENA

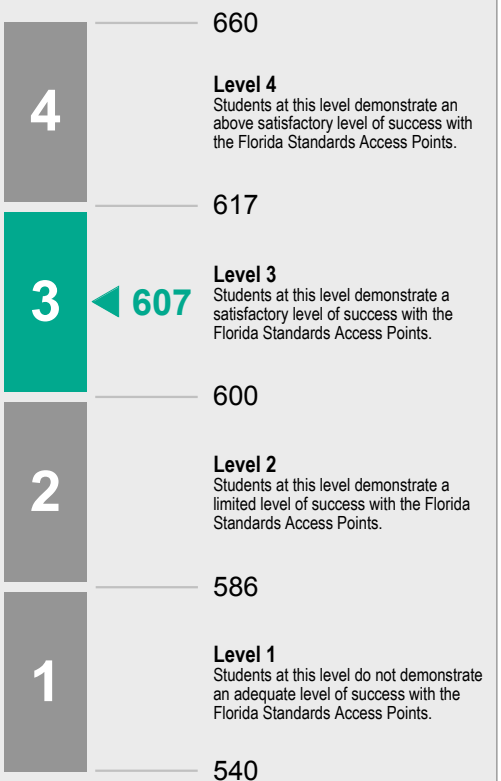
Your Student's Performance on the Grade 5 Mathematics Assessment

Your Student's Achievement Level

This category represents satisfactory academic achievement. Students scoring in this category have developed basic academic concepts, frequently relate to abstract material, and are able to more closely discriminate specific academic skills derived from instruction and practice.

Complexity Level	Student Accuracy
TASK 1 • Tasks at this level generally require the student to recall previously learned information or pull numbers, shapes, or descriptions directly from the stimulus. • The student may be asked to: identify, state, label, recognize, match, or recall information related to the skill being assessed. • The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., circle, addition, graph, pattern).	Your student correctly answered **15** out of **16** questions. Your student's accuracy is **94%**. In **Mathematics** at the **Task 1** level, your student was successful **1** out of **1** times when response options were reduced to two choices.
TASK 2 • Tasks at this level generally require the student to make some level of calculation beyond recall. • The student may be asked to: demonstrate, follow, count, measure, select, or locate information related to the skill being assessed. • The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., geometric shapes, fraction, data table, measurement).	Your student correctly answered **8** out of **15** questions. Your student's accuracy is **53%**.
TASK 3 • Tasks at this level generally require the student to reason, plan, or sequence steps to formulate a response. • The student may be asked to: estimate, compute, solve, or classify information related to the skill being assessed. • The setting may reference home, school, community, and/or global community with a combination of familiar/unfamiliar words and content specific/complex content specific words (e.g., area, formula, variable, equation).	Your student correctly answered **4** out of **8** questions. Your student's accuracy is **50%**.

Your Student's Score



Your Student's Performance on the FSAA Compared to School, District, and State

Percentage of students in each Achievement Level in your student's school, district, and state.

	School	District	State
Level 4		4%	20%
Level 3		**28%**	**30%**
Level 2		52%	28%
Level 1		16%	22%

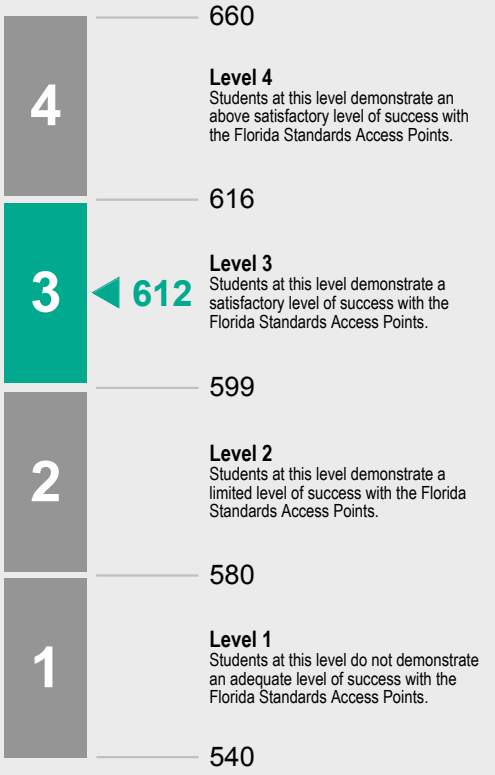
Your Student's Performance on the Grade 5 Science Assessment

Your Student's Achievement Level

This category represents satisfactory academic achievement. Students scoring in this category have developed basic academic concepts, frequently relate to abstract material, and are able to more closely discriminate specific academic skills derived from instruction and practice.

Complexity Level	Student Accuracy
TASK 1 • Tasks at this level generally require the student to recall previously learned information or pull words or phrases directly from the stimulus. • The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed. • The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., weather, energy, liquid, basic body parts).	Your student correctly answered **16** out of **16** questions. Your student's accuracy is **100%**.
TASK 2 • Tasks at this level generally require the student to make some level of inference. • The student may be asked to: demonstrate, follow, select, locate, describe, or define information related to the skill being assessed. • The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., animal facts, heat, light, internal function of organs).	Your student correctly answered **14** out of **16** questions. Your student's accuracy is **88%**.
TASK 3 • Tasks at this level generally require the student to reason, plan, or sequence steps to formulate a response. • The student may be asked to: explain, predict, or classify information related to the skill being assessed. • The setting may reference home, school, community, and/or global community with a combination of familiar/unfamiliar words and content specific/complex content specific words (e.g., life cycle, respiratory system, gravity, genes, environmental/global issues).	Your student correctly answered **9** out of **14** questions. Your student's accuracy is **64%**.

Your Student's Score



Your Student's Performance on the FSAA Compared to School, District, and State

Percentage of students in each Achievement Level in your student's school, district, and state.

	School	District	State
Level 4		8%	25%
Level 3		**40%**	**31%**
Level 2		40%	27%
Level 1		12%	16%

Florida Standards Alternate Assessment
PERFORMANCE TASK

THE FLORIDA STANDARDS ALTERNATE ASSESSMENT PERFORMANCE TASK STUDENT AND PARENT REPORT

Name: HEIN, SHEENA	**Spring 2017**
SID: D000000002	**District: DA-Demonstration District A**
Grade: 07	**School: DEM1-Demonstration School 1**

Dear Parents and/or Guardians,

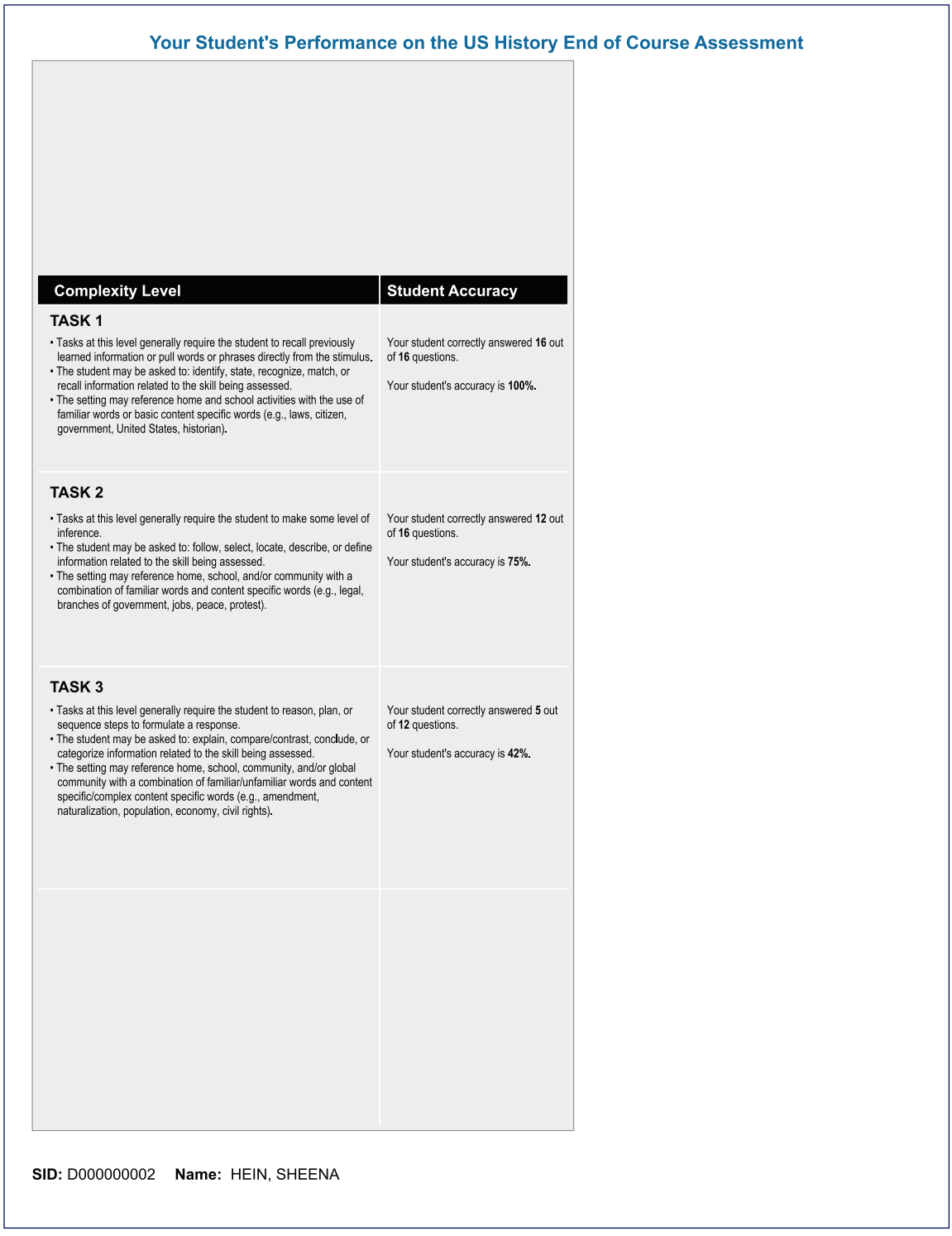
This report is a summary of your student's performance on the Florida Standards Alternate Assessment–Performance Task (FSAA–Performance Task). The FSAA–Performance Task is designed to measure the academic skills your student knows and is able to demonstrate with respect to the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science and Social Studies. The FSAA–Performance Task is designed to provide tiered participation within the assessment for students working on Access Points at various levels of complexity. Each item set is built with three levels of cognitive demand—with Task 1 representing the least complex tasks and Task 3 representing the most complex tasks.

At the Task 1 level of complexity, a process called "scaffolding" occurs if a student is unable to respond correctly to the initial presentation. The number of response options is then reduced from three to two, and the task is re-administered to the student. If your student utilized this supplementary support, the number of times your student was successful is indicated within the Task 1 Student Accuracy section of each content area. This information can be used to help support discussions about your student's current academic abilities and can support and inform instructional planning with your student's teacher.

Your student will be provided a total of three scores. The three scores will report how your student performed at each level of complexity (Task 1 level, Task 2 level and Task 3 level). The provided scores will reflect the number of tasks your student scored correctly out of the total number of tasks your student attempted and the corresponding accuracy percentage at each level. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your student responded correctly to the previous task, the student accuracy information may vary across task levels.

For more information about the Access Points and Access Courses, visit the Curriculum Planning and Learning Management System (CPALMS) website at http://www.cpalms.org. For additional resources, visit the Project Access website at http://accesstofls.weebly.com and the Department of Education FSAA website at http://fldoe.org/accountability/assessments/k-12-student-assessment/fl-alternate-assessment.stml.

Please note, Standard Setting for Civics and U.S. History will occur in July 2017. Therefore, final scale score cuts, achievement level designations, and Achievement Level Descriptors are not available for the 2017 results release. As such, sections of this report will present blank in comparison to other End of Course assessment reports.



Your Student's Performance on the US History End of Course Assessment

Complexity Level	Student Accuracy
TASK 1 • Tasks at this level generally require the student to recall previously learned information or pull words or phrases directly from the stimulus. • The student may be asked to: identify, state, recognize, match, or recall information related to the skill being assessed. • The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., laws, citizen, government, United States, historian).	Your student correctly answered **16** out of **16** questions. Your student's accuracy is **100%.**
TASK 2 • Tasks at this level generally require the student to make some level of inference. • The student may be asked to: follow, select, locate, describe, or define information related to the skill being assessed. • The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., legal, branches of government, jobs, peace, protest).	Your student correctly answered **12** out of **16** questions. Your student's accuracy is **75%.**
TASK 3 • Tasks at this level generally require the student to reason, plan, or sequence steps to formulate a response. • The student may be asked to: explain, compare/contrast, conclude, or categorize information related to the skill being assessed. • The setting may reference home, school, community, and/or global community with a combination of familiar/unfamiliar words and content specific/complex content specific words (e.g., amendment, naturalization, population, economy, civil rights).	Your student correctly answered **5** out of **12** questions. Your student's accuracy is **42%.**

SID: D000000002 **Name:** HEIN, SHEENA

NOTE: Standard Setting for the FSAA—Performance Task Civics and U.S. History assessments did not occur until July 2017; therefore, final scale scores, achievement level designations, and ALDs are not available for the 2017 results release. As such, the “Your Student’s Score” and “Your Student’s Performance on the FSAA Compared to School, District, and State” sections will not be included on the ISR for those assessments.

Florida Standards Alternate Assessment
PERFORMANCE TASK

THE FLORIDA STANDARDS ALTERNATE ASSESSMENT PERFORMANCE TASK STUDENT AND PARENT REPORT

Name: HEIN, SHEENA	**Spring 2017**
SID: D000000002	**District: DA-Demonstration District A**
Grade: 10	**School: DEM1-Demonstration School 1**

Dear Parents and/or Guardians,

This report is a summary of your student's performance on the Florida Standards Alternate Assessment–Performance Task (FSAA–Performance Task). The Florida Standards Alternate Assessment is designed to measure the academic skills your student knows and is able to demonstrate with respect to the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science and Social Studies. The FSAA–Performance Task Assessment is designed to provide tiered participation within the assessment for students working on Access Points at various levels of complexity. Each item set is built with three levels of cognitive demand—with Task 1 representing the least complex tasks and Task 3 representing the most complex tasks.

At the Task 1 level of complexity, a process called "scaffolding" occurs if a student is unable to respond correctly to the initial presentation. The number of response options is then reduced from three to two, and the task is re-administered to the student. If your student utilized this supplementary support, the number of times your student was successful is indicated within the Task 1 Student Accuracy section of each content area. This information can be used to help support discussions about your student's current academic abilities and can support and inform instructional planning with your student's teacher.

For more information about the Access Points and Access Courses, visit the Curriculum Planning and Learning Management System (CPALMS) website at http://www.cpalms.org. For additional resources, visit the Project Access website at http://accesstofls.weebly.com and the Department of Education FSAA website at http://fldoe.org/accountability/assessments/k-12-student-assessment/fl-alternate-assessment.stml.

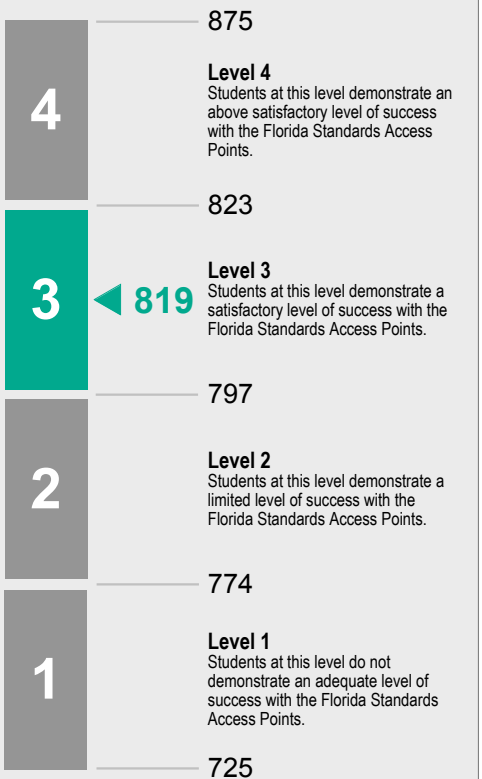
Your Student's Performance on the Algebra 1 End of Course Assessment

Your Student's Achievement Level

This category represents satisfactory academic achievement. Students scoring in this category have developed basic academic concepts, frequently relate to abstract material, and are able to more closely discriminate specific academic skills derived from instruction and practice.

Complexity Level	Student Accuracy
TASK 1 • Tasks at this level generally require the student to recall previously learned information or pull numbers, shapes, or descriptions directly from the stimulus. • The student may be asked to: identify, state, label, recognize, match, or recall information related to the skill being assessed. • The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., circle, addition, graph, pattern).	Your student correctly answered **16** out of **16** questions. Your student's accuracy is **100%**.
TASK 2 • Tasks at this level generally require the student to make some level of calculation beyond recall. • The student may be asked to: demonstrate, follow, count, measure, select, or locate information related to the skill being assessed. • The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., geometric shapes, fraction, data table, measurement).	Your student correctly answered **11** out of **16** questions. Your student's accuracy is **69%**.
TASK 3 • Tasks at this level generally require the student to reason, plan, or sequence steps to formulate a response. • The student may be asked to: estimate, compute, solve, or classify information related to the skill being assessed. • The setting may reference home, school, community, and/or global community with a combination of familiar/unfamiliar words and content specific/complex content specific words (e.g., area, formula, variable, equation).	Your student correctly answered **6** out of **11** questions. Your student's accuracy is **55%**.

Your Student's Score



Your Student's Performance on the FSAA Compared to School, District, and State

Percentage of students in each Achievement Level in your student's school, district, and state.

	School	District	State
Level 4	0%	8%	20%
Level 3	**45%**	**41%**	**40%**
Level 2	45%	38%	28%
Level 1	9%	12%	12%

SID: D000000002 **Name:** HEIN, SHEENA

FSAA—PERFORMANCE TASK SCHOOL ROSTER REPORT SAMPLES

Authorized users must log in to the FSAA Student Reporting System to access and view the confidential School Roster Reports.

The School Roster Report is not translated into Spanish and Haitian Creole.

The following FSAA—Performance Task School Roster Report samples are included in this appendix:

Florida Standards Alternate Assessment
PERFORMANCE TASK

Florida Standards Alternate Assessment – Performance Task
School Roster Report
Spring 2017 Administration

District: DA-Demonstration District A
School: DEM1-Demonstration School 1

MATHEMATICS								
Student Name	SID	Grade	Score	Achievement Level	Task 1 Accuracy	Task 2 Accuracy	Task 3 Accuracy	Participation Status
LAST NAME, FIRST NAME	D00000000X	04						12
LAST NAME, FIRST NAME	D00000000X	04	589	Level 2	11 out of 16	7 out of 11	2 out of 7	1
LAST NAME, FIRST NAME	D00000000X	05	607	Level 3	15 out of 16	8 out of 15	4 out of 8	1
LAST NAME, FIRST NAME	D00000000X	05	588	Level 2	9 out of 16	6 out of 9	3 out of 6	1
LAST NAME, FIRST NAME	D00000000X	05	589	Level 2	10 out of 16	6 out of 10	2 out of 6	1
LAST NAME, FIRST NAME	D00000000X	05						12
LAST NAME, FIRST NAME	D00000000X	05	581	Level 1	9 out of 16	2 out of 9	1 out of 2	1
LAST NAME, FIRST NAME	D00000000X	06	574	Level 1	5 out of 16	0 out of 5	NA	1
LAST NAME, FIRST NAME	D00000000X	06						12
LAST NAME, FIRST NAME	D00000000X	06	578	Level 1	6 out of 16	1 out of 6	1 out of 1	1
LAST NAME, FIRST NAME	D00000000X	06	581	Level 1	8 out of 16	3 out of 8	0 out of 3	1
LAST NAME, FIRST NAME	D00000000X	06	577	Level 1	5 out of 16	3 out of 5	1 out of 3	1
LAST NAME, FIRST NAME	D00000000X	07	563	Level 1	3 out of 16	1 out of 3	0 out of 1	1
LAST NAME, FIRST NAME	D00000000X	07	581	Level 1	8 out of 16	4 out of 8	2 out of 4	1
LAST NAME, FIRST NAME	D00000000X	07	575	Level 1	6 out of 16	2 out of 6	0 out of 2	1
LAST NAME, FIRST NAME	D00000000X	07	582	Level 1	10 out of 16	2 out of 10	0 out of 2	1
LAST NAME, FIRST NAME	D00000000X	08	586	Level 2	10 out of 16	7 out of 10	2 out of 7	1
LAST NAME, FIRST NAME	D00000000X	08	583	Level 1	9 out of 16	4 out of 9	2 out of 4	1
LAST NAME, FIRST NAME	D00000000X	08	594	Level 2	14 out of 16	7 out of 14	4 out of 7	1
LAST NAME, FIRST NAME	D00000000X	08						12
LAST NAME, FIRST NAME	D00000000X	08	574	Level 1	6 out of 16	2 out of 6	0 out of 2	1
LAST NAME, FIRST NAME	D00000000X	08	582	Level 1	9 out of 16	4 out of 9	1 out of 4	1
LAST NAME, FIRST NAME	D00000000X	08						12
LAST NAME, FIRST NAME	D00000000X	08						12

Participation Status Legend

0 = Not Tested-Unspecified
1 = Tested
2 = Absent
4 = EOC Deferred
5 = Extraordinary Exemption
6 = Home School
7 = Hospitalized
8 = LY < 1 yr – ELA ONLY
9 = McKay Scholarship
10 = Medical Complexity
11 = Not in Tested Grade
12 = Participating in Datafolio
13 = Participating in FSA ELA/MATH/SCIENCE
14 = Test Administration Violation
15 = Withdrew
16 = Did Not Meet Attemptedness

Florida Standards Alternate Assessment
PERFORMANCE TASK

Florida Standards Alternate Assessment – Performance Task
School Roster Report
Spring 2017 Administration

District: DA-Demonstration District A
School: DEM1-Demonstration School 1

ACCESS CIVICS

Student Name	SID	Grade	Score	Achievement Level	Task 1 Accuracy	Task 2 Accuracy	Task 3 Accuracy	Participation Status
LAST NAME, FIRST NAME	D00000000X	06						11
LAST NAME, FIRST NAME	D00000000X	06						11
LAST NAME, FIRST NAME	D00000000X	06						11
LAST NAME, FIRST NAME	D00000000X	07			3 out of 16	0 out of 3	NA	1
LAST NAME, FIRST NAME	D00000000X	07			5 out of 16	3 out of 5	1 out of 3	1
LAST NAME, FIRST NAME	D00000000X	07			8 out of 16	4 out of 8	2 out of 4	1
LAST NAME, FIRST NAME	D00000000X	07			13 out of 16	4 out of 13	1 out of 4	1

Participation Status Legend

0 = Not Tested-Unspecified
1 = Tested
2 = Absent
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14 = Test Administration Violation
15 = Withdrew
16 = Did Not Meet Attemptedness

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NOTE: Standard Setting for the FSAA—Performance Task Civics and U.S. History assessments did not occur until July 2017; therefore, final scale scores and achievement level designations are not available for the 2017 results release. As such, the score and achievement level sections will be blank for those assessments.

APPENDIX H—WRITING RUBRIC STATISTICS

Table H-1. 2016–17 FSAA-PT: Writing Rubric Statistics by Item Number—ELA

Grade	*Item ID*	*Dimension*	*Dim*	*Max*	*Avg.*	*CorrW Total*	*P0*	*P1*	*P2*	*P3*
04	465985	Title	1	3.00	1.75	0.56	7.17	20.38	62.85	9.59
	465985	Introduction	2	3.00	1.65	0.58	10.00	27.79	49.33	12.87
	465985	Supporting Details	3	3.00	1.83	0.55	7.44	21.30	51.72	19.53
	465985	Conclusion	4	3.00	1.64	0.55	12.53	23.93	50.90	12.63
05	466137	Title	1	3.00	2.10	0.61	8.23	24.00	17.19	50.58
	466137	Introduction	2	3.00	1.90	0.62	9.51	22.49	36.57	31.43
	466137	Supporting Details	3	3.00	2.12	0.54	6.17	11.15	46.79	35.89
	466137	Conclusion	4	3.00	1.76	0.56	10.93	28.95	33.45	26.67
06	466010	Title	1	3.00	1.84	0.46	8.68	32.85	24.57	33.91
	466010	Introduction	2	3.00	1.85	0.58	9.08	18.25	50.80	21.88
	466010	Supporting Details	3	3.00	2.17	0.53	8.74	12.73	31.15	47.37
	466010	Conclusion	4	3.00	1.83	0.59	9.77	19.88	47.81	22.54
07	466953	Title	1	3.00	1.79	0.54	9.31	37.17	18.52	35.00
	466953	Introduction	2	3.00	1.67	0.62	9.65	27.36	49.13	13.86
	466953	Supporting Details	3	3.00	1.99	0.60	9.41	21.10	30.51	38.98
	466953	Conclusion	4	3.00	1.65	0.62	10.98	28.16	45.41	15.44
08	466293	Title	1	3.00	1.90	0.60	7.36	17.10	53.96	21.58
	466293	Introduction	2	3.00	1.74	0.60	8.50	22.35	55.37	13.78
	466293	Supporting Details	3	3.00	1.83	0.56	9.07	17.30	55.04	18.60
	466293	Conclusion	4	3.00	1.66	0.61	10.91	27.67	45.80	15.62
09	466315	Title	1	3.00	1.88	0.61	9.61	21.69	40.12	28.58
	466315	Introduction	2	3.00	1.68	0.62	11.04	23.22	52.26	13.47
	466315	Supporting Details	3	3.00	1.71	0.59	11.48	16.57	61.74	10.21
	466315	Conclusion	4	3.00	1.61	0.63	13.47	23.82	51.40	11.31
10	466358	Title	1	3.00	1.73	0.51	10.74	35.18	24.28	29.79
	466358	Introduction	2	3.00	1.92	0.63	10.23	21.21	34.57	33.99
	466358	Supporting Details	3	3.00	1.86	0.62	11.02	15.58	49.51	23.89
	466358	Conclusion	4	3.00	1.80	0.65	12.42	21.12	40.60	25.87

Table H-2. 2016–17 FSAA-PT: Writing Rubric Statistics Correlation by Item Number—ELA

Grade	*Dimension*	*Dim*	*Item ID*	*Title*	*Introduction*	*Supporting Details*	*Conclusion*
04	Title	1	465985	1.00	0.65	0.60	0.60
	Introduction	2	465985	0.65	1.00	0.61	0.68
	Supporting Details	3	465985	0.60	0.61	1.00	0.62
	Conclusion	4	465985	0.60	0.68	0.62	1.00
05	Title	1	466137	1.00	0.61	0.53	0.54
	Introduction	2	466137	0.61	1.00	0.58	0.67
	Supporting Details	3	466137	0.53	0.58	1.00	0.55
	Conclusion	4	466137	0.54	0.67	0.55	1.00
06	Title	1	466010	1.00	0.54	0.47	0.48
	Introduction	2	466010	0.54	1.00	0.66	0.68
	Supporting Details	3	466010	0.47	0.66	1.00	0.71
	Conclusion	4	466010	0.48	0.68	0.71	1.00
07	Title	1	466953	1.00	0.60	0.56	0.54
	Introduction	2	466953	0.60	1.00	0.71	0.71
	Supporting Details	3	466953	0.56	0.71	1.00	0.74
	Conclusion	4	466953	0.54	0.71	0.74	1.00
08	Title	1	466293	1.00	0.71	0.66	0.66
	Introduction	2	466293	0.71	1.00	0.72	0.72
	Supporting Details	3	466293	0.66	0.72	1.00	0.72
	Conclusion	4	466293	0.66	0.72	0.72	1.00
09	Title	1	466315	1.00	0.68	0.67	0.65
	Introduction	2	466315	0.68	1.00	0.78	0.76
	Supporting Details	3	466315	0.67	0.78	1.00	0.78
	Conclusion	4	466315	0.65	0.76	0.78	1.00
10	Title	1	466358	1.00	0.55	0.56	0.53
	Introduction	2	466358	0.55	1.00	0.73	0.73
	Supporting Details	3	466358	0.56	0.73	1.00	0.77
	Conclusion	4	466358	0.53	0.73	0.77	1.00

Table H-3. 2016–17 FSAA-PT: Writing Rubric Statistics Summary by Item Number—ELA

Grade	*Dimension*	*Dim*	*Max*	*Avg.*	*SD*
04	Title	1	3	1.75	0.72
	Introduction	2	3	1.65	0.83
	Supporting Details	3	3	1.83	0.82
	Conclusion	4	3	1.64	0.86
05	Title	1	3	2.10	1.03
	Introduction	2	3	1.90	0.95
	Supporting Details	3	3	2.12	0.84
	Conclusion	4	3	1.76	0.97
06	Title	1	3	1.84	0.99
	Introduction	2	3	1.85	0.86
	Supporting Details	3	3	2.17	0.96
	Conclusion	4	3	1.83	0.89
07	Title	1	3	1.79	1.03
	Introduction	2	3	1.67	0.83
	Supporting Details	3	3	1.99	0.99
	Conclusion	4	3	1.65	0.87
08	Title	1	3	1.90	0.82
	Introduction	2	3	1.74	0.80
	Supporting Details	3	3	1.83	0.83
	Conclusion	4	3	1.66	0.87
09	Title	1	3	1.88	0.93
	Introduction	2	3	1.68	0.84
	Supporting Details	3	3	1.71	0.80
	Conclusion	4	3	1.61	0.86
10	Title	1	3	1.73	1.00
	Introduction	2	3	1.92	0.98
	Supporting Details	3	3	1.86	0.90
	Conclusion	4	3	1.80	0.96

