

# Florida Standards Alternate Assessment

# Technical Report 2015–2016

Prepared by Measured Progress for the Florida Department of Education



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# SECTION I OVERVIEW & 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), and the FSAA-Datafolio, which was administered as a formal trial in 2015-2016. The FSAA—Performance Task and FSAA-Datafolio form a continuum of assessment to meet the needs of Florida's students with the most severe cognitive disabilities.

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 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-Performance Task 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 knowledge, skills, and abilities (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, 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, 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 in 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.

## **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, 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. For each academic area, a student was provided with a total of three scores. The three scores reported student performance at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to the student's score. Informational brochures related to student and school reports, Facts about the Florida Standards Alternate Assessment (FSAA) and Understanding the Florida Standards Alternate Assessment (FSAA) and Understanding the Florida Standards Alternate Assessment (FSAA) and understanding the Florida 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 NCLB 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 1-1when determining the appropriate assessment.

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?		

#### Figure 1-1. 2015–16 FSAA-PT: Participation Guidelines

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 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—to write draft Access Points for three levels of complexity: Participatory, Supported, and Independent. The draft 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 policy makers. 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 ELA, mathematics, and science. 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 gradelevel (based on chronological age).
- Criterion 2: Standards Fidelity
- Content Centrality The target content of the Access Points maintain fidelity with the content of the original grade-level standards.
- Performance Centrality The focus of achievement of the Access Points maintain 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 Points 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 MAFS, 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 FAA. This new assessment would be aligned to the Florida Standards Access Points (FS-AP) in ELA and mathematics. 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. All items are developed as items sets containing three tasks (Tasks 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.

All content on the FSAA-PT is fully aligned to Florida Access Points. Table 2-1 displays the grades and courses assessed on the 2016 FSAA-PT.

Grade Level	ELA	Mathematics	Science	Algebra 1 EOC	Geometry EOC	Biology 1 EOC
3	Х	х				
4	Х	Х				
5	Х	х	Х			
6	Х	Х				
7	Х	Х				
8	Х	Х	Х			
9	Х					
10	Х					
High School				Х	Х	Х

Table 2-1. 2015–16 FSAA-PT: Grades and Contents Assessed

ELA was assessed in grades 3 through 10 access courses, including field testing of text-based writing prompts in grades 4–10.

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

Science was assessed in grades 5 and 8 access courses with biology 1 being assessed in high school as an EOC assessment.

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 administration in 2016, 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 items will be gradually phased in the assessment beginning with text-based writing in 2016 and ELA and mathematics in 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).





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 2016 FSAA-PT also included the field-testing of a new text-based writing design intended to assess a student's ability to compose a product in response to text. The field-test writing prompts 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, 3, or 4 (see Table 2-2)
    - Note the 2015-16 writing prompt was originally scored on a rubric of 0-4. In the exploratory research analysis, it was found that Categories 2 and 3 were underutilized. In consultation with the Department and the Technical Advisory Committee, Categories 2 and 3 were collapsed in the operational analysis to produce scores for 2015-16 administration. And a rubric of 0-3 would be used operationally. Please see Section III for further detail about the process that was followed to update the rubric.

Grade Span	Туре	Traits Scored (0-4)
Grades 4-5	Informative	<ul> <li>Title</li> <li>Introduction</li> <li>Details from the Passage that Support the Topic</li> <li>Conclusion</li> </ul>
Grades 5-8	Persuasive	<ul> <li>Title/Greeting</li> <li>Introduction</li> <li>Reasons from the Passage that Support the Claim</li> <li>Conclusion</li> </ul>
Grades 8- 10	Informative and Persuasive	<ul> <li>Title/Greeting</li> <li>Introduction</li> <li>Details from the Passage that Support the Topic <i>or</i> Reasons from the Passage that Support the Claim</li> <li>Conclusion</li> </ul>

Table 2-2. 2015–16 FSAA-PT: Content by Grade and Course

#### 2.3.3 Components

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

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

There were four to six forms of the 2016 FSAA-PT (see Table 2-3). The forms were clearly labeled on the cover of all test components.

Grades 3–8 and Grades 9–10 ELA	Α	В	С	D	E	F
End-of-Course: Algebra 1, Geometry, and Biology 1	A	В	С	D		

Table 2-3. 2015–16 FSAA-PT: Test Forms

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

The *Materials* column outlined for the test administrator which materials would 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 provides 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 2016 FSAA-PT was separated into two or three sessions. Each session required the teacher to follow different administration procedures.

Session 1 included the first 10 item sets in ELA, mathematics, and science. 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. 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 item sets 11–19 in ELA, mathematics, and science. Teachers administered these items in a nonadaptive 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 the field-test 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. 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.

## 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. Appendix D contains all of the test blueprints.

#### 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.

# 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 Standards 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 2016 FSAA-PT were developed and included in the document *FSAA-PT Test Design, Blueprints, and Item Specifications for ELA, Mathematics, and Science: 2015–2016 Development (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.



## 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 2015. All newly developed item sets were posted in a staggered fashion to the Measured Progress FTP site where the FLDOE had the opportunity to evaluate the content of all new development. Comments were drawn up within an electronic file by the FLDOE and submitted to the Measured Progress special education specialist to review in conjunction with the respective content-area specialists from CDD. Measured Progress provided a list of resolutions to the FLDOE to confirm the type and extent of changes made to items.

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 posted in a staggered fashion by grade to the Client Item Viewer throughout the window from July to October 2015. During this time, the FLDOE had the opportunity to evaluate all new development post-committee review. Comments were 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 in November to December 2015. 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 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 on March 12, 2015. 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, graphics, and graphic captions (read aloud to students with visual impairments) 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 six individuals selected to participate by the FLDOE (see list in Appendix A, Table A-3). They included four special education teachers/coordinators, one of whom had experience in teaching students with hearing impairments and three others with experience in teaching students with varying exceptionalities. The fifth individual on the panel was a consultant to the FLDOE 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 English language arts (ELA) were also present, along with additional staff from the FLDOE.

Committee members reviewed the reading passages, associated graphics, and passage captions. They 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.

#### 3.2.4 Item Content and Bias Sensitivity Reviews

All new development for the 2016 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. Due to the increased volume of new development in 2015–16, two meetings were held to perform these activities. The first meeting was held in Orlando on June 22–26, 2015, for ELA and mathematics. The second was held in Tampa on July 20–24, 2015, for science, additional ELA development, and text-based writing.

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 1 variety of different grades and backgrounds. (See Appendix A, Tables A-3 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.

The Item Content and Bias Sensitivity Review committees completed all of the activities put before them and participated in an anonymous survey at the end of the meeting. Feedback received from each of the content review and bias review panels is compiled in Appendix E. 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.

#### 3.2.5 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 posted to the Client Item Viewer 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 are intended to guide (1) participants during the standard-setting process for the FSAA-PT in February 2017, (2) score interpretation on student reports, and (3) 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 the 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 takeaway message regarding a student's achievement within each achievementlevel.

#### 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 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 definitionss 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, 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 (REPORT THE CUTSCORES)

Standard setting was conducted in February 2017 to establish cut scores for each achievement level in ELA, mathematics, and science. 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 report (Measured Progress, 2017a).

# CHAPTER 5 TRAINING AND ADMINISTRATION

# 5.1 Administrator Training

## 5.1.1 Professional Development

Measured Progress, in conjunction with the FLDOE, hosted three one-day FSAA-PT Train-the-Trainer workshops. These trainings were held in Orlando on October 20–22, 2015. Because the FSAA-PT was a newly designed assessment with different administration procedures and guidelines, Alternate Assessment Coordinators (AACs), district trainers, and/or designees were required to attend one workshop, regardless of past participation in FAA training. The participants who attended the workshop, in turn, were responsible for training individuals within districts and/or acting as a resource for FSAA-PT administration questions. A total of 161 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 had involvement in the development, item review, and writing of the administration manual for the FSAA-PT. The 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 2016 FSAA-PT overview and also highlighted differences between the old FAA and the new FSAA-PT with the participants. New training requirements were 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 three workshops were compiled into one document that was made available to all participants following the meeting. The PowerPoint presentation, a draft 2016 administration manual, and all training activities used for the FSAA-PT Train-the-Trainer workshops were prevented with the opportunity to provide feedback on the FSAA-PT Train-the-Trainer workshops at the end of each session. (See Appendix E for feedback related to the Train-the-Trainer sessions.)

## 5.1.2 FSAA-PT Administration Training Modules

Teachers were required to receive FSAA-PT administration training prior to administering the spring 2016 assessment to students. This training was accomplished by completing all three administration training modules online or by participating in district face-to-face training. Training requirements were dependent on prior experience with administering the alternate assessment in Florida. Teachers who had been previously

trained to administer the FAA could meet their training requirement by participating in the administration training modules. Teachers who had not been previously trained to administer the FAA were required to attend a face-to-face training provided at the district level, but they were also recommended to review the administration training modules.

The modules 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 Administration Manual 2015–16*. 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 to seven 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
  - o FSAA-PT Overview and Highlights
  - o Assessment Participation Guidelines
  - o Administrator Qualifications
  - o Important Dates
  - o Test Security
  - o Operational Design Overview
  - o Contents and Grades Assessed
  - o Assessment Components
  - o Item Set Design
- Module 2: Administration Procedures
  - o Administration Overview
  - o Administration Procedures
  - o Content Specific Directions
  - Writing Prompt Administration
  - o Writing Prompt: Capturing Student Response
- Module 3: Before, During, and After Administration
  - o Before Administration Preparation
    - Preparation Before Materials Arrive
    - Practice Materials
    - Preparation After Materials Arrive
    - Allowable Adjustments and Accommodations

- Writing Open-Response
- During Administration
- o After Administration

The administration training modules were available to teachers 24 hours a day, 7 days a week, for a four-month window starting December 1, 2015. In addition to the modules, additional 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 2016 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.

Date	Milestone	
January 14, 2016	Participation Report #1 to AACs	
February 3, 2016	Participation Report #2 to AACs	
February 19, 2016	Participation Report #3 to AACs	
March 2, 2016	Participation Report #4 to AACs	
March 14, 2016	Participation Report #5 to AACs	
March 28, 2016	Participation Report #6 to AACs	
April 8, 2016	Participation Report #7 to AACs	
April 18, 2016	Participation Report #8 (final report) to AACs	

Table 5-1. 2015–16 FSAA-PT: Participation Report Dates

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 15-16 FSAA-PT. Teachers were also required to participate in a short quiz following each of the modules 1-3.

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.

Module 1	3,855 teachers completed
Module 2	3,780 teachers completed
Module 3	3,754 teachers completed
Module 4	3,759 teachers completed

Table 5-2. 2015–16 FSAA-PT: Teacher Participation Summary

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 3,438 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 newly designed 2015–2016 FSAA-PT Administration Manual was created by Measured Progress, in conjunction with the FLDOE, to partner with the release of the 2016 FSAA-PT. The 2015–2016 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 2015–2016 FSAA-PT Administration Manual was available to teachers for download on the FSAA Portal in early November 2015 with the printed copies arriving in districts by late November 2015.

### 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. 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. The printed kits and PDF versions were made available to AACs and teachers in December 2015. Table 5-3 shows how the 2016 FSAA-PT Practice Materials Kits were organized.

	ELA	2 item sets per grade		
Elementary Kit	Text-based Writing	2 writing prompts		
Grades 3–5	Mathematics	2 item sets per grade		
	Science	2 item sets grade 5		
	ELA	2 item sets per grade		
Middle School Kit	Text-Based Writing	2 writing prompts		
Grades 6–8	Mathematics	2 item sets per grade		
	Science	2 item sets grade 8		
High School ELA Kit	ELA	2 item sets per grade		
	Text-Based Writing	2 writing prompts		
High School	Algebra 1	2 item sets		
Mathematics Kit	Geometry	2 item sets		
High School Science Kit	Biology	2 item sets		

Table 5-3. The 2015–16 FSAA-PT: Practice Material Kits

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 2016; see table 5-4 below for details.