APPENDIX I—CLASSICAL ITEM STATISTICS

Table I-1. 2016–17 FSAA-PT: Classical Item Statistics— ELA Grade 3

Item Set	*Item*		*P-Value*	*Item-total Correlation*
	Number	*Task*		
01	266817	1	0.86	0.48
01	268696	2	0.69	0.4
01	266821	3	0.73	0.31
02	265893	1	0.81	0.48
02	265898	2	0.52	0.41
02	265902	3	0.69	0.25
03	266834	1	0.76	0.42
03	266836	2	0.51	0.48
03	266838	3	0.74	0.38
04	267318	1	0.49	0.45
04	267320	2	0.64	0.37
04	267322	3	0.48	0.37
05	262777	1	0.83	0.46
05	262779	2	0.66	0.53
05	262781	3	0.7	0.45
06	266827	1	0.7	0.57
06	266825	2	0.63	0.46
06	266829	3	0.72	0.32
07	179293	1	0.69	0.55
07	179304	2	0.73	0.52
07	179308	3	0.69	0.24
08	265947	1	0.84	0.48
08	265949	2	0.43	0.36
08	265950	3	0.44	0.36
09	221255	1	0.85	0.48
09	221260	2	0.58	0.29
09	221264	3	0.73	0.34
10	266767	1	0.37	0.31
10	266771	2	0.59	0.49
10	266773	3	0.53	0.31
11	265882	1	0.81	0.49
11	265884	2	0.61	0.35
11	265887	3	0.39	0.34
12	265954	1	0.47	0.46
12	265958	2	0.2	0.17
12	265959	3	0.38	0.39
13	265867	1	0.71	0.38
13	265869	2	0.34	0.23
13	265871	3	0.46	0.22
14	265873	1	0.59	0.51
14	265877	2	0.72	0.41
14	265879	3	0.47	0.37
15	265962	1	0.61	0.42
15	265964	2	0.52	0.41
15	265965	3	0.57	0.25
16	265911	1	0.67	0.55
16	265919	2	0.62	0.48
16	265924	3	0.58	0.27

Table I-2. 2016–17 FSAA-PT: Classical Item Statistics— ELA Grade 4

Item Set	Item		P- Value	Item-total Correlation
	Number	Task		
01	268889	1	0.84	0.59
01	221282	2	0.77	0.38
01	221288	3	0.51	0.37
02	268896	1	0.47	0.38
02	257092	2	0.55	0.46
02	257096	3	0.4	0.32
03	244335	1	0.89	0.5
03	244337	2	0.83	0.49
03	244338	3	0.88	0.34
04	244384	1	0.81	0.56
04	244386	2	0.85	0.43
04	244388	3	0.63	0.32
05	266781	1	0.46	0.4
05	266783	2	0.67	0.38
05	266785	3	0.81	0.31
06	265972	1	0.87	0.5
06	265975	2	0.4	0.24
06	265980	3	0.33	0.19
07	267335	1	0.62	0.48
07	267337	2	0.76	0.38
07	267338	3	0.47	0.26
08	221258	1	0.87	0.5
08	268791	2	0.69	0.52
08	221266	3	0.76	0.38
09	262717	1	0.82	0.53
09	262719	2	0.72	0.54
09	262721	3	0.65	0.43
10	262733	1	0.79	0.5
10	262734	2	0.46	0.39
10	262736	3	0.83	0.31
11	267327	1	0.83	0.56
11	267329	2	0.74	0.47
11	267331	3	0.43	0.31
12	265981	1	0.85	0.5
12	265983	2	0.71	0.21
12	265986	3	0.35	0.23
13	265967	1	0.75	0.48
13	265969	2	0.68	0.35
13	265971	3	0.55	0.23
14	265990	1	0.82	0.58
14	265992	2	0.76	0.45
14	265994	3	0.9	0.38
15	266012	1	0.63	0.34
15	266014	2	0.51	0.36
15	268793	3	0.49	0.25
16	266003	1	0.86	0.53
16	266006	2	0.35	0.48
16	266009	3	0.36	0.16
20	267511	WRI-MC	0.84	0.54
21	267513	WRI-MC	0.81	0.59
22	267515	WRI-MC	0.73	0.55
23	267517	WRI-MC	0.51	0.23
24	267518	WRI-MC	0.71	0.39
25	465985C	WRI-WP	0.61	0.55
25	465985D	WRI-WP	0.55	0.55
25	465985B	WRI-WP	0.55	0.58
25	465985A	WRI-WP	0.58	0.56

Table I-3. 2016–17 FSAA-PT: Classical Item Statistics— ELA Grade 5

Item Set	*Item*		*P-Value*	*Item-total Correlation*
	Number	*Task*		
01	181684	1	0.90	0.48
01	181688	2	0.71	0.41
01	181692	3	0.70	0.35
02	98981	1	0.83	0.55
02	98984	2	0.78	0.42
02	268973	3	0.76	0.32
03	245011	1	0.87	0.55
03	245013	2	0.78	0.56
03	245015	3	0.83	0.35
04	266063	1	0.87	0.55
04	266065	2	0.74	0.53
04	266066	3	0.40	0.33
05	268836	1	0.84	0.58
05	257519	2	0.52	0.18
05	257521	3	0.63	0.48
06	266051	1	0.70	0.38
06	266053	2	0.80	0.57
06	266055	3	0.69	0.35
07	266843	1	0.84	0.54
07	266845	2	0.81	0.52
07	268838	3	0.50	0.32
08	266105	1	0.80	0.54
08	266107	2	0.58	0.30
08	266109	3	0.64	0.34
09	245017	1	0.86	0.57
09	245019	2	0.63	0.30
09	268839	3	0.67	0.18
10	266791	1	0.83	0.54
10	268737	2	0.63	0.45
10	266797	3	0.65	0.31
11	266057	1	0.86	0.54
11	266059	2	0.60	0.48
11	266061	3	0.37	0.09
12	266096	1	0.75	0.59
12	266098	2	0.49	0.28
12	266101	3	0.44	0.30
13	266085	1	0.81	0.48
13	266087	2	0.62	0.27
13	266089	3	0.40	0.19
14	266090	1	0.76	0.52
14	266092	2	0.63	0.36
14	266094	3	0.54	0.35
15	266067	1	0.80	0.56
15	266069	2	0.32	0.29
15	266073	3	0.40	0.41
16	266076	1	0.84	0.54
16	267267	2	0.63	0.46
16	266082	3	0.61	0.17
20	267581	WRI-MC	0.85	0.55
21	267616	WRI-MC	0.67	0.54
22	267623	WRI-MC	0.62	0.57
23	267627	WRI-MC	0.56	0.41
24	267631	WRI-MC	0.72	0.40
25	466137A	WRI-WP	0.70	0.61
25	466137B	WRI-WP	0.63	0.62
25	466137C	WRI-WP	0.71	0.53
25	466137D	WRI-WP	0.59	0.56

Table I-4. 2016–17 FSAA-PT: Classical Item Statistics— ELA Grade 6

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	267342	1	0.73	0.55
01	267344	2	0.75	0.41
01	267346	3	0.51	0.34
02	267351	1	0.65	0.58
02	267353	2	0.64	0.31
02	267355	3	0.51	0.26
03	267285	1	0.92	0.44
03	267287	2	0.73	0.45
03	267289	3	0.83	0.50
04	267359	1	0.79	0.64
04	267361	2	0.52	0.37
04	267363	3	0.43	0.24
05	266852	1	0.85	0.52
05	266854	2	0.57	0.22
05	266856	3	0.63	0.38
06	267368	1	0.84	0.57
06	267370	2	0.83	0.55
06	267372	3	0.37	0.22
07	182850	1	0.85	0.55
07	268900	2	0.58	0.48
07	182867	3	0.66	0.28
08	267400	1	0.69	0.51
08	267402	2	0.53	0.27
08	267403	3	0.58	0.14
09	263023	1	0.83	0.55
09	263025	2	0.72	0.39
09	263027	3	0.65	0.38
10	267311	1	0.78	0.50
10	267313	2	0.59	0.44
10	267314	3	0.43	0.27
11	266135	1	0.69	0.57
11	266137	2	0.60	0.35
11	266139	3	0.38	0.20
12	266162	1	0.84	0.52
12	266165	2	0.61	0.55
12	266168	3	0.51	0.22
13	266198	1	0.56	0.48
13	266200	2	0.64	0.47
13	267269	3	0.80	0.40
14	266147	1	0.83	0.58
14	266151	2	0.66	0.25
14	266155	3	0.37	0.39
15	266172	1	0.76	0.53
15	266176	2	0.66	0.36
15	266185	3	0.64	0.54
16	266141	1	0.87	0.51
16	266143	2	0.64	0.44
16	266145	3	0.46	0.34
20	267784	WRI-MC	0.84	0.58
21	267786	WRI-MC	0.80	0.57
22	267790	WRI-MC	0.70	0.56
23	267792	WRI-MC	0.74	0.44
24	267795	WRI-MC	0.38	0.25
25	466010D	WRI-WP	0.61	0.59
25	466010C	WRI-WP	0.72	0.53
25	466010B	WRI-WP	0.62	0.58
25	466010A	WRI-WP	0.61	0.46

Table I-5. 2016–17 FSAA-PT: Classical Item Statistics— ELA Grade 7

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	183800	1	0.81	0.58
01	183803	2	0.52	0.33
01	183808	3	0.59	0.27
02	245649	1	0.87	0.53
02	245651	2	0.63	0.49
02	245653	3	0.67	0.40
03	266920	1	0.81	0.63
03	266922	2	0.80	0.44
03	266924	3	0.67	0.27
04	263097	1	0.84	0.57
04	263099	2	0.68	0.58
04	263101	3	0.77	0.37
05	183790	1	0.73	0.53
05	183792	2	0.87	0.51
05	183796	3	0.76	0.37
06	268825	1	0.85	0.51
06	263093	2	0.35	0.41
06	263095	3	0.56	0.35
07	263103	1	0.79	0.61
07	268814	2	0.69	0.39
07	263107	3	0.54	0.35
08	267393	1	0.87	0.48
08	267395	2	0.72	0.54
08	267397	3	0.41	0.27
09	257775	1	0.86	0.53
09	257777	2	0.65	0.56
09	257779	3	0.60	0.31
10	266290	1	0.79	0.51
10	266292	2	0.46	0.29
10	266294	3	0.77	0.45
11	266296	1	0.82	0.61
11	266298	2	0.74	0.48
11	266300	3	0.72	0.18
12	266313	1	0.59	0.53
12	266315	2	0.58	0.27
12	267265	3	0.50	0.26
13	266308	1	0.83	0.52
13	266310	2	0.52	0.44
13	266312	3	0.72	0.43
14	266325	1	0.83	0.56
14	266327	2	0.61	0.31
14	266329	3	0.62	0.42
15	266302	1	0.86	0.55
15	266304	2	0.57	0.62
15	266306	3	0.85	0.38
16	266319	1	0.64	0.50
16	266321	2	0.66	0.35
16	267266	3	0.32	0.19
20	267721	WRI-MC	0.86	0.55
21	267723	WRI-MC	0.82	0.58
22	267727	WRI-MC	0.36	0.23
23	267729	WRI-MC	0.58	0.45
24	267737	WRI-MC	0.64	0.52
25	466953B	WRI-WP	0.56	0.62
25	466953A	WRI-WP	0.60	0.54
25	466953D	WRI-WP	0.55	0.62
25	466953C	WRI-WP	0.66	0.60

Table I-6. 2016–17 FSAA-PT: Classical Item Statistics— ELA Grade 8

Item Sets	Item		P- Value	Item-total Correlation
	Number	Task		
01	257838	1	0.90	0.46
01	268845	2	0.50	0.38
01	268882	3	0.67	0.30
02	266911	1	0.83	0.59
02	266913	2	0.71	0.43
02	266915	3	0.67	0.39
03	268847	1	0.82	0.61
03	257820	2	0.85	0.33
03	257822	3	0.61	0.26
04	267376	1	0.75	0.58
04	267378	2	0.82	0.54
04	267380	3	0.71	0.28
05	263162	1	0.82	0.56
05	263164	2	0.57	0.29
05	263166	3	0.59	0.43
06	266894	1	0.86	0.47
06	266896	2	0.87	0.54
06	266898	3	0.45	0.35
07	266928	1	0.78	0.59
07	266930	2	0.69	0.39
07	266932	3	0.40	0.21
08	266351	1	0.86	0.50
08	266353	2	0.71	0.59
08	266355	3	0.38	0.39
09	263148	1	0.87	0.45
09	263150	2	0.60	0.58
09	268851	3	0.44	0.24
10	266876	1	0.85	0.54
10	266878	2	0.76	0.45
10	266880	3	0.60	0.33
11	263167	1	0.64	0.50
11	263169	2	0.74	0.45
11	268734	3	0.69	0.45
12	267227	1	0.78	0.62
12	267229	2	0.64	0.37
12	267231	3	0.52	0.37
13	266356	1	0.79	0.48
13	266358	2	0.43	0.27
13	266359	3	0.44	0.43
14	266339	1	0.46	0.37
14	266341	2	0.43	0.31
14	266343	3	0.49	0.41
15	268497	1	0.85	0.54
15	268499	2	0.70	0.44
15	268849	3	0.65	0.35
16	266345	1	0.74	0.62
16	266347	2	0.79	0.46
16	266349	3	0.62	0.24
20	267907	WRI-MC	0.85	0.58
21	267909	WRI-MC	0.85	0.46
22	267911	WRI-MC	0.52	0.39
23	267913	WRI-MC	0.74	0.40
24	267915	WRI-MC	0.47	0.30
25	466293C	WRI-WP	0.61	0.56
25	466293D	WRI-WP	0.55	0.61
25	466293A	WRI-WP	0.63	0.60
25	466293B	WRI-WP	0.58	0.60

Table I-7. 2016–17 FSAA-PT: Classical Item Statistics— ELA Grade 9

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	268689	1	0.87	0.55
01	268691	2	0.66	0.50
01	268693	3	0.60	0.23
02	266860	1	0.86	0.56
02	266862	2	0.76	0.41
02	266864	3	0.86	0.43
03	246785	1	0.68	0.47
03	246789	2	0.62	0.45
03	246791	3	0.44	0.19
04	266410	1	0.84	0.58
04	266412	2	0.49	0.21
04	266414	3	0.62	0.18
05	263363	1	0.87	0.52
05	263365	2	0.63	0.42
05	263367	3	0.69	0.41
06	266416	1	0.86	0.56
06	266418	2	0.85	0.52
06	266420	3	0.55	0.28
07	267294	1	0.86	0.57
07	267296	2	0.49	0.38
07	267298	3	0.70	0.52
08	266382	1	0.79	0.49
08	456665	2	0.57	0.39
08	456686	3	0.36	0.23
09	263351	1	0.79	0.56
09	263353	2	0.72	0.37
09	263355	3	0.76	0.40
10	183973	1	0.85	0.51
10	183982	2	0.61	0.47
10	183994	3	0.55	0.32
11	266405	1	0.70	0.38
11	266406	2	0.79	0.25
11	266408	3	0.34	0.13
12	266399	1	0.82	0.60
12	266401	2	0.52	0.26
12	266403	3	0.53	0.21
13	267303	1	0.86	0.52
13	267305	2	0.65	0.38
13	267307	3	0.69	0.46
14	266376	1	0.85	0.57
14	266378	2	0.63	0.40
14	266380	3	0.51	0.37
15	266387	1	0.78	0.60
15	266389	2	0.32	0.32
15	266391	3	0.51	0.26
16	266393	1	0.63	0.40
16	266395	2	0.39	0.31
16	266397	3	0.52	0.21
20	268227	WRI-MC	0.84	0.60
21	268229	WRI-MC	0.82	0.60
22	268231	WRI-MC	0.69	0.35
23	268233	WRI-MC	0.50	0.26
24	268234	WRI-MC	0.52	0.37
25	466315D	WRI-WP	0.53	0.63
25	466315C	WRI-WP	0.57	0.59
25	466315B	WRI-WP	0.56	0.62
25	466315A	WRI-WP	0.62	0.61

Table I-8. 2016–17 FSAA-PT: Classical Item Statistics— ELA Grade 10

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	246983	1	0.67	0.51
01	246987	2	0.82	0.51
01	246992	3	0.44	0.23
02	266868	1	0.88	0.53
02	266870	2	0.91	0.38
02	266872	3	0.74	0.46
03	267385	1	0.81	0.55
03	267387	2	0.33	0.21
03	267389	3	0.63	0.29
04	267199	1	0.84	0.58
04	267201	2	0.80	0.38
04	267203	3	0.69	0.47
05	257967	1	0.75	0.45
05	257970	2	0.67	0.53
05	257969	3	0.76	0.42
06	266456	1	0.71	0.62
06	266458	2	0.48	0.26
06	266460	3	0.39	0.25
07	266884	1	0.74	0.62
07	266886	2	0.79	0.37
07	266888	3	0.72	0.31
08	257956	1	0.81	0.60
08	257960	2	0.73	0.45
08	257958	3	0.52	0.35
09	257972	1	0.84	0.62
09	257974	2	0.47	0.32
09	257976	3	0.63	0.33
10	266902	1	0.87	0.50
10	266904	2	0.64	0.52
10	266906	3	0.70	0.32
11	266474	1	0.75	0.52
11	266476	2	0.79	0.39
11	268812	3	0.63	0.35
12	266450	1	0.75	0.50
12	266452	2	0.46	0.33
12	266454	3	0.40	0.13
13	266439	1	0.87	0.52
13	266441	2	0.65	0.48
13	266443	3	0.56	0.24
14	266462	1	0.85	0.58
14	266464	2	0.57	0.23
14	266466	3	0.49	0.27
15	266480	1	0.81	0.62
15	266482	2	0.62	0.37
15	266484	3	0.62	0.32
16	267164	1	0.83	0.54
16	267166	2	0.75	0.41
16	267168	3	0.51	0.41
20	268317	WRI-MC	0.87	0.55
21	268319	WRI-MC	0.86	0.51
22	268325	WRI-MC	0.72	0.56
23	268328	WRI-MC	0.68	0.60
24	268331	WRI-MC	0.62	0.49
25	466358D	WRI-WP	0.60	0.64
25	466358C	WRI-WP	0.62	0.62
25	466358B	WRI-WP	0.64	0.63
25	466358A	WRI-WP	0.58	0.51

Table I-9. 2016–17 FSAA-PT: Classical Item Statistics— Mathematics Grade 3

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	179089	1	0.80	0.54
01	179095	2	0.80	0.54
01	179099	3	0.59	0.47
02	261859	1	0.74	0.51
02	261861	2	0.70	0.43
02	261863	3	0.56	0.35
03	267245	1	0.87	0.49
03	267247	2	0.53	0.50
03	267249	3	0.35	0.09
04	179019	1	0.82	0.58
04	179043	2	0.78	0.53
04	179045	3	0.38	0.18
05	256353	1	0.77	0.52
05	256355	2	0.71	0.56
05	256357	3	0.49	0.36
06	268827	1	0.72	0.59
06	179140	2	0.71	0.52
06	179141	3	0.75	0.37
07	245946	1	0.79	0.55
07	245948	2	0.23	0.19
07	245950	3	0.62	0.47
08	261865	1	0.75	0.59
08	261867	2	0.84	0.52
08	261869	3	0.91	0.28
09	268831	1	0.83	0.53
09	256331	2	0.56	0.52
09	256333	3	0.56	0.43
10	266579	1	0.81	0.47
10	266581	2	0.71	0.55
10	266583	3	0.47	0.36
11	265024	1	0.89	0.50
11	265026	2	0.33	0.27
11	265028	3	0.55	0.38
12	265041	1	0.85	0.53
12	265043	2	0.43	0.26
12	265045	3	0.51	0.37
13	261837	1	0.76	0.39
13	261839	2	0.52	0.48
13	261841	3	0.52	0.21
14	265035	1	0.51	0.45
14	265037	2	0.53	0.44
14	265039	3	0.49	0.23
15	261871	1	0.79	0.57
15	261873	2	0.85	0.48
15	261875	3	0.85	0.47
16	265030	1	0.81	0.55
16	265032	2	0.79	0.39
16	265034	3	0.50	0.26

Table I-10. 2016–17 FSAA-PT: Classical Item Statistics— Mathematics Grade 4

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	256383	1	0.71	0.38
01	256385	2	0.58	0.42
01	256387	3	0.57	0.40
02	261883	1	0.87	0.52
02	261885	2	0.53	0.44
02	261886	3	0.53	0.28
03	261905	1	0.72	0.52
03	261907	2	0.64	0.35
03	261909	3	0.75	0.27
04	256372	1	0.89	0.47
04	268415	2	0.64	0.29
04	268417	3	0.44	0.36
05	256365	1	0.87	0.48
05	256367	2	0.49	0.42
05	268895	3	0.44	0.30
06	256377	1	0.64	0.48
06	256379	2	0.49	0.17
06	256381	3	0.35	0.19
07	223540	1	0.77	0.56
07	223545	2	0.67	0.34
07	223547	3	0.41	0.23
08	268891	1	0.83	0.52
08	223564	2	0.75	0.50
08	223567	3	0.54	0.39
09	151617	1	0.87	0.52
09	151619	2	0.66	0.46
09	151622	3	0.65	0.33
10	245486	1	0.84	0.51
10	245488	2	0.59	0.47
10	245489	3	0.32	0.18
11	265051	1	0.90	0.48
11	265053	2	0.87	0.42
11	265055	3	0.50	0.34
12	265068	1	0.73	0.57
12	265070	2	0.62	0.36
12	265072	3	0.39	0.31
13	261893	1	0.88	0.51
13	261895	2	0.30	0.21
13	261897	3	0.26	0.16
14	245490	1	0.80	0.58
14	268795	2	0.52	0.19
14	245494	3	0.34	0.33
15	265057	1	0.83	0.51
15	265059	2	0.56	0.44
15	265061	3	0.54	0.31
16	256392	1	0.76	0.54
16	256394	2	0.50	0.40
16	256396	3	0.43	0.35

Table I-11. 2016–17 FSAA-PT: Classical Item Statistics— Mathematics Grade 5

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	256498	1	0.72	0.38
01	256500	2	0.66	0.20
01	256502	3	0.43	0.38
02	262530	1	0.68	0.50
02	262533	2	0.41	0.27
02	262535	3	0.59	0.42
03	262565	1	0.85	0.46
03	262567	2	0.65	0.46
03	262569	3	0.56	0.37
04	256466	1	0.77	0.56
04	256468	2	0.40	0.34
04	256470	3	0.63	0.51
05	262542	1	0.87	0.46
05	262544	2	0.71	0.46
05	262546	3	0.37	0.34
06	268965	1	0.79	0.45
06	256473	2	0.65	0.46
06	256474	3	0.31	0.19
07	262553	1	0.81	0.53
07	262555	2	0.46	0.25
07	262557	3	0.55	0.07
08	256480	1	0.79	0.48
08	268418	2	0.64	0.38
08	256484	3	0.44	0.34
09	256504	1	0.75	0.51
09	256506	2	0.31	0.37
09	256508	3	0.85	0.33
10	266564	1	0.85	0.45
10	266566	2	0.72	0.47
10	266568	3	0.62	0.35
11	265243	1	0.52	0.48
11	265245	2	0.66	0.37
11	265247	3	0.74	0.51
12	265194	1	0.83	0.46
12	265196	2	0.53	0.53
12	265198	3	0.34	0.17
13	265233	1	0.88	0.42
13	265235	2	0.60	0.43
13	265236	3	0.69	0.22
14	256492	1	0.80	0.51
14	256494	2	0.60	0.45
14	256496	3	0.48	0.32
15	256475	1	0.64	0.49
15	256477	2	0.55	0.51
15	256478	3	0.43	0.27
16	246011	1	0.87	0.45
16	246013	2	0.39	0.43
16	246015	3	0.39	0.12

Table I-12. 2016–17 FSAA-PT: Classical Item Statistics— Mathematics Grade 6

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	256526	1	0.74	0.46
01	256528	2	0.56	0.40
01	256530	3	0.65	0.20
02	267260	1	0.76	0.55
02	455105	2	0.61	0.45
02	267263	3	0.63	0.31
03	262594	1	0.83	0.53
03	262596	2	0.81	0.52
03	262598	3	0.72	0.40
04	262577	1	0.67	0.47
04	262579	2	0.76	0.57
04	262581	3	0.79	0.29
05	262611	1	0.85	0.54
05	262613	2	0.85	0.51
05	262615	3	0.72	0.40
06	256538	1	0.52	0.44
06	256540	2	0.82	0.50
06	256542	3	0.70	0.45
07	262571	1	0.75	0.58
07	262573	2	0.38	0.36
07	262575	3	0.44	0.28
08	265371	1	0.86	0.47
08	265373	2	0.53	0.30
08	265374	3	0.53	0.50
09	265387	1	0.69	0.55
09	265389	2	0.74	0.50
09	265391	3	0.42	0.28
10	265375	1	0.80	0.58
10	265377	2	0.67	0.48
10	265379	3	0.47	0.16
11	265361	1	0.72	0.54
11	265363	2	0.59	0.32
11	265365	3	0.54	0.41
12	265381	1	0.88	0.50
12	265383	2	0.77	0.37
12	265385	3	0.76	0.30
13	265403	1	0.80	0.56
13	265405	2	0.52	0.32
13	265407	3	0.53	0.40
14	265392	1	0.80	0.52
14	265394	2	0.75	0.50
14	265396	3	0.42	0.35
15	265366	1	0.71	0.55
15	265368	2	0.63	0.40
15	265370	3	0.55	0.31
16	265397	1	0.75	0.47
16	265399	2	0.65	0.52
16	265401	3	0.78	0.43

Table I-13. 2016–17 FSAA-PT: Classical Item Statistics— Mathematics Grade 7

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	262858	1	0.60	0.42
01	262860	2	0.67	0.48
01	262862	3	0.69	0.33
02	266629	1	0.90	0.44
02	266631	2	0.75	0.45
02	266632	3	0.67	0.39
03	180162	1	0.74	0.51
03	268453	2	0.75	0.41
03	180168	3	0.55	0.44
04	257325	1	0.72	0.39
04	257327	2	0.48	0.39
04	257329	3	0.44	0.31
05	244055	1	0.93	0.38
05	244057	2	0.28	0.33
05	244059	3	0.70	0.48
06	257342	1	0.71	0.51
06	257344	2	0.63	0.49
06	257346	3	0.36	0.20
07	266622	1	0.88	0.45
07	266624	2	0.75	0.41
07	268745	3	0.67	0.44
08	265676	1	0.83	0.48
08	265678	2	0.61	0.31
08	265680	3	0.43	0.28
09	245396	1	0.87	0.47
09	245403	2	0.50	0.46
09	245405	3	0.44	0.28
10	262864	1	0.67	0.48
10	268960	2	0.64	0.35
10	262868	3	0.71	0.44
11	265654	1	0.83	0.46
11	265656	2	0.39	0.38
11	265658	3	0.55	0.38
12	257321	1	0.75	0.53
12	257323	2	0.45	0.34
12	268962	3	0.62	0.26
13	265688	1	0.89	0.46
13	265690	2	0.60	0.30
13	265692	3	0.57	0.23
14	265666	1	0.72	0.52
14	265668	2	0.72	0.42
14	265670	3	0.32	0.11
15	265660	1	0.67	0.50
15	265662	2	0.45	0.41
15	265664	3	0.68	0.29
16	257351	1	0.86	0.40
16	257353	2	0.56	0.24
16	257355	3	0.24	0.21

Table I-14. 2016–17 FSAA-PT: Classical Item Statistics— Mathematics Grade 8

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	265736	1	0.80	0.56
01	265738	2	0.84	0.46
01	267273	3	0.81	0.37
02	262890	1	0.66	0.37
02	268860	2	0.59	0.45
02	262894	3	0.71	0.41
03	179076	1	0.91	0.46
03	179079	2	0.65	0.17
03	179081	3	0.43	0.24
04	257357	1	0.65	0.47
04	257359	2	0.85	0.49
04	257360	3	0.77	0.41
05	267252	1	0.89	0.46
05	267254	2	0.73	0.35
05	267256	3	0.45	0.32
06	262914	1	0.66	0.45
06	262916	2	0.73	0.55
06	262918	3	0.62	0.36
07	266571	1	0.85	0.51
07	266573	2	0.82	0.29
07	266575	3	0.75	0.42
08	267236	1	0.92	0.47
08	267238	2	0.80	0.43
08	267240	3	0.61	0.36
09	268854	1	0.73	0.52
09	262928	2	0.75	0.35
09	262930	3	0.60	0.34
10	265718	1	0.82	0.55
10	265720	2	0.63	0.44
10	265722	3	0.69	0.42
11	262902	1	0.88	0.46
11	262904	2	0.77	0.53
11	262906	3	0.80	0.35
12	265730	1	0.86	0.55
12	265732	2	0.79	0.50
12	267271	3	0.67	0.40
13	265708	1	0.86	0.56
13	455154	2	0.73	0.41
13	455178	3	0.81	0.35
14	265742	1	0.72	0.41
14	265744	2	0.65	0.45
14	265746	3	0.50	0.22
15	265724	1	0.88	0.53
15	265726	2	0.66	0.43
15	265728	3	0.35	0.07
16	265712	1	0.89	0.50
16	265714	2	0.50	0.34
16	265716	3	0.59	0.33

Table I-15. 2016–17 FSAA-PT: Classical Item Statistics— Science Grade 5

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	243643	1	0.69	0.62
01	243651	2	0.57	0.41
01	243654	3	0.62	0.23
02	220693	1	0.88	0.48
02	268967	2	0.77	0.66
02	220702	3	0.88	0.39
03	262240	1	0.74	0.67
03	262241	2	0.81	0.49
03	268858	3	0.51	0.32
04	268841	1	0.86	0.51
04	268969	2	0.79	0.62
04	268128	3	0.80	0.56
05	262252	1	0.84	0.64
05	262256	2	0.94	0.45
05	262257	3	0.66	0.48
06	243705	1	0.86	0.60
06	243708	2	0.74	0.46
06	243712	3	0.48	0.44
07	256232	1	0.73	0.61
07	256234	2	0.78	0.58
07	256236	3	0.51	0.29
08	268971	1	0.81	0.59
08	220632	2	0.84	0.60
08	268843	3	0.60	0.37
09	220671	1	0.84	0.55
09	220676	2	0.82	0.51
09	220687	3	0.79	0.47
10	256179	1	0.78	0.58
10	256182	2	0.48	0.28
10	256184	3	0.75	0.56
11	220769	1	0.87	0.57
11	220771	2	0.87	0.60
11	220776	3	0.61	0.41
12	243737	1	0.86	0.55
12	243742	2	0.86	0.65
12	243745	3	0.74	0.52
13	256037	1	0.81	0.66
13	256039	2	0.74	0.52
13	256041	3	0.34	0.21
14	262258	1	0.71	0.56
14	262259	2	0.83	0.58
14	262262	3	0.73	0.49
15	243754	1	0.87	0.57
15	243759	2	0.80	0.63
15	243761	3	0.67	0.48
16	256043	1	0.88	0.51
16	256045	2	0.46	0.10
16	256047	3	0.64	0.62

Table I-16. 2016–17 FSAA-PT: Classical Item Statistics— Science Grade 8

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	222907	1	0.91	0.48
01	222909	2	0.75	0.43
01	222911	3	0.47	0.19
02	245073	1	0.77	0.56
02	245075	2	0.72	0.36
02	245077	3	0.48	0.29
03	256698	1	0.67	0.60
03	256702	2	0.72	0.36
03	268976	3	0.86	0.47
04	222934	1	0.81	0.50
04	222940	2	0.53	0.50
04	222947	3	0.42	0.24
05	268870	1	0.75	0.64
05	262650	2	0.93	0.46
05	268872	3	0.37	0.26
06	245078	1	0.92	0.45
06	245080	2	0.74	0.53
06	245082	3	0.64	0.37
07	268874	1	0.71	0.43
07	262656	2	0.82	0.55
07	268978	3	0.65	0.41
08	256716	1	0.69	0.49
08	256720	2	0.84	0.52
08	256722	3	0.66	0.26
09	245056	1	0.90	0.49
09	245058	2	0.58	0.47
09	245060	3	0.60	0.22
10	262672	1	0.57	0.40
10	262674	2	0.57	0.51
10	262676	3	0.36	0.23
11	265084	1	0.91	0.46
11	265086	2	0.85	0.52
11	265088	3	0.50	0.31
12	256736	1	0.90	0.48
12	256738	2	0.50	0.24
12	256740	3	0.52	0.15
13	256756	1	0.87	0.56
13	268878	2	0.59	0.43
13	256763	3	0.44	0.09
14	262660	1	0.86	0.56
14	262662	2	0.73	0.47
14	262664	3	0.48	0.28
15	222968	1	0.86	0.53
15	222972	2	0.75	0.45
15	222977	3	0.64	0.25
16	265090	1	0.83	0.48
16	265092	2	0.73	0.46
16	265094	3	0.51	0.30

Table I-17. 2016–17 FSAA-PT: Classical Item Statistics— Algebra 1 Grade HS

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	265831	1	0.81	0.50
01	265834	2	0.41	0.25
01	265837	3	0.49	0.28
02	266654	1	0.78	0.55
02	266656	2	0.74	0.36
02	266658	3	0.70	0.30
03	265880	1	0.82	0.45
03	265885	2	0.51	0.23
03	265890	3	0.54	0.27
04	263287	1	0.74	0.55
04	263289	2	0.43	0.34
04	263291	3	0.60	0.37
05	266660	1	0.84	0.54
05	266662	2	0.57	0.42
05	266664	3	0.48	0.30
06	265926	1	0.80	0.52
06	265928	2	0.65	0.48
06	265931	3	0.53	0.20
07	265857	1	0.80	0.37
07	265859	2	0.59	0.57
07	265860	3	0.51	0.32
08	257723	1	0.69	0.54
08	257725	2	0.67	0.48
08	257726	3	0.74	0.29
09	265906	1	0.75	0.55
09	265910	2	0.70	0.39
09	265913	3	0.37	0.31
10	265839	1	0.80	0.51
10	265841	2	0.34	0.22
10	265843	3	0.46	0.29
11	265934	1	0.89	0.44
11	265936	2	0.64	0.53
11	265938	3	0.63	0.34
12	455313	1	0.77	0.59
12	263283	2	0.69	0.36
12	263285	3	0.59	0.31
13	265895	1	0.88	0.48
13	265900	2	0.54	0.41
13	265904	3	0.44	0.19
14	257693	1	0.82	0.47
14	257696	2	0.64	0.45
14	257697	3	0.53	0.30
15	266700	1	0.76	0.56
15	266702	2	0.66	0.43
15	266703	3	0.76	0.33
16	266683	1	0.84	0.38
16	266685	2	0.56	0.52
16	266686	3	0.74	0.48

Table I-18. 2016–17 FSAA-PT: Classical Item Statistics— Biology Grade HS

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	245928	1	0.89	0.56
01	246478	2	0.48	0.41
01	245932	3	0.64	0.40
02	267049	1	0.90	0.56
02	267051	2	0.65	0.47
02	267053	3	0.76	0.42
03	245877	1	0.82	0.64
03	245881	2	0.58	0.35
03	245882	3	0.66	0.48
04	245922	1	0.92	0.49
04	245924	2	0.92	0.48
04	245926	3	0.43	0.22
05	224615	1	0.90	0.55
05	268862	2	0.77	0.57
05	224621	3	0.81	0.43
06	224592	1	0.90	0.48
06	224599	2	0.91	0.34
06	224606	3	0.65	0.53
07	268883	1	0.73	0.64
07	268885	2	0.73	0.11
07	263511	3	0.53	0.38
08	266990	1	0.87	0.61
08	266992	2	0.76	0.47
08	266994	3	0.65	0.34
09	265544	1	0.88	0.56
09	265546	2	0.67	0.47
09	265548	3	0.58	0.35
10	266984	1	0.89	0.52
10	266986	2	0.85	0.60
10	266988	3	0.56	0.35
11	267032	1	0.93	0.47
11	267034	2	0.83	0.44
11	267036	3	0.60	0.52
12	265594	1	0.92	0.49
12	265596	2	0.71	0.54
12	265598	3	0.78	0.33
13	267008	1	0.79	0.47
13	267010	2	0.77	0.59
13	267012	3	0.55	0.35
14	267043	1	0.77	0.61
14	267045	2	0.72	0.38
14	267047	3	0.80	0.24
15	266996	1	0.92	0.50
15	266998	2	0.54	0.34
15	267000	3	0.67	0.33
16	267026	1	0.90	0.49
16	267028	2	0.61	0.23
16	267030	3	0.51	0.39

Table I-19. 2016–17 FSAA-PT: Classical Item Statistics—Geometry Grade HS

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	266775	1	0.71	0.47
01	266779	2	0.75	0.49
01	266787	3	0.75	0.48
02	266804	1	0.83	0.49
02	266806	2	0.71	0.56
02	266808	3	0.75	0.40
03	266761	1	0.87	0.55
03	266764	2	0.60	0.45
03	266769	3	0.59	0.35
04	257663	1	0.77	0.53
04	257665	2	0.80	0.59
04	257667	3	0.33	0.14
05	266556	1	0.90	0.53
05	266558	2	0.93	0.41
05	266560	3	0.93	0.31
06	266597	1	0.85	0.53
06	266599	2	0.63	0.30
06	266601	3	0.68	0.57
07	257669	1	0.89	0.50
07	257671	2	0.75	0.49
07	257673	3	0.42	0.26
08	266585	1	0.81	0.47
08	266587	2	0.50	0.29
08	266589	3	0.49	0.16
09	266544	1	0.86	0.58
09	266546	2	0.70	0.45
09	266548	3	0.62	0.26
10	266737	1	0.89	0.49
10	266739	2	0.88	0.43
10	266741	3	0.42	0.26
11	257717	1	0.92	0.50
11	257719	2	0.53	0.44
11	257721	3	0.77	0.49
12	257711	1	0.79	0.52
12	257713	2	0.59	0.43
12	257715	3	0.67	0.39
13	455245	1	0.85	0.59
13	455257	2	0.63	0.53
13	455276	3	0.66	0.35
14	266526	1	0.84	0.48
14	266528	2	0.66	0.52
14	266530	3	0.49	0.31
15	266795	1	0.89	0.55
15	266799	2	0.94	0.44
15	266801	3	0.77	0.34
16	266732	1	0.44	0.28
16	266733	2	0.86	0.50
16	266735	3	0.70	0.36

Table I-20. 2016–17 FSAA-PT: Classical Item Statistics— Civics Grade 7

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	428824	1	0.82	0.59
01	428837	2	0.79	0.55
01	428860	3	0.57	0.35
02	428618	1	0.81	0.61
02	428635	2	0.67	0.39
02	428649	3	0.49	0.36
03	431907	1	0.86	0.56
03	431922	2	0.66	0.48
03	431935	3	0.61	0.30
04	432298	1	0.80	0.59
04	432311	2	0.57	0.26
04	432324	3	0.53	0.36
05	431439	1	0.88	0.53
05	431455	2	0.66	0.51
05	431470	3	0.48	0.36
06	428139	1	0.84	0.59
06	428101	2	0.75	0.57
06	428116	3	0.44	0.22
07	430591	1	0.83	0.61
07	430687	2	0.83	0.47
07	430655	3	0.54	0.19
08	431591	1	0.76	0.51
08	431626	2	0.66	0.47
08	431653	3	0.53	0.37
09	428052	1	0.77	0.64
09	428065	2	0.88	0.53
09	428079	3	0.57	0.35
10	431275	1	0.85	0.53
10	431292	2	0.84	0.37
10	431332	3	0.66	0.51
11	434033	1	0.86	0.57
11	434047	2	0.74	0.57
11	434061	3	0.41	0.24
12	431670	1	0.79	0.64
12	431963	2	0.56	0.34
12	432009	3	0.60	0.32
13	431867	1	0.85	0.57
13	431880	2	0.83	0.40
13	431893	3	0.50	0.42
14	431516	1	0.81	0.65
14	431545	2	0.82	0.53
14	431563	3	0.50	0.25
15	431107	1	0.88	0.54
15	431173	2	0.89	0.40
15	431144	3	0.46	0.30
16	428533	1	0.83	0.61
16	428552	2	0.59	0.39
16	428565	3	0.60	0.18

Table I-21. 2016–17 FSAA-PT: Classical Item Statistics—U.S. History Grade HS

Item Sets	Item		P-Value	Item-total Correlation
	Number	Task		
01	427435	1	0.85	0.57
01	427457	2	0.78	0.25
01	427473	3	0.65	0.52
02	424154	1	0.72	0.59
02	424139	2	0.81	0.49
02	424168	3	0.68	0.28
03	425510	1	0.88	0.50
03	425535	2	0.67	0.58
03	425552	3	0.68	0.38
04	424080	1	0.89	0.47
04	424096	2	0.82	0.56
04	424124	3	0.75	0.51
05	423220	1	0.82	0.49
05	423286	2	0.73	0.64
05	423300	3	0.60	0.32
06	423892	1	0.79	0.57
06	423922	2	0.70	0.25
06	423942	3	0.49	0.02
07	424280	1	0.81	0.63
07	424293	2	0.66	0.34
07	424314	3	0.55	0.41
08	424334	1	0.86	0.55
08	424349	2	0.64	0.50
08	424599	3	0.44	0.22
09	426500	1	0.86	0.52
09	426642	2	0.59	0.54
09	426565	3	0.67	0.35
10	427535	1	0.85	0.42
10	427571	2	0.59	0.52
10	427551	3	0.70	0.32
11	425807	1	0.79	0.64
11	424683	2	0.74	0.33
11	426226	3	0.77	0.21
12	426853	1	0.76	0.60
12	426873	2	0.78	0.43
12	426990	3	0.65	0.15
13	427489	1	0.82	0.60
13	427506	2	0.56	0.40
13	427584	3	0.55	0.22
14	425756	1	0.81	0.62
14	425771	2	0.73	0.53
14	425787	3	0.76	0.45
15	425387	1	0.85	0.56
15	425402	2	0.58	0.28
15	425427	3	0.69	0.49
16	427379	1	0.87	0.53
16	427408	2	0.80	0.42
16	427395	3	0.91	0.42

APPENDIX J—SUMMARY CLASSICAL STATISTICS

Table J-1. 2016–17 FSAA-PT: Summary Classical Item Statistics—ELA

Grade	*Task*	*Number of Items*	P-Value		Item-total Correlation	
			Mean	*SD*	*Mean*	*SD*
3	1	16	0.69	0.15	0.47	0.07
	2	16	0.56	0.14	0.40	0.10
	3	16	0.58	0.13	0.32	0.06
	All	48	0.61	0.15	0.40	0.10
4	1	16	0.76	0.14	0.50	0.07
	2	16	0.65	0.15	0.41	0.09
	3	16	0.58	0.20	0.30	0.07
	WRI-MC	5	0.72	0.13	0.46	0.15
	WRI-WP	4	0.57	0.03	0.56	0.01
	All	57	0.66	0.17	0.42	0.12
5	1	16	0.82	0.05	0.53	0.05
	2	16	0.64	0.13	0.40	0.12
	3	16	0.58	0.14	0.30	0.10
	WRI-MC	5	0.68	0.11	0.49	0.08
	WRI-WP	4	0.66	0.06	0.58	0.04
	All	57	0.68	0.15	0.43	0.13
6	1	16	0.78	0.09	0.54	0.05
	2	16	0.64	0.08	0.39	0.10
	3	16	0.55	0.14	0.32	0.11
	WRI-MC	5	0.69	0.18	0.48	0.14
	WRI-WP	4	0.64	0.05	0.54	0.06
	All	57	0.66	0.14	0.43	0.13
7	1	16	0.80	0.08	0.55	0.04
	2	16	0.63	0.13	0.44	0.11

continued

Grade	Task	Number of Items	P-Value		Item-total Correlation	
			Mean	*SD*	*Mean*	*SD*
7	3	16	0.63	0.14	0.33	0.08
	WRI-MC	5	0.65	0.20	0.47	0.14
	WRI-WP	4	0.59	0.05	0.60	0.04
	All	57	0.68	0.14	0.45	0.12
8	1	16	0.79	0.11	0.53	0.07
	2	16	0.68	0.14	0.43	0.10
	3	16	0.56	0.11	0.34	0.08
	WRI-MC	5	0.69	0.18	0.43	0.10
	WRI-WP	4	0.59	0.04	0.59	0.02
	All	57	0.67	0.15	0.44	0.12
9	1	16	0.81	0.07	0.53	0.07
	2	16	0.61	0.14	0.38	0.09
	3	16	0.58	0.14	0.30	0.12
	WRI-MC	5	0.67	0.16	0.44	0.16
	WRI-WP	4	0.57	0.04	0.61	0.02
	All	57	0.66	0.15	0.42	0.14
10	1	16	0.80	0.06	0.55	0.05
	2	16	0.66	0.16	0.38	0.10
	3	16	0.59	0.12	0.32	0.09
	WRI-MC	5	0.75	0.11	0.54	0.04
	WRI-WP	4	0.61	0.03	0.60	0.06
	All	57	0.68	0.14	0.44	0.13

Table J-2. 2016–17 FSAA-PT: Summary Classical Item Statistics—Mathematics

Grade	*Task*	*Number of Items*	P-Value		*Item-total Correlation*	
			Mean	*SD*	*Mean*	*SD*
3	1	16	0.78	0.09	0.52	0.05
	2	16	0.63	0.19	0.45	0.11
	3	16	0.57	0.15	0.33	0.11
	All	48	0.66	0.17	0.43	0.12
4	1	16	0.81	0.08	0.51	0.05
	2	16	0.59	0.13	0.37	0.10
	3	16	0.47	0.13	0.30	0.07
	All	48	0.62	0.18	0.39	0.12
5	1	16	0.78	0.10	0.47	0.04
	2	16	0.56	0.13	0.40	0.09
	3	16	0.53	0.15	0.31	0.13
	All	48	0.62	0.17	0.39	0.12
6	1	16	0.76	0.09	0.52	0.04
	2	16	0.67	0.13	0.44	0.09
	3	16	0.60	0.13	0.34	0.09
	All	48	0.68	0.13	0.43	0.11
7	1	16	0.79	0.10	0.46	0.05
	2	16	0.58	0.14	0.39	0.07
	3	16	0.54	0.15	0.32	0.10
	All	48	0.63	0.17	0.39	0.10
8	1	16	0.81	0.10	0.49	0.06
	2	16	0.72	0.10	0.42	0.10
	3	16	0.64	0.14	0.34	0.09
	All	48	0.72	0.13	0.41	0.10

Table J-3. 2016–17 FSAA-PT: Summary Classical Item Statistics—Science

Grade	*Task*	*Number of Items*	P-Value		*Item-total Correlation*	
			Mean	*SD*	*Mean*	*SD*
5	1	16	0.81	0.06	0.58	0.05
	2	16	0.76	0.14	0.51	0.15
	3	16	0.65	0.14	0.43	0.12
	All	48	0.74	0.14	0.51	0.13
8	1	16	0.81	0.10	0.51	0.06
	2	16	0.71	0.12	0.45	0.08
	3	16	0.54	0.13	0.27	0.09
	All	48	0.69	0.16	0.41	0.13

Table J-4. 2016–17 FSAA-PT: Summary Classical Item Statistics—Algebra 1

Grade	*Task*	*Number of Items*	P-Value		*Item-total Correlation*	
			Mean	*SD*	*Mean*	*SD*
HS	1	16	0.80	0.05	0.50	0.06
	2	16	0.58	0.11	0.40	0.11
	3	16	0.57	0.12	0.31	0.07
	All	48	0.65	0.14	0.40	0.11

Table J-5. 2016–17 FSAA-PT: Summary Classical Item Statistics—Biology

Grade	*Task*	*Number of Items*	P-Value		*Item-total Correlation*	
			Mean	*SD*	*Mean*	*SD*
HS	1	16	0.87	0.06	0.54	0.06
	2	16	0.72	0.13	0.42	0.13
	3	16	0.64	0.11	0.38	0.09
	All	48	0.74	0.14	0.45	0.12

Table J-6. 2016–17 FSAA-PT: Summary Classical Item Statistics—Geometry

Grade	*Task*	*Number of Items*	P-Value		*Item-total Correlation*	
			Mean	*SD*	*Mean*	*SD*
HS	1	16	0.82	0.11	0.50	0.07
	2	16	0.72	0.14	0.46	0.08
	3	16	0.63	0.16	0.34	0.11
	All	48	0.72	0.16	0.43	0.11

Table J-7. 2016–17 FSAA-PT: Summary Classical Item Statistics—Civics

Grade	*Task*	*Number of Items*	P-Value		*Item-total Correlation*	
			Mean	*SD*	*Mean*	*SD*
7	1	16	0.83	0.04	0.58	0.04
	2	16	0.73	0.11	0.45	0.09
	3	16	0.53	0.07	0.32	0.09
	All	48	0.70	0.15	0.45	0.13

Table J-8. 2016–17 FSAA-PT: Summary Classical Item Statistics—U.S. History

Grade	*Task*	*Number of Items*	P-Value		*Item-total Correlation*	
			Mean	*SD*	*Mean*	*SD*
HS	1	16	0.83	0.05	0.55	0.06
	2	16	0.70	0.09	0.44	0.12
	3	16	0.66	0.12	0.33	0.14
	All	48	0.73	0.11	0.44	0.14

APPENDIX K—DIFFERENTIAL ITEM FUNCTIONING RESULTS

Table K-1. 2016–17 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—ELA

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
3	Male	Female	1	16	0	0	0	0	0	0
			2	16	1	0	1	1	0	1
			3	15	2	1	1	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	2	1	1	0	0	0
			3	15	4	3	1	1	1	0
		Hispanic	1	16	1	0	1	0	0	0
			2	16	1	0	1	0	0	0
			3	15	3	3	0	2	2	0
	Non-Limited English Proficient	Limited English Proficient	1	16	1	0	1	0	0	0
			2	16	1	1	0	0	0	0
			3	12	2	2	0	0	0	0
4	Male	Female	1	16	0	0	0	0	0	0
			2	16	2	1	1	0	0	0
			3	16	1	1	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	2	1	1	0	0	0
			3	16	4	2	2	1	0	1
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
		Hispanic	1	16	1	0	1	0	0	0
			2	16	3	1	2	0	0	0
			3	16	1	0	1	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
4	Non-Limited English Proficient	Limited English Proficient	1	16	1	1	0	0	0	0
			2	16	1	0	1	0	0	0
			3	13	1	1	0	0	0	0
			WRI-MC	5	2	1	1	0	0	0
			WRI-WP	4	0	0	0	0	0	0

continued

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
5	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	1	0	1	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	2	1	1	0	0	0
			3	16	1	1	0	0	0	0
			WRI-MC	5	1	0	1	0	0	0
			WRI-WP	4	0	0	0	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	2	1	1	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	15	2	1	1	0	0	0
			WRI-MC	5	1	1	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
6	Male	Female	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	16	3	2	1	1	1	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	White	Black	1	16	1	0	1	0	0	0
			2	16	3	1	2	0	0	0
			3	16	3	1	2	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	4	2	2	0	0	0
			3	16	2	1	1	0	0	0
			WRI-MC	5	0	0	0	0	0	0

continued

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
6	White	Hispanic	WRI-WP	4	0	0	0	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	2	1	1	0	0	0
			2	16	1	1	0	0	0	0
			3	15	2	1	1	2	2	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
7	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	0	0	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	2	0	2	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	16	2	2	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	0	0	0	0	0	0
			2	16	4	2	2	0	0	0
			3	9	1	1	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
8	Male	Female	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	0	0	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	2	2	0	0	0	0

continued

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
8	White	Black	3	16	3	3	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	White	Hispanic	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	4	1	3	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	2	1	1	0	0	0
			2	15	2	1	1	1	1	0
			3	6	1	1	0	0	0	0
			WRI-MC	5	1	0	1	0	0	0
			WRI-WP	4	0	0	0	0	0	0
9	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	1	1	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	16	2	0	2	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
		Hispanic	1	16	1	0	1	0	0	0
			2	16	2	1	1	0	0	0
			3	16	1	0	1	2	0	2
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	6	2	4	1	0	1
			2	12	6	4	2	1	0	1
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
			1	16	0	0	0	0	0	0

continued

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
10	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	1	1	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	16	1	0	1	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	4	1	3	1	1	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	0	0	0	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	1	0	1	0	0	0
			2	13	6	3	3	1	0	1
			3	1	0	0	0	0	0	0
			WRI-MC	5	0	0	0	0	0	0
			WRI-WP	4	1	1	0	1	1	0

Table K-2. 2016–17 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—Mathematics

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
3	Male	Female	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	3	1	2	1	1	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	15	4	3	1	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0

continued

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
3	White	Hispanic	3	15	2	2	0	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	1	0	1	0	0	0
			2	16	1	1	0	0	0	0
			3	13	2	1	1	0	0	0
4	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	3	3	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	3	1	2	1	0	1
		Hispanic	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	16	2	1	1	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	2	0	2	0	0	0
			2	16	0	0	0	0	0	0
			3	15	2	1	1	0	0	0
5	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	1	1	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	1	1	0	1	1	0
			3	16	2	0	2	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	16	4	2	2	1	0	1
	Non-Limited English Proficient	Limited English Proficient	1	16	3	1	2	0	0	0
			2	16	0	0	0	0	0	0
			3	12	2	1	1	1	1	0
6	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	0	0	0	1	1	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	2	0	2	0	0	0
			3	16	2	1	1	0	0	0
		Hispanic	1	16	0	0	0	0	0	0

continued

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
6	White	Hispanic	2	16	2	1	1	0	0	0
			3	16	1	0	1	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	3	2	1	0	0	0
			2	16	0	0	0	0	0	0
			3	15	0	0	0	0	0	0
7	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	0	0	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	3	0	3	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	2	1	1	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	0	0	0	0	0	0
			2	16	2	0	2	1	0	1
			3	8	3	3	0	0	0	0
8	Male	Female	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	1	1	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	1	0	1	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	2	1	1	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	0	0	0	0	0	0
			2	16	3	2	1	0	0	0
			3	7	2	2	0	0	0	0

Table K-3. 2016–17 Florida Alternate Assessment: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—Science

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
5	Male	Female	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	0	0	0	1	1	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	2	1	1	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	1	0	1	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	16	1	1	0	0	0	0
8	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	2	2	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	6	3	3	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	3	0	3	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	0	0	0	0	0	0
			2	15	3	1	2	1	1	0
			3	8	1	1	0	2	2	0

Table K-4. 2016–17 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—HS Algebra 1

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
11	Male	Female	1	16	0	0	0	0	0	0
			2	16	2	1	1	0	0	0
			3	16	4	2	2	1	1	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	4	2	2	1	1	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	3	2	1	0	0	0
			3	16	2	2	0	1	0	1

Table J-5. 2016–17 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—HS Biology

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
11	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	2	1	1	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	0	0	0	1	0	1
			3	16	0	0	0	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	2	1	1	0	0	0
			3	16	1	0	1	1	1	0
	Non-Limited English Proficient	Limited English Proficient	1	16	2	1	1	0	0	0
			2	16	6	5	1	1	0	1
			3	4	1	1	0	0	0	0

Table K-6. 2016–17 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—HS Geometry

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
11	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	1	0	1
			3	14	2	1	1	0	0	0
	White	Black	1	16	2	1	1	0	0	0
			2	16	3	3	0	0	0	0
			3	14	2	0	2	0	0	0
		Hispanic	1	16	2	1	1	0	0	0
			2	16	4	3	1	0	0	0
			3	15	2	1	1	0	0	0

Table K-7. 2016–17 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—Civics

Grade	Group		Task	Number of Items	Number "Low"			Number "High"		
	Reference	Focal			Total	Favoring		Total	Favoring	
						Reference	Focal		Reference	Focal
7	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	1	1	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	4	3	1	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	2	2	0	0	0	0
			3	16	6	3	3	0	0	0
	Non-Limited English Proficient	Limited English Proficient	1	16	0	0	0	0	0	0
			2	16	1	0	1	0	0	0
			3	12	4	2	2	0	0	0

Table K-8. 2016–17 FSAA-PT: Number of Items Classified as "Low" or "High"
DIF Overall and by Group Favored—HS U.S. History

Grade	*Group*		*Task*	*Number of Items*	*Number "Low"*			*Number "High"*		
	Reference	*Focal*			*Total*	*Favoring*		*Total*	*Favoring*	
						Reference	*Focal*		*Reference*	*Focal*
11	Male	Female	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	0	0	0	0	0	0
	White	Black	1	16	0	0	0	0	0	0
			2	16	3	2	1	0	0	0
			3	16	3	2	1	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	3	1	2	0	0	0
			3	16	3	2	1	0	0	0

APPENDIX L—IRT PARAMETERS

Table L-1. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—ELA Grade 3

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
266817	1.44044	0.07369	-1.38327	0.03799
268696	0.64538	0.03592	-0.40270	0.04661
266821	0.58879	0.04582	-0.43812	0.07704
265893	1.22319	0.05399	-0.99480	0.03196
265898	0.64104	0.03690	0.38775	0.04340
265902	0.40531	0.04753	-0.37283	0.14151
266834	0.98993	0.04287	-0.79174	0.03357
266836	0.70477	0.04063	0.08719	0.04226
266838	0.58062	0.05551	-0.44659	0.10756
267318	0.50191	0.02763	0.08102	0.04778
267320	0.65217	0.04471	0.04927	0.05644
267322	0.55871	0.05640	0.96065	0.08430
262777	1.33793	0.05919	-1.01124	0.03016
262779	1.27472	0.05850	-0.25476	0.02718
262781	1.11629	0.07001	-0.03926	0.04030
266827	1.23477	0.05084	-0.72979	0.02737
266825	0.86952	0.04653	-0.01808	0.03679
266829	0.69858	0.05856	0.02811	0.06699
179293	1.20401	0.04877	-0.63601	0.02678
179304	1.18396	0.06084	-0.23304	0.03263
179308	0.50404	0.05026	-0.19644	0.10020
265947	1.72025	0.07649	-0.97938	0.02456
265949	0.64984	0.03717	0.62857	0.04528
265950	0.55506	0.05227	0.84247	0.07573
221255	1.57147	0.07366	-1.14649	0.02944
221260	0.33996	0.03007	-0.40442	0.08937
221264	0.68477	0.05182	-0.51568	0.07168
266767	0.29629	0.02475	1.44310	0.13556
266771	0.77901	0.05468	0.15112	0.05834
266773	0.33788	0.05351	1.00307	0.16328
265882	1.35931	0.05743	-0.85863	0.02718
265884	0.58938	0.03910	-0.40512	0.05983
265887	0.54593	0.04497	1.02765	0.07198
265954	0.71362	0.03223	0.13770	0.03570
265958	0.26995	0.03330	3.83956	0.38788
265959	0.37233	0.07292	1.31052	0.24248
265867	0.78062	0.03588	-0.71406	0.03927
265869	0.26409	0.03072	1.57511	0.17428
265871	0.27915	0.04517	1.04005	0.18291
265873	0.69659	0.03246	-0.39860	0.03810
265877	0.80473	0.04816	-0.40012	0.05198
265879	0.57035	0.04900	0.77358	0.06613
265962	0.78947	0.03451	-0.29014	0.03342
265964	0.57059	0.04056	0.11272	0.05803
265965	0.45701	0.04943	0.45974	0.09321
265911	1.24677	0.04951	-0.55314	0.02529
265919	0.92822	0.05071	0.04285	0.03596
265924	0.48057	0.04956	0.56222	0.07769