Elementary and Middle School (Grades 3-8) Testing Schedule				
Alternate Assessment Materials in Districts	February 19–24, 2016			
Student Testing Window	February 29–April 15, 2016			
Student Responses Entered into FSAA Online System	No later than 11:59 PM EST on April 15, 2016			
Return of Test Materials to Piedra Data Services	No later than May 13, 2016			
High School (Grades 9 & 10) ELA, Algebra 1, Geometry, and Biology 1 Testing Schedule				
Alternate Assessment Materials in Districts	March 15–23, 2016			
Student Testing Window	Upon receipt of materials through April 29, 2016			
Student Responses Entered into FSAA Online System	No later than 11:59 PM EST on April 29, 2016			
Return of Test Materials to Piedra Data Services	No later than May 13, 2016			

Table 5-4. The 2015–16 FSAA-PT: Administration Windows
The elementary and middle school tests were administered February 29–April 15, 2016. Once the teachers 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 15, 2016. All secure assessment materials were returned to Piedra Data Services for storage no later than May 13, 2016.

The high school tests were administered March 15–April 29, 2016. Once the teachers 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 29, 2016. All secure assessment materials were returned to Piedra Data Services for storage no later than May 13, 2016.

#### 5.2.2 Administration Survey Results

An online administration survey was conducted from March 23 through May 6, 2016. It is unclear how many teachers administered the assessment; however, approximately 1,398 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, AND SCIENCE

#### 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.

For the 2015-16 reporting purposes, raw score information for each level of complexity based on student performance on the first 10 item sets were provided in a student report to schools and districts. As indicated in Chapter 1, this was an interim reporting process as standard setting was not conducted until February 2017. 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. Item sets 11-19 were administered non-adaptively and were not reported on during this interim reporting.

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.

by Content Area and Grade						
Test Administration	Dover, NH	Menands, NY	Longmont, CO			
Grades 4–8 & High School Writing Prompts	Х					

Table 6-1. 2015–16 FSAA-PT: Operational Scoring Locations	
by Content Area and Grade	

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 readbehind activities for the scorers at their scoring tables. (The ratio of STLs to Scorers was approximately 1:6.)
- Scorers at scoring sites scored field-test 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.

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 6-2 summarizes the qualifications of the FSAA-PT scoring leadership and scorers.

Scoring		Total			
Responsibility	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 6-3.

#### Table 6-3. 2015–16 FSAA-PT: Possible Score Points for Polytomous Item Types

Polytomous	Possible Score
Item Type	Point Range
Writing Prompt	0–4; 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 6-4 demonstrates the levels of exact agreement and exact and adjacent agreement between scorers on each trait. Exact agreement ranged from 66.67% to 96.91% exact agreement and 95.19% to 100% exact and adjacent agreement. Table 6-5 illustrates the high level of agreement between readers beyond "chance" agreement.

Trait		Ti	tle	Introc	luction	Supportir	ng Details	Conclusion	
Agreement Rates	Item ID	% Exact Agreement	% Exact and Adjacent Agreement	% Exact Agreement	% Exact and Adjacent Agreement	% Exact Agreement	% Exact and Adjacent Agreement	% Exact Agreement	% Exact and Adjacent Agreement
	267419	84.04	100.00	74.47	100.00	93.62	100.00	82.98	100.00
	267430	82.18	100.00	75.25	100.00	83.17	100.00	83.17	98.02
Grade 4	267465	89.91	98.17	88.07	99.08	93.58	100.00	84.40	98.16
	267498	85.42	100.00	86.46	100.00	91.67	100.00	84.38	100.01
	267529	90.00	100.00	86.00	99.00	88.00	100.00	86.00	100.00
	267540	85.85	100.00	86.79	100.00	90.57	100.00	89.62	100.00
	267498	80.73	99.08	85.32	99.08	89.91	100.00	84.40	98.16
	267529	88.12	98.02	86.14	99.01	81.19	100.00	76.24	99.01
Grade 5	267540	90.29	100.00	87.38	100.00	88.35	100.00	79.61	99.03
Grade J	267579	84.38	100.00	75.00	100.00	90.63	100.01	72.92	98.96
	267675	79.59	98.98	86.73	100.00	78.57	100.00	77.55	100.00
	267685	92.00	99.00	84.00	100.00	84.00	100.00	83.00	99.00
	267579	76.15	97.25	68.81	98.17	83.49	100.00	77.98	100.00
	267675	86.27	100.00	84.31	100.00	83.33	100.00	72.55	99.02
Grade 6	267685	88.04	97.82	92.39	100.00	88.04	100.00	84.78	97.82
Grade 0	267709	83.70	98.92	82.61	100.00	79.35	100.00	79.35	98.92
	267765	87.13	100.00	91.09	100.00	79.21	100.00	89.11	100.00
	267782	95.00	100.00	86.00	100.00	80.00	99.00	85.00	100.00
	267709	82.57	100.00	82.57	100.00	72.48	100.00	78.90	100.00
	267765	87.96	100.00	85.19	99.08	72.22	100.00	82.41	99.08
Grade 7	267766	83.84	100.00	76.77	100.00	85.86	100.00	78.79	100.00
	267782	94.79	100.00	88.54	100.00	78.13	100.01	83.33	100.00
	267801	96.67	100.00	76.67	100.00	77.78	100.00	80.00	100.00
	267877	95.96	100.00	86.87	100.00	81.82	100.00	83.84	100.00

#### Table 6-4. 2015–16 FSAA-PT: Levels of Agreement

continued

Trait		Ti	Title		luction	Supportir	ng Details	Concl	usion
Agreement Rates	Item ID	% Exact Agreement	% Exact and Adjacent Agreement	% Exact Agreement	% Exact and Adjacent Agreement	% Exact Agreement	% Exact and Adjacent Agreement	% Exact Agreement	% Exact and Adjacent Agreement
	267766	86.14	100.00	85.15	100.00	79.21	100.00	78.22	100.00
	267801	93.64	100.00	79.09	100.00	82.73	99.09	74.55	100.00
Grade 8	267877	96.91	100.00	83.51	100.00	83.51	100.00	89.69	100.00
Grade o	267944	93.07	99.01	80.20	100.00	70.30	98.02	81.19	100.00
	267972	82.08	97.17	86.79	100.00	73.58	98.11	68.87	97.17
	267987	93.27	100.00	83.65	100.00	84.62	100.00	70.19	98.07
	267944	82.86	95.24	79.05	97.15	80.95	98.09	84.76	100.00
	267972	82.52	99.02	84.47	100.00	81.55	99.03	86.41	99.03
Grade 9	267987	85.59	99.10	66.67	98.20	75.68	99.10	70.27	97.30
Grade 9	268235	92.16	100.00	86.27	100.00	78.43	100.00	85.29	100.00
	268258	83.84	96.97	79.80	98.99	79.80	98.99	84.85	98.99
	268268	79.61	96.11	81.55	99.03	83.50	100.00	85.44	100.00
	268235	94.62	98.92	83.87	98.92	87.10	100.00	92.47	100.00
	268258	92.23	100.00	84.47	100.00	77.67	99.03	83.50	98.06
Grade 10	268268	81.73	98.08	77.88	100.00	79.81	99.04	77.88	95.19
Grade 10	268282	80.61	96.94	77.55	97.96	83.67	97.96	87.76	97.96
	268315	90.43	98.94	84.04	98.93	78.72	98.93	81.91	100.00
	268570	94.79	100.00	85.42	100.00	89.58	100.00	79.17	98.96

			<u> </u>	•	_
-	Grade	Title	Introduction	Supporting Details	Conclusion
•	4	0.88	0.81	0.91	0.82
	5	0.86	0.83	0.89	0.78
	6	0.87	0.84	0.86	0.81
	7	0.92	0.84	0.81	0.80
	8	0.92	0.84	0.77	0.77
	9	0.87	0.80	0.80	0.80
	10	0.90	0.84	0.82	0.82

 Table 6-5. 2015–16 FSAA-PT: Weighted Kappa for the Writing Performance Task

< 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 thoroughly reviewed and discussed the rubric for each item to be scored. Rubrics were developed as part of the item development process (discussed in Chapter 3).

Following review of the rubric, scorers reviewed 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 Scoring 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 6-6 illustrates how scores were resolved by read-behind.

Scorer Score	Leadership Score	Final
4-4-4-4	4-4-4	4-4-4-4
4-3-3-4	3-3-3-4	3-3-3-4
4-3-3-3	2-2-2-3	2-2-2-3

Table 6-6. 2015–16 FSAA-PT: Examples of Read-Behind Scoring Resolutions<sup>1</sup>

<sup>1</sup> 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 qualitycontrol 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

For each academic area assessed, individual student reports provided a total of three scores. The three scores reported how the student performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the first 10 item sets. The score reflected the percentage of tasks the student scored correctly out of the total number of tasks attempted.

Parent/guardian and teacher brochures were prepared to be distributed with the individual student reports. The parent/guardian brochures focused on providing an overview of the FSAA-PT, including the Access Points and a description of the levels of complexity, information on who determines whether the student will participate in the alternate assessment, when the assessment takes place, who administers the assessment, and how the results are used. The teacher brochure included some of the same information but focused more on what results are provided and how they could be used by the teacher. Printed copies of the parent/guardian and teacher brochures were shipped with the individual student reports and also made available electronically to the public on the FLDOE website at http://www.fldoe.org/asp/altassessment.asp. (Copies of the brochures can be found in Appendix H.)

In addition to the individual student reports and the supplemental brochures, school s and districts were provided with the following student data reports,

- Student Test Results Data File: data included basic demographic information, test participation status, and item set scores for each student within the district detailed by school. This was provided as a CSV file.
- Assessed Summary Data File: data include number of students *Tested* and number of students *Not Tested* by grade and content area within the district detailed by school. This was provided as a CSV file.
- School Level Student Roster Reports: for each academic area, each school was provided with a roster style report that captured their students' individual performances, including *Not Tested* participation status codes as applicable.

# 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. Session 1 included the first 10 item sets in ELA, mathematics, and science. 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 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 answers each task correctly, incorrectly, or provides no response. Session 3 included field-test 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.

The operational field test was designed such that the optimal scoring and calibration model could be explored and selected. Measured Progress psychometric team conducted extensive research and analyses. In consultation with the Technical Advisory Committee (TAC) in November 2016, the following psychometric and scoring procedures for the operational implementation of the FSAA-PT tests were approved by the Florida Department of Education:

- Each operational test consists of 16 core item sets that will be scored adaptively. The 3 field test item sets will be scored non-adaptively.
- The ELA tests for grades 4-10 consist of:
- 48 Reading multiple-choice (MC) items
- 5 Writing MC items
- 1 writing prompt scored on 4 traits on a rubric of 0-3 for each trait
- The two-parameter IRT model will be used to calibrate MC items and the generalized partial credit model (GPCM) will be used to calibrate the writing prompt traits. For ELA grades 4-10, MC items will be calibrated first and the writing prompt traits will then be scaled with all the parameters of the MC items fixed.
- Pattern scoring using the Expected A Posteriori (EAP) procedure will be employed to produce student ability estimates.

These procedures, described in detail in this section, were implemented for the 2015-16 FSAA-PT. Note the writing prompt was originally scored on a rubric of 0-4. In the exploratory research analysis, it was found that Categories 2 and 3 were underutilized. In consultation with the Department and the Technical Advisory Committee, Categories 2 and 3 were collapsed in the operational analysis to produce scores for 2015-16 administration. And a rubric of 0-3 would be used operationally. Measured Progress worked with the Florida Department of Education (FLDOE) to adjust the rubric. The descriptions in the rubric for Categories 1 and 4 were not modified. The descriptions in the rubric for Categories 2 and 3 were combined so that it was a clearer description of the writing evidence expectation within the collapsed category. The reporting scale was established at the completion of standard setting in February 2017. After the approval of the cut scores by the State Board of Education following a 90-day public review, Florida Department of Education requested that scale scores produced and retrofitted to the 2015-16 operational form. The data included in this technical report are, therefore, based on the 2015-16 operational test results. As described in Chapter 1, the 2015-16 FSAA-PT raw score results were provided in July 2016 at the student, school, district and state levels as an interim measure since the reporting scale had not yet been established. The reporting scale was established.