Table L-2. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—ELA Grade 4

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
268889	2.20616	0.10384	-1.00489	0.02048
221282	0.81203	0.04748	-0.82529	0.05599
221288	0.69971	0.04162	0.44577	0.04271
268896	0.54436	0.02775	0.23072	0.04422
257092	0.72860	0.04612	0.24287	0.05079
257096	0.57560	0.05776	1.39411	0.09077
244335	1.94982	0.10352	-1.25723	0.02802
244337	1.30044	0.06607	-0.90908	0.03613
244338	0.97833	0.06954	-1.18706	0.08067
244384	1.52248	0.06753	-0.98269	0.02662
244386	1.11827	0.06391	-0.99138	0.05033
244388	0.62824	0.04114	-0.12868	0.05368
266781	0.58650	0.02859	0.27151	0.04183
266783	0.58156	0.04250	-0.38166	0.07868
266785	0.59912	0.06026	-0.89216	0.15060
265972	1.73606	0.08694	-1.19971	0.02880
265975	0.37485	0.02821	0.89737	0.07919
265980	0.33330	0.04046	1.84561	0.18580
267335	0.78814	0.03447	-0.43862	0.03440
267337	0.64769	0.04452	-0.84720	0.08126
267338	0.46610	0.04084	0.77081	0.07287
221258	1.83792	0.09231	-1.18630	0.02725
268791	1.12241	0.05039	-0.39558	0.02923
221266	0.88370	0.05723	-0.45658	0.05713
262717	1.45990	0.06600	-1.03131	0.02850
262719	1.31824	0.06006	-0.40947	0.02753
262721	0.94909	0.05558	0.06429	0.03925
262733	1.13688	0.05118	-1.00180	0.03406
262734	0.58193	0.03362	0.49156	0.04682
262736	0.66612	0.06738	-1.00215	0.14400
267327	1.86243	0.08572	-1.01952	0.02344
267329	1.04132	0.05174	-0.55234	0.03639
267331	0.57900	0.03995	0.86829	0.05554

continued

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
265981	1.42151	0.06779	-1.15317	0.03212
265983	0.34567	0.03121	-1.34747	0.15005
265986	0.38241	0.03368	1.46106	0.11491
265967	0.98473	0.04361	-0.87251	0.03518
265969	0.59582	0.03787	-0.56028	0.06351
265971	0.35963	0.03703	0.17569	0.09426
265990	1.98157	0.08897	-0.94934	0.02133
265992	1.03986	0.05397	-0.61517	0.03951
265994	1.32906	0.09479	-0.90351	0.06245
266012	0.49643	0.02817	-0.63513	0.05641
266014	0.50120	0.03390	0.27785	0.05901
268793	0.40390	0.04398	0.71238	0.10057
266003	1.95255	0.09416	-1.09388	0.02398
266006	0.98016	0.04346	0.78100	0.03317
266009	0.36266	0.04884	1.95837	0.17185
267511	1.78936	0.08309	-1.04892	0.02470
267513	1.95340	0.08615	-0.91522	0.02110
267515	1.20989	0.04974	-0.73057	0.02743
267517	0.32003	0.02391	-0.02066	0.07045
267518	0.67035	0.03402	-0.93429	0.05089

Table L-3. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—ELA Grade 5

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
181684	1.82742	0.09889	-1.33777	0.03108
181688	0.72917	0.03763	-0.68171	0.04695
181692	0.65369	0.04312	-0.45881	0.06293
98981	1.56269	0.06909	-1.05045	0.02661
98984	0.91972	0.04809	-0.78166	0.04664
268973	0.66451	0.04654	-0.71309	0.07846
245011	1.96272	0.09487	-1.14103	0.02399
245013	1.50888	0.06711	-0.61855	0.02629
245015	0.94190	0.06238	-0.75689	0.06532
266063	2.13684	0.10550	-1.14100	0.02250
266065	1.29554	0.05663	-0.51695	0.02764
266066	0.70079	0.04171	0.93876	0.04625
268836	1.86074	0.08353	-1.03562	0.02296
257519	0.30643	0.02733	0.15621	0.07801
257521	0.87443	0.05392	-0.04031	0.04675
266051	0.60629	0.03096	-0.87955	0.05272
266053	1.30443	0.06426	-0.72636	0.03445
266055	0.61412	0.04402	-0.33438	0.07171
266843	1.57111	0.06997	-1.06403	0.02676
266845	1.35326	0.06476	-0.72920	0.03273
268838	0.63817	0.03952	0.49457	0.04352
266105	1.34451	0.05741	-0.98539	0.02864
266107	0.44567	0.03078	-0.14434	0.06168
266109	0.58198	0.04595	-0.13855	0.07089
245017	2.18205	0.10436	-1.08437	0.02110
245019	0.49290	0.03203	-0.44803	0.06259
268839	0.36239	0.03683	-0.77809	0.14189
266791	1.43360	0.06304	-1.05116	0.02852
268737	0.81082	0.03942	-0.22213	0.03658
266797	0.59493	0.04496	-0.09067	0.06723
266057	1.90634	0.09081	-1.12843	0.02427
266059	0.91234	0.04078	-0.08221	0.03024
266061	0.24831	0.03410	1.95630	0.21273
266096	1.43942	0.05629	-0.75051	0.02370
266098	0.44420	0.03177	0.45249	0.05782
266101	0.52681	0.04624	0.98095	0.07528
266085	1.11517	0.05014	-1.09006	0.03602
266087	0.44007	0.03070	-0.40674	0.06971
266089	0.36569	0.03530	1.22620	0.10650
266090	1.12807	0.04672	-0.85394	0.03038
266092	0.58503	0.03554	-0.26550	0.05348
266094	0.63812	0.04525	0.40024	0.05316
266067	1.51188	0.06308	-0.92881	0.02512
266069	0.54761	0.03338	1.25367	0.06650
266073	0.75436	0.06287	1.20688	0.06799
266076	1.55144	0.06891	-1.06105	0.02697
267267	0.87628	0.04126	-0.20809	0.03366
266082	0.33444	0.03669	-0.17299	0.11921
267581	1.74885	0.08118	-1.11345	0.02561
267616	1.08260	0.04188	-0.53114	0.02690
267623	1.10163	0.04131	-0.34838	0.02512
267627	0.64648	0.02944	-0.18547	0.03710
267631	0.69457	0.03348	-0.89933	0.04730

Table L-4. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—ELA Grade 6

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
267342	1.05810	0.04338	-0.80383	0.03131
267344	0.78071	0.04467	-0.68632	0.05657
267346	0.63152	0.04293	0.55362	0.04983
267351	1.07335	0.04119	-0.48456	0.02725
267353	0.47174	0.03598	-0.31989	0.07912
267355	0.47614	0.04480	0.60338	0.07369
267285	1.93541	0.11557	-1.48312	0.03378
267287	0.79333	0.03904	-0.76406	0.04472
267289	1.44148	0.07908	-0.61955	0.03624
267359	2.02914	0.08491	-0.85857	0.01973
267361	0.61664	0.03588	0.26871	0.04271
267363	0.50280	0.04583	1.03822	0.07630
266852	1.42293	0.06670	-1.20826	0.03196
266854	0.30624	0.02712	-0.26340	0.08939
266856	0.68296	0.04839	-0.14625	0.05778
267368	1.87860	0.08587	-1.07303	0.02329
267370	1.72197	0.08232	-0.70009	0.02704
267372	0.44659	0.03590	1.24628	0.08104
182850	1.82910	0.08663	-1.14797	0.02508
268900	0.90340	0.04078	-0.00586	0.03086
182867	0.53878	0.04552	-0.13586	0.08231
267400	0.92325	0.03810	-0.68025	0.03302
267402	0.40292	0.03148	0.22895	0.06804
267403	0.23194	0.03581	-0.12966	0.19386
263023	1.46785	0.06577	-1.10712	0.02886
263025	0.72839	0.03995	-0.67073	0.05246
263027	0.70546	0.04363	-0.10498	0.05214
267311	1.04083	0.04572	-1.03748	0.03634
267313	0.77352	0.03856	-0.05993	0.03770
267314	0.52264	0.04324	1.02087	0.06919
266135	1.14643	0.04437	-0.61293	0.02706
266137	0.55544	0.03655	-0.04600	0.05620
266139	0.39339	0.04268	1.49677	0.11902
266162	1.48754	0.06802	-1.14705	0.02942
266165	1.13877	0.04818	-0.08139	0.02666
266168	0.40741	0.04043	0.64383	0.07645
266198	0.72883	0.03119	-0.21060	0.03448
266200	0.80972	0.04636	-0.07133	0.04635
267269	0.88133	0.07242	-0.33971	0.08159
266147	1.91549	0.08617	-1.03546	0.02242
266151	0.40506	0.03166	-0.69806	0.09249
266155	0.74660	0.04552	1.00565	0.05094
266172	1.05978	0.04440	-0.88778	0.03269
266176	0.59148	0.03604	-0.39532	0.05795
266185	1.25338	0.06933	0.14673	0.03336
266141	1.68388	0.08126	-1.21195	0.02814
266143	0.77623	0.03798	-0.30419	0.03842
266145	0.60456	0.04181	0.73065	0.05297
267784	1.94598	0.08924	-1.06559	0.02258
267786	1.47884	0.06298	-0.98996	0.02656
267790	1.14571	0.04477	-0.65866	0.02755
267792	0.77810	0.03611	-0.98718	0.04501
267795	0.36204	0.02420	0.94756	0.08150

Table L-5. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—ELA Grade 7

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
183800	1.61708	0.06981	-1.09865	0.02527
183803	0.50358	0.03129	0.16847	0.05098
183808	0.47817	0.04259	0.06358	0.08289
245649	1.87631	0.09271	-1.31061	0.02592
245651	0.88667	0.04024	-0.27985	0.03324
245653	0.76211	0.04977	-0.11567	0.05312
266920	1.98521	0.08571	-1.02356	0.02102
266922	0.98940	0.05361	-0.82369	0.04756
266924	0.49990	0.04005	-0.45818	0.08581
263097	1.83008	0.08405	-1.18770	0.02425
263099	1.30008	0.05581	-0.34448	0.02611
263101	0.87543	0.06009	-0.42532	0.06128
183790	0.95702	0.04008	-0.91900	0.03478
183792	1.41336	0.07919	-1.03534	0.04284
183796	0.77275	0.05096	-0.62221	0.06565
268825	1.33160	0.06202	-1.31342	0.03387
263093	0.67195	0.03420	0.87350	0.04692
263095	0.65496	0.05801	0.52072	0.06816
263103	1.67353	0.06944	-0.99017	0.02336
268814	0.71438	0.03994	-0.50509	0.05031
263107	0.62429	0.04279	0.38733	0.05168
267393	1.33509	0.06594	-1.43542	0.03731
267395	1.07995	0.04773	-0.62026	0.03291
267397	0.50927	0.03707	0.94268	0.06381
257775	1.63389	0.07802	-1.30490	0.02868
257777	1.12802	0.04808	-0.28549	0.02788
257779	0.57284	0.04310	0.10863	0.06150
266290	1.02608	0.04478	-1.12382	0.03677
266292	0.39661	0.02865	0.51030	0.06643
266294	0.86415	0.06690	-0.56639	0.07404
266296	1.89860	0.08263	-1.06087	0.02204
266298	1.01228	0.05016	-0.56041	0.03754
266300	0.32716	0.03805	-1.22543	0.21057
266313	0.83073	0.03349	-0.36517	0.03198
266315	0.38012	0.03312	-0.04989	0.08648
267265	0.42354	0.04344	0.66900	0.09229
266308	1.28795	0.05753	-1.22149	0.03256
266310	0.70681	0.03514	0.14667	0.03791
266312	0.87583	0.06135	-0.16809	0.05742
266325	1.51184	0.06667	-1.16444	0.02764
266327	0.44534	0.03048	-0.37692	0.06715
266329	0.73853	0.04888	-0.02873	0.05165
266302	2.13063	0.10424	-1.23716	0.02236
266304	1.37703	0.05525	-0.01245	0.02251
266306	1.13620	0.08562	-0.48364	0.06544
266319	0.79451	0.03328	-0.58406	0.03520
266321	0.54013	0.03685	-0.44784	0.07074
267266	0.34921	0.03923	1.98192	0.16983
267721	1.87414	0.09022	-1.26562	0.02508
267723	1.61369	0.07006	-1.11227	0.02550
267727	0.35698	0.02367	1.07240	0.08936
267729	0.68527	0.02996	-0.36932	0.03737
267737	0.84875	0.03461	-0.56250	0.03312

Table L-6. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—ELA Grade 8

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
257838	1.72523	0.09407	-1.40298	0.03375
268845	0.61299	0.03146	0.18135	0.04072
268882	0.50307	0.04192	-0.36529	0.09334
266911	2.00619	0.09046	-1.02412	0.02154
266913	0.86125	0.04503	-0.52206	0.04142
266915	0.78085	0.04913	-0.15709	0.04981
268847	1.99446	0.08786	-0.97833	0.02104
257820	0.81478	0.05466	-1.25486	0.08150
257822	0.44699	0.03516	-0.18328	0.07284
267376	1.32232	0.05406	-0.82313	0.02629
267378	1.45328	0.07466	-0.70613	0.03437
267380	0.56222	0.04489	-0.50861	0.08756
263162	1.59327	0.07045	-1.04095	0.02592
263164	0.46593	0.03116	-0.11098	0.05813
263166	0.70588	0.04677	0.16486	0.05286
266894	1.25484	0.06231	-1.32154	0.03924
266896	1.99097	0.10238	-0.98073	0.02711
266898	0.68012	0.03789	0.58549	0.04170
266928	1.55720	0.06491	-0.89683	0.02413
266930	0.67230	0.03993	-0.52389	0.05472
266932	0.40619	0.03661	1.21209	0.09278
266351	1.58393	0.07675	-1.22982	0.03023
266353	1.41625	0.06074	-0.41895	0.02460
266355	0.81362	0.04657	0.98858	0.04340
263148	1.24947	0.06291	-1.35120	0.04046
263150	1.23186	0.05061	-0.13175	0.02466
268851	0.44632	0.03929	1.00893	0.07568

continued

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
266876	1.72985	0.08114	-1.14512	0.02628
266878	0.95788	0.04920	-0.72544	0.04168
266880	0.56207	0.03880	0.00425	0.05687
263167	0.83074	0.03524	-0.49764	0.03310
263169	0.86183	0.04975	-0.55776	0.05134
268734	0.93255	0.05945	-0.02223	0.04792
267227	1.81109	0.07451	-0.83966	0.02099
267229	0.67412	0.03942	-0.25716	0.04737
267231	0.66682	0.04513	0.52306	0.05069
266356	1.03467	0.04688	-1.06211	0.03716
266358	0.41175	0.02927	0.73717	0.06850
266359	0.80419	0.05741	0.83040	0.05541
266339	0.56297	0.02753	0.26951	0.04317

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
266341	0.47789	0.03734	0.89766	0.07693
266343	0.66297	0.06386	0.95659	0.08369
268497	1.59776	0.07372	-1.13215	0.02766
268499	0.81949	0.04203	-0.52451	0.04176
268849	0.61955	0.04320	-0.17595	0.06148
266345	1.58533	0.06264	-0.72883	0.02199
266347	1.05996	0.05846	-0.62205	0.04376
266349	0.47090	0.04045	-0.08254	0.08023
267907	2.11127	0.09952	-1.08982	0.02169
267909	1.15652	0.05660	-1.29308	0.04073
267911	0.57741	0.02809	-0.08477	0.04113
267913	0.69093	0.03468	-1.04695	0.05173
267915	0.42975	0.02505	0.25752	0.05447

Table L-7. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—ELA Grade 9

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
268689	1.86449	0.08992	-1.22613	0.02559
268691	1.01202	0.04481	-0.29900	0.03075
268693	0.36911	0.03591	-0.05529	0.09907
266860	1.77111	0.08298	-1.19457	0.02602
266862	0.74020	0.04084	-0.85531	0.05683
266864	1.21014	0.07558	-0.84817	0.05394
246785	0.75781	0.03307	-0.69479	0.03907
246789	0.74219	0.03906	-0.08050	0.04436
246791	0.34366	0.03853	1.23866	0.11038
266410	1.79961	0.08026	-1.09311	0.02409
266412	0.27204	0.02601	0.44311	0.08901
266414	0.29873	0.03802	-0.49143	0.16469
263363	1.43590	0.06885	-1.30617	0.03336
263365	0.71214	0.03545	-0.29432	0.04111
263367	0.84289	0.05227	-0.17464	0.04997
266416	1.95337	0.09207	-1.16661	0.02371
266418	1.45109	0.07294	-0.88211	0.03429
266420	0.51157	0.03524	0.23311	0.05370
267294	2.25042	0.10838	-1.14042	0.02104
267296	0.62111	0.03276	0.35565	0.04113
267298	1.17136	0.07291	0.00733	0.04152
266382	0.94150	0.04204	-1.09879	0.04046
456665	0.59305	0.03287	-0.01024	0.04694
456686	0.43766	0.04006	1.50943	0.10291
263351	1.27744	0.05321	-0.98672	0.02949
263353	0.62415	0.03767	-0.71616	0.06519
263355	0.85956	0.05610	-0.49096	0.05944
183973	1.38320	0.06293	-1.20644	0.03182
183982	0.85967	0.03966	-0.12466	0.03356

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
183994	0.56597	0.04195	0.43313	0.05842
266405	0.54497	0.02886	-0.98500	0.06069
266406	0.38313	0.03411	-1.91576	0.18903
266408	0.22340	0.02860	2.25220	0.25587
266399	1.83308	0.07853	-0.99949	0.02262
266401	0.40377	0.02947	0.22578	0.06194
266403	0.34326	0.03740	0.40406	0.10100
267303	1.61587	0.07568	-1.22591	0.02857
267305	0.62137	0.03414	-0.41713	0.04979
267307	0.94034	0.05435	-0.14046	0.04341
266376	1.90377	0.08664	-1.11187	0.02336
266378	0.66768	0.03576	-0.25220	0.04419
266380	0.66083	0.04331	0.55752	0.04923
266387	1.58817	0.06361	-0.86171	0.02357
266389	0.49288	0.03277	1.38903	0.07764
266391	0.49067	0.05499	0.74835	0.09289
266393	0.60248	0.02869	-0.55476	0.04489
266395	0.44886	0.03290	1.04708	0.07638
266397	0.32083	0.04314	0.60817	0.14163
268227	2.24740	0.10428	-1.07430	0.02032
268229	1.88574	0.08204	-1.02329	0.02243
268231	0.52819	0.02845	-0.99058	0.06260
268233	0.34024	0.02287	0.05169	0.06571
268234	0.54387	0.02652	-0.02703	0.04328

Table L-8. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—ELA Grade 10

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
246983	0.82791	0.03287	-0.65290	0.03364
246987	1.15386	0.06023	-0.78880	0.04366
246992	0.42897	0.03515	0.98964	0.07267
266868	1.67199	0.08014	-1.35432	0.02874
266870	1.12378	0.06783	-1.52986	0.06449
266872	0.96020	0.04582	-0.58042	0.03880
267385	1.33727	0.05522	-1.10792	0.02857
267387	0.31691	0.02631	1.67663	0.12806
267389	0.42502	0.04542	-0.21831	0.12273
267199	1.76754	0.07744	-1.17010	0.02392
267201	0.72812	0.04149	-1.10713	0.06660
267203	0.98227	0.04880	-0.23598	0.03611
257967	0.75551	0.03357	-1.08066	0.04512
257970	0.88074	0.03979	-0.36213	0.03752
257969	0.94554	0.06048	-0.28547	0.05329
266456	1.37296	0.04986	-0.69311	0.02315
266458	0.38972	0.02952	0.59767	0.06578
266460	0.45812	0.04274	1.33025	0.09570
266884	1.41019	0.05252	-0.79846	0.02356
266886	0.70495	0.04276	-0.91100	0.07040
266888	0.59351	0.04253	-0.52294	0.07979
257956	1.67438	0.06880	-1.05201	0.02326
257960	0.88608	0.04276	-0.56913	0.04053
257958	0.63041	0.03928	0.47013	0.04599
257972	2.31517	0.10390	-1.09826	0.01889
257974	0.49638	0.02898	0.49353	0.04918
257976	0.56562	0.04449	0.01596	0.07334
266902	1.40831	0.06668	-1.39265	0.03390
266904	0.94857	0.03936	-0.28931	0.03037
266906	0.61462	0.04335	-0.34408	0.07169
266474	0.93471	0.03796	-0.94518	0.03483
266476	0.72258	0.04185	-1.01286	0.06745
268812	0.62336	0.03893	-0.06280	0.05473
266450	0.92693	0.03799	-0.97440	0.03564
266452	0.50911	0.02959	0.56982	0.05120
266454	0.28715	0.03722	1.63534	0.16533
266439	1.66215	0.07828	-1.32593	0.02817
266441	0.87366	0.03784	-0.33382	0.03288
266443	0.41071	0.03409	0.20335	0.07452
266462	1.97137	0.08768	-1.15574	0.02185
266464	0.30990	0.02574	-0.26576	0.08523
266466	0.47827	0.03762	0.50055	0.06564
266480	1.71610	0.06925	-1.00096	0.02227
266482	0.58911	0.03300	-0.23315	0.04875
266484	0.54056	0.04025	0.00887	0.06759
267164	1.45005	0.06143	-1.15773	0.02765
267166	0.74348	0.03877	-0.80154	0.05260
267168	0.76818	0.04104	0.45459	0.03832
268317	1.92832	0.09206	-1.28965	0.02441
268319	1.38949	0.06412	-1.34678	0.03293
268325	1.05605	0.04045	-0.80219	0.02939
268328	1.21832	0.04384	-0.59867	0.02447
268331	0.81038	0.03164	-0.46707	0.03211

Table L-9. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Mathematics Grade 3

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
179089	1.33568	0.05883	-0.97706	0.02954
179095	1.54782	0.07623	-0.62199	0.02907
179099	1.03844	0.05455	0.27754	0.03178
261859	0.93163	0.04124	-0.85660	0.03660
261861	0.76903	0.04315	-0.47015	0.04905
261863	0.59592	0.04212	0.34896	0.05716
267245	1.74031	0.08759	-1.22484	0.02943
267247	0.89258	0.03957	0.14514	0.03067
267249	0.19745	0.03176	2.63558	0.33851
179019	1.91304	0.08704	-0.97847	0.02258
179043	1.47835	0.07066	-0.53098	0.02789
179045	0.33831	0.03315	1.48884	0.11620
256353	1.12990	0.04908	-0.90671	0.03223
256355	1.25976	0.05851	-0.33531	0.02952
256357	0.64997	0.04395	0.74344	0.04971
268827	1.26875	0.05142	-0.69547	0.02626
179140	1.07385	0.05425	-0.30396	0.03585
179141	0.87319	0.06196	-0.22388	0.06061
245946	1.40588	0.06111	-0.93883	0.02769
245948	0.32035	0.03032	2.73127	0.22118
245950	0.73831	0.07117	0.14120	0.08580
261865	1.29651	0.05389	-0.79461	0.02711
261867	1.58431	0.08497	-0.68131	0.03299

continued

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
261869	0.98019	0.08398	-1.14540	0.10768
268831	1.60853	0.07390	-1.05691	0.02713
256331	0.97695	0.04369	0.07793	0.02948
256333	0.84292	0.05334	0.53074	0.04398
266579	1.07653	0.05022	-1.11954	0.03872
266581	1.26045	0.05654	-0.38051	0.02840
266583	0.67600	0.04328	0.78418	0.04764
265024	2.00739	0.10437	-1.22664	0.02664
265026	0.41244	0.02812	1.36800	0.08925
265028	0.50609	0.04530	0.38594	0.08877
265041	1.87557	0.08959	-1.09109	0.02487
265043	0.35878	0.02747	0.81704	0.07733
265045	0.60113	0.04691	0.55025	0.06626

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
261837	0.70189	0.03560	-1.10821	0.05439
261839	0.77850	0.03807	0.22410	0.03717
261841	0.39882	0.04020	0.69851	0.09149
265035	0.66325	0.02972	0.06779	0.03701
265037	0.66821	0.04209	0.43087	0.05194
265039	0.38923	0.04706	1.03454	0.11369
261871	1.48602	0.06311	-0.86855	0.02543
261873	1.44623	0.08016	-0.81005	0.03805
261875	1.58778	0.09372	-0.52594	0.03696
265030	1.48926	0.06455	-0.92589	0.02628
265032	0.81916	0.04835	-0.85966	0.05970
265034	0.42794	0.03417	0.54776	0.06735

Table L-10. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Mathematics Grade 4

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
256383	0.59788	0.03228	-0.96493	0.05800
256385	0.66718	0.03808	-0.06512	0.04491
256387	0.73024	0.05224	0.34712	0.05362
261883	1.89044	0.09224	-1.14692	0.02666
261885	0.78661	0.03835	0.12734	0.03350
261886	0.49472	0.04253	0.47259	0.06953
261905	1.00578	0.04345	-0.75986	0.03296
261907	0.56609	0.03747	-0.31440	0.05989
261909	0.51686	0.04944	-0.82687	0.13067
256372	1.66739	0.08574	-1.29762	0.03340
268415	0.48886	0.03249	-0.54701	0.06509
268417	0.59718	0.03882	0.69771	0.05539
256365	1.58268	0.07794	-1.22772	0.03250
256367	0.73912	0.03639	0.26595	0.03546
268895	0.52409	0.04313	0.95634	0.07183
256377	0.84105	0.03670	-0.50232	0.03360
256379	0.23099	0.02849	0.51143	0.11991
256381	0.33814	0.04247	1.74050	0.18107
223540	1.44272	0.06035	-0.82000	0.02575
223545	0.59508	0.03894	-0.45626	0.06097
223547	0.41184	0.03904	1.11995	0.09133
268891	1.46772	0.06655	-1.05271	0.02974
223564	1.22033	0.05872	-0.54515	0.03200
223567	0.80309	0.04736	0.38263	0.03857
151617	1.85515	0.09001	-1.14291	0.02693
151619	0.89801	0.04399	-0.33186	0.03467

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
151622	0.67243	0.04735	-0.13597	0.05863
245486	1.50105	0.06940	-1.09802	0.03029
245488	0.91891	0.04338	-0.04085	0.03096
245489	0.35557	0.03862	1.94861	0.15913
265051	2.04029	0.11091	-1.31021	0.02944
265053	1.44044	0.07858	-1.03962	0.03856
265055	0.63261	0.03681	0.34216	0.04214
265068	1.38970	0.05630	-0.69648	0.02475
265070	0.61827	0.03907	-0.16121	0.05178
265072	0.54674	0.04525	1.17854	0.07468
261893	2.06130	0.10332	-1.16139	0.02540
261895	0.33590	0.02884	1.81096	0.14361
261897	0.30223	0.04438	2.73033	0.33026
245490	1.68368	0.07215	-0.88333	0.02387
268795	0.28759	0.02880	0.13306	0.08855
245494	0.54205	0.04447	1.32173	0.08899
265057	1.46843	0.06627	-1.04051	0.02946
265059	0.80733	0.04014	0.06396	0.03403
265061	0.54700	0.04444	0.42409	0.06429
256392	1.34910	0.05608	-0.78669	0.02657
256394	0.69461	0.03864	0.34970	0.03979
256396	0.63834	0.05148	1.02733	0.06424

Table L-11. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Mathematics Grade 5

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
256498	0.58130	0.03129	-1.10767	0.06130
256500	0.26816	0.02726	-1.25940	0.17355
256502	0.52030	0.03545	0.77544	0.06803
262530	0.99095	0.04069	-0.63207	0.02958
262533	0.36185	0.02878	1.06121	0.08781
262535	0.62117	0.05092	0.30677	0.07578
262565	1.41061	0.06528	-1.20298	0.03238
262567	0.92846	0.04333	-0.33494	0.03231
262569	0.66038	0.04211	0.32417	0.04807
256466	1.76307	0.07123	-0.81398	0.02095
256468	0.47599	0.03058	0.94513	0.06356
256470	0.92812	0.06539	0.20631	0.05322
262542	1.57075	0.07516	-1.25981	0.03141
262544	1.02610	0.04776	-0.52257	0.03222
262546	0.55864	0.03585	1.14643	0.06325
268965	1.01176	0.04611	-1.09762	0.03857
256473	0.88479	0.04280	-0.30760	0.03501
256474	0.31658	0.03319	2.23821	0.18382
262553	1.74785	0.07434	-0.96497	0.02305
262555	0.34497	0.02706	0.60148	0.07366
262557	0.16471	0.02820	-0.19708	0.24811
256480	1.12281	0.04948	-1.03551	0.03394
268418	0.63797	0.03553	-0.32449	0.04740
256484	0.54178	0.03826	0.85068	0.06247
256504	1.21919	0.05016	-0.82724	0.02777
256506	0.51922	0.03177	1.42054	0.07529
256508	0.75024	0.08644	-0.83125	0.15101
266564	1.29502	0.06126	-1.26057	0.03625
266566	1.05666	0.04938	-0.57013	0.03281
266568	0.61591	0.04031	-0.06216	0.05459
265243	0.70785	0.03064	-0.05917	0.03384
265245	0.55521	0.03851	-0.32867	0.07242
265247	0.95260	0.06640	-0.13349	0.06023
265194	1.33428	0.06015	-1.13883	0.03205
265196	1.03085	0.04444	0.13312	0.02711
265198	0.30193	0.03475	2.09713	0.17945
265233	1.39413	0.06969	-1.37725	0.03814
265235	0.67029	0.03388	-0.22795	0.03963
265236	0.35638	0.03481	-0.90637	0.15154
256492	1.48974	0.06259	-0.94592	0.02562
256494	0.82149	0.04074	-0.07079	0.03441
256496	0.49689	0.03838	0.77963	0.06663
256475	0.90530	0.03728	-0.48961	0.03003
256477	0.88570	0.04476	0.24399	0.03538
256478	0.41859	0.04124	1.35080	0.09800
246011	1.67115	0.07953	-1.23273	0.02930
246013	0.68260	0.03283	0.71436	0.04243
246015	0.22138	0.03231	1.96322	0.23354

Table L-12. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Mathematics Grade 6

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
256526	0.81172	0.03729	-0.93689	0.04345
256528	0.57252	0.03322	0.06898	0.04917
256530	0.31454	0.03730	-0.47702	0.16953
267260	1.25903	0.05190	-0.82463	0.02851
455105	0.79852	0.04109	-0.02837	0.03777
267263	0.53643	0.04420	0.10811	0.07547
262594	1.43325	0.06349	-1.04358	0.02952
262596	1.52618	0.07377	-0.64042	0.02955
262598	0.92136	0.05406	-0.22984	0.04447
262577	0.73306	0.03308	-0.64746	0.04042
262579	1.30917	0.06579	-0.46561	0.03393
262581	0.63932	0.05466	-0.70735	0.10937
262611	1.86738	0.08765	-1.09512	0.02511
262613	1.74556	0.08778	-0.76967	0.02881
262615	0.92630	0.05247	-0.27428	0.04200
256538	0.59770	0.02800	0.04154	0.03980
256540	1.08065	0.06752	-0.71343	0.05460
256542	0.87980	0.05969	0.00058	0.05496
262571	1.39150	0.05556	-0.72794	0.02516
262573	0.60950	0.03536	1.02239	0.05252
262575	0.46629	0.04835	1.24814	0.09688
265371	1.36907	0.06597	-1.24865	0.03578
265373	0.43698	0.02848	0.15484	0.05620
265374	0.88372	0.05205	0.45765	0.04286
265387	1.02375	0.04130	-0.59170	0.02991
265389	1.09842	0.05654	-0.36712	0.03781
265391	0.52564	0.04148	1.16759	0.06746
265375	1.75332	0.07366	-0.86494	0.02277
265377	1.00775	0.04836	-0.18083	0.03234
265379	0.30396	0.03472	0.98277	0.10322
265361	1.06591	0.04360	-0.70535	0.03052
265363	0.49210	0.03326	-0.05982	0.06147
265365	0.65492	0.04553	0.53291	0.05664

continued

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
265381	1.87718	0.09335	-1.20157	0.02723
265383	0.68769	0.04061	-0.95476	0.06588
265385	0.63514	0.04666	-0.78815	0.08494
265403	1.47095	0.06155	-0.88592	0.02620
265405	0.47922	0.03138	0.31620	0.05351
265407	0.66408	0.04769	0.54192	0.05663
265392	1.24294	0.05343	-0.96064	0.03120
265394	1.13354	0.05468	-0.48800	0.03465

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
265396	0.65572	0.04167	0.97500	0.05008
265366	1.11220	0.04425	-0.60698	0.02823
265368	0.66499	0.03878	-0.10442	0.04948
265370	0.53038	0.04288	0.51642	0.06731
265397	0.89804	0.03951	-0.86574	0.03826
265399	0.93870	0.04519	-0.15341	0.03505
265401	0.98676	0.06667	-0.29951	0.05838

Table L-13. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Mathematics Grade 7

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
262858	0.58119	0.02895	-0.47588	0.04407
262860	0.78171	0.04466	-0.38998	0.04940
262862	0.61526	0.05163	-0.24330	0.08382
266629	1.77516	0.09281	-1.41504	0.03208
266631	1.01118	0.04873	-0.76092	0.03658
266632	0.82741	0.04696	-0.26042	0.04345
180162	1.03914	0.04444	-0.89642	0.03268
268453	0.83172	0.04712	-0.74185	0.05216
180168	0.84967	0.04918	0.31821	0.03961
257325	0.66394	0.03350	-1.05278	0.05229
257327	0.58566	0.03374	0.33794	0.04796
257329	0.46653	0.04361	1.01883	0.08924
244055	1.79828	0.10482	-1.59760	0.03831
244057	0.48549	0.02948	1.40387	0.08374
244059	0.77431	0.06275	-0.30960	0.08020
257342	1.00512	0.04235	-0.79832	0.03182
257344	0.91525	0.04621	-0.14995	0.03571
257346	0.36451	0.04007	1.65196	0.13539
266622	1.63376	0.08177	-1.36111	0.03236
266624	0.87143	0.04504	-0.82473	0.04453
268745	0.94834	0.05049	-0.22488	0.03812
265676	1.37158	0.06256	-1.18538	0.03184
265678	0.47764	0.03164	-0.36984	0.06129
265680	0.42109	0.03643	0.87177	0.08309
245396	1.71135	0.08268	-1.27285	0.02899
245403	0.78613	0.03696	0.17498	0.03366

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
245405	0.45223	0.04060	0.99083	0.08250
262864	0.81710	0.03583	-0.69197	0.03584
268960	0.53031	0.03608	-0.40221	0.06645
262868	0.87580	0.05943	-0.26040	0.05701
265654	1.25862	0.05794	-1.21151	0.03468
265656	0.58708	0.03265	0.74134	0.05088
265658	0.60332	0.04978	0.44756	0.07093
257321	1.26770	0.05247	-0.87375	0.02759
257323	0.47265	0.03207	0.61240	0.05914
268962	0.46461	0.04853	-0.03832	0.10310
265688	2.02392	0.10440	-1.33441	0.02715
265690	0.43067	0.02963	-0.42417	0.06522
265692	0.35565	0.03450	-0.14699	0.09752
265666	1.06420	0.04424	-0.79112	0.03029
265668	0.82622	0.04633	-0.54025	0.04792
265670	0.21884	0.03316	2.68264	0.33930
265660	0.89999	0.03794	-0.63926	0.03231
265662	0.62172	0.03702	0.58830	0.04860
265664	0.46114	0.05037	-0.28042	0.13412
257351	1.14424	0.05671	-1.40391	0.04351
257353	0.34832	0.02754	-0.27979	0.07622
257355	0.32693	0.03591	2.63764	0.24626

Table L-14. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Mathematics Grade 8

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
265736	1.46281	0.06297	-0.93441	0.02740
265738	1.36318	0.07342	-0.80981	0.03872
267273	1.03672	0.06507	-0.60572	0.05293
262890	0.51827	0.02934	-0.78692	0.05943
268860	0.74307	0.04099	-0.07761	0.04261
262894	0.77996	0.05732	-0.21785	0.06785
179076	1.80078	0.09935	-1.39163	0.03474
179079	0.25048	0.02692	-1.28302	0.17763
179081	0.37370	0.03262	0.80902	0.08805
257357	0.76666	0.03464	-0.55343	0.03712
257359	1.09237	0.06417	-0.93658	0.05440
257360	0.99122	0.06289	-0.39276	0.05199
267252	1.43603	0.07461	-1.36725	0.03970
267254	0.65388	0.03831	-0.85270	0.06093
267256	0.53632	0.03576	0.67617	0.05572
262914	0.73315	0.03396	-0.59556	0.03936
262916	1.22976	0.06197	-0.38333	0.03366
262918	0.71612	0.05143	0.19196	0.05420
266571	1.31871	0.06206	-1.16729	0.03534
266573	0.57750	0.04304	-1.49521	0.11595
266575	0.89013	0.05089	-0.56331	0.04852
267236	2.44030	0.14507	-1.35633	0.02711
267238	1.02470	0.05259	-0.91792	0.04300
267240	0.68641	0.04037	-0.08227	0.04421
268854	0.99692	0.04283	-0.75796	0.03317
262928	0.66701	0.04384	-0.79780	0.07163
262930	0.65597	0.04483	0.08149	0.05379
265718	1.53441	0.06670	-0.96040	0.02690
265720	0.81397	0.04186	-0.17922	0.03706
265722	0.90778	0.05831	-0.09812	0.04804
262902	1.28527	0.06465	-1.32184	0.04120
262904	1.36985	0.06311	-0.63386	0.02871
262906	0.93823	0.06044	-0.64271	0.05802
265730	1.89117	0.08820	-1.07850	0.02511
265732	1.39574	0.06731	-0.61921	0.02991
267271	0.90506	0.05203	-0.12609	0.04023
265708	2.04405	0.09562	-1.05713	0.02336
455154	0.78974	0.04374	-0.62687	0.04824
455178	0.90959	0.06184	-0.70597	0.06463
265742	0.68724	0.03456	-0.92860	0.05044
265744	0.78514	0.04187	-0.30155	0.04261
265746	0.38564	0.03862	0.63518	0.08483
265724	2.15727	0.10703	-1.14365	0.02405
265726	0.82847	0.04166	-0.35627	0.03713
265728	0.18879	0.03051	2.49491	0.34666
265712	2.03206	0.10306	-1.20564	0.02650
265714	0.54540	0.03181	0.26306	0.04501
265716	0.63948	0.04786	0.13997	0.05966

Table L-15. FSAA-PT: IRT Parameters for Dichotomous Items—Science Grade 5

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
243643	1.25062	0.04641	-0.61379	0.02478
243651	0.70915	0.03862	0.17207	0.04166
243654	0.46739	0.04463	0.13318	0.09458
220693	1.35610	0.06973	-1.40789	0.03815
268967	1.68039	0.07039	-0.63690	0.02328
220702	1.08253	0.07157	-0.92518	0.06775
262240	1.58996	0.06065	-0.73718	0.02164
262241	1.09035	0.05757	-0.66093	0.04413
268858	0.63917	0.04152	0.59632	0.04636
268841	1.33501	0.06542	-1.32651	0.03564
268969	1.54044	0.06722	-0.71389	0.02649
268128	1.55940	0.07892	-0.34619	0.03006
262252	2.47499	0.11854	-1.05713	0.01789
262256	2.14242	0.14659	-1.17939	0.03709
262257	1.02465	0.04776	-0.14702	0.03109
243705	2.52486	0.12753	-1.13298	0.01846
243708	0.88789	0.04315	-0.63900	0.04119
243712	0.95250	0.04758	0.61327	0.03292
256232	1.23037	0.04752	-0.76244	0.02640
256234	1.28609	0.06094	-0.49053	0.03371
256236	0.60785	0.04241	0.63812	0.04955
268971	1.46886	0.06315	-1.04701	0.02646
220632	1.70601	0.08190	-0.77854	0.02854
268843	0.74132	0.04256	0.14000	0.04151
220671	1.39341	0.06392	-1.19043	0.03061
220676	1.14181	0.05595	-0.89187	0.03967
220687	1.09660	0.05869	-0.51587	0.04264
256179	1.30289	0.05299	-0.92709	0.02720
256182	0.40099	0.02876	0.49549	0.06301
256184	1.28157	0.08296	-0.19119	0.04398
220769	2.10609	0.10665	-1.21158	0.02254
220771	2.36185	0.12289	-0.89979	0.02200
220776	0.85757	0.04306	0.05423	0.03442

continued

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
243737	1.57466	0.07467	-1.21667	0.02838
243742	2.64112	0.13760	-0.84696	0.02026
243745	1.34569	0.06451	-0.22114	0.02836
256037	2.23723	0.09841	-0.95038	0.01830
256039	1.23234	0.05550	-0.39619	0.02969
256041	0.41939	0.03701	1.70571	0.10784
262258	0.96767	0.03878	-0.75224	0.03189
262259	1.38823	0.06991	-0.72754	0.03652

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
262262	1.18824	0.06483	-0.07451	0.03571
243754	2.13939	0.10687	-1.18446	0.02176
243759	1.82332	0.08019	-0.63866	0.02268
243761	1.14295	0.05668	0.00337	0.03052
256043	1.62855	0.08231	-1.31129	0.03018
256045	0.18533	0.02233	0.83693	0.14016
256047	1.17696	0.06615	-0.11270	0.04011

Table L-16. FSAA-PT: IRT Parameters for Dichotomous Items—Science Grade 8

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
222907	2.27938	0.13173	-1.35790	0.02629
222909	0.85687	0.04320	-0.79485	0.04433
222911	0.33070	0.03150	0.67919	0.08492
245073	1.27166	0.05295	-0.90000	0.02869
245075	0.64624	0.03975	-0.67033	0.06321
245077	0.51517	0.03963	0.63045	0.06027
256698	1.17493	0.04527	-0.52492	0.02576
256702	0.59651	0.04153	-0.60930	0.07611
268976	1.43488	0.09923	-0.51171	0.05006
222934	1.17535	0.05297	-1.10553	0.03499
222940	0.91176	0.04187	0.16148	0.03082
222947	0.46065	0.04364	1.13968	0.08327
268870	1.64953	0.06505	-0.75113	0.02195
262650	2.14630	0.14143	-0.99262	0.03848
268872	0.51013	0.03741	1.18730	0.07083
245078	2.34052	0.14214	-1.40843	0.02741
245080	1.17030	0.05129	-0.63659	0.03004
245082	0.71996	0.04363	-0.11423	0.04684
268874	0.70893	0.03414	-0.88066	0.04637
262656	1.31270	0.06714	-0.79051	0.03744
268978	0.85099	0.05171	-0.00027	0.04343
256716	0.81783	0.03598	-0.69562	0.03700
256720	1.33177	0.07281	-0.81186	0.04150
256722	0.49846	0.04202	-0.29789	0.08602
245056	1.95535	0.10423	-1.31326	0.02804
245058	0.82637	0.03808	-0.12059	0.03283

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
245060	0.39139	0.03863	-0.10490	0.09873
262672	0.57920	0.02874	-0.28253	0.04252
262674	0.91752	0.04858	0.15771	0.03806
262676	0.43971	0.04936	1.68776	0.12278
265084	1.82340	0.10057	-1.39026	0.03208
265086	1.64146	0.07956	-0.93292	0.02914
265088	0.56367	0.03560	0.39737	0.04683
256736	1.90320	0.10029	-1.30730	0.02844
256738	0.31816	0.02666	0.26400	0.07406
256740	0.27404	0.03539	0.21579	0.12353
256756	2.18163	0.10711	-1.14568	0.02222
268878	0.77217	0.03821	-0.10753	0.03560
256763	0.23303	0.03241	1.14309	0.15162
262660	2.09289	0.09977	-1.11422	0.02240
262662	1.03296	0.04963	-0.52638	0.03487
262664	0.53699	0.03896	0.61288	0.05468
222968	1.65277	0.07661	-1.14244	0.02739
222972	0.91285	0.04658	-0.66883	0.04255
222977	0.45572	0.03778	-0.29909	0.08397
265090	1.18868	0.05422	-1.13848	0.03552
265092	0.93670	0.04628	-0.57946	0.03969
265094	0.52777	0.03903	0.46562	0.05628

Table L-17. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Algebra 1

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
265831	1.18114	0.04717	-1.03971	0.03115
265834	0.36161	0.02576	0.98733	0.07532
265837	0.44029	0.03892	0.71438	0.08230
266654	1.27514	0.04863	-0.90432	0.02695
266656	0.63517	0.03679	-0.74845	0.06294
266658	0.58670	0.04107	-0.42781	0.07235
265880	0.95657	0.04137	-1.21875	0.04172
265885	0.30874	0.02414	0.25075	0.07206
265890	0.41710	0.03551	0.29434	0.07785
263287	1.22130	0.04471	-0.72830	0.02531
263289	0.53610	0.03075	0.79472	0.04927
263291	0.60161	0.04671	0.30164	0.06988
266660	1.67395	0.06744	-1.03823	0.02391
266662	0.73553	0.03407	0.06709	0.03327
266664	0.50081	0.03704	0.77003	0.06088
265926	1.25347	0.04868	-0.96203	0.02828
265928	0.92327	0.04081	-0.18189	0.03107
265931	0.36238	0.03397	0.48244	0.07922
265857	0.66541	0.03295	-1.40972	0.06356
265859	1.13177	0.04418	-0.04948	0.02491
265860	0.59201	0.04038	0.70959	0.05167
257723	1.03598	0.03803	-0.59564	0.02700
257725	0.89325	0.04315	-0.17193	0.03620
257726	0.59362	0.04779	-0.44381	0.09432
265906	1.20310	0.04463	-0.77887	0.02627
265910	0.72359	0.03813	-0.44184	0.04753
265913	0.55839	0.03742	1.31165	0.06450
265839	1.21748	0.04812	-1.01233	0.02987
265841	0.30429	0.02539	1.71261	0.12890
265843	0.46598	0.04495	0.86599	0.08827
265934	1.41143	0.06581	-1.40724	0.03628
265936	1.05331	0.04121	-0.23631	0.02585
265938	0.64772	0.04087	0.06690	0.05061
455313	1.53939	0.05662	-0.79028	0.02202
263283	0.66774	0.03720	-0.44084	0.05102
263285	0.53346	0.03727	0.16444	0.05935
265895	1.59381	0.07005	-1.24795	0.02893
265900	0.66825	0.03094	0.09482	0.03492
265904	0.30918	0.03169	1.14822	0.10607
257693	1.06100	0.04419	-1.14104	0.03635
257696	0.78387	0.03571	-0.25990	0.03595
257697	0.51964	0.03629	0.50852	0.05560
266700	1.32507	0.04896	-0.79679	0.02465
266702	0.75831	0.03810	-0.25486	0.04036
266703	0.74879	0.05202	-0.41971	0.06883
266683	0.81354	0.03892	-1.46193	0.05662
266685	0.89929	0.03649	0.02451	0.02848
266686	1.08533	0.06239	-0.12641	0.04268

Table L-18. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Biology

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
245928	2.50996	0.11335	-1.30914	0.01759
246478	0.69159	0.02781	0.24328	0.03089
245932	0.74471	0.04328	0.04328	0.04741
267049	2.79319	0.13113	-1.31718	0.01637
267051	0.82878	0.03237	-0.42489	0.02990
267053	0.88590	0.04574	-0.50908	0.04547
245877	2.20293	0.08096	-1.01917	0.01611
245881	0.55789	0.02820	-0.09965	0.04097
245882	1.07106	0.05306	0.00657	0.03304
245922	1.99384	0.09770	-1.50675	0.02593
245924	1.85734	0.09125	-1.33001	0.02926
245926	0.35815	0.02385	0.77668	0.06543
224615	2.59648	0.12126	-1.33931	0.01764
268862	1.45238	0.05373	-0.71865	0.02200
224621	1.12798	0.05442	-0.63920	0.03788
224592	1.58704	0.07281	-1.51031	0.03060
224599	0.88278	0.05017	-1.79333	0.07700
224606	1.09685	0.04010	-0.26892	0.02425
268883	1.47332	0.04771	-0.76724	0.01926
268885	0.15117	0.02347	-3.57809	0.62011
263511	0.70509	0.03793	0.28141	0.03876
266990	2.87242	0.12446	-1.19799	0.01470
266992	1.00876	0.04140	-0.72154	0.03169
266994	0.64117	0.03470	-0.21497	0.04624
265544	1.98505	0.08289	-1.28564	0.02060
265546	0.89432	0.03455	-0.45374	0.02916
265548	0.62961	0.03441	0.14930	0.04316
266984	1.67613	0.07185	-1.38540	0.02575
266986	2.16780	0.08882	-0.91884	0.01913
266988	0.63332	0.03165	0.11093	0.03658
267032	2.33237	0.12092	-1.50806	0.02326
267034	0.97135	0.04241	-1.18743	0.04091
267036	1.06523	0.03979	-0.04278	0.02442

continued

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
265594	2.59762	0.13317	-1.45080	0.01996
265596	1.08084	0.03893	-0.60711	0.02521
265598	0.68572	0.04036	-0.85280	0.06812
267008	0.89816	0.03476	-1.18193	0.03594
267010	1.31365	0.05044	-0.70093	0.02656
267012	0.69983	0.03622	0.31253	0.03696
267043	1.51637	0.05128	-0.91207	0.02001
267045	0.68472	0.03349	-0.64272	0.04827

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
267047	0.50234	0.03859	-1.25116	0.12805
266996	2.57140	0.12682	-1.40989	0.01914
266998	0.49955	0.02430	-0.08519	0.04101
267000	0.54676	0.03555	-0.41815	0.06705
267026	1.65285	0.07350	-1.44735	0.02773
267028	0.35699	0.02283	-0.60671	0.07018
267030	0.61500	0.03227	0.28422	0.04398

Table L-19. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Geometry

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
266775	0.71025	0.03191	-0.91648	0.04480
266779	0.88660	0.04620	-0.66450	0.04698
266787	1.15917	0.06666	-0.23248	0.04051
266804	1.00215	0.04539	-1.31013	0.04265
266806	1.14633	0.04980	-0.44736	0.03024
266808	0.90607	0.05555	-0.33016	0.05208
266761	1.68929	0.07925	-1.32115	0.02865
266764	0.75513	0.03546	-0.17324	0.03622
266769	0.64304	0.04286	0.21171	0.05298
257663	1.00998	0.04201	-1.01503	0.03528
257665	1.57662	0.07420	-0.61601	0.02899
257667	0.28962	0.03345	2.12375	0.19162
266556	2.05553	0.10794	-1.42170	0.02676
266558	1.38187	0.08586	-1.49184	0.05585
266560	1.15304	0.08312	-1.49113	0.08115
266597	1.31818	0.05909	-1.29572	0.03402
266599	0.47331	0.02975	-0.50471	0.06508
266601	1.18464	0.06063	-0.09319	0.03534
257669	1.57211	0.07899	-1.47701	0.03423
257671	0.97853	0.04445	-0.72258	0.03697
257673	0.46129	0.03335	0.91558	0.06551
266585	0.90437	0.04144	-1.30434	0.04613
266587	0.38239	0.02667	0.25050	0.06399
266589	0.26483	0.03361	0.69806	0.12841
266544	1.84867	0.08388	-1.21826	0.02503
266546	0.85424	0.04107	-0.48618	0.03864

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
266548	0.46007	0.03696	-0.11630	0.07727
266737	1.39986	0.06917	-1.49088	0.03778
266739	1.12043	0.06058	-1.31773	0.05206
266741	0.44362	0.03008	0.85122	0.06422
257717	2.30660	0.13233	-1.48866	0.02615
257719	0.70007	0.03210	0.06637	0.03549
257721	1.16808	0.07033	-0.33478	0.04447
257711	1.04958	0.04426	-1.09038	0.03571
257713	0.69968	0.03539	-0.08486	0.04062
257715	0.75958	0.05120	-0.02916	0.05627
455245	1.84986	0.08244	-1.18062	0.02447
455257	1.14150	0.04835	-0.16163	0.02635
455276	0.67635	0.04648	-0.00808	0.05837
266526	1.05716	0.04846	-1.35722	0.04224
266528	1.02015	0.04421	-0.31814	0.03052
266530	0.53063	0.03857	0.64992	0.05706
266795	1.97713	0.09695	-1.33069	0.02565
266799	2.22913	0.14693	-1.34255	0.03625
266801	0.68304	0.04218	-0.92624	0.06885
266732	0.30878	0.02178	0.59243	0.07884
266733	1.07337	0.07639	-1.15329	0.06700
266735	0.62240	0.05076	-0.44639	0.08553

Table L-20. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—Civics

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
428824	1.58138	0.07557	-1.09107	0.02805
428837	1.33148	0.06918	-0.69093	0.03483
428860	0.69265	0.04719	0.20358	0.04757
428618	1.78036	0.08408	-1.03995	0.02478
428635	0.69328	0.04197	-0.46364	0.05227
428649	0.69652	0.04798	0.55765	0.05060
431907	1.83062	0.09669	-1.22974	0.02776
431922	0.89218	0.04550	-0.40428	0.03781
431935	0.53390	0.04379	-0.04681	0.07203
432298	1.52856	0.07075	-1.02710	0.02768
432311	0.39193	0.03281	-0.21347	0.07787
432324	0.69421	0.05200	0.32715	0.05534
431439	1.81416	0.10065	-1.31015	0.03013
431455	1.03375	0.04906	-0.38806	0.03258
431470	0.72843	0.04837	0.58897	0.04713
428139	1.89911	0.09520	-1.13030	0.02497
428101	1.45056	0.07081	-0.56187	0.02905
428116	0.42190	0.03920	0.87572	0.07926
430591	1.99598	0.09900	-1.09456	0.02347
430687	1.12660	0.06618	-0.95901	0.04926
430655	0.36126	0.03572	0.11210	0.08430
431591	1.03013	0.04845	-1.00130	0.03757
431626	0.84696	0.04585	-0.36286	0.04300
431653	0.77260	0.05355	0.45052	0.04799
428052	1.69963	0.07430	-0.87341	0.02366
428065	1.61587	0.09818	-0.93453	0.04183
428079	0.75536	0.04833	0.20630	0.04274
431275	1.52245	0.07705	-1.21180	0.03162
431292	0.79891	0.05313	-1.29047	0.07865
431332	1.08670	0.05704	-0.18086	0.03487
434033	2.02652	0.10871	-1.21553	0.02535
434047	1.40326	0.06660	-0.56904	0.02870
434061	0.45343	0.03954	1.01666	0.07952
431670	1.88024	0.08547	-0.94501	0.02268
431963	0.51623	0.03624	-0.01157	0.05680
432009	0.58143	0.05076	0.08128	0.07243
431867	1.71423	0.08688	-1.18236	0.02811
431880	0.88575	0.05592	-1.17835	0.06719
431893	0.80406	0.04564	0.36979	0.03934
431516	2.18778	0.10396	-0.98317	0.02070
431545	1.40948	0.07733	-0.72806	0.03618
431563	0.49501	0.04076	0.49257	0.06123
431107	1.90087	0.10514	-1.28715	0.02842
431173	1.12718	0.07547	-1.40283	0.06689
431144	0.54348	0.03600	0.49586	0.05365
428533	1.96412	0.09530	-1.06138	0.02329
428552	0.65921	0.03908	-0.12680	0.04574
428565	0.34971	0.04065	-0.18024	0.12596

Table L-21. 2016–17 FSAA-PT: IRT Parameters for Dichotomous Items—U.S. History

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
427435	2.17447	0.09350	-1.15504	0.01855
427457	0.42867	0.03182	-1.66211	0.13143
427473	1.11772	0.04893	-0.19899	0.02755
424154	1.29119	0.04582	-0.78743	0.02228
424139	1.13271	0.05414	-0.78478	0.03840
424168	0.48408	0.03654	-0.49240	0.08544
425510	1.78226	0.08135	-1.30378	0.02499
425535	1.27195	0.04682	-0.39105	0.02220
425552	0.85670	0.04608	-0.15247	0.04113
424080	1.64753	0.07890	-1.39859	0.02953
424096	1.55368	0.06427	-0.89201	0.02449
424124	1.34976	0.05982	-0.42777	0.02674
423220	1.17668	0.04938	-1.21689	0.03189
423286	1.66957	0.06367	-0.51547	0.02052
423300	0.67391	0.03951	0.13989	0.04308
423892	1.38573	0.05262	-0.99458	0.02355
423922	0.39033	0.02849	-1.09621	0.10517
423942	0.14486	0.02323	0.62587	0.18111
424280	2.22330	0.08647	-0.97171	0.01620
424293	0.62596	0.03297	-0.46517	0.04688
424314	0.78214	0.04108	0.30924	0.03834
424334	2.26059	0.09971	-1.18189	0.01843
424349	0.97048	0.03856	-0.31494	0.02709
424599	0.40148	0.03196	0.95685	0.07299
426500	1.72625	0.07562	-1.24828	0.02419
426642	1.07489	0.04002	-0.15215	0.02392
426565	0.64189	0.04117	-0.14086	0.05845
427535	1.00482	0.04694	-1.44760	0.04445
427571	0.92529	0.03557	-0.18565	0.02743
427551	0.63108	0.04182	-0.37256	0.06758
425807	1.96796	0.07366	-0.92548	0.01729
424683	0.55860	0.03466	-0.98842	0.07634
426226	0.43045	0.03778	-1.29386	0.14806

continued

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
426853	1.48995	0.05432	-0.89456	0.02097
426873	0.89590	0.04456	-0.81923	0.04561
426990	0.29428	0.03014	-0.79475	0.15097
427489	1.96100	0.07753	-1.03936	0.01845
427506	0.68209	0.03161	-0.02814	0.03498
427584	0.41452	0.03455	0.29527	0.07361
425756	2.17790	0.08540	-0.99443	0.01663
425771	1.21929	0.05097	-0.50418	0.02661

Item Number	*a*	*SE(a)*	*b*	*SE(b)*
425787	1.09867	0.05744	-0.32797	0.03750
425387	1.96319	0.08198	-1.13670	0.01977
425402	0.41514	0.02614	-0.26411	0.05796
425427	0.96065	0.05024	-0.28087	0.03985
427379	2.06461	0.09282	-1.23791	0.02082
427408	0.87037	0.04261	-1.04701	0.04705
427395	1.50139	0.09107	-1.14237	0.04664

Table L-22. 2016–17 FSAA-PT: IRT Parameters for Writing Prompt—ELA Grade 4

Item Number	*a*	*SE(a)*	*b*	*SE(b)*	*D0*	*SE(D0)*	*D1*	*SE(D1)*	*D2*	*SE(D2)*	*D3*	*SE(D3)*
465985A	0.72985	0.01891	-0.17389	0.02579	0.00000	0.00000	1.46713	0.06742	0.90469	0.04087	-2.37182	0.05609
465985B	0.68252	0.01990	-0.10461	0.02416	0.00000	0.00000	1.46300	0.06124	0.47601	0.04078	-1.93901	0.05399
465985C	0.60617	0.01807	-0.45444	0.02699	0.00000	0.00000	1.30695	0.07879	0.59533	0.04865	-1.90228	0.05131
465985D	0.59974	0.01743	-0.02048	0.02601	0.00000	0.00000	1.24269	0.06547	0.78591	0.04757	-2.02860	0.06077

Table L-23. 2016–17 FSAA-PT: IRT Parameters for Writing Prompt —ELA Writing Prompt Grade 5