# 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 (itemtest 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 operational field test administration of the FSAA-PT assessments in spring 2016.

#### 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. The writing prompt is 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 9.

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, 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
  - $\circ$  P-value <= 0.25
  - $\circ$  Point-biserial <= 0.15

- Flagging on Distractors
  - $\circ$  P-value >= 0.3
  - $\circ$  Point-biserial >= 0.3
- Omit Rate Flagging
  - $\circ$  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. For each of these grades, one Reading form was administered to all students while 6 Writing forms were spirally administered. The Reading form consists of 48 items. A Writing form consists of 9 items: 5 MC items and 1 writing prompt scored on 4 dimensions. With 6 forms, the Writing component has a total of 54 items. Adding the 48 Reading items, the ELA test consists of 102 items for each of the grades 4-10. Because the nature and purpose of the FSAA-PT 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. Discrimination indices (i.e., item-total correlations) are provided for each test in Appendix I by item and in Appendix J by task level.

Subject	Grade	Number of Items -	P-value		Item-total Correlation	
Subject	Grade	Number of items	Mean	SD	Mean	SD
	3	48	0.59	0.14	0.38	0.12
	4	102	0.64	0.15	0.45	0.11
	5	102	0.66	0.13	0.47	0.11
ELA	6	102	0.64	0.13	0.46	0.11
ELA	7	102	0.66	0.14	0.46	0.11
	8	102	0.64	0.14	0.47	0.11
	9	102	0.63	0.15	0.44	0.13
	10	102	0.65	0.15	0.45	0.11
	3	48	0.64	0.17	0.43	0.13
	4	48	0.61	0.17	0.39	0.12
	5	48	0.62	0.17	0.38	0.14
Mathematics	6	48	0.66	0.14	0.43	0.10
	7	48	0.63	0.17	0.38	0.10
	8	48	0.71	0.13	0.43	0.11
Colorado	5	48	0.73	0.13	0.50	0.12
Science	8	48	0.68	0.16	0.42	0.14
Algebra 1	HS	48	0.63	0.14	0.40	0.12
Biology	HS	48	0.72	0.17	0.44	0.12
Geometry	HS	48	0.71	0.16	0.42	0.12

Table 8-1. 2015–16 FSAA–PT: Item Difficulty and Discrimination Statistics—All

## 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, 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 nonadministered 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. Only when sources of DIF are determined to come from the difference in relevant knowledge and skills measured by the items can they be included on the assessments.

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.<sup>1</sup>

For the 2015–16 FSAA-PT, the following subgroup comparisons were evaluated for DIF:

- Male versus female
- White versus Black

<sup>&</sup>lt;sup>1</sup> 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.

- White versus Hispanic
- Non-limited English Proficient versus Limited English Proficient
- Not Economically Disadvantaged versus Economically Disadvantaged

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.

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 clusters that best exemplify 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 results 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 2015–16 assessments for ELA and mathematics in grades 3 through 8, ELA in grades 9 and 10, and science in grades 5 and 8 – a total of 16 tests. For all these tests, Session 2 consisted of 9 item sets (27 items) that were administered non-adaptively to all the test takers. The 9 item sets in Session 2 consist of 6 operational item sets (18 items) that all the students took plus 3 field-test item sets (9 items). There also were additional ELA writing-prompt-based field-test items. These were new items that did not have counterparts within the operationally scored items. Thus, the dimensionality analysis of the writing-prompt-based items are treated separately below. Here we will first focus on the results for the operational ELA, mathematics, and science performance-task item sets, plus their corresponding field-test item sets. Thus, each analyzed test consisted of 27 items. Next, we describe the sample sizes for each of the analyzed tests.

For 13 of the 16 ELA, mathematics, and science tests, there were two field-test forms per operational form. Because the total sample size for each test consisted of about 2900 examinees, this resulted in approximately 1450 examinees per analyzed test. There were three tests that did not have two field-test forms – grade 10 ELA, which had four field-test forms, and grades 3 and 8 ELA, each of which had only one field-test form. Since there was only one field-test form for ELA in grades 3 and 8, the sample size was the total number of examinees who took the tests, about 2900. For grade 10 reading, two of the four field-test forms had approximately 950 examinees each while the other two had approximately 500 examinees each. Thus, only the two grade 10 field-test forms with 950 examinees each were included in our analyses.

Two sets of analyses were then conducted: (1) DIMTEST and DETECT analyses of the field-test forms using training and cross-validation samples, and (2) DETECT analyses of the field-test forms conducted without cross-validation. In the first set of analyses, 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. The second set of analyses was conducted to obtain less noisy estimation of the DETECT item clusterings. For ELA in grades 3 and 8, analyses were conducted in two ways – first, using the smaller (approximately 1450) field-test sample sizes and, second, using the full (approximately 2900) sample size. This allowed us to better judge the effect of sample size in our interpretations of the results for the other tests.

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.

Table 8-2. 2016-	-1 F3AA-P		Insionality En	ect Sizes by	
Content	Grade	Form	Number of Examinees	DETECT with Cross Validation	DETECT with No Cross Validation .
	0	A <sup>1</sup>	1,423	0.57	0.69
	3	B <sup>1</sup>	1,358	0.51	0.60
	4	A <sup>1</sup>	1,469	0.48	0.46
	4	B <sup>1</sup>	1,435	0.45	0.63
	F	A <sup>1</sup>	1,468	0.56	0.71
	5	B <sup>1</sup>	1,436	0.78	0.76
Mathematics	<u>^</u>	A <sup>1</sup>	1,475	0.45	0.49
	6	B <sup>1</sup>	1,424	0.34	0.46
	7	A <sup>1</sup>	1,492	0.62	0.66
	1	B <sup>1</sup>	1,463	0.49	0.68
	0	A <sup>1</sup>	1,522	0.48	0.56
	8	B <sup>1</sup>	1,448	0.48	0.49
		A <sup>1</sup>	1,445	0.47	0.57
	3	B <sup>1</sup>	1,353	0.60	0.52
		Common <sup>2</sup>	2,798	0.54	0.53
	4	A <sup>1</sup>	1,471	0.36	0.46
	4	B <sup>1</sup>	1,441	0.30	0.36
	5	A <sup>1</sup>	1,478	0.29	0.47
	Э	B <sup>1</sup>	1,440	0.37	0.50
	6	A <sup>1</sup>	1,479	0.23	0.45
Deeding	6	B <sup>1</sup>	1,428	0.30	0.48
Reading	7	A <sup>1</sup>	1,495	0.39	0.47
	1	B <sup>1</sup>	1,463	0.34	0.47
		A <sup>1</sup>	1,525	0.32	0.46
	8	B <sup>1</sup>	1,460	0.36	0.47
		Common <sup>2</sup>	2,985	0.39	0.45
	0	A <sup>1</sup>	1,558	0.56	0.64
	9	B <sup>1</sup>	1,496	0.54	0.60
	10	A <sup>1</sup>	983	0.18	0.41
	10	B <sub>1</sub>	932	0.57	0.55
	5	A <sub>1</sub>	1,461	0.33	0.44
Saianaa	Э	B <sup>1</sup>	1,440	0.31	0.43
Science	0	A <sup>1</sup>	1,518	0.41	0.61
	8	B <sup>1</sup>	1,451	0.43	0.56

Table 8-2. 2016–1 FSAA-PT: Multidimensionality Effect Sizes by Content Area

<sup>1</sup> field test item forms

<sup>2</sup> items common to all field test forms

Scanning the results, as expected, the DETECT indices for the analyses using cross validation are generally lower than the results that did not use cross validation. A positive bias is to be expected when cross-validation is not used due to the statistic's capitalization on chance. Even when cross-validation is used, the 27-item test length would still induce a small amount of positive bias – about 0.15, estimated from the results of Roussos and Ozbek (2006). When cross-validation is not used, the bias would be expected to be still larger. Of course, random estimation error (random noise) also occurs in the estimation of the DETECT

index, and such random error would be expected to be greater in the case where cross-validation is used because of the smaller sample size used in calculating the DETECT index.

Comparing the content areas, ELA and science have similar DETECT indices, while mathematics tends to have values that are higher than ELA or science, within mathematics, taking the 0.15 bias into account, most of the results indicate weak multidimensionality or moderate multidimensionality on the low side of the moderate range. The highest DETECT index for mathematics occurred for Form B of grade 5, still indicating moderate multidimensionality, though on the high end of the moderate range. Thus, overall for mathematics, the DETECT index indicates weak to moderate multidimensionality. For ELA and science, most of the results indicate very weak or weak multidimensionality. The highest values occurred for the grade 3 and grade 9 tests, which displayed moderate multidimensionality on the low side of the moderate range. Thus, for ELA and science, the DETECT index generally indicates very weak (<0.20) to weak (0.20 to 0.30) 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. The analyses with cross validation, as expected displayed a substantial amount of noise in the sign-pattern matrices. Of the 32 analyses, 13 displayed a strong tendency of forming three clusters corresponding to items having the three keys of "A", "B", and "C", respectively. Another 17 analyses showed only some indication of a cluster or two being associated with an answer key. For two other tests, the clusters did not seem to have any obvious interpretation. If the keys really do have some role to play in the multidimensionality, then we would expect the results with the larger sample sizes in the no-cross-validation analyses to confirm such a role. When the no-cross-validation results were investigated, it was found that 28 of the 32 analyses displayed a strong tendency of DETECT to form three clusters, each aligned to one of the three answer keys. Importantly, for the two tests with full sample size analyses, grade 3 and grade 8 ELA, not only was the DETECT index nearly the same for both cross-validation and no-cross-validation, but the strong clustering tendency was present for both tests for the no-cross-validation case.

These results indicate that the violations of local independence are related to the placement of the correct response options. This phenomenon requires further research, the scale and size of which is beyond the scope of the standard analyses conducted for this section. The nature of these results indicate that there are students who tend to give responses corresponding to a particular key to some degree on at least some items, regardless as to whether the particular key is the correct response or not. Given that the DETECT effect sizes are not large, this phenomenon is probably occurring with a small, but still substantial number of students, and the phenomenon is present to at least some degree for nearly every item on each test. 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.

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DETECT was also performed for the operational ELA Session 2 items combined with the writingprompt stand-alone and essay field-test items. These field-test items consisted of 5 Writing MC items and a writing prompt essay scored on 4 traits using a rubric of 0-3 on each trait. In 2015-16, 6 writing prompt forms were spiraled and randomly assigned to each student. Combining all the operational ELA items with the fieldtest writing items for each field-test form resulted in 6 forms, each of which consisted of 39 points, with approximately 500 students on each form. Each of these forms was then analyzed using DIMTEST and DETECT. The DIMTEST null hypothesis was rejected at a significance level of 0.01 for every grade. Table 8-3 displays the multidimensional effect size estimates from DETECT for Form A (similar results occurred for Forms B, C, D, E, and F).

Content Area	Grade	Multidimensionality Effect Size
	4	0.96
	5	0.61
	6	0.81
Reading + Writing	7	0.64
	8	0.83
	9	0.96
	10	1.04
	Average	0.84

Table 8-3. 2015-16 FSAA-PT: Multidimensionality Effect Sizes by Grade for Reading and Writing Combined

All the DETECT values indicated moderate to strong multidimensionality. These test forms tended to show more multidimensionality than did the operational mathematics, ELA, or science test forms. How DETECT divided the tests into clusters was also investigated to see if there were any discernable patterns with respect to item type. The combined ELA/Writing tests clearly showed two dimensions for each grade: one for ELA combined with writing multiple-choice items and the other for the writing prompts. To mitigate the possible effects of multidimensionality on scoring, the ELA scale was set by calibrating and equating all MC items first and then bringing the writing prompts onto that scale. Please refer to chapter 10 for details.