Item Number	*a*	*SE(a)*	*b*	*SE(b)*	*D0*	*SE(D0)*	*D1*	*SE(D1)*	*D2*	*SE(D2)*	*D3*	*SE(D3)*
466137A	0.59445	0.01810	-0.86509	0.02477	0.00000	0.00000	0.95133	0.07343	-0.88326	0.05807	-0.06808	0.05200
466137B	0.65617	0.02226	-0.52403	0.02264	0.00000	0.00000	0.97685	0.06402	0.12714	0.04552	-1.10398	0.04252
466137C	0.54247	0.01775	-0.90926	0.03063	0.00000	0.00000	0.51135	0.09918	0.97218	0.06667	-1.48353	0.04629
466137D	0.53642	0.01865	-0.39358	0.02538	0.00000	0.00000	1.26430	0.07155	-0.12745	0.05218	-1.13685	0.05406

Table L-24. 2016–17 FSAA-PT: IRT Parameters for Writing Prompt —ELA Writing Prompt Grade 6

Item Number	*a*	*SE(a)*	*b*	*SE(b)*	*D0*	*SE(D0)*	*D1*	*SE(D1)*	*D2*	*SE(D2)*	*D3*	*SE(D3)*
466010A	0.34364	0.01257	-0.86306	0.03737	0.00000	0.00000	1.93636	0.12093	-1.26234	0.08505	-0.67403	0.08483
466010B	0.61723	0.01845	-0.44459	0.02558	0.00000	0.00000	1.00510	0.07294	0.73130	0.05011	-1.73640	0.04793
466010C	0.45514	0.01812	-1.01547	0.03744	0.00000	0.00000	0.23307	0.10541	0.46700	0.08031	-0.70007	0.05702
466010D	0.61693	0.01910	-0.41122	0.02504	0.00000	0.00000	1.02378	0.07022	0.60869	0.04914	-1.63247	0.04794

Table L-25. 2016–17 FSAA-PT: IRT Parameters for Writing Prompt —ELA Writing Prompt Grade 7

Item Number	*a*	*SE(a)*	*b*	*SE(b)*	*D0*	*SE(D0)*	*D1*	*SE(D1)*	*D2*	*SE(D2)*	*D3*	*SE(D3)*
466953A	0.42166	0.01281	-0.75763	0.03044	0.00000	0.00000	1.81547	0.0952	-1.56525	0.07498	-0.25023	0.07613
466953B	0.68711	0.01981	-0.21088	0.0242	0.00000	0.00000	1.50477	0.06125	0.45556	0.04093	-1.96032	0.05223
466953C	0.55746	0.02013	-0.79606	0.02727	0.00000	0.00000	0.91826	0.07787	-0.07105	0.05734	-0.84721	0.0501
466953D	0.66827	0.02011	-0.19701	0.02387	0.00000	0.00000	1.42489	0.05994	0.36318	0.0421	-1.78808	0.05177

Table L-26. 2016–17 FSAA-PT: IRT Parameters for Writing Prompt —ELA Writing Prompt Grade 8

Item Number	*a*	*SE(a)*	*b*	*SE(b)*	*D0*	*SE(D0)*	*D1*	*SE(D1)*	*D2*	*SE(D2)*	*D3*	*SE(D3)*
466293A	0.73391	0.02090	-0.50342	0.02326	0.00000	0.00000	1.02612	0.06677	0.70682	0.04341	-1.73294	0.04178
466293B	0.74587	0.02052	-0.23843	0.02320	0.00000	0.00000	1.31316	0.06042	0.66782	0.03928	-1.98098	0.04800
466293C	0.62753	0.01755	-0.37898	0.02583	0.00000	0.00000	0.97783	0.07236	0.93902	0.04992	-1.91684	0.05007
466293D	0.72829	0.02182	-0.15205	0.02208	0.00000	0.00000	1.32050	0.05517	0.36633	0.03869	-1.68683	0.04780

Table L-27. 2016–17 FSAA-PT: IRT Parameters for Writing Prompt —ELA Writing Prompt Grade 9

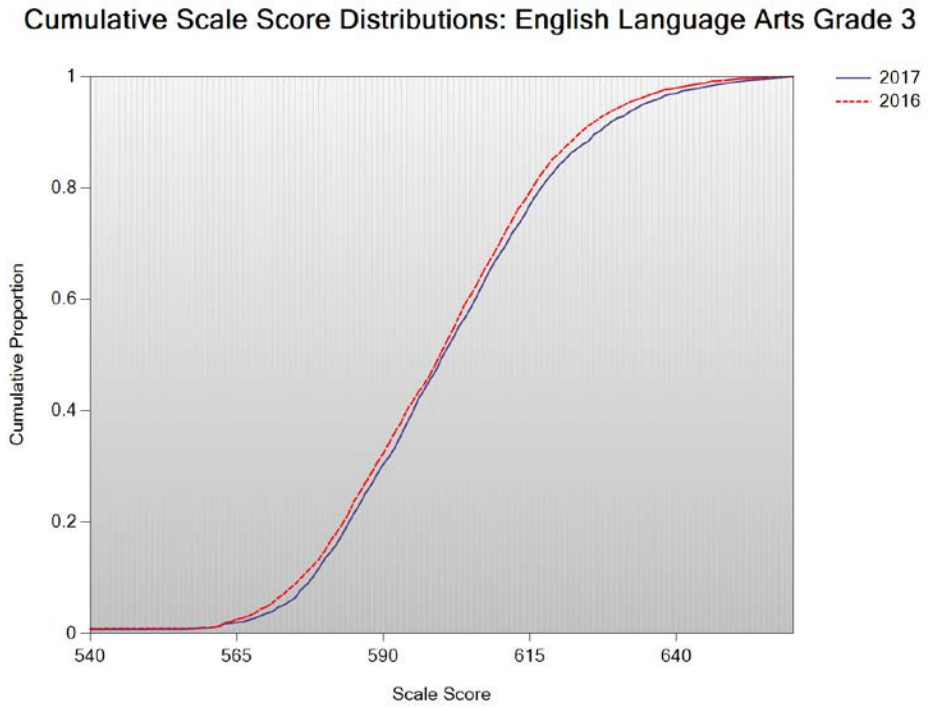
Item Number	*a*	*SE(a)*	*b*	*SE(b)*	*D0*	*SE(D0)*	*D1*	*SE(D1)*	*D2*	*SE(D2)*	*D3*	*SE(D3)*
466315A	0.62752	0.02106	-0.50444	0.02423	0.00000	0.00000	1.02181	0.06781	0.29034	0.04838	-1.31215	0.04552
466315B	0.75669	0.02101	-0.10039	0.02209	0.00000	0.00000	1.25172	0.05399	0.64133	0.03875	-1.89306	0.04779
466315C	0.73263	0.01837	-0.03887	0.02348	0.00000	0.00000	1.05532	0.05830	1.16043	0.04358	-2.21575	0.05371
466315D	0.78026	0.02144	0.04639	0.02133	0.00000	0.00000	1.21900	0.04938	0.68103	0.03753	-1.90003	0.04974

Table L-28. 2016–17 FSAA-PT: IRT Parameters for Writing Prompt —ELA Writing Prompt Grade 10

Item Number	*a*	*SE(a)*	*b*	*SE(b)*	*D0*	*SE(D0)*	*D1*	*SE(D1)*	*D2*	*SE(D2)*	*D3*	*SE(D3)*
466358A	0.40054	0.01308	-0.55333	0.03033	0.00000	0.00000	1.72657	0.09017	-1.01475	0.06956	-0.71182	0.07230
466358B	0.59063	0.01984	-0.61205	0.02412	0.00000	0.00000	0.90537	0.06759	0.13926	0.05050	-1.04463	0.04512
466358C	0.64103	0.01823	-0.42901	0.02298	0.00000	0.00000	0.70797	0.06466	0.89109	0.04919	-1.59906	0.04337
466358D	0.65534	0.02043	-0.36842	0.02170	0.00000	0.00000	0.88509	0.05786	0.42049	0.04488	-1.30558	0.04283

APPENDIX M—CUMULATIVE SCALE SCORE DISTRIBUTIONS

Figure M-1. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
Top: ELA Grade 3 Bottom: ELA Grade 4



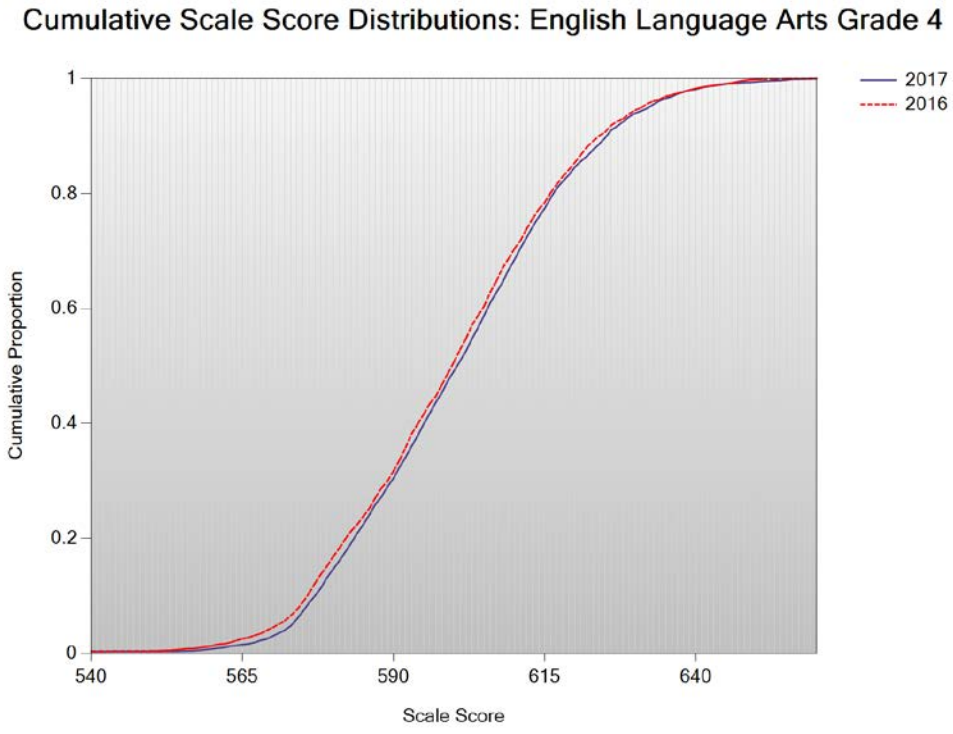
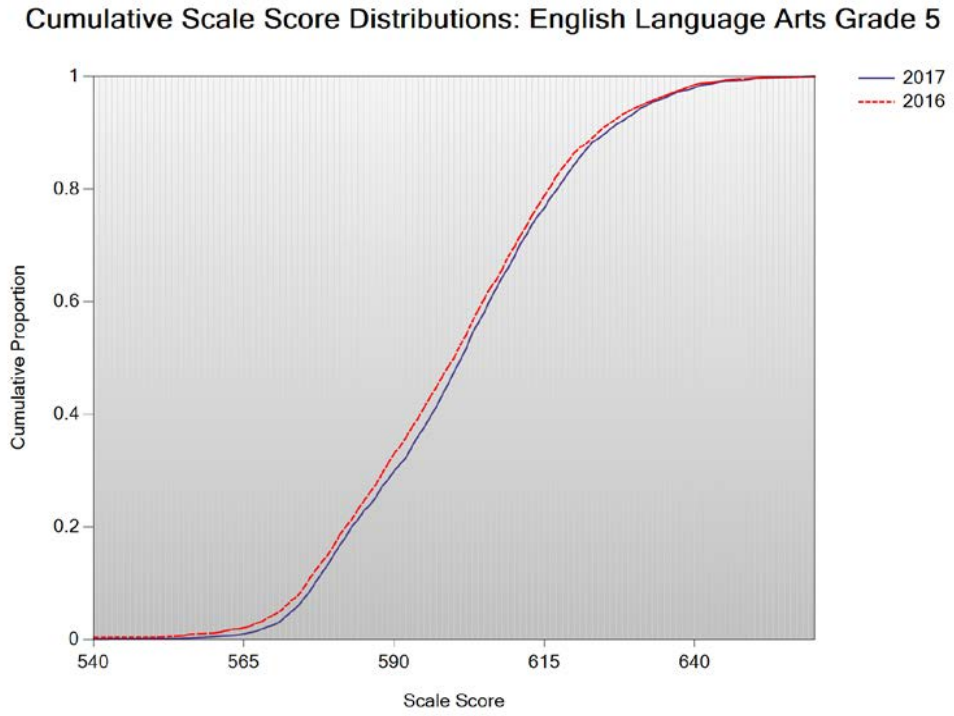


Figure M-2. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
Top: ELA Grade 5 Bottom: ELA Grade 6



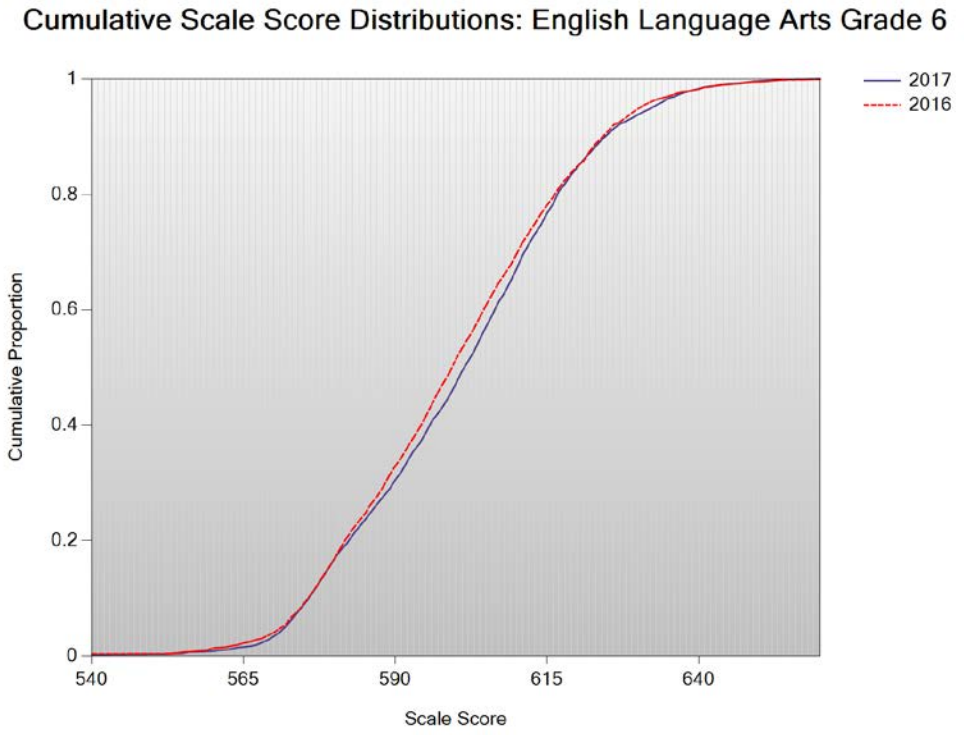
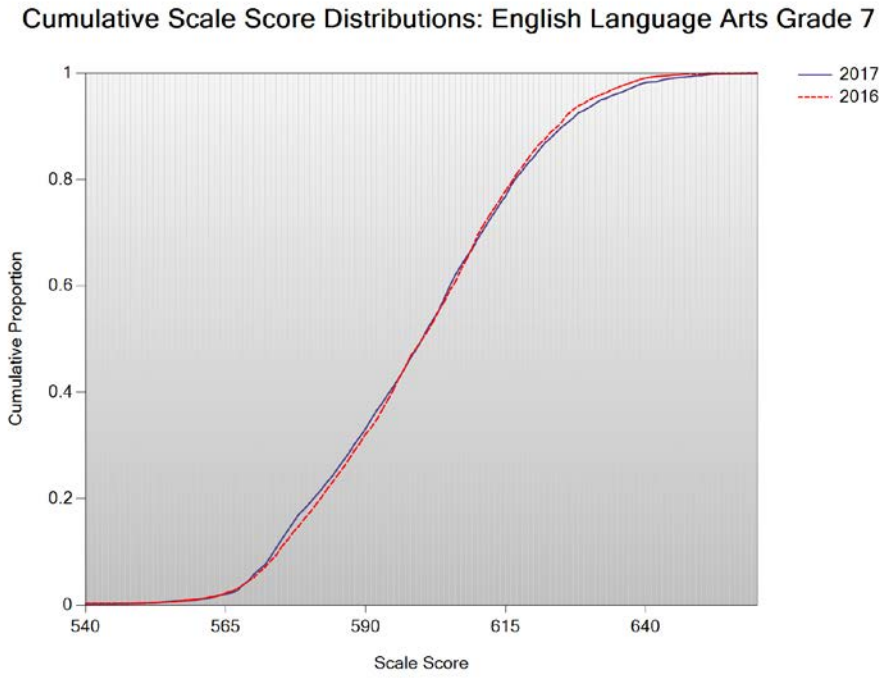


Figure M-3. FSAA-PT: Cumulative Scale Score Distribution Plots
Top: ELA Grade 7 Bottom: ELA Grade 8



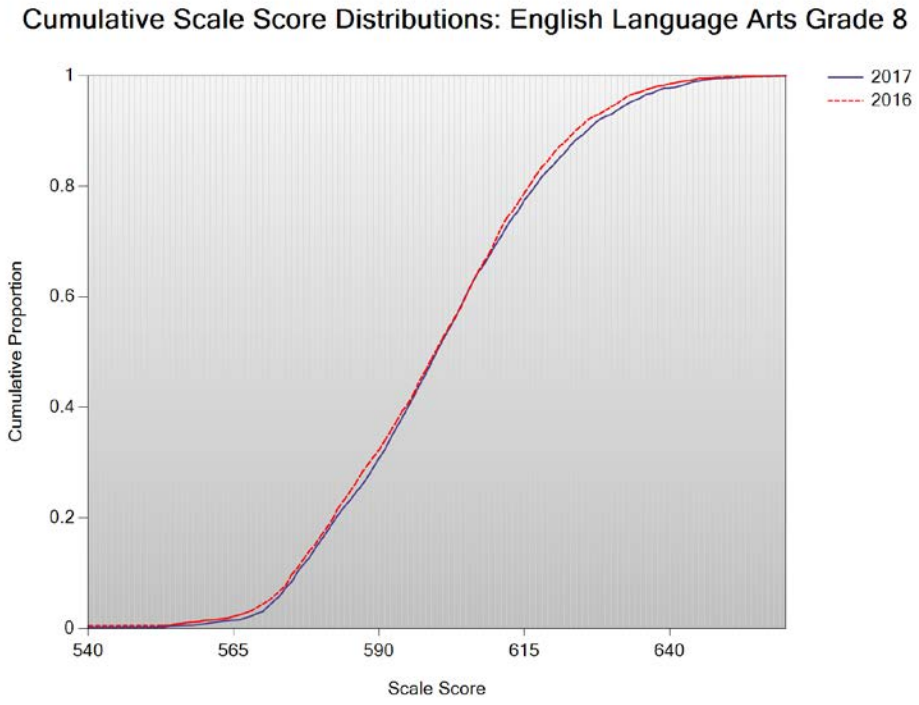


Figure M-4. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
Top: ELA 9 Bottom: ELA 10

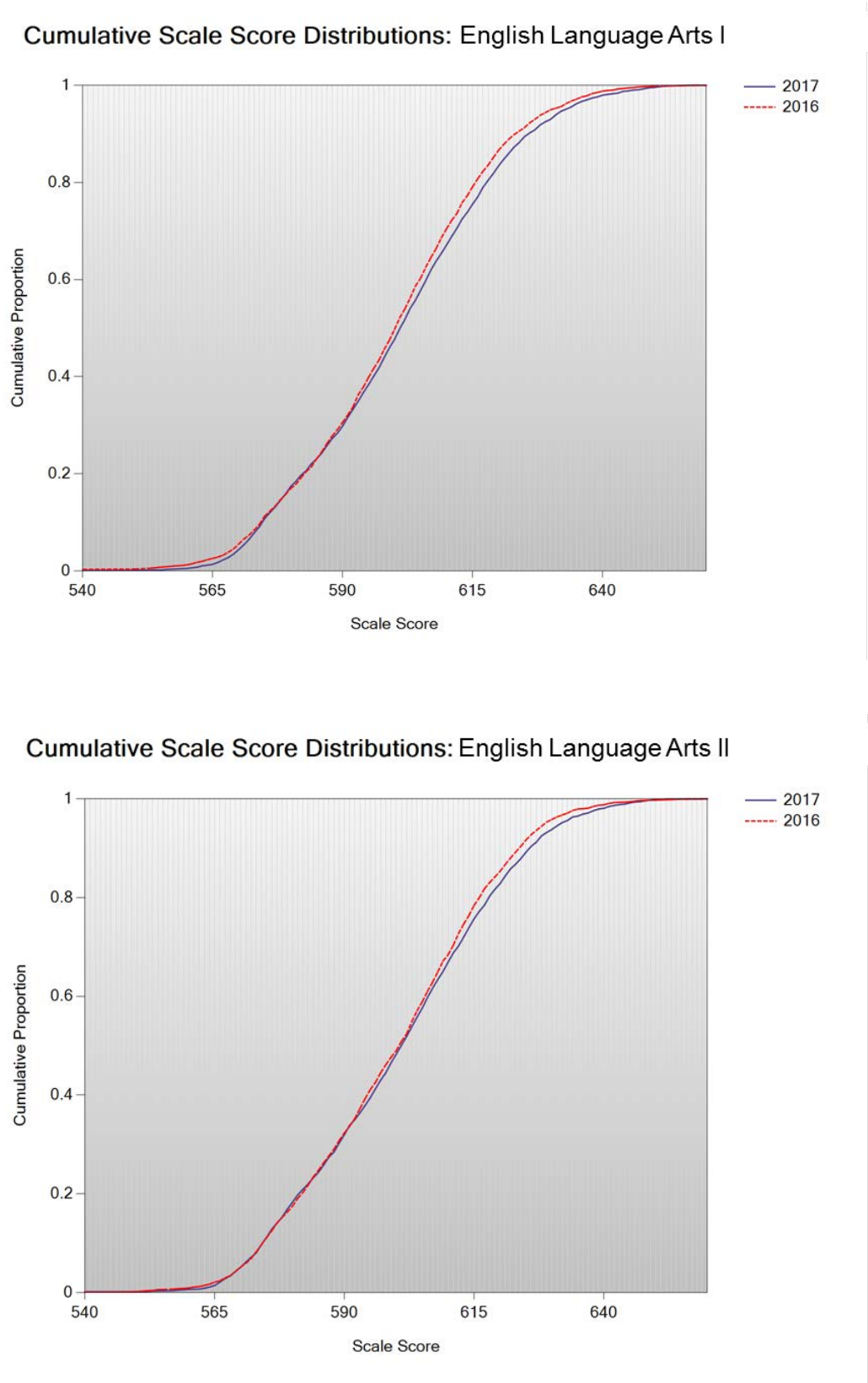
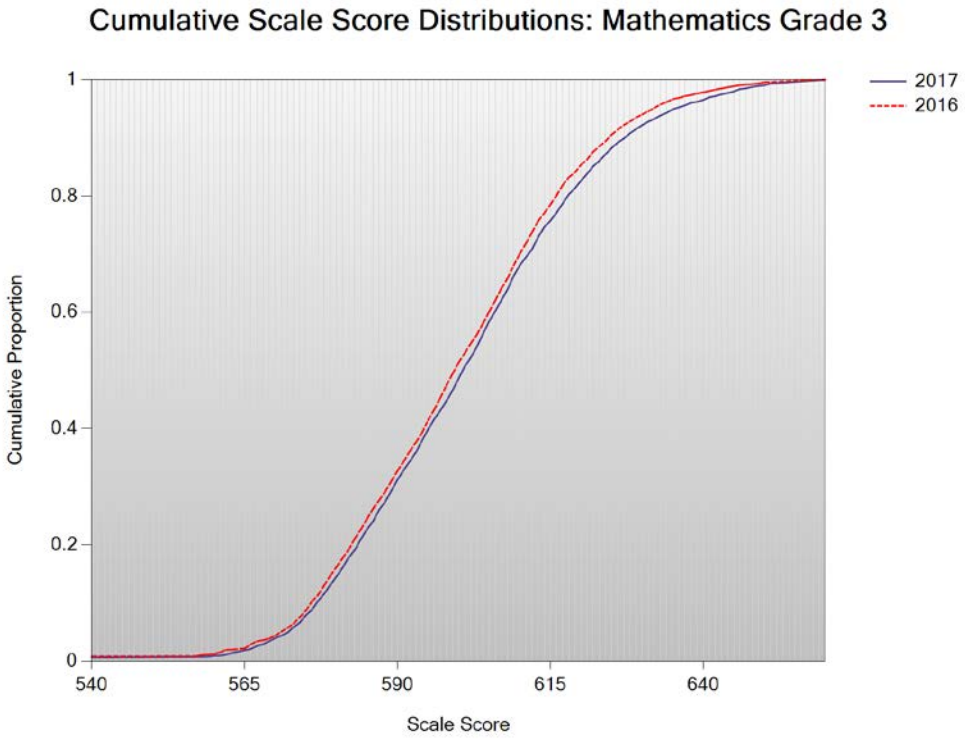


Figure M-5. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
Top: Mathematics Grade 3 Bottom: Mathematics Grade 4



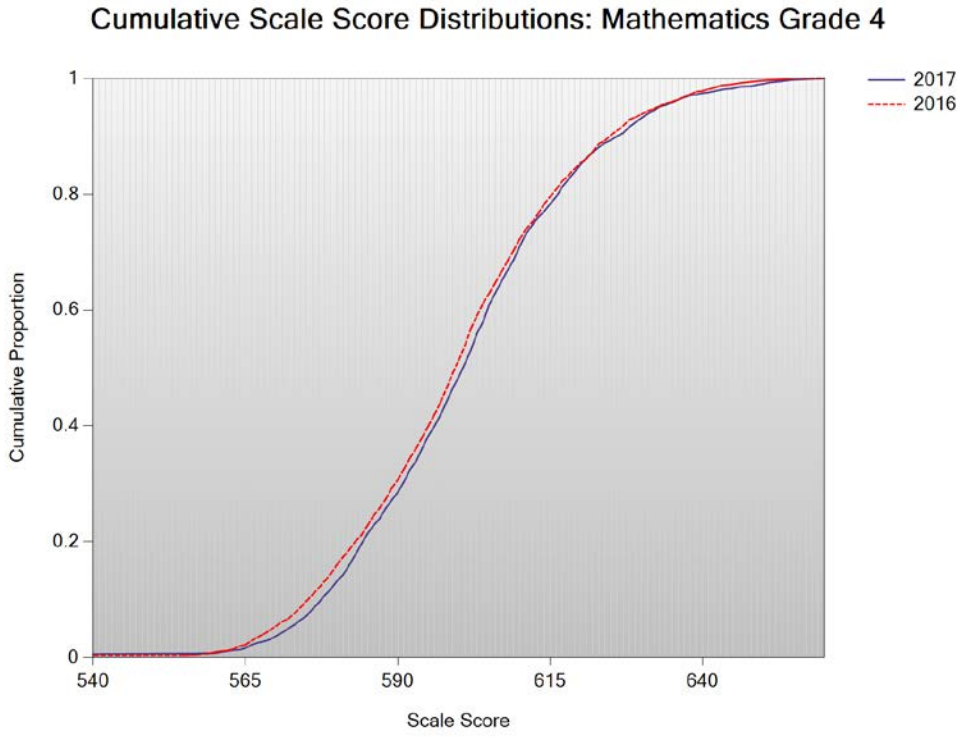
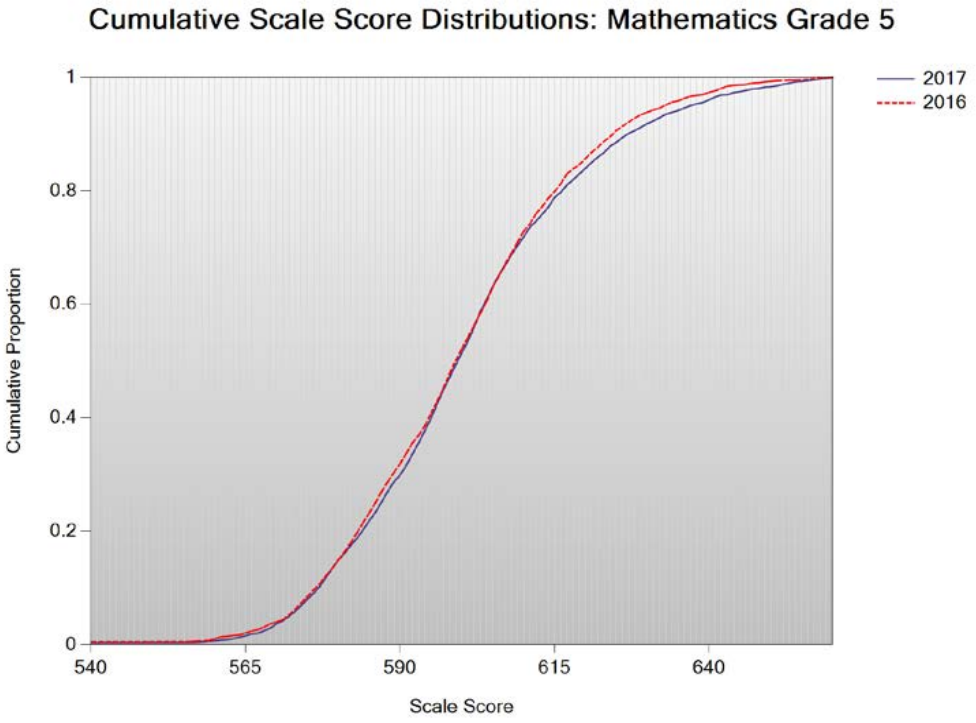


Figure M-6. FSAA-PT: Cumulative Scale Score Distribution Plots
Top: Mathematics Grade 5 Bottom: Mathematics Grade 6



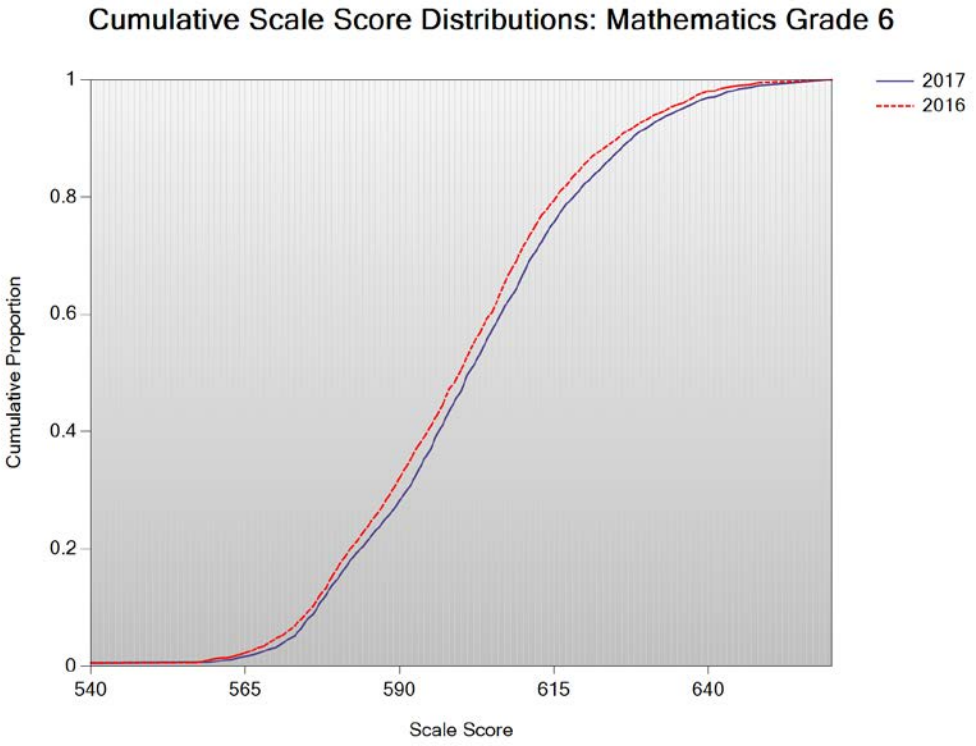
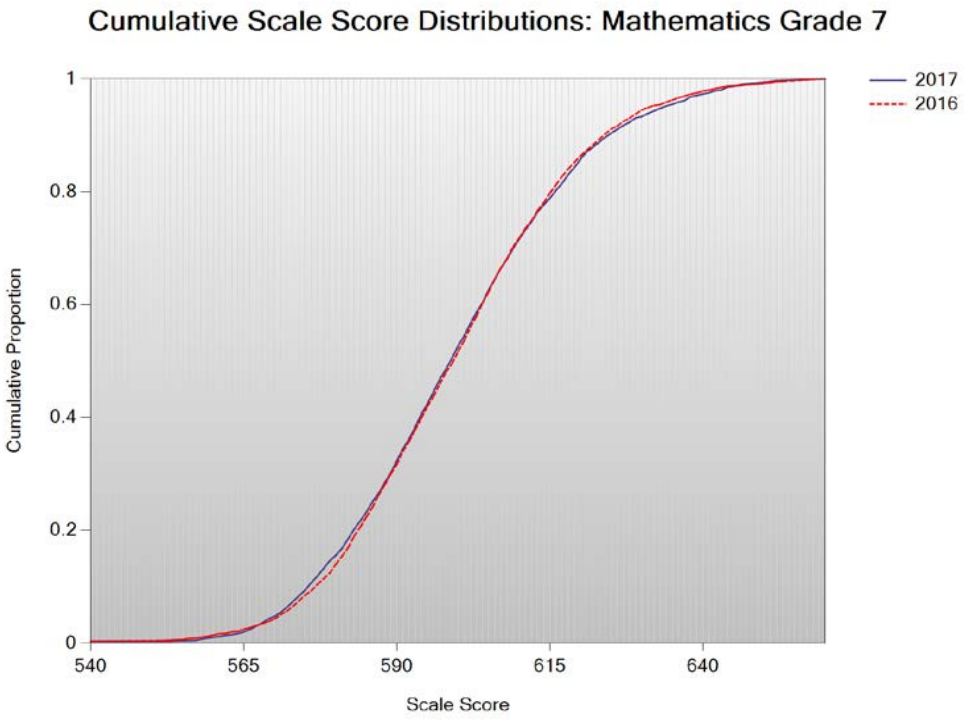


Figure M-7. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
Top: Mathematics Grade 7 Bottom: Mathematics Grade 8



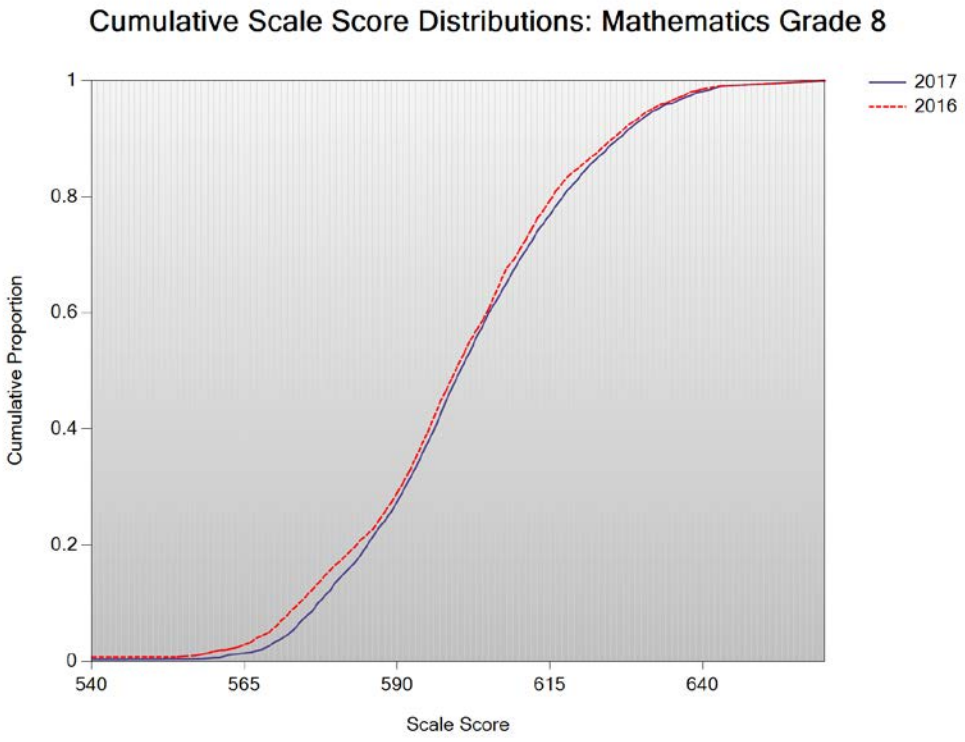
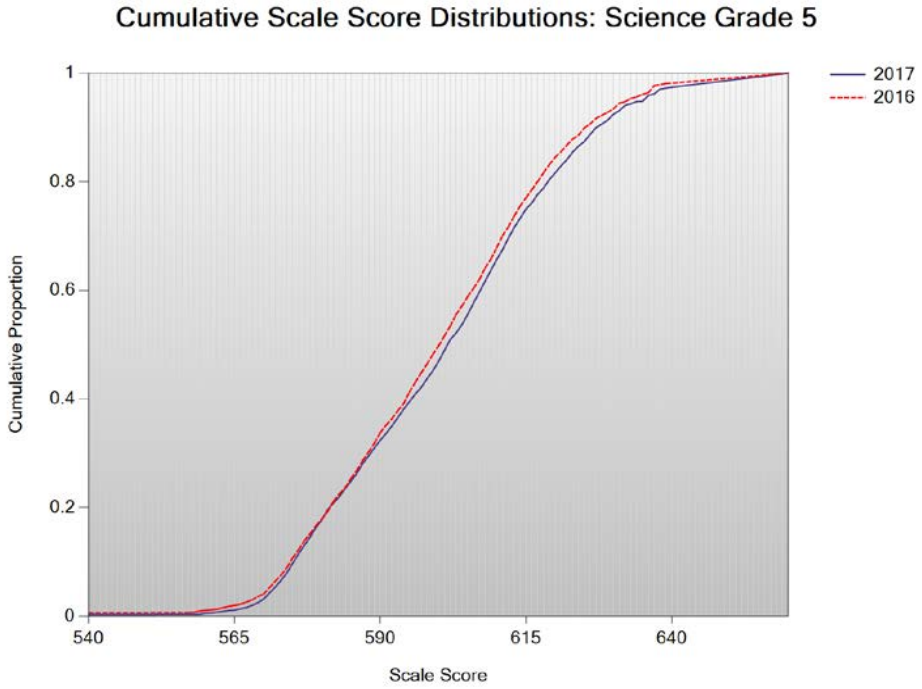


Figure M-8. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
Top: Science Grade 5 Bottom: Science Grade 8



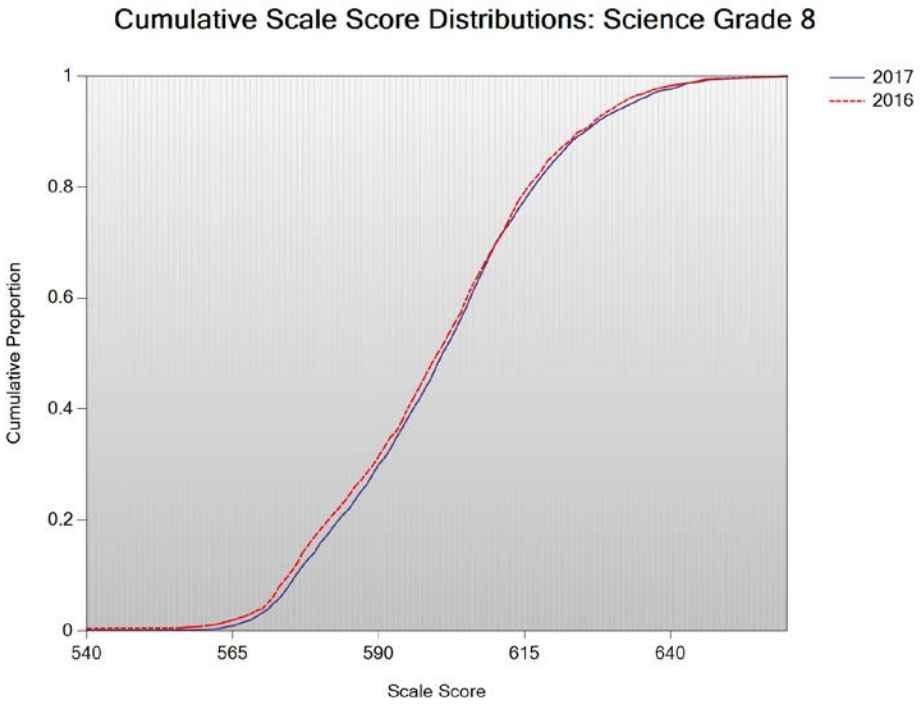
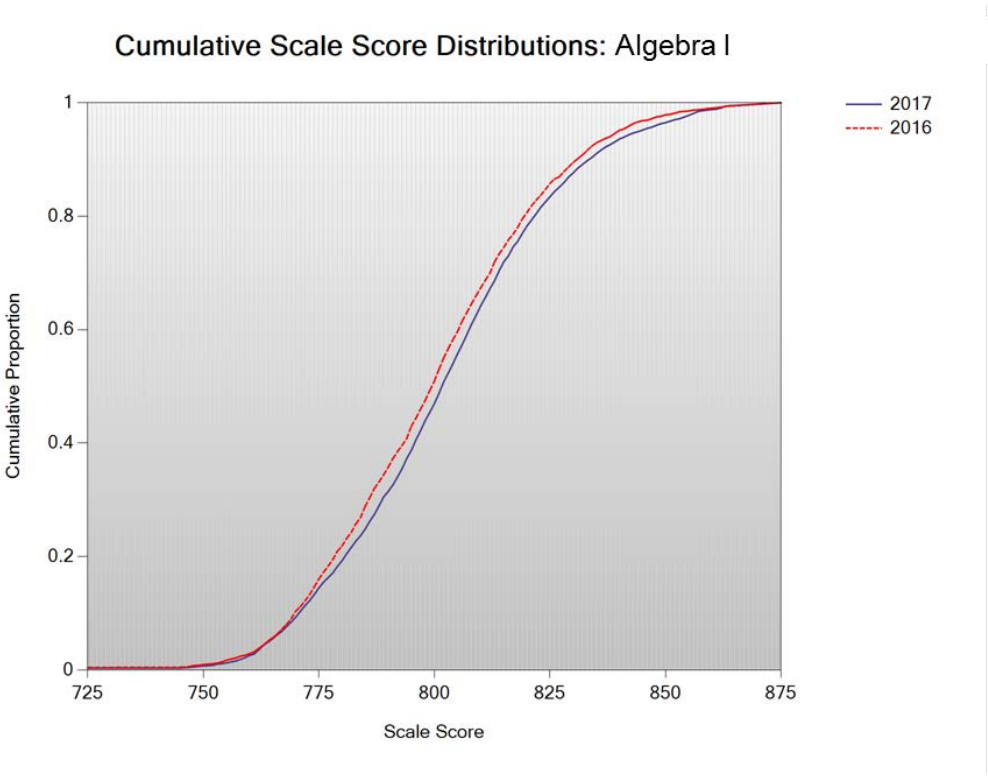


Figure M-9. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
Top: Algebra 1 Grade HS Bottom: Biology Grade HS



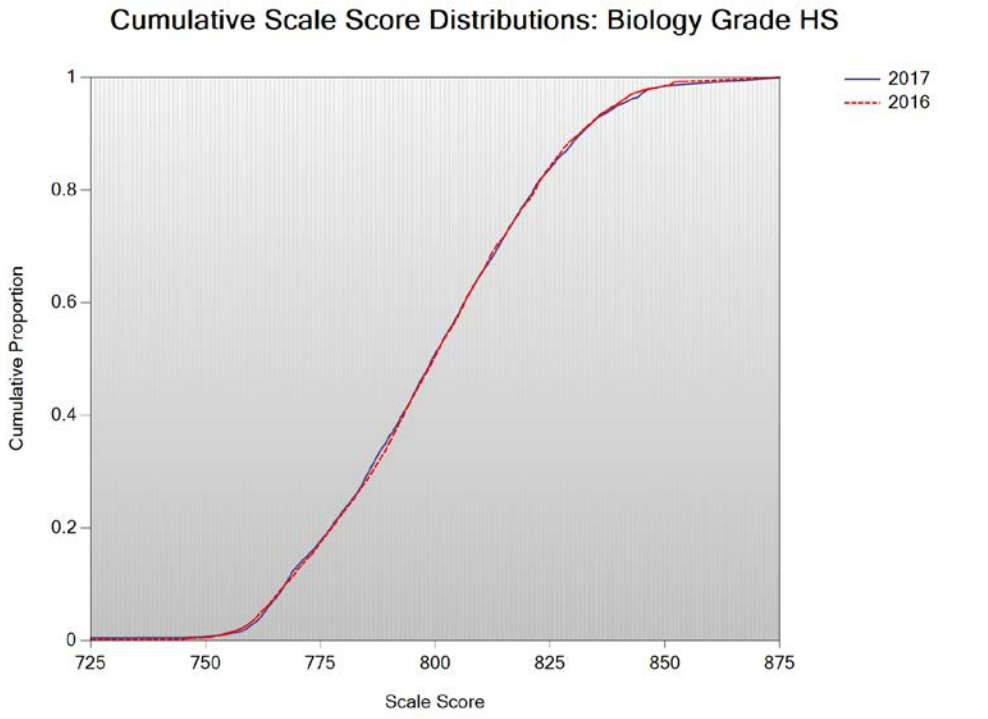
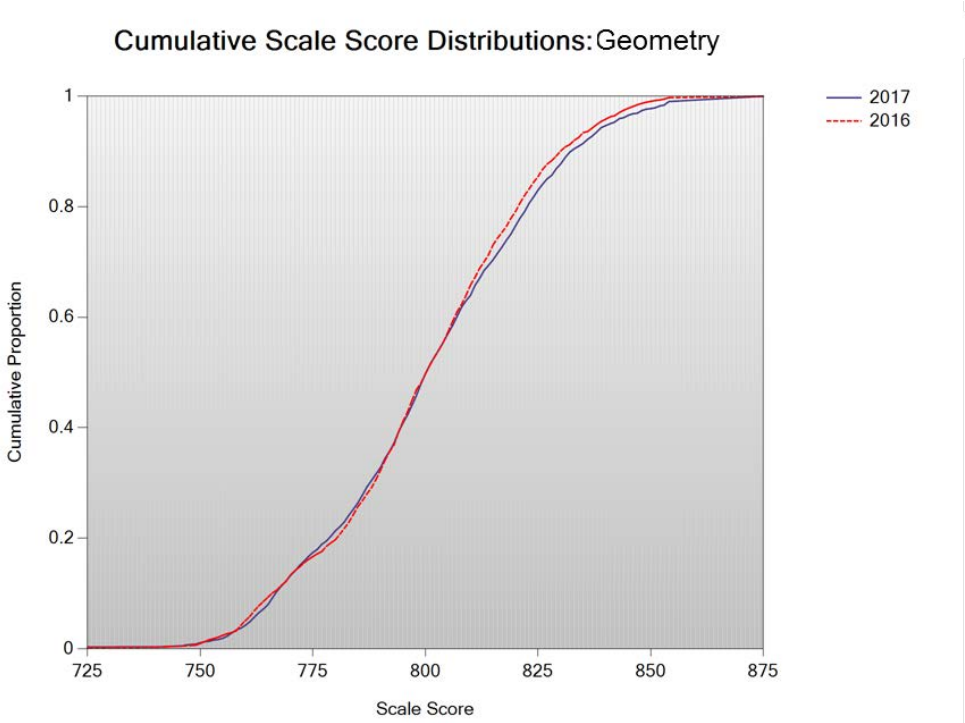


Figure M-10. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
Top: Geometry Grade HS Bottom: Civics Grade 7



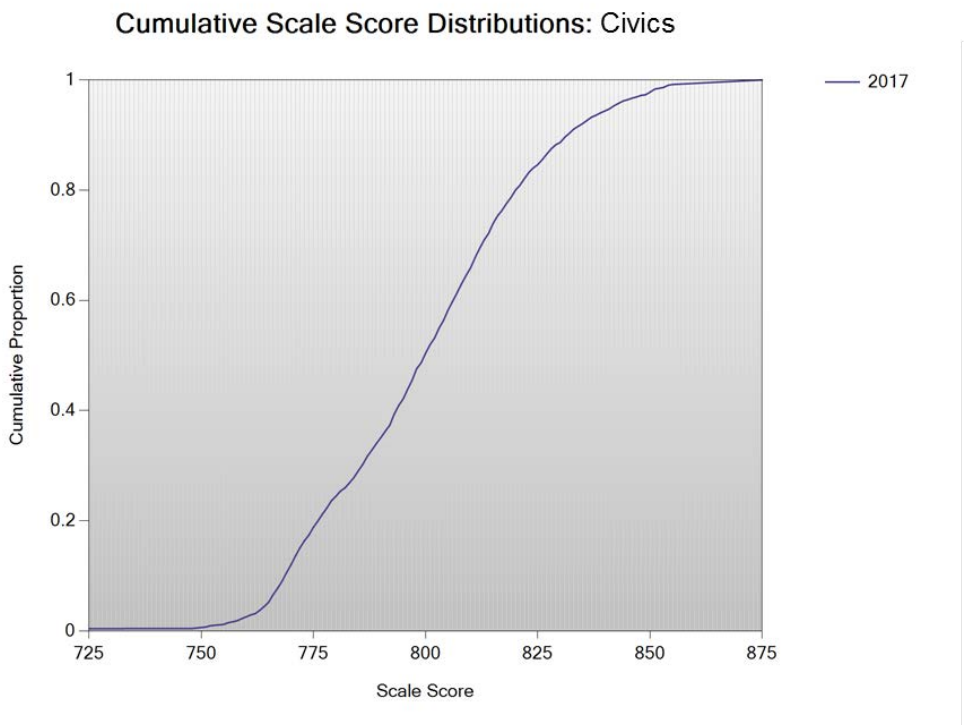
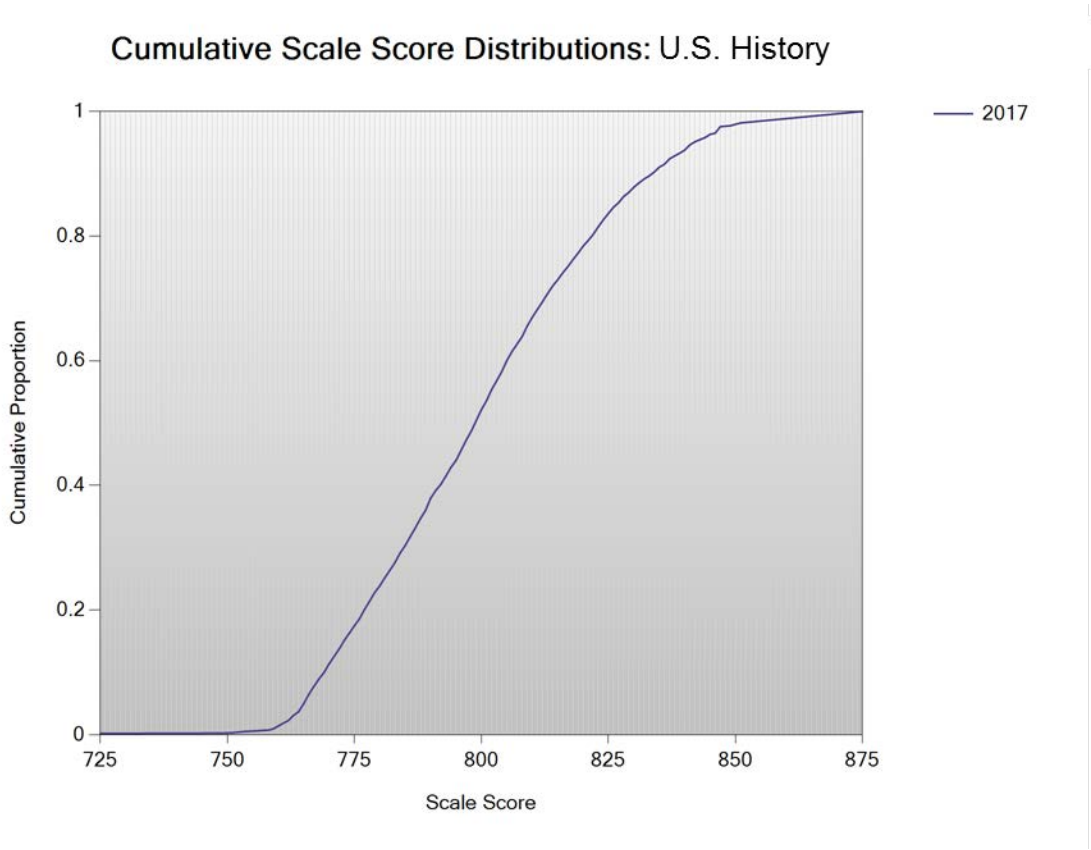


Figure M-11. 2016–17 FSAA-PT: Cumulative Scale Score Distribution Plots
U.S. History Grade HS



APPENDIX N—ACHIEVEMENT LEVEL DISTRIBUTIONS

Table N-1. 2016—17 FSAA-PT: Achievement Level Distributions by Grade—ELA

Grade	Achievement Level	2016–17	2015–16
3	1	15.99	18.05
	2	29.63	28.48
	3	34.50	36.03
	4	19.88	17.44
4	1	16.04	18.23
	2	25.70	25.24
	3	39.18	38.12
	4	19.08	18.41
5	1	18.27	20.08
	2	25.11	26.56
	3	36.38	35.64
	4	20.23	17.72
6	1	19.41	20.43
	2	24.03	26.97
	3	37.16	33.75
	4	19.41	18.85
7	1	21.59	20.08
	2	24.87	26.74
	3	34.00	34.31
	4	19.54	18.86
8	1	17.38	18.16
	2	26.70	26.73
	3	30.28	30.62
	4	25.64	24.49
9	1	18.41	17.81
	2	23.39	25.57
	3	40.03	41.72
	4	18.17	14.90
10	1	21.98	21.73
	2	21.04	22.80
	3	34.18	35.44
	4	22.80	20.03

Table N-2. 2016—17 FSAA-PT: Achievement Level Distribution by Grade—Mathematics

Grade	Achievement Level	2016–17	2015–16
3	1	22.64	24.45
	2	23.91	24.96
	3	30.57	30.67
	4	22.88	19.92
4	1	22.76	24.45
	2	21.40	22.07
	3	37.14	35.74
	4	18.71	17.73
5	1	21.80	23.17
	2	27.50	26.89
	3	30.41	31.16
	4	20.29	18.77
6	1	21.63	24.08
	2	23.71	24.46
	3	31.97	32.46
	4	22.69	19.01
7	1	25.04	24.06
	2	25.44	25.45
	3	29.76	31.71
	4	19.75	18.78
8	1	19.81	21.72
	2	22.41	22.79
	3	33.26	33.23
	4	24.52	22.26

Table N-3. 2016—17 FSAA-PT: Achievement Level Distribution by Grade—Science

Grade	Achievement Level	2016–17	2015–16
5	1	16.34	16.68
	2	27.32	29.68
	3	31.30	30.68
	4	25.04	22.96
8	1	14.08	16.94
	2	31.45	31.05
	3	36.57	35.13
	4	17.90	16.87

Table N-4. 2016—17 FSAA-PT: Achievement Level Distribution by Grade—Algebra 1

Grade	Achievement Level	2016–17	2015–16
HS	1	12.22	13.28
	2	28.34	31.12
	3	39.85	38.42
	4	19.58	17.18

Table N-5. 2016—17 FSAA-PT: Achievement Level Distribution by Grade—Biology

Grade	Achievement Level	2016–17	2015–16
HS	1	14.87	14.40
	2	26.74	27.18
	3	39.42	38.85
	4	18.98	19.58

Table N-6. 2016—17 FSAA-PT: Achievement Level Distribution by Grade—Geometry

Grade	Achievement Level	2016–17	2015–16
HS	1	17.97	17.17
	2	27.88	29.72
	3	38.24	39.89
	4	15.91	13.23

Table N-7. 2016—17 FSAA-PT: Achievement Level Distribution by Grade—Civics

Grade	Achievement Level	2016–17	2015–16
7	1	15.08	
	2	27.04	
	3	34.20	
	4	23.69	

Table N-8. 2016—17 FSAA-PT: Achievement Level Distribution by Grade—U.S. History

Grade	Achievement Level	2016–17	2015–16
HS	1	20.09	
	2	19.08	
	3	35.91	
	4	24.92	

APPENDIX O—SUBGROUP RELIABILITY

Part I: 2016–17 FSAA-PT: Cronbach's α Reliability for Subgroups

Table O-1. 2016–17 FSAA-PT: Subgroup Reliabilities— ELA

Grade	*Group*	*Number of Students*	*Reliability*
3	All Students	2,933	0.94
	Male	1,362	0.94
	Female	630	0.94
	Hispanic	720	0.94
	American Indian or Alaskan Native	3	N/A
	Asian	48	0.94
	Black Non-Hispanic	594	0.94
	Pacific Islander	1	N/A
	White Non-Hispanic	573	0.94
	Multiracial	53	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,933	0.94
	LEP	290	0.93
	Non-LEP	2,643	0.94
4	All Students	2,930	0.95
	Male	1,641	0.95
	Female	822	0.95
	Hispanic	824	0.95
	American Indian or Alaskan Native	6	N/A
	Asian	52	0.93
	Black Non-Hispanic	745	0.95
	Pacific Islander	5	N/A
	White Non-Hispanic	737	0.95
	Multiracial	94	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,930	0.95
	LEP	292	0.95
	Non-LEP	2,638	0.95
5	All Students	3,114	0.95
	Male	1,810	0.95
	Female	839	0.95
	Hispanic	791	0.95
	American Indian or Alaskan Native	6	N/A
	Asian	66	0.94
	Black non-Hispanic	797	0.95
	Pacific Islander	10	0.94
	White Non-Hispanic	895	0.95
	Multiracial	84	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,114	0.95
	LEP	274	0.94
	Non-LEP	2,840	0.95
6	All Students	3,009	0.95
	Male	1,822	0.95
	Female	800	0.95
	Hispanic	820	0.95

continued

Grade	Group	Number of Students	Reliability
6	American Indian or Alaskan Native	11	0.95
	Asian	63	0.95
	Black non-Hispanic	818	0.95
	Pacific Islander	4	N/A
	White Non-Hispanic	814	0.95
	Multiracial	92	0.94
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,009	0.95
	LEP	234	0.94
	Non LEP	2,775	0.95
7	All Students	2,988	0.96
	Male	1,818	0.96
	Female	872	0.96
	Hispanic	811	0.96
	American Indian or Alaskan Native	11	0.96
	Asian	49	0.94
	Black non-Hispanic	816	0.96
	Pacific Islander	4	N/A
	White Non-Hispanic	918	0.96
	Multiracial	81	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,988	0.96
	LEP	198	0.95
	Non-LEP	2,790	0.96
8	All Students	2,992	0.96
	Male	1,851	0.96
	Female	887	0.95
	Hispanic	770	0.96
	American Indian or Alaskan Native	4	N/A
	Asian	70	0.95
	Black Non-Hispanic	809	0.95
	Pacific Islander	6	N/A
	White Non-Hispanic	992	0.96
	Multiracial	87	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,992	0.96
	LEP	148	0.95
	Non-LEP	2,844	0.96
9	All Students	3,010	0.95
	Male	1,732	0.95
	Female	886	0.95
	Hispanic	729	0.95
	American Indian or Alaskan Native	12	0.93
	Asian	58	0.94
	Black Non-Hispanic	760	0.94
	Pacific Islander	0	N/A
	White Non-Hispanic	970	0.95
	Multiracial	89	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,010	0.95

continued

Grade	Group	Number of Students	Reliability
9	LEP	131	0.94
	Non-LEP	2,879	0.95
10	All Students	3,294	0.96
	Male	1,806	0.96
	Female	920	0.95
	Hispanic	734	0.96
	American Indian or Alaskan Native	8	N/A
	Asian	51	0.95
	Black Non-Hispanic	844	0.95
	Pacific Islander	2	N/A
	White Non-Hispanic	1,019	0.96
	Multiracial	68	0.96
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,294	0.96
	LEP	141	0.95
	Non-LEP	3,153	0.96