# CHAPTER 9 ITEM RESPONSE THEORY SCALING AND EQUATING

This chapter describes the procedures used to calibrate, equate, and scale the FSAA-PT. 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 ( $\theta$ ) and the probability (p) of getting a dichotomous item correct. In the IRT literature,  $\theta$  is commonly referred to as the "ability parameter" or the "person parameter"; thus, the term "ability" is sometimes used to refer to  $\theta$  in this chapter. In IRT, all items are assumed to be independent measures of the same construct (i.e., of the same  $\theta$ ). Another way to think of  $\theta$  is as a mathematical representation of the latent trait of interest. Several common IRT models are used to specify the relationship between  $\theta$  and p (Hambleton & Swaminathan, 1985; Hambleton & van der Linden, 1997). The process of determining the specific mathematical relationship between  $\theta$  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  $\theta$  and p. Once the item parameters are known, an estimate of  $\theta$  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,  $\alpha$  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:

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

where *i* indexes the items, *k* indexes score categories (1, ..., m), *j* indexes students, *a* 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, 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 2015–16 FSAA-PT 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.

Content	Grade	Number of		а	b	
Area	Graue	Items	Mean	SD	Mean	SD
	3	48	0.77	0.37	0.05	0.95
	4	48	0.90	0.43	-0.29	0.86
	5	48	0.96	0.48	-0.35	0.76
ELA	6	48	0.90	0.44	-0.25	0.76
	7	48	0.97	0.43	-0.42	0.70
	8	48	0.96	0.46	-0.31	0.73
	9	48	0.89	0.49	-0.27	0.83
	10	48	0.89	0.42	-0.38	0.80
	3	48	0.99	0.46	-0.11	0.95
	4	48	0.84	0.41	0.00	1.03
	5	48	0.83	0.45	-0.08	1.06
Mathematics	6	48	0.93	0.36	-0.27	0.68
	7	48	0.78	0.34	-0.18	1.00
	8	48	0.98	0.42	-0.55	0.68
Science	5	48	1.30	0.48	-0.49	0.66
20101100	8	48	1.00	0.52	-0.37	0.76
Algebra 1	HS	48	0.81	0.35	-0.19	0.78
Biology	HS	48	1.16	0.58	-0.60	1.04
Geometry	HS	48	1.01	0.46	-0.56	0.84

Table 9-1. 2015–16 FSAA-PT: IRT Summary Statistics Overall

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.

Content Area	Grade	Task	Number of	а		b	
Content Alea	Grade	Level	ltems	Mean	SD	Mean	SD
		1	16	1.07	0.4	-0.55	0.67
	3	2	16	0.70	0.29	0.33	1.18
		3	16	0.55	0.19	0.37	0.64
		1	16	1.24	0.44	-0.87	0.45
	4	2	16	0.82	0.35	-0.33	0.63
		3	16	0.64	0.27	0.33	0.99
		1	16	1.46	0.34	-1.05	0.17
ELA	5	2	16	0.79	0.36	-0.25	0.57
		3	16	0.61	0.20	0.25	0.75
		1	16	1.33	0.36	-0.93	0.31
	6	2	16	0.73	0.30	-0.27	0.35
		3	16	0.63	0.28	0.44	0.77
		1	16	1.38	0.34	-1.10	0.27
	7	2	16	0.86	0.36	-0.23	0.44
		3	16	0.67	0.23	0.07	0.71

Table 9-2. 2015–16 FSAA-PT: IRT Summary Statistics by Grade and Task

continued

Content Area	Grade	Task	Number of	а		b	
	Grade	Level	Items	Mean	SD	Mean	SD
		1	16	1.39	0.37	-0.94	0.37
	8	2 3	16	0.87	0.41	-0.29	0.59
		<u> </u>	<u>16</u> 16	0.61 1.35	0.16	0.30 -1.05	0.59 0.21
	9	2	16	0.72	0.32	-0.11	0.67
ELA		3	16	0.60	0.35	0.36	0.76
		1	16	1.34	0.31	-1.07	0.21
	10	2	16	0.72	0.29	-0.28	0.80
		3	16	0.63	0.22	0.22	0.65
		1	16	1.30	0.36	-0.90	0.31
	3	2	16	0.97	0.47	0.06	0.98
		3	16	0.70	0.32	0.50	0.81
		1	16	1.25	0.35	-0.95	0.36
	4	2	16	0.72	0.29	-0.02	0.54
		3	16	0.55	0.18	0.96	0.99
		1	16	1.28	0.36	-0.93	0.28
	5	2	16	0.74	0.30	-0.02	0.70
Mathematica		3	16	0.48	0.24	0.72	1.22
Mathematics		1	16	1.17	0.32	-0.84	0.34
	6	2	16	0.91	0.39	-0.25	0.52
		3	16	0.71	0.22	0.27	0.63
		1	16	1.07	0.35	-1.04	0.42
	7	2	16	0.73	0.20	-0.14	0.58
		3	16	0.56	0.23	0.66	1.05
		1	16	1.32	0.47	-1.06	0.26
	8	2	16	0.88	0.31	-0.64	0.46
		3	16	0.73	0.22	0.06	0.71
		1	16	1.52	0.34	-1.08	0.21
	5	2	16	1.33	0.57	-0.48	0.59
Osianaa		3	16	1.03	0.41	0.08	0.52
Science		1	16	1.47	0.44	-1.00	0.28
	8	2	16	0.94	0.36	-0.42	0.41
		3	16	0.59	0.34	0.31	0.79
		1	16	1.19	0.21	-0.99	0.22
Algebra 1	HS	2	16	0.69	0.25	0.09	0.68
-		3	16	0.56	0.17	0.34	0.57
		1	16	1.79	0.27	-1.33	0.22
Biology	HS	2	16	0.92	0.52	-0.52	1.34
0,		3	16	0.77	0.24	0.06	0.72
		1	16	1.28	0.47	-1.13	0.58
Geometry	HS	2	16	1.03	0.42	-0.58	0.55
		3	16	0.70	0.29	0.04	0.91

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.

## 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. Equating was not performed for 2015-16, which was an operational field test administration.

#### 9.4 ACHIEVEMENT STANDARDS

Standard setting for the 2015-16 FSAA-PT was conducted in February 2017. Details of the standard setting procedures can be found in the standard setting report (Measured Progress, 2017a). At the completion of standard setting, the reporting scale was established and theta cuts were transformed to the reporting scale. As described in the standard setting report, policy adjustments were made to the cut scores on the scale score metric and made available for public review. These cut scores were approved in May 2017 by the Florida State Board of Education following the 90-day public review. The scale score cuts are presented in the next section.

## 9.5 REPORTED SCALED SCORES

Because the  $\theta$  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  $\theta$  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 2015–16 FSAA-PT 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 2015–16 FSAA-PT can be expressed in scale scores.

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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  $\theta$ . 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  $\theta$  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  $\theta$  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 end-of-course (EOC) assessments was established with a mean of 800 and standard deviation of 25, and the scale score ranges between 725 and 875.

Table 9-3 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.

Subject	Grade	Slope	Intercept
	3	20	600
	4	20	600
	5	20	600
ELA	6	20	600
ELA	7	20	600
	8	20	600
	9	20	600
	10	20	600
	3	20	600
Mathematics	4	20	600
	5	20	600
			continued

Table 9-3. 2015–16 FSAA-PT: Theta-to-Scale Score Transformation Constants by Content Area and Grade

Subject	Grade	Slope	Intercept
	6	20	600
Mathematics	7	20	600
	8	20	600
Science	5	20	600
Science	8	20	600
Algebra 1	HS	25	800
Biology	HS	25	800
Geometry	HS	25	800

Table 9-4 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 for these tests 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.

Subject	Crada		S	cale Sco	ore	
Subject	Grade	Minimum	Cut1	Cut2	Cut3	Maximum
	3	540	583	599	618	660
	4	540	582	597	618	660
	5	540	583	599	618	660
ELA	6	540	583	599	618	660
ELA	7	540	583	599	618	660
	8	540	582	598	614	660
	9	540	582	598	620	660
	10	540	584	598	617	660
	3	540	586	600	617	660
	4	540	587	599	618	660
Mathematics	5	540	586	600	617	660
Mathematics	6	540	586	600	617	660
	7	540	587	600	617	660
	8	540	586	598	615	660
Saianaa	5	540	580	599	616	660
Science	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

Table 9-4. 2015–16 FSAA-PT: Cut Scores on the Reporting Scale

Table 9-5 shows the standard errors in scale score metric at the cut scores.

Subject	Grade -	S	tandard Err	or
	Ulduc	Cut1	Cut2	Cut3
	3	5	5	7
	4	4	5	7
	5	3	5	7
ELA	6	3	4	6
ELA	7	3	5	7
	8	3	4	6
	9	3	5	7
	10	4	5	7
	3	4	5	7
	4	5	6	8
Mathematics	5	4	6	8
	6	4	5	7
	7	5	6	8
	8	4	5	7
Science	5	3	4	7
	8	4	5	8
Algebra 1	HS	6	6	9
Biology	HS	4	6	11
Geometry	HS	5	7	11

Table 9-5. 2015–16 FSAA-PT: Standard Errors at the Cut Scores

Table 9-6 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.

Content Area	Grade	Number of			Levels			Average Scale	SD of Scale
Alea		Students	Level 1	Level 2	Level 3	Level 4	Levels 3 & 4	Score	Score
	3	2,798	18.05	28.48	36.03	17.44	53.47	600.07	19.06
	4	2,912	18.23	25.24	38.12	18.41	56.53	600.08	18.87
	5	2,918	20.08	26.56	35.64	17.72	53.36	600.07	18.88
ELA	6	2,907	20.43	26.97	33.75	18.85	52.60	600.09	18.94
ELA	7	2,958	20.08	26.74	34.31	18.86	53.17	600.09	18.87
	8	2,985	18.16	26.73	30.62	24.49	55.11	600.00	18.85
	9	3,054	17.81	25.57	41.72	14.90	56.62	600.03	18.74
	10	2,881	21.73	22.80	35.44	20.03	55.47	600.04	18.70

Table 9-6. 2015–16 FSAA-PT: Percentage of Students by Performance-Level Categories

continued

Content	Grade	Number of			Levels			Average Scale	SD of Scale	
Area		Students	Level 1	Level 2	Level 3	Level 4	Levels 3 & 4	Score	Score	
	3	2,781	24.45	24.96	30.67	19.92	50.59	600.19	19.34	
	4	2,904	24.45	22.07	35.74	17.73	53.47	600.17	18.90	
5	5	2,904	23.17	26.89	31.16	18.77	49.93	600.18	18.92	
Mathematics	6	2,899	24.08	24.46	32.46	19.01	51.47	600.23	19.31	
	7	2,955	24.06	25.45	31.71	18.78	50.49	600.17	18.78	
	11	2,970	21.72	22.79	33.23	22.26	55.49	600.29	19.50	
Science	5	2,901	16.68	29.68	30.68	22.96	53.64	600.65	20.27	
Science	8	2,969	16.94	31.05	35.13	16.87	52.00	600.24	19.13	
Algebra 1	HS	2,876	13.28	31.12	38.42	17.18	55.60	800.23	23.78	
Biology	HS	3,223	14.40	27.18	38.85	19.58	58.43	800.43	23.98	
Geometry	HS	1,928	17.17	29.72	39.89	13.23	53.12	800.39	23.61	

# 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 ( $\alpha$ ), that avoids the shortcomings of the split-half method by comparing individual item variances to total test variance. Cronbach's  $\alpha$  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  $\alpha$ . The formula is as follows:

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

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

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

Subject	Grade	Number of Students	Cronbach's Alpha
	3	2,798	0.94
	4	2,912	0.95
	5	2,918	0.95
	6	2,907	0.95
ELA	7	2,958	0.95
	8	2,985	0.95
	9	3,054	0.94
	10	2,881	0.95
	3	2,781	0.95
	4	2,904	0.94
Mathematica	5	2,904	0.94
Mathematics	6	2,899	0.95
	7	2,955	0.94
	8	2,970	0.95
Saianaa	5	2,901	0.97
Science	8	2,969	0.95
Algebra 1	HS	2,876	0.94
Biology	HS	3,223	0.95
Geometry	HS	1,928	0.95

Table 10-1. 2015–16 FSAA-PT: Classical Reliability Summary

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  $\theta$  is found for each student. The Bayesian posterior standard deviation of  $\theta$  provides the standard error estimate for this  $\theta$  estimate. Using this Bayesian estimation approach, the IRT marginal reliability is calculated using the following formula:

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

where

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

 $Var(\hat{\theta})$  represents total variance of observed  $\theta$  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 than Cronbach's alpha. The table also includes the square root of the average error variance for each test.

Subject	ubject Grade Num Stud		IRT Marginal Reliability	SEM
	3	2,798	0.8926	0.3065
	4	2,912	0.9211	0.2640
	5	2,918	0.9237	0.2597
	6	2,907	0.9260	0.2566
ELA	7	2,958	0.9256	0.2568
	8	2,985	0.9285	0.2507
	9	3,054	0.9187	0.2663
	10	2,881	0.9188	0.2661
	3	2,781	0.9083	0.2871
	4	2,904	0.8970	0.3014
	5	2,904	0.8932	0.3055
Mathematics	6	2,899	0.9076	0.2883
	7	2,955	0.8853	0.3161
	8	2,970	0.8992	0.3001
Colonno	5	2,901	0.9142	0.2807
Science	8	2,969	0.8989	0.2999
Algebra 1	HS	2,876	0.8964	0.3021
Biology	HS	3,223	0.8950	0.3059
Geometry	HS	1,928	0.8900	0.3107

Table 10-2. 2015–16 FSAA-PT: IRT Reliability Summary

#### Subgroup Reliability

The reliability coefficients discussed in the previous section were based on the overall population of students who took the 2015–16 FSAA-PT test. Cronbach's  $\alpha$  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 M. 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 M that subgroup sample sizes may vary considerably, which results in natural variation in reliability coefficients. Alternatively,  $\alpha$ , 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 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 N.

Grade	Number of Score Categories	Number of Included Scores	Percent Exact	Percent Adjacent	Percent Third Score	Correlation
4	4	2,424	86.14	13.53	0.33	0.91
5	4	2,428	83.65	15.82	0.54	0.90
6	4	2,384	83.35	16.11	0.55	0.90
7	4	2,404	82.99	16.93	0.08	0.90
8	4	2,476	82.43	17.00	0.57	0.90
9	4	2,492	81.62	17.13	1.24	0.88
10	4	2,352	84.35	14.54	1.11	0.89

Table 10-3. 2015–16 FSAA-PT: Summary Interrater Consistency Statistics by Grade—ELA

# **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 2015–16 FSAA-PT 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 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, scale scores, instead of raw scores, were used in estimating accuracy and consistency indices reported in Appendix O.

For the 2015–16 FSAA-PT, 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  $\kappa$  (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  $\kappa$  is corrected for chance, its values are lower than are other consistency estimates.

The accuracy and consistency analyses described above are provided in Appendix O. 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 0.86 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, 86% would be expected to be in this classification when categorized according to their observed scores. Similarly, a consistency value of 0.78 indicates that 78% 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 2015–16 FSAA-PT, Table O-2 in Appendix O 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 O-1 in Appendix O 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 O 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 is based on, and aligned to, the Florida Standards in reading, mathematics and writing and the Next Generation Sunshine State Standards Access Points in science. The results are intended to enable inferences about student achievement on Florida Standards Access Points and the 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, the sources 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 Florida Standards and 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 items are aligned by Florida educators to specific Florida Standards and 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). 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 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. 2013–10 Fiolida Standards Alternate Assessment. Technical Advisory Committee						
Name	Position	Function				
Dr. Claudia Flowers	Professor, Department of Educational Administration, Research, and Technology, the University of North Carolina at Charlotte					
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-1. 2015–16 Florida Standards Alternate Assessment:	<b>Technical Advisor</b>	y Committee
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Name	Position	Function
Dr. Carol Allman	Consultant	Member
Jill Brookner	Alternate Assessment Coordinator	Member
Dr. Drew Andrews	Alternate Assessment Coordinator	Member
Anne Chartrand	Facilitator	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
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
Lindee Morgan		Member
Rebecca Nance	ESE Teacher	Member
Sandra Olivia	ESE Teacher	Member
Teresa Pinder	ESE Teacher	Member
Betsy Pittinger	ESE Teacher	Member
Sheryl Sandvoss	Florida State University	Member
June Sellers	Alternate Assessment Coordinator	Member
Dr. Stacie Whinnery	Professor; School of Education; University of West Florida	Member
Sandra White	ESE Teacher	Member

Table A-3. 2015–16 Florida Standards Alternate Assessment: March 2015 Passage Bias
Review Committee

Name	District	Grade	Position	Gender	Ethnicity
Tarrelle Brooks	Hillsborough	Middle & High	ESE Curriculum Coordinator	Male	Black, non- Hispanic
Everette Laird	Walton	Elementary & High	Special Education Teacher	Male	White, non- Hispanic
Cynthia McBride	Leon	Elementary	Special Education Teacher	Female	Black, non- Hispanic
Carey Roberts	F.S.D.B.	Elementary	Special Education Teacher, Hearing Specialist	Female	White, non- Hispanic

Name	athematics Grad District	Grade	Position	Gender	Ethnicity
INGINE	District	Giaue	General	Gendel	Lunnolly
Megan Abbott	Palm Beach	Elementary	Education	Female	White, non-Hispanic
wegan / bbott	r ann Beach	Liementary	Teacher	remaie	White, non mopulie
			General		
Sherry Ashley	Collier	Elementary	Education	Female	Hispanic
Onerry Ashiey	Collici	Liementary	Teacher	remaie	Thispanie
			Alternate		
Zana Brooks	Pasco	Middle	Assessment	Female	Hispanic
	1 4300	Middle	Coordinator	remaie	Thispanie
			General		
Bertha Brooks	Citrus	Elementary	Education	Female	Black, non-Hispanic
Dentha Diooks	Cillus	Liementary	Teacher	i emale	black, non-i lispanic
			Special		
Jeris Burns	Duval	Elementary	Education	Female	Black, non-Hispanic
	Duvai	Liementary	Teacher	remaie	Diack, non mispanie
			General		
Jonetta Dawson	Calhoun	High	Education	Female	Black, non-Hispanic
Jonetta Dawson	Califouri	riigii	Teacher	remaie	Diack, non moparite
			Alternate		
Margie Haugh	Lee	All Grades	Assessment	Female	White, non-Hispanic
Margie Haugh	LCC		Coordinator	remaie	White, non mopulie
			Special		
Carey Roberts	F.S.D.B.	Elementary	Education	Female	White, non-Hispanic
	T.0.D.D.	Liementary	Teacher	remaie	White, non maparite
			Special		
Christopher	Broward	Middle	Education	Male	White, non-Hispanic
Townley	2.00010	Middle	Teacher	maio	
			Special		
Connie Westberry	Putnam	Elementary	Education	Female	Hispanic
		Liementary	Teacher	i cinaic	i nopulito

#### Table A-4. 2015–16 Florida Standards Alternate Assessment: June 2015 Item Content Review Committee - Mathematics Grades 3-8

#### Table A-5. 2015-16 Florida Standards Alternate Assessment: June 2015 Item Content Review Committee - Geometry & Algebra

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Name	District	Grade	Position	Gender	Ethnicity
Cheryl Bishop	Lake	All Grades	Alternate Assessment Coordinator	Female	White, non-Hispanic
Christopher Drummer	Charlotte	High	General Education Teacher	Male	White, non-Hispanic
Matthew Elixson	Union	Middle & High	General Education Teacher	Male	White, non-Hispanic
Kathleen Foley	F.S.D.B.	Middle & High	Special Education Teacher	Female	White, non-Hispanic
Iris Grandison	Palm Beach	Middle	Special Education Teacher	Female	Black, non-Hispanic

Name	District	Grade	Position	Gender	Ethnicity
			General		
Rebecca Lee	Orange	High	Education	Female	White, non-Hispanic
			Teacher		
		<b>-</b> , ,	General		American Indian or
Renea McKenzie	Washington	Elementary	Education	Female	Alaskan Native
			Teacher		
O Madanaa	Dede		ESE		
Georgina Mederos	Dade	All Grades	Curriculum	Female	White, non-Hispanic
			Coordinator		
Brittany Paige		Lline	Special	Famala	M/bite nen Llienenie
Montano	Lee	High	Education	Female	White, non-Hispanic
			Teacher		
Kelly Stevenson-	Collier	Lliab	Special Education	Famala	White nen Hienenia
Crews	Collier	High	Teacher	Female	White, non-Hispanic

### Table A-6. 2015–16 Florida Standards Alternate Assessment: June 2015 Item Content Review Committee - English Language Arts

Name	District	Grade	Position	Gender	Ethnicity
Thomas Allard	Volusia	Middle	Special Education Teacher	Male	White, non-Hispanic
Julia Bentley	Calhoun	Elementary	General Education Teacher	Female	White, non-Hispanic
Mary Caupp	Santa Rosa	Middle & High	Special Education Teacher General	Female	White, non-Hispanic
Kayla Cerquozzi	Manatee	Elementary	Education Teacher	Female	White, non-Hispanic
Catherine Chellberg	Seminole	Elementary	Special Education Teacher	Female	White, non-Hispanic
Rafael Harley	Broward	Elementary	ESE Curriculum Coordinator District	Male	Black, non-Hispanic
Pierre Hilaire	Desoto	All Grades	Assessment Coordinator	Male	Multiracial
Kathy Jones	Sumter	Elementary	Special Education Teacher	Female	White, non-Hispanic
Laurester Kelly	Palm Beach	High	General Education Teacher	Female	Black, non-Hispanic
Jenny Strickland	Washington	Middle & High	General Education Teacher	Female	White, non-Hispanic

Name	District	Grade	Position	Gender	Ethnicity
Kathy Bussendorf	Brevard	Elementary & Middle	General Education Teacher Alternate	Female	White, non-Hispanic
Kori Gedris	Putnam	All Grades	Assessment Coordinator	Female	White, non-Hispanic
David Hass	Lake	Elementary & Middle	Special Education Teacher General	Male	White, non-Hispanic
Jeanette Herring	Charlotte	Middle	Education Teacher	Female	Hispanic
Yolanda Jenkins- Jackson	Broward	All Grades	Special Education Teacher	Female	Black, non-Hispanic
Bruce McVae	Citrus	Elementary & High	Special Education Teacher	Male	White, non-Hispanic
Kimberly Riley	Orange	All Grades	Other General	Female	White, non-Hispanic
Jennifer Schmitt	Santa Rosa	High	Education Teacher	Female	White, non-Hispanic
Jacqueline Williams	Collier	High	Special Education Teacher	Female	Black, non-Hispanic
Paula Wilson	Washington	Elementary	General Education Teacher	Female	White, non-Hispanic

#### Table A-7. 2015–16 Florida Standards Alternate Assessment: June 2015 Item Bias Review Committee - Mathematic

#### Table A-8. 2015–16 Florida Standards Alternate Assessment: June 2015 Item Bias Review Committee - ELA

Name	District	Grade	Position	Gender	Ethnicity
			Alternate		
Mary Asciutto	Highlands	All Grades	Assessment Coordinator	Female	White, non-Hispanic
	•		Special		
Brian Becker	Orange	Elementary	Education Teacher	Male	White, non-Hispanic
		Middle &	Special		
Jordan Bombard	Lake	High	Education Teacher Special	Female	White, non-Hispanic
Rachel Clarke	F.S.D.B.	Middle	Education Teacher	Female	Asian
Bettye Rho-nan Florio	Marion	Elementary	Other	Female	White, non-Hispanic

Name	District	Grade	Position	Gender	Ethnicity
Tabetha Harrison	Citrus	Elementary	General Education Teacher	Female	White, non-Hispanic
Jennifer Pyott	Sarasota	Middle	General Education Teacher	Female	White, non-Hispanic
Cassandra Richards	Polk	Middle & High	Special Education Teacher	Female	Black, non-Hispanic
Frank Santa Maria	Charlotte	Middle	General Education Teacher General	Male	White, non-Hispanic
Rebecca Stewart	Calhoun	High	Education Teacher	Female	White, non-Hispanic

# Table A-9. 2015–16 Florida Standards Alternate Assessment: July 2015 Item Content Review Committee - English Language Arts

Name	District	Grade	Position	Gender	Ethnicity
Samelia Davis	Polk	High	General Education	Female	Black, non-Hispanic
	1 OIK	riigii	Teacher ESE	T emale	Diack, non-mspanie
Rafael Harley	Broward	Elementary	Curriculum Coordinator General	Male	Black, non-Hispanic
David Herring	Charlotte	Middle	Education Teacher Special	Male	White, non-Hispanic
Kathy Jones	Sumter	Elementary	Education Teacher ESE	Female	White, non-Hispanic
Cynthia Rekort	Pinellas	All Grades	Curriculum Coordinator	Female	White, non-Hispanic
Janeice Smith	Levy	Elementary & Middle	General Education Teacher Special	Female	White, non-Hispanic
Nancy Sokoloff	Palm Beach	Middle	Education Teacher Special	Female	White, non-Hispanic
Marlynn Stillions	Okaloosa	Elementary	Education Teacher	Female	Black, non-Hispanic
Jenny Strickland	Washington	Middle & High	General Education Teacher Special	Female	White, non-Hispanic
Kay Svitenko	Bay	High	Education Teacher	Female	White, non-Hispanic

Name	District	Grade	Position	Gender	Ethnicity
Thomas Allard	Volusia	Middle	Special Education Teacher	Male	White, non-Hispanic
Mary Caupp	Santa Rosa	Middle & High	Special Education Teacher	Female	White, non-Hispanic
Kasey Cavanaugh	Hernando	Middle & High	General Education Teacher	Female	White, non-Hispanic
Andrea Ciotti	Broward	All Grades	District Assessment Coordinator	Female	Hispanic
Bessie Edwards	Marion	All Grades	Special Education Teacher	Female	Black, non-Hispanic
Rose Freeman	Hardee	Elementary	General Education Teacher	Female	White, non-Hispanic
Pierre Hilaire	Desoto	All Grades	District Assessment Coordinator	Male	Multiracial
Robin Hunter	Gilchrist	Elementary	Special Education Teacher	Female	White, non-Hispanic
Amy Jordan	Calhoun	Middle	General Education Teacher	Female	White, non-Hispanic
Laurester Kelly	Palm Beach	High	General Education Teacher	Female	Black, non-Hispanic

#### Table A-10. 2015–16 Florida Standards Alternate Assessment: July 2015 Item Content Review Committee – Writing Prompt

### Table A-11. 2015–16 Florida Standards Alternate Assessment: July 2015 Item Content Review Committee - Science

Name	District	Grade	Position	Gender	Ethnicity
			General		
			Education		
Alesia Andry	Santa Rosa	Middle	Teacher	Female	Black, non-Hispanic
			Special		
			Education		
Acsa Biancuzzo	Broward	Elementary	Teacher	Female	Hispanic
			General		
			Education		
Craig Everhart	Hillsborough	High	Teacher	Male	White, non-Hispanic
U	U	Ū.	General		· •
			Education		
Sidney Keith	F.S.D.B.	High	Teacher	Female	White, non-Hispanic

Name	District	Grade	Position	Gender	Ethnicity
			Administrator		
Matthew Krajewski	Volusia	Middle		Male	White, non-Hispanic
Maribal Magdalana	Collier	Elementery	Administrator	Female	Hisponia
Maribel Magdaleno	Collier	Elementary	General	remale	Hispanic
			Education		
Tavia Marez	Okaloosa	High	Teacher	Female	White, non-Hispanic
			Special		
			Education		
Leslie Martha	Washington	High	Teacher	Female	Black, non-Hispanic
			Special		
			Special Education		
Celeste Middleton	Pasco	Elementary	Teacher	Female	White, non-Hispanic
			<b>o</b>		
			Special Education		
Kathy Russ	Walton	Middle	Teacher	Female	White, non-Hispanic

### Table A-12. 2015–16 Florida Standards Alternate Assessment: July 2015 Item Bias Review Committee - ELA & Science

Name	District	Grade	Position	Gender	Ethnicity
			General		
Cindy Ginsburg	Lee	Middgh	Education	Female	White, non-Hispanic
			Teacher		
Jennifer Greco	Marion	All Grades	Administrator	Female	White, non-Hispanic
Sarah Hickey			Alternate		
(anderson)	Sarasota	All Grades	Assessment	Female	White, non-Hispanic
(anderson)			Coordinator		
			Special		
Patricia Kenney	Okeechobee	Elementary	Education	Female	White, non-Hispanic
			Teacher		
<b>.</b>	•	-	General		
Carlos Lebron	Orange	Elementary	Education	Male	Hispanic
			Teacher		
Cassandra	Della	Middle &	Special		Black non Hispania
Richards	Polk	High	Education	Female	Black, non-Hispanic
		-	Teacher General		
James Richardson	Charlotte	Elementary	Education	Male	White, non-Hispanic
James Richardson	Chanolle	Elementary	Teacher	Male	white, non-mispanic
			General		
Eugenia Salvo	Dade	High	Education	Female	Hispanic
Eugenia Gaivo	Dude	riigii	Teacher	1 cmaic	Thopanio
			Special		
Deborah Stern	Palm Beach	Middle	Education	Female	White, non-Hispanic
			Teacher		
			Special		
Lyssa Young	Collier	Middle	Education	Female	Black, non-Hispanic
,			Teacher		,

Committee -	0	0	Deeillen	O a va al a va	
Name	District	Grade	Position	Gender	Ethnicity
Kathleen Bussendorf	Brevard	Elementary, Middle & High	General Education Teacher Special	Female	White / Caucasian
Cynthia Carrig	Volusia	High	Education Teacher Special	Female	White / Caucasian
Candi Cook	Brevard	High	Education Teacher General	Female	White / Caucasian
Adrian Dowdell	Palm Beach	High	Education Teacher General	Male	
Vera Gibson-Willis	Palm Beach		Education Teacher Special		
Danielle Grier	Hillsborough	High	Education Teacher Special	Female	White / Caucasian
Heather Howell	Manatee	High	Education Teacher Alternate	Female	White / Caucasian
Elizabeth Lewis	Sarasota	Elementary, Middle, High	Assessment Coordinator Special	Female	White / Caucasian
Karen Port	Duval	High	Education Teacher Alternate	Female	White / Caucasian
Jeannine Welch	Pasco	All Grades	Assessment Coordinator	Female	White / Caucasian

### Table A-13. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee - Algebra 1

### Table A-14. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – Biology 1

Name	District	Grade	Position	Gender	Ethnicity
			ESE		
Katie Csaszar	Pinellas	High	Curriculum Coordinator Special	Female	White / Caucasian
Nathan Hafner	Duval	High	Education Teacher ESE	Male	White / Caucasian
Linda Johnston	Pasco	All Grades	Resource Teacher General	Female	White / Caucasian
Richard Morera	Dade	High	Education Teacher		

Name	District	Grade	Position	Gender	Ethnicity
Paley Munn	Broward	High	ESE Specialist Special	Female	White / Caucasian
Luann Reel	Flagler	High	Education	Female	White / Caucasian
Elvira Ruiz-Carrillo	Dade	High	Administrator Science	Female	Hispanic or Latino
Monica Wright	Nassau	All Grades	Curriculum Resource Teacher General	Female	White / Caucasian
Martha Adams	Dade	High	Education Teacher Special		
Sally Walden	Bay	High	Education Teacher	Female	White / Caucasian

### Table A-15. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – ELA I & II

Name	District	Grade	Position	Gender	Ethnicity
Kasey Cavanaugh	Hernando	Middle, High	General Education Teacher	Female	White / Caucasian
Samantha Gesa	Hernando	All Grades	Alternate Assessment Coordinator	Female	White / Caucasian
Laurester Kelly	Palm Beach	High	General Education Teacher	Female	Black or African American
Deborah Kootsouradis	Duval	High	General Education Teacher	Female	White / Caucasian
Scott Kozlowski	Collier	All Grades	Administrator	Male	White / Caucasian
Kelli Lipe	Charlotte	High	General Education Teacher	Female	White / Caucasian
Robin Meyers	Lake	All Grades	Administrator	Female	White / Caucasian
Christopher Salamone	Pinellas	High	Special Education Teacher	Male	White / Caucasian
Lynne Tiner	St. Johns	High	Special Education Teacher	Female	White / Caucasian

•••••••••	ELA Orades 5	<b>u</b> 1			
Name	District	Grade	Position	Gender	Ethnicity
Brittany Aponte	Broward	Elementary	General Education Teacher	Female	Hispanic or Latino
Natasha Auriemma	Charlotte	Elementary	General Education Teacher Special	Female	White / Caucasian
Kimberly Carraha	Broward	Elementary	Education Teacher	Female	Asian or Pacific Islander
Pierre Hilaire	Desoto	All Grades	Administrator Special	Male	Bi-Racial
Mary Lamy	Escambia	Elementary	Education Teacher Special	Female	White / Caucasian
Carlos Lebron	Orange	Elementary	Education Teacher Special	Male	Hispanic or Latino
Jagathy Nair	Palm Beach	Elementary	Education Teacher General	Female	Asian or Pacific Islander
Brittny Sanders	Sumter	Elementary	Education Teacher	Female	Black or African American

### Table A-16. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – ELA Grades 3 & 4

### Table A-17. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – ELA Grades 5 & 6

Name	District	Grade	Position	Gender	Ethnicity
Kelsie Austin	Clay	Elementary	Special Education Teacher	Female	White / Caucasian
Chinita Bascom	Gadsden	Not Applicable	Alternate Assessment Coordinator	Female	Black or African American
Kayla Cerquozzi	Manatee	Elementary	General Education Teacher	Female	White / Caucasian
Mindy Chaimowitz	Broward	Middle	Special Education Teacher General	Female	Hispanic or Latino, White / Caucasian
Linda Graham	Calhoun	Elementary	Education Teacher General	Female	White / Caucasian
Amy Hasler	Charlotte	Elementary	Education Teacher	Female	White / Caucasian
Cassandra King	Sarasota	All Grades	Special Education Teacher	Female	White / Caucasian
Elizabeth Shumate	Pinellas	All Grades	Special Education Teacher	Female	Hispanic or Latino

Name	District	Grade	Position	Gender	Ethnicity	
			General			
Christine Burkhart	Charlotte	High	Education	Female	White / Caucasian	
			Teacher			
			Special			
Dina Casabianca	Brevard	Middle	Education	Female	White / Caucasian	
			Teacher			
Dobby Drouton	Loon	Middle	Special Education	Male	Black or African American	
Bobby Drayton	Leon	widdie	Teacher	Male	Black of American American	
			Special			
Susan Huggins	Volusia	Middle	Education	Female	White / Caucasian	
e de dan 11 de genie	Volucia Midalo		Teacher	i onidio		
			Special			
Tara Logiudice	Collier	Middle	Education	Female	White / Caucasian	
			Teacher			
			General			
Anna Mcdaniel	Duval	High	Education			
			Teacher			
Mary Ciarra	Dede	Elementary &	Special	Famala	Llionopio en Lotino	
Mary Sierra	Dade	Middle	Education Teacher	Female	Hispanic or Latino	
			Special			
Vilmary Tautiva	Lake	Elementary,	Education	Female	Hispanic or Latino	
	Lano	Middle	Teacher	i omalo		
During			General			
Precious	Dade	High	Education	Female	Black or African American	
Symonette		J	Teacher			

#### Table A-18. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – ELA Grades 7 & 8

Table A-19. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – Geometry

Name	District	Grade	Position	Gender	Ethnicity
		Elementary &	Alternate		
Cheryl Bishop	Lake	High, Not	Assessment	Female	Black or African American
		Applicable	Coordinator Special		American Indian or
Amy Fulleton	Lee	High	Education	Female	Alaskan Native, White /
-		-	Teacher		Caucasian
			Special		
William Gomes	Charlotte	High	Education Teacher	Male	White / Caucasian
			School		
Carol Hall	Duval	High	Assessment Coordinator	Female	White / Caucasian
Candaaa "Candu"			Special		
Candace "Candy" Lee	St. Lucie	High	Education Teacher	Female	White / Caucasian

Name	District	Grade	Position	Gender	Ethnicity
Virginia Santoni	Palm Beach	High	General Education Teacher Special	Female	Hispanic or Latino
Tracey Swart	Manatee	High	Education Teacher	Female	White / Caucasian
Christopher Townley	Broward	All Grades	Special Education Teacher	Male	American Indian or Alaskan Native, White / Caucasian
Kim Wuellner	St. Johns	High	General Education Teacher/AD MIN		

#### Table A-20. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – Mathematics Grades 3 & 4

Name	District	Grade	Position	Gender	Ethnicity
Charlotte Bradley	Flagler	Elementary	General Education Teacher	Female	White / Caucasian
Abbey Cooke	Flagler	Elementary & Middle	General Education Teacher	Female	White / Caucasian
Sheila Renea Mckenzie	Washington	Elementary	General Education Teacher	Female	American Indian or Alaskan Native
Carey Roberts	F.S.D.B.	Elementary	Special Education Teacher	Female	White / Caucasian
Michael Rosen	Volusia	Elementary	Special Education Teacher	Male	White / Caucasian
Connie Westberry	Putnam	Elementary	Special Education Teacher	Female	Hispanic or Latino, White / Caucasian
Sandra Walker	Brevard	Elementary	Special Education Teacher	Female	White / Caucasian

### Table A-21. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – Mathematics Grades 5 & 6

Name	District	Grade	Position	Gender	Ethnicity
Ashley French	Volusia	Middle	General Education Teacher		
Lisa Graham	Sarasota	Middle	Special Education Teacher	Female	White / Caucasian

Name	District	Grade	Position	Gender	Ethnicity
David Hass	Lake	All Grades	Special Education Teacher	Male	White / Caucasian
Nancy Mcelligott	Broward	Elementary & Middle	Special Education Teacher Special	Female	White / Caucasian
Brandie Padlo	St. Johns	Middle	Education Teacher Special	Female	White / Caucasian
Colette Sheppard- Slater	Volusia	Middle	Education Teacher General	Female	Black or African American
Elise Tanner	Hillsborough		Education Teacher Special		
Lorrie White	Sarasota	Middle	Education Teacher	Female	White / Caucasian

### Table A-22. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – Mathematics Grades 7 & 8

Name	District	Grade	Position	Gender	Ethnicity
Elizabeth Calderon	Dade	Elementary & Middle	Special Education Teacher	Female	Hispanic or Latino
Kelly Gaziano	Hillsborough	Middle	Special Education Teacher	Female	White / Caucasian
Robin Harwell	F.S.D.B.	Middle	Educational Diagnostician Special	Female	White / Caucasian
Marjorie Johnson	Charlotte	Middle	Education Teacher ESE	Female	Black or African American
Celeste Plunkett	Pinellas	Middle	Curriculum Coordinator General	Female	Prefer not to answer
Jodi Richards	Charlotte	High	Education Teacher Special	Female	White / Caucasian
Diana Tyson	Desoto	Middle	Education Teacher	Female	White / Caucasian
Stephanie Webster	Palm Beach		General Education Teacher		
Jacqueline Williams	Collier	High	Special Education Teacher	Female	Black or African American

Name	District	Grade	Position	Gender	Ethnicity
Helen Christian	Sumter	Elementary	Administrator Special	Female	Black or African American
Michelle Kendall	Hillsborough	Middle	Education Teacher General	Female	White / Caucasian
Maribel Magdaleno	Collier	Elementary	Education Teacher Special	Female	Hispanic or Latino
Orin Mayer	Broward	Elementary	Education Teacher Special	Male	White / Caucasian
Kathy Russ	Walton	Middle	Education Teacher Special	Female	White / Caucasian
Jessica Shafer	Monroe	Elementary & Middle	Education Teacher	Female	White / Caucasian
Suzanne Towner	Charlotte	High	General Education Teacher	Female	American Indian or Alaskan Native, White / Caucasian

### Table A-23. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard SettingCommittee – Science Grades 5 & 8

### Table A-24. 2015–16 Florida Standards Alternate Assessment: February 2016 Standard Setting Committee – Articulation

Name	District	Grade	Position	Gender	Ethnicity
Natasha		Elementary	General	Female	White / Caucasian
Auriemma	Charlotte		Education		
			Teacher		
Dina Casabianca		Middle	Special	Female	White / Caucasian
	Brevard		Education		
			Teacher		
Kayla Cerquozzi		Elementary	General	Female	White / Caucasian
	Manatee		Education		
			Teacher		
Mindy Chaimowitz		Middle	Special	Female	Hispanic or Latino, White
	Broward		Education		Caucasian
Apples / Exemple		Middle	Teacher		
Ashley French	N/ 1 ·	Middle	General		
	Volusia		Education		
Deborah		Lliab	Teacher General	Female	White / Caucasian
Kootsouradis	Duval	High	Education	remale	white / Caucasian
NUUISUUIAUIS	Duvai		Teacher		
Sheila Renea		Elementary	General	Female	American Indian or
Mckenzie	Washington	Liomontary	Education	remaie	Alaskan Native
	washington		Teacher		
Jagathy Nair		Elementary	Special	Female	Asian or Pacific Islander
ouguir, run	Palm Beach	Liemontary	Education	. emaio	
	Faill Deach		Teacher		

Name	District	Grade	Position	Gender	Ethnicity
Brandie Padlo		Middle	Special	Female	White / Caucasian
	St. Johns		Education		
		1.12.1	Teacher	<b>F</b> I .	
Jodi Richards	Charlette	High	General	Female	White / Caucasian
	Charlotte		Education Teacher		
Christopher		High	Special	Male	White / Caucasian
Salamone	Pinellas	riigit	Education	Male	White / Caucasian
Calamone	Tinchus		Teacher		
Mary Sierra		Elementary &	Special	Female	Hispanic or Latino
-	Dade	Middle	Education		-
			Teacher		
Sandra Walker		Elementary	Special	Female	White / Caucasian
	Brevard		Education		
			Teacher		
Jacqueline		High	Special	Female	Black or African American
Williams	Collier		Education		
			Teacher		

#### **APPENDIX B—STUDENT PARTICIPATION RATES**

	N/ /	<b>D</b> (
Description	Number	Percent
Description	Enrolled	Tested
All Students	17,413	97.14
Male	9,453	97.45
Female	4,577	96.58
Asian	307	96.85
Pacific Islander	22	95.65
Black non-Hispanic	4,178	97.23
Hispanic	4,241	96.89
American Indian or Alaskan Native	48	97.96
Multiracial	476	98.14
White non-Hispanic	4,758	97.28
Economically Disadvantaged	7,892	97.90
Not Economically Disadvantaged	9,521	96.51
Limited English Proficient	1,350	97.68
Non Limited English Proficient	16,063	97.09
* Data asuras, Elevide Devertes ant of Es	less and a se	

#### Table B-1. 2015–16 FSAA-PT: Summary of Participation by Demographic Category—Mathematics\*

\* Data source: Florida Department of Education

#### Table B-2. 2015–16 FSAA-PT: Summary of Participation by Demographic Category—ELA\*

Description	Number Enrolled	Percent Tested
All Students	23,413	97.20
Male	12,815	97.37
Female	6,293	96.77
Asian	401	97.57
Pacific Islander	27	100
Black non-Hispanic	5,737	97.24
Hispanic	5,577	96.71
American Indian or Alaskan Native	69	97.18
Multiracial	609	98.23
White non-Hispanic	6,688	97.38
Economically Disadvantaged	10,903	97.63
Not Economically Disadvantaged	12,510	96.83
Limited English Proficient	1,581	97.17
Non Limited English Proficient	21,832	97.20
* Data any way. Flavida Davavter ant of Fr	du a a ti a a	

\* Data source: Florida Department of Education

by Demographic Category—Science			
Description	Number	Percent	
Description	Enrolled	Tested	
All Students	5,870	96.77	
Male	3,388	97.05	
Female	1,636	96.35	
Asian	116	97.48	
Pacific Islander	6	100	
Black non-Hispanic	1,498	96.90	
Hispanic	1,496	96.45	
American Indian or Alaskan Native	22	100	
Multiracial	171	97.71	
White non-Hispanic	1,715	96.89	
Economically Disadvantaged	2,779	97.51	
Not Economically Disadvantaged	3,091	96.11	
Limited English Proficient	407	96.90	
Non Limited English Proficient	5,463	96.76	
* Data source: Floride Department of Education			

#### Table B-3. 2015–16 FSAA-PT: Summary of Participation by Demographic Category—Science\*

\* Data source: Florida Department of Education

#### Table B-4. 2015–16 FSAA-PT: Summary of Participation by Demographic Category—Biology\*

Description	Number	Percent
Description	Enrolled	Tested
All Students	3,223	96.76
Male	1,178	96.64
Female	599	96.30
Asian	30	96.77
Pacific Islander	1	100
Black non-Hispanic	563	96.40
Hispanic	440	95.65
American Indian or Alaskan Native	7	100
Multiracial	47	97.92
White non-Hispanic	689	97.04
Economically Disadvantaged	1,013	96.85
Not Economically Disadvantaged	2,210	96.72
Limited English Proficient	82	96.47
Non Limited English Proficient	3,141	96.77

\* Data source: Florida Department of Education

Description	Number	Percent		
Description	Enrolled	Tested		
All Students	1,928	97.28		
Male	366	96.32		
Female	171	96.61		
Asian	8	100		
Pacific Islander	2	100		
Black non-Hispanic	163	96.45		
Hispanic	167	94.89		
American Indian or Alaskan Native	4	100		
Multiracial	11	91.67		
White non-Hispanic	182	97.85		
Economically Disadvantaged	387	97.73		
Not Economically Disadvantaged	1,541	97.16		
Limited English Proficient	36	94.74		
Non Limited English Proficient	1,892	97.33		
* Data source: Elorida Department of Ec	lucation			

#### Table B-5. 2015–16 FSAA-PT: Summary of Participation by Demographic Category—Geography\*

\* Data source: Florida Department of Education

#### APPENDIX C—SAMPLE ITEM SET

#### Sample Item Set Table

Task 1		
Materials	Teacher Script	Student Response
Response Booklet: page 21	Here is a picture of three erasers.	○ A: quarters
Stimulus picture card:	Here are three groups of objects.	O B: rulers
3 erasers	○ C: books	
Picture cards:	Which group has a different number of objects than the number of erasers?	O D: No Response
(quarters)		Scaffolded Response (when applicable)
(rulers)		○ A: quarters
(books)		O B: rulers
		⊖ C: books
		○ D: No Response
Task 2		
Materials	Teacher Script	Student Response
Response Booklet: page 23	Here is a package of two paintbrushes.	○ A: 2
Stimulus picture card:	Ms. Tandy bought five of these packages.	⊖ <b>B: 10</b>
package of 2 paintbrushes	ws. randy bought we of these packages.	○ C: 50
package of 2 paints action	Here are three numbers.	○ D: No Response
Number cards:	Read the number cards to the student.	
2	How many paintbrushes did Ms. Tandy buy in all?	
10	now many participantes and ws. randy buy in an:	
50		
Task 3		
Materials	Teacher Script	Student Response
Response Booklet: page 25	Here is a picture of three jars of paint.	O A: 3
Stimulus picture card:	Ms. Tandy has twenty students in her class. She puts the students	○ <b>B: 15</b>
3 jars of paint	into groups of four. She gives each group three jars of paint.	○ C: 20
	Here are three numbers.	○ D: No Response
Number cards:		
3	Read the number cards to the student.	
15		

#### 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.



#### Sample Student Response Booklet (cont.)

Task 3 Stimulus and Response Options

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


# **APPENDIX D—TEST DESIGN AND BLUEPRINT SPECIFICATIONS**



# Florida Standards Alternate Assessment Performance Task

Test Design, Blueprints, and Item Specifications for English Language Arts, Mathematics, and Science

2015–2016 Development



Prepared by Measured Progress for the Florida Department of Education

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# Introduction

The Florida Standards Alternate Assessment (FSAA) *Item Specifications* are based upon the Florida Standards and the Florida Course Descriptions as provided in CPALMs. The *Item Specifications* are a resource that defines the content and format of the assessment.

### Purpose of the Item Specifications

The *Item Specifications* define the expectations for content, standards alignment, and format of assessment items for the FSAA. The *Item Specifications* are intended for use by item writers and reviewers in the development of high-quality assessment items.

# **Design Overview**

The Florida Standards Alternate Assessment (FSAA) is designed specifically for students with significant cognitive disabilities; the FSAA is a performance-based assessment aligned with the Florida Standards Access Points for English language arts and mathematics and the Next Generation Sunshine State Standards Access Points for science. The assessment measures student performance based on alternate achievement standards. The FSAA'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—a low-level task (Task 1), a medium-level task (Task 2), and a high-level task (Task 3).



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 2016 FSAA also includes a new writing design intended to assess a student's ability to compose a product in response to text. The writing prompts, which are being field-tested in 2016, will include two levels of cognitive demand:

- The lower-level writing prompt includes a series of five selected-response questions in response 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, opening sentence, supporting details, and a conclusion.
- The higher-level writing prompt includes an open-response format where the student is asked to respond to text utilizing his or her primary mode of communication.

### Online Student Response Entry

For the 2016 FSAA, teachers will enter student responses into an online system for electronic scoring.

Teachers will also submit student writing products into the FSAA online system. Open-response writing responses will be scored by professional scorers specifically trained to use the FSAA writing rubrics.

Grade Level	ELA	Mathematics	Science	Algebra 1 EOC	Geometry EOC	Biology 1 EOC
3	Х	x				
4	Х	x				
5	х	х	х			
6	х	x				
7	Х	x				
8	х	x	Х			
9	х					
10	х					
High School				Х	х	х

#### Grades and Contents Assessed

ELA is assessed in access courses for grades 3–10 with writing being introduced in each grade with the exception of grade 3. Mathematics is assessed in access courses for grades 3–8 with access end-of-course (EOC) Algebra 1 and Geometry being assessed in high school. Science is assessed in access courses grades 5 and 8 with access EOC Biology 1 being assessed in high school.

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

### Number of Forms

There will be four to six forms of the 2016 FSAA (see table below). The form will be clearly labeled on the cover of all test components.

Grades 3–8	А	В	С	D	E	F
Grades 9-10 ELA	Α	в	С	D	Е	F
End of Course: Algebra 1, Geometry, and Biology 1	Α	В	С	D		

# **Review Procedures**

Prior to being included in the Florida Standards Alternate Assessment (FSAA), all items must pass several levels of review.

#### **Content Review**

All items are reviewed during the committee review meetings; facilitators will ensure that committees focus on the main goals and objectives of each type of review. Content review, at a minimum, will focus on:

- Alignment to the item specifications
- Alignment to the standards
- Accessibility of the content, and adherence to the required complexity for the item level

### Bias and Sensitivity Review

Bias and sensitivity review panels follow a training and logistics process identical to that of content review panels. Panelists on these committees review and determine if any items are likely to place a particular group of students at an advantage or disadvantage for non-educational reasons.

### Passage Review

Passage review panels follow a training and logistics process identical to that of content review panels. Panelists review proposed ELA passages to ensure passages are fair, free of bias, and do not contain inflammatory issues.

# 2015–2016 Development

Several 15–16 development related activities occurred in the summer and fall of 2014:

- Assessment blueprints were developed for ELA grades 3–10 and for mathematics grades 3–8 to reflect the shift to the new Florida Standards. In addition, Florida has transitioned to an endof-course assessment model for some high school courses. Therefore, assessment blueprints were developed for high school Algebra 1, high school Geometry, and high school Biology 1.
- 2. Next, an alignment study was performed by Measured Progress in August 2014. This task was performed in order to determine what standards needed to be developed in order to fully align the Florida Alternate Assessment (FAA) to the new assessment blueprints for spring 2016. Content specialists identified which currently available FAA items in the item data bank were aligned to the new assessment blueprints for ELA, mathematics, and Biology 1 (grade 5/8 science were status quo). The mathematics and ELA content specialists also identified which Florida Standards Access Points (FS-AP) each item set would be aligned to moving forward.
- 3. Content areas with gaps in the assessment blueprints, as identified in the results of the alignment study, were targeted for 15–16 new development. Unlike prior years, development was not evenly dispersed across grades (i.e., eight item sets per content/grade) but targeted to the grades/contents with more substantial gaps. This development was divided into two rounds (see charts below).

ELA			
Grade	# Item Sets		
3	10		
4	6		
5	9		
6	8		
7	9		
8	5		
9	8		
10	9		
Total:	64		

#### 15–16 Development by Content and Grade Level (Round 1)

Mathematics			
# Item Sets			
4			
4			
5			
9			
7			
7			
14			
14			
64			

Science			
Grade	# Item Sets		
5	8		
8	5		
Biology 1	11		
Total:	24		

ELA				
Grade	# Item Sets			
3	0			
4	0			
5	0			
6	0			
7	0			
8	1			
9	0			
10	15			
Total:	16			

Mathematics			
Grade	# Item Sets		
3	0		
4	0		
5	0		
6	0		
7	0		
8	0		
Geometry	10		
Algebra 1	10		
Total:	20		

Science			
Grade	# Item Sets		
5	0		
8	0		
Biology 1	17		
Total:	17		

2016 Writing Field Test					
Grade	Selected	Open			
Span	Response	Response			
3/4	30	6			
4/5	30	6			
5/6	30	6			
6/7	30	6			
7/8	30	6			
8/9	30	6			
9/10	30	6			
Total:	210	42			

# 15–16 Development by Content and Grade Level (Round 2)

# Administration

Each content area of the 2016 Florida Standards Alternate Assessment (FSAA) will be separated into three sessions. Each session will require the teacher to follow different administration procedures.



### Session 1: Item Sets 1–10

The graphic below depicts the Session 1 administration process.



Session 1 will include the first 10 item sets in ELA, mathematics, and science. These first 10 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 Florida Standards Access Point (FS-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. This administration procedure is consistent with prior administration of the Florida Alternate Assessment. 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 11–19

The graphic below depicts the Session 2 administration process.



Session 2 will include item sets 11–19 in ELA, mathematics, and science. Teachers will administer these items in a non-adaptive 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 student receives a final score for the item set based on the highest level at which he or she answered correctly.

#### Sessions 1 and 2: Scaffolding Procedure

If a student is unable to complete the Task 1 question accurately, scaffolding will be administered by removing one response option.

Sample scaffolding response removal procedure:



- If the student selects option C (correct option), then move on to Task 2.
- If the student selects option A (incorrect option), then option A should be covered/removed during scaffolding.
- If the student selects option B (incorrect option), then option B should be covered/removed during scaffolding.
- If the student does not respond, then option A (first incorrect option in the Materials column) should be covered/removed during scaffolding.

#### Session 3: Writing Prompt 1 and 2

The graphic below depicts the Session 3 administration process.



Teachers will administer both Writing Prompt 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.

# **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, Text-Based Writing being the exception, only addressing informational text. The assessment consists of a total of 16 common item sets.

All newly developed items for ELA will be field-tested and their statistics will be evaluated prior to using the items as common. Further details have yet to be determined at this time.

In developing the assessment blueprints 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

NOTE: The Florida Standards Alternate Assessment (FSAA) 15–16 ELA blueprints 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. The heavier emphasis on literary text in grades 3–5 is well-placed. 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 will include decoding literary text and point of view in literary text.

- Grades 3 and 4 will include text structures in informational text where text structures are more concrete.
- Grade 5 will transition to more complex 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 will include 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.
- RL 3.7 and RI 3.7 in grades 6–8 are not appropriate for this population as items would require the use of hearing and/or seeing, creating access issues.

Language and Editing

- Both standards (1.1 and 1.2) can be assessed at each grade level.
- Literary and informational text will alternate for 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).

### Writing

- Writing will be in response to informational text based upon the informational emphasis in the Access Points.
- 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.

# Grades 9–10:

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

• In grade 9 skills will be balanced 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.
- RL 3.7 in grades 9–10 is not appropriate for this population as items would require the use of hearing and/or seeing, creating access issues.

Language and Editing

- Both standards (1.1 and 1.2) can be assessed at each grade level.
- Alternate using literary and informational text in each successive grade, opposite to Key Ideas and Details, in order to balance the assessment.

Writing Questions

- Writing will be in response to text. For high school the writing response will alternate between explanatory and argument. For grade 9 the response will be explanatory, and for grade 10 the response will be an argument.
- 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, acknowledgement, reasons, etc.
- 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 All Grades

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

#### Writing

All writing prompts were developed to address a grade span to accommodate a vertically scaled assessment design. Three writing standards were addressed: W.1.1, W.1.2, and W.2.4. All writing development will be field-tested in spring 2016.

Grade Span	W.1.1/W.2.4	W.1.2/W.2.4
3/4		6
4/5		6
5/6	3	3
6/7	6	
7/8	6	
8/9	3	3
9/10	3	3

Item level specifications have been written for each standard addressed at each grade span. These specifications will be utilized by test developers when writing the items and offer guidelines regarding passage word count, response options, and complexity ratings.

NOTE: A Sample Writing Item Level Specification document can be found in Appendix D.

# **ELA Passage Specifications**

# Topics

All passages are written specifically for the FSAA. 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 who are alternately assessed 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 upon the requirements in the standard being assessed. Some examples are listed below:

Forms of Informational Text	Forms of Literary Text
• Subject-area text (e.g., science, history)	Short stories
Magazine and newspaper articles	Excerpts from literary works
Diaries	Poems
Editorials	Historical fiction
• Essays (e.g., critiques, personal narratives)	Fables and folktales
Informational essays	Plays
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)	

Passage topics and characters are considered to ensure that each student reads some passages of interest and/or some passages with familiar knowledge. Stereotypes based on gender are avoided, as all stereotypes are.

Although the use of a selection of diverse ethnic names for the characters in the passages is encouraged, the names are simple and, preferably, of one or two syllables, and familiar to most students. 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. Names used in the previous assessment are best avoided in the current test form.

#### **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 one or two sentences, the first paragraph, or the first stanza of a poem can stand on its own. Task 1 items are developed from the beginning sentences of a passage. Students should be able to answer a Task 1 question directly from the information included in the beginning of a passage. Unless specifically required by the Access Point, no inference is required of the student in order to respond correctly at the Task 1 level.

#### Passage Graphics

Graphics, for both passages and item response options, provide access for students so that they can show what they know and are able to do. Graphics are black and white line drawings with grayscale only used 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 is 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 only to students with visual impairments. 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 described above. In these cases, an additional graphic (e.g., tables, charts, etc.) will also accompany the passage.

### 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% 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 the FSAA, 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 and 150 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 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 readabilities are determined using the Spache Scale. For grade 6 through high school, the readabilities are determined by using Powers Scale.

No readability formula is perfect; readabilities may become somewhat skewed for those passages at grades 3–6 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. Efforts will be made to develop passages that are the appropriate length and readability, while containing enough vocabulary and content to allow the assessment of reading skills. For these reasons, the Passage Bias and Review Committee is relied on heavily 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			

# Mathematics

#### **Blueprint Design