Table O-2. 2016–17 FSAA-PT: Subgroup Reliabilities—Mathematics

Grade	Group	Number of Students	Reliability
3	All Students	2,928	0.95
	Male	1,359	0.95
	Female	632	0.95
	Hispanic	716	0.95
	American Indian or Alaskan Native	3	N/A
	Asian	48	0.95
	Black Non-Hispanic	596	0.95
	Pacific Islander	1	N/A
	White Non-Hispanic	574	0.95
	Multiracial	53	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,928	0.95
	LEP	289	0.94
	Non-LEP	2,639	0.95
4	All Students	2,935	0.94
	Male	1,643	0.94
	Female	825	0.93
	Hispanic	828	0.94
	American Indian or Alaskan Native	6	N/A
	Asian	51	0.91
	Black Non-Hispanic	745	0.94
	Pacific Islander	5	N/A

continued

Grade	Group	Number of Students	Reliability
4	White Non-Hispanic	739	0.94
	Multiracial	94	0.94
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,935	0.94
	LEP	294	0.94
	Non-LEP	2,641	0.94
5	All Students	3,124	0.94
	Male	1,815	0.94
	Female	842	0.93
	Hispanic	797	0.94
	American Indian or Alaskan Native	6	N/A
	Asian	65	0.93
	Black Non-Hispanic	797	0.95
	Pacific Islander	10	0.90
	White Non-Hispanic	898	0.93
	Multiracial	84	0.92
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,124	0.94
	LEP	274	0.94
	Non-LEP	2,850	0.94
6	All Students	3,015	0.95
	Male	1,830	0.95
	Female	795	0.95
	Hispanic	820	0.96
	American Indian or Alaskan Native	11	0.92
	Asian	64	0.94
	Black Non-Hispanic	820	0.95
	Pacific Islander	4	N/A
	White Non-Hispanic	814	0.96
	Multiracial	92	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,015	0.95
	LEP	236	0.94
	Non-LEP	2,779	0.95
7	All Students	2,987	0.94
	Male	1,819	0.94
	Female	872	0.94
	Hispanic	814	0.94
	American Indian or Alaskan Native	11	0.94
	Asian	49	0.93
	Black Non-Hispanic	815	0.93
	Pacific Islander	4	N/A
	White Non-Hispanic	917	0.94
	Multiracial	81	0.92
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,987	0.94
	LEP	199	0.93

continued

Grade	Group	Number of Students	Reliability
7	Non-LEP	2,788	0.94
8	All Students	2,998	0.95
	Male	1,856	0.95
	Female	890	0.94
	Hispanic	770	0.95
	American Indian or Alaskan Native	4	N/A
	Asian	70	0.93
	Black Non-Hispanic	813	0.94
	Pacific Islander	6	N/A
	White Non-Hispanic	996	0.95
	Multiracial	87	0.94
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,998	0.95
	LEP	148	0.93
	Non-LEP	2,850	0.95

Table O-3. 2016–17 FSAA-PT: Subgroup Reliabilities— Science

Grade	Group	Number of Students	Reliability
5	All Students	3,115	0.97
	Male	1,810	0.97
	Female	843	0.96
	Hispanic	799	0.97
	American Indian or Alaskan Native	6	N/A
	Asian	65	0.97
	Black Non-Hispanic	797	0.97
	Pacific Islander	10	0.95
	White Non-Hispanic	892	0.97
	Multiracial	84	0.97
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,115	0.97
	LEP	274	0.96
	Non-LEP	2,841	0.97
8	All Students	2,989	0.95
	Male	1,851	0.95
	Female	888	0.94
	Hispanic	769	0.95
	American Indian or Alaskan Native	4	N/A
	Asian	71	0.94
	Black Non-Hispanic	811	0.94
	Pacific Islander	6	N/A
	White Non-Hispanic	991	0.95

continued

Grade	Group	Number of Students	Reliability
8	Multiracial	87	0.94
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,989	0.95
	LEP	148	0.94
	Non-LEP	2,841	0.95

Table O-4. 2016–17 Florida Alternate Assessment: Subgroup Reliabilities— Algebra 1

Grade	Group	Number of Students	Reliability
HS	All Students	3,641	0.95
	Male	1,208	0.94
	Female	632	0.94
	Hispanic	505	0.94
	American Indian or Alaskan Native	7	N/A
	Asian	35	0.94
	Black Non-Hispanic	562	0.93
	Pacific Islander	1	N/A
	White Non-Hispanic	683	0.95
	Multiracial	47	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,641	0.95
	LEP	80	0.90
	Non-LEP	3,561	0.95

Table O-5. 2016–17 FSAA-PT: Subgroup Reliabilities— Biology

Grade	Group	Number of Students	Reliability
HS	All Students	4,305	0.95
	Male	1,608	0.95
	Female	789	0.95
	Hispanic	677	0.95
	American Indian or Alaskan Native	10	0.95
	Asian	39	0.96
	Black Non-Hispanic	703	0.95
	Pacific Islander	1	N/A
	White Non-Hispanic	893	0.95
	Multiracial	74	0.96
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	4,305	0.95
	LEP	137	0.95
	Non-LEP	4,168	0.95

Table O-6. 2016–17 FSAA-PT: Subgroup Reliabilities— Geometry

Grade	*Group*	*Number of Students*	*Reliability*
HS	All Students	3,117	0.95
	Male	560	0.96
	Female	285	0.95
	Hispanic	269	0.96
	American Indian or Alaskan Native	2	N/A
	Asian	18	0.96
	Black Non-Hispanic	223	0.95
	Pacific Islander	1	N/A
	White Non-Hispanic	307	0.95
	Multiracial	25	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,117	0.95
	LEP	73	0.96
	Non-LEP	3,044	0.95

Table O-7. 2016–17 FSAA-PT: Subgroup Reliabilities— Civics

Grade	*Group*	*Number of Students*	*Reliability*
HS	All Students	2,567	0.96
	Male	1,589	0.96
	Female	747	0.96
	Hispanic	707	0.96
	American Indian or Alaskan Native	10	0.96
	Asian	38	0.97
	Black Non-Hispanic	709	0.96
	Pacific Islander	4	N/A
	White Non-Hispanic	795	0.96
	Multiracial	73	0.95
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	2,567	0.96
	LEP	174	0.94
	Non-LEP	2,393	0.96

Table O-8. 2016–17 FSAA-PT: Subgroup Reliabilities—U.S. History

Grade	*Group*	*Number of Students*	*Reliability*
5	All Students	3,832	0.96
	Male	1,121	0.96
	Female	550	0.96
	Hispanic	449	0.96
	American Indian or Alaskan Native	7	N/A
	Asian	37	0.96
	Black Non-Hispanic	488	0.96
	Pacific Islander	0	N/A
	White Non-Hispanic	641	0.96
	Multiracial	49	0.97
	Economically Disadvantaged	0	N/A
	Not Economically Disadvantaged	3,832	0.96
	LEP	67	0.94
	Non-LEP	3,765	0.96

Part II: 2016–17 FSAA-PT: IRT Marginal Reliability for Subgroups

Table O-9. 2016–17 FSAA-PT: Subgroup Reliabilities— ELA

Grade	*Group*	*Number of Students*	*IRT Marginal Reliability*	*SEM*
3	All Students	2,933	0.89438	0.31081
	Female	630	0.89654	0.31134
	Male	1,362	0.89562	0.30813
	Hispanic	720	0.89102	0.30684
	American Indian / Alaska Native	3	N/A	N/A
	Asian	48	0.89190	0.29551
	Black Non-Hispanic	594	0.89897	0.31356
	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	573	0.89540	0.30585
	Multiracial	53	0.89711	0.33600
	LEP	290	0.87772	0.30913
	Non-LEP	2,643	0.89594	0.31100
4	All Students	2,930	0.91853	0.26471
	Female	822	0.92121	0.25890
	Male	1,641	0.92101	0.26249
	Hispanic	824	0.92043	0.25688
	American Indian / Alaska Native	6	N/A	N/A
	Asian	52	0.91399	0.23463
	Black Non-Hispanic	745	0.91576	0.27019
	Pacific Islander	5	N/A	N/A
	White Non-Hispanic	737	0.92321	0.25725
	Multiracial	94	0.92651	0.26125
	Limited English Proficient	292	0.91388	0.27401
	Non-LEP	2,638	0.91891	0.26366
5	All Students	3,114	0.91723	0.26479
	Female	839	0.91879	0.26324
	Male	1,810	0.92014	0.26277
	Hispanic	791	0.91714	0.25699
	American Indian / Alaska Native	6	N/A	N/A
	Asian	66	0.92164	0.23260
	Black Non-Hispanic	797	0.91863	0.27549
	Pacific Islander	10	0.93218	0.25141
	White Non-Hispanic	895	0.92116	0.25854
	Multiracial	84	0.91516	0.26594
	Limited English Proficient	274	0.90032	0.26602
	Non-LEP	2,840	0.91855	0.26468
6	All Students	3,009	0.92092	0.26469
	Female	800	0.92000	0.25941
	Male	1,822	0.92258	0.26358
	Hispanic	820	0.92403	0.26315
	American Indian / Alaska Native	11	0.91082	0.29510
	Asian	63	0.92985	0.23660
	Black Non-Hispanic	818	0.91732	0.26551
	Pacific Islander	4	N/A	N/A
	White Non-Hispanic	814	0.92346	0.26130
	Multiracial	92	0.91438	0.24919

continued

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
6	LEP	234	0.90067	0.27326
	Non-LEP	2,775	0.92212	0.26396
7	All Students	2,988	0.92890	0.26237
	Female	872	0.92862	0.26140
	Male	1,818	0.93004	0.26035
	Hispanic	811	0.93381	0.25640
	American Indian / Alaska Native	11	0.93182	0.25021
	Asian	49	0.92318	0.22862
	Black Non-Hispanic	816	0.92608	0.26334
	Pacific Islander	4	N/A	N/A
	White Non-Hispanic	918	0.92911	0.26410
	Multiracial	81	0.91417	0.25603
	LEP	198	0.91533	0.26912
	Non-LEP	2,790	0.92968	0.26188
8	All Students	2,992	0.92721	0.25458
	Female	887	0.92424	0.25163
	Male	1,851	0.92879	0.25386
	Hispanic	770	0.92655	0.24907
	American Indian / Alaska Native	4	N/A	N/A
	Asian	70	0.92863	0.22851
	Black Non-Hispanic	809	0.92011	0.25746
	Pacific Islander	6	N/A	N/A
	White Non-Hispanic	992	0.93266	0.25527
	Multiracial	87	0.91932	0.24499
	LEP	148	0.91188	0.26808
	Non-LEP	2,844	0.92781	0.25386
9	All Students	3,010	0.91938	0.27300
	Female	886	0.92168	0.26885
	Male	1,732	0.92106	0.27168
	Hispanic	729	0.92645	0.26369
	American Indian / Alaska Native	12	0.91370	0.24364
	Asian	58	0.90487	0.23580
	Black Non-Hispanic	760	0.91002	0.27526
	Pacific Islander	0	NA	NA
	White Non-Hispanic	970	0.92368	0.27512
	Multiracial	89	0.92689	0.26492
	LEP	131	0.91192	0.26661
	Non-LEP	2,879	0.91970	0.27329
10	All Students	3,294	0.92079	0.27297
	Female	920	0.92012	0.26918
	Male	1,806	0.92476	0.27173
	Hispanic	734	0.92435	0.26327
	American Indian / Alaska Native	8	N/A	N/A
	Asian	51	0.93704	0.22574
	Black Non-Hispanic	844	0.91882	0.27402
	Pacific Islander	2	N/A	N/A
	White Non-Hispanic	1,019	0.92262	0.27510
	Multiracial	68	0.92801	0.27902
	LEP	141	0.92523	0.26122
	Non-LEP	3,153	0.92055	0.27349

Table O-10. 2016–17 FSAA-PT: Subgroup Reliabilities— Mathematics

Grade	*Group*	*Number of Students*	*IRT Marginal Reliability*	*SEM*
3	All Students	2,928	0.91042	0.29230
	Female	632	0.91396	0.28555
	Male	1,359	0.91131	0.28825
	Hispanic	716	0.90777	0.28704
	American Indian / Alaska Native	3	N/A	N/A
	Asian	48	0.91897	0.26909
	Black Non-Hispanic	596	0.91366	0.29121
	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	574	0.91382	0.28282
	Multiracial	53	0.91364	0.31479
	LEP	289	0.89502	0.28985
	Non-LEP	2,639	0.91182	0.29257
4	All Students	2,935	0.89727	0.29838
	Female	825	0.89659	0.28740
	Male	1,643	0.90173	0.29872
	Hispanic	828	0.90278	0.29571
	American Indian / Alaska Native	6	N/A	N/A
	Asian	51	0.86482	0.26978
	Black Non-Hispanic	745	0.89495	0.30346
	Pacific Islander	5	N/A	N/A
	White Non-Hispanic	739	0.90087	0.28667
	Multiracial	94	0.90428	0.28918
	LEP	294	0.89559	0.30923
	Non-LEP	2,641	0.89726	0.29715
5	All Students	3,124	0.90088	0.30616
	Female	842	0.89801	0.29962
	Male	1,815	0.90659	0.30842
	Hispanic	797	0.90425	0.30444
	American Indian / Alaska Native	6	N/A	N/A
	Asian	65	0.89268	0.27956
	Black Non-Hispanic	797	0.90735	0.31894
	Pacific Islander	10	0.88922	0.30822
	White Non-Hispanic	898	0.90037	0.29771
	Multiracial	84	0.87947	0.29020
	LEP	274	0.89173	0.31409
	Non-LEP	2,850	0.90157	0.30539
6	All Students	3,015	0.90649	0.29540
	Female	795	0.90562	0.28556
	Male	1,830	0.90848	0.29669
	Hispanic	820	0.91202	0.29940
	American Indian / Alaska Native	11	0.82749	0.28315
	Asian	64	0.89947	0.26483
	Black Non-Hispanic	820	0.90120	0.29315
	Pacific Islander	4	N/A	N/A
	White Non-Hispanic	814	0.91109	0.29226
	Multiracial	92	0.89277	0.27220
	LEP	236	0.88364	0.30685

continued

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
6	Non-LEP	2,779	0.90769	0.29441
7	All Students	2,987	0.89108	0.31424
	Female	872	0.89569	0.31154
	Male	1,819	0.89025	0.31404
	Hispanic	814	0.89856	0.31110
	American Indian / Alaska Native	11	0.91356	0.31936
	Asian	49	0.88899	0.29674
	Black Non-Hispanic	815	0.88368	0.31223
	Pacific Islander	4	N/A	N/A
	White Non-Hispanic	917	0.89453	0.31733
	Multiracial	81	0.86307	0.30640
	LEP	199	0.87300	0.32504
	Non-LEP	2,788	0.89195	0.31346
8	All Students	2,998	0.88933	0.30308
	Female	890	0.88635	0.29462
	Male	1,856	0.89110	0.30424
	Hispanic	770	0.89252	0.29898
	American Indian / Alaska Native	4	N/A	N/A
	Asian	70	0.87322	0.26706
	Black Non-Hispanic	813	0.87555	0.30587
	Pacific Islander	6	N/A	N/A
	White Non-Hispanic	996	0.89742	0.30266
	Multiracial	87	0.88837	0.28700
	LEP	148	0.84962	0.32119
	Non-LEP	2,850	0.89065	0.30211

Table O-11. 2016–17 FSAA-PT: Subgroup Reliabilities— Science

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
5	All Students	3,115	0.91189	0.28880
	Female	843	0.91224	0.27897
	Male	1,810	0.91553	0.28975
	Hispanic	799	0.91599	0.27766
	American Indian / Alaska Native	6	N/A	N/A
	Asian	65	0.92576	0.23727
	Black Non-Hispanic	797	0.90763	0.30485
	Pacific Islander	10	0.92228	0.26087
	White Non-Hispanic	892	0.91689	0.27871
	Multiracial	84	0.90871	0.29888
	LEP	274	0.89296	0.29605
	Non-LEP	2,841	0.91330	0.28809
8	All Students	2,989	0.89421	0.30135
	Female	888	0.88786	0.29220
	Male	1,851	0.89787	0.30307
	Hispanic	769	0.90291	0.29570
	American Indian / Alaska Native	4	N/A	N/A

continued

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
8	Asian	71	0.90281	0.26749
	Black Non-Hispanic	811	0.87870	0.30724
	Pacific Islander	6	N/A	N/A
	White Non-Hispanic	991	0.89901	0.29989
	Multiracial	87	0.88611	0.28597
	LEP	148	0.87550	0.31612
	Non-LEP	2,841	0.89494	0.30056

Table O-12. 2016–17 FSAA-PT: Subgroup Reliabilities— Algebra 1

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
HS	All Students	3,641	0.89821	0.30564
	Female	632	0.89335	0.29387
	Male	1,208	0.89562	0.30265
	Hispanic	505	0.89484	0.29807
	American Indian / Alaska Native	7	N/A	N/A
	Asian	35	0.89651	0.27551
	Black Non-Hispanic	562	0.88825	0.29530
	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	683	0.89849	0.30526
	Multiracial	47	0.90230	0.30064
	LEP	80	0.81662	0.28215
	Non-LEP	3,561	0.89908	0.30615

Table O-13. 2016–17 FSAA-PT: Subgroup Reliabilities— Biology

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
HS	All Students	4,305	0.89843	0.30358
	Female	789	0.89989	0.29507
	Male	1,608	0.90065	0.29883
	Hispanic	677	0.90547	0.29001
	American Indian / Alaska Native	10	0.90185	0.29385
	Asian	39	0.93140	0.23302
	Black Non-Hispanic	703	0.88923	0.30231
	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	893	0.89877	0.30273
	Multiracial	74	0.91701	0.29071
	LEP	137	0.88609	0.31029
	Non-LEP	4,168	0.89881	0.30335

Table O-14. 2016–17 FSAA-PT: Subgroup Reliabilities— Geometry

Grade	*Group*	*Number of Students*	*IRT Marginal Reliability*	*SEM*
HS	All Students	3,117	0.89603	0.31546
	Female	285	0.90483	0.30407
	Male	560	0.90415	0.32433
	Hispanic	269	0.90824	0.32020
	American Indian / Alaska Native	2	N/A	N/A
	Asian	18	0.93056	0.27982
	Black Non-Hispanic	223	0.88943	0.33214
	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	307	0.90712	0.30931
	Multiracial	25	0.90351	0.28852
	LEP	73	0.91127	0.33972
	Non-LEP	3,044	0.89556	0.31485

Table O-15. 2016–17 FSAA-PT: Subgroup Reliabilities— Civics

Grade	*Group*	*Number of Students*	*IRT Marginal Reliability*	*SEM*
HS	All Students	2,567	0.90780	0.28858
	Female	747	0.90727	0.28265
	Male	1,589	0.90927	0.28894
	Hispanic	707	0.90933	0.27643
	American Indian / Alaska Native	10	0.92239	0.29907
	Asian	38	0.92743	0.27538
	Black Non-Hispanic	709	0.90408	0.28727
	Pacific Islander	4	N/A	N/A
	White Non-Hispanic	795	0.91080	0.29569
	Multiracial	73	0.89722	0.28641
	LEP	174	0.87350	0.29283
	Non-LEP	2,393	0.90949	0.28827

Table O-16. 2016–17 FSAA-PT: Subgroup Reliabilities— U.S. History

Grade	*Group*	*Number of Students*	*IRT Marginal Reliability*	*SEM*
HS	All Students	3,832	0.90137	0.29742
	Female	550	0.89900	0.27753
	Male	1,121	0.90311	0.29388
	Hispanic	449	0.90670	0.27779
	American Indian / Alaska Native	7	N/A	N/A
	Asian	37	0.91904	0.24361
	Black Non-Hispanic	488	0.89971	0.28321
	Pacific Islander	0	NA	NA
	White Non-Hispanic	641	0.89664	0.29950
	Multiracial	49	0.91333	0.31892
	LEP	67	0.88209	0.26593
	Non-LEP	3,765	0.90159	0.29795

APPENDIX P—SUMMARY INTERRATER CONSISTENCY STATISTICS

Table P-1. 2016–17 FSAA-PT: Summary Interrater Consistency Statistics Item-level by Grade—ELA

Grade	*Item*	*Number of Included Scores*	*Percent Exact*	*Percent Adjacent*	*Percent Third Score*	*Correlation*
4	465985A	575	91.30	8.70	8.87	0.90
	465985B	575	82.61	17.39	8.87	0.87
	465985C	575	82.61	17.04	8.87	0.84
	465985D	575	82.26	17.57	8.87	0.87
5	466137A	615	93.17	6.34	7.97	0.96
	466137B	615	79.84	20.00	7.97	0.88
	466137C	615	80.98	18.54	7.97	0.84
	466137D	615	77.72	22.11	7.97	0.88
6	466010A	606	91.75	8.09	11.88	0.95
	466010B	606	76.73	22.77	11.88	0.82
	466010C	606	73.93	24.75	11.88	0.82
	466010D	606	77.89	21.78	11.88	0.85
7	466953A	588	94.39	5.44	11.73	0.97
	466953B	588	81.12	18.88	11.73	0.86
	466953C	588	80.27	19.22	11.73	0.89
	466953D	588	74.66	25.00	11.73	0.82
8	466293A	589	87.61	12.22	9.00	0.89
	466293B	589	82.51	17.32	9.00	0.85
	466293C	589	76.57	23.43	9.00	0.80
	466293D	589	74.87	24.79	9.00	0.82
9	466315A	583	89.19	10.46	11.49	0.92
	466315B	583	80.45	19.55	11.49	0.85
	466315C	583	82.85	17.15	11.49	0.85
	466315D	583	82.16	17.67	11.49	0.87
10	466358A	638	88.87	10.82	11.44	0.94
	466358B	638	76.80	22.73	11.44	0.85
	466358C	638	76.96	22.88	11.44	0.84
	466358D	638	76.96	22.57	11.44	0.85

APPENDIX Q—DECISION ACCURACY AND CONSISTENCY

Table Q-1. 2016–17 FSAA-PT: Summary of Decision Accuracy (and Consistency) Results by Subject and Grade—Overall and Conditional on Performance Level

Content	*Grade*	*Overall*	*Kappa*	*Conditional on Level*			
				Level 1	*Level 2*	*Level 3*	*Level 4*
ELA	3	0.75 (0.66)	0.54	0.84 (0.73)	0.67 (0.57)	0.73 (0.64)	0.85 (0.75)
	4	0.79 (0.71)	0.6	0.85 (0.75)	0.71 (0.61)	0.80 (0.73)	0.86 (0.78)
	5	0.79 (0.70)	0.59	0.85 (0.75)	0.73 (0.63)	0.77 (0.70)	0.86 (0.77)
	6	0.79 (0.71)	0.6	0.85 (0.76)	0.73 (0.63)	0.77 (0.69)	0.86 (0.78)
	7	0.80 (0.72)	0.62	0.87 (0.79)	0.73 (0.63)	0.77 (0.69)	0.87 (0.79)
	8	0.79 (0.71)	0.61	0.86 (0.77)	0.74 (0.64)	0.74 (0.65)	0.88 (0.81)
	I	0.80 (0.71)	0.6	0.85 (0.76)	0.72 (0.62)	0.80 (0.73)	0.86 (0.77)
	II	0.78 (0.70)	0.6	0.86 (0.78)	0.68 (0.57)	0.76 (0.68)	0.87 (0.80)
Mathematics	3	0.76 (0.67)	0.56	0.86 (0.77)	0.65 (0.54)	0.71 (0.61)	0.86 (0.78)
	4	0.75 (0.66)	0.54	0.85 (0.76)	0.59 (0.48)	0.74 (0.65)	0.85 (0.75)
	5	0.75 (0.66)	0.54	0.85 (0.76)	0.64 (0.53)	0.70 (0.60)	0.85 (0.77)
	6	0.76 (0.67)	0.55	0.85 (0.76)	0.64 (0.53)	0.70 (0.61)	0.86 (0.78)
	7	0.74 (0.65)	0.53	0.85 (0.77)	0.60 (0.49)	0.69 (0.60)	0.84 (0.74)
	8	0.74 (0.65)	0.52	0.84 (0.74)	0.58 (0.47)	0.70 (0.60)	0.85 (0.77)
Science	5	0.77 (0.69)	0.58	0.84 (0.74)	0.73 (0.64)	0.70 (0.60)	0.87 (0.80)
	8	0.77 (0.68)	0.55	0.82 (0.70)	0.75 (0.67)	0.74 (0.65)	0.84 (0.74)
Algebra 1	HS	0.77 (0.68)	0.56	0.82 (0.70)	0.73 (0.63)	0.76 (0.68)	0.85 (0.76)
Biology	HS	0.77 (0.68)	0.56	0.83 (0.71)	0.71 (0.61)	0.77 (0.69)	0.84 (0.75)
Geometry	HS	0.77 (0.68)	0.55	0.84 (0.73)	0.70 (0.60)	0.76 (0.69)	0.84 (0.73)
Civics	7	0.78 (0.69)	0.57	0.84 (0.72)	0.74 (0.65)	0.72 (0.63)	0.86 (0.79)
U.S. History	HS	0.76 (0.67)	0.55	0.84 (0.75)	0.56 (0.44)	0.75 (0.67)	0.86 (0.78)

Table Q-2. 2016–17 FSAA-PT: Summary of Decision Accuracy (and Consistency) Results by Subject and Grade—Overall and Conditional on Cutpoint

Content	*Grade*	*Level 1 / Level 2*			*Level 2 / Level 3*			*Level 3 / Level 4*		
		Accuracy (Consistency)	*False*		*Accuracy (Consistency)*	*False*		*Accuracy (Consistency)*	*False*	
			Positive	*Negative*		*Positive*	*Negative*		*Positive*	*Negative*
ELA	3	0.93 (0.91)	0.03	0.04	0.90 (0.86)	0.05	0.05	0.92 (0.89)	0.05	0.03
	4	0.95 (0.92)	0.02	0.03	0.91 (0.88)	0.04	0.05	0.94 (0.91)	0.04	0.03
	5	0.94 (0.92)	0.02	0.03	0.91 (0.87)	0.04	0.05	0.93 (0.91)	0.04	0.03
	6	0.94 (0.92)	0.02	0.03	0.91 (0.88)	0.04	0.05	0.94 (0.91)	0.04	0.03
	7	0.94 (0.92)	0.03	0.03	0.92 (0.88)	0.04	0.04	0.94 (0.92)	0.03	0.03
	8	0.95 (0.92)	0.02	0.03	0.92 (0.88)	0.04	0.04	0.93 (0.90)	0.04	0.03
	I	0.94 (0.92)	0.02	0.03	0.91 (0.88)	0.04	0.05	0.94 (0.91)	0.04	0.03
	II	0.94 (0.91)	0.03	0.04	0.91 (0.88)	0.04	0.04	0.93 (0.91)	0.04	0.03
Mathematics	3	0.93 (0.90)	0.03	0.04	0.91 (0.87)	0.05	0.05	0.92 (0.89)	0.04	0.03
	4	0.92 (0.89)	0.03	0.04	0.90 (0.86)	0.05	0.05	0.93 (0.90)	0.04	0.03
	5	0.92 (0.89)	0.03	0.04	0.90 (0.86)	0.05	0.05	0.92 (0.89)	0.04	0.03
	6	0.93 (0.90)	0.03	0.04	0.90 (0.87)	0.05	0.05	0.92 (0.89)	0.04	0.03
	7	0.92 (0.88)	0.04	0.05	0.90 (0.85)	0.05	0.05	0.92 (0.89)	0.04	0.03
	8	0.92 (0.89)	0.03	0.04	0.90 (0.86)	0.05	0.05	0.91 (0.88)	0.05	0.04
Science	5	0.94 (0.92)	0.02	0.03	0.91 (0.87)	0.04	0.05	0.92 (0.89)	0.04	0.03
	11	0.94 (0.92)	0.02	0.03	0.90 (0.86)	0.05	0.05	0.93 (0.90)	0.04	0.03
Algebra 1	HS	0.95 (0.93)	0.02	0.03	0.90 (0.86)	0.05	0.05	0.92 (0.89)	0.04	0.03
Biology	HS	0.94 (0.92)	0.02	0.04	0.90 (0.86)	0.05	0.05	0.93 (0.90)	0.04	0.03
Geometry	HS	0.93 (0.91)	0.03	0.04	0.90 (0.86)	0.05	0.05	0.93 (0.91)	0.04	0.03
Civics	7	0.95 (0.92)	0.02	0.03	0.91 (0.87)	0.05	0.05	0.92 (0.89)	0.04	0.03
U.S. History	HS	0.93 (0.90)	0.03	0.04	0.91 (0.87)	0.04	0.05	0.92 (0.88)	0.05	0.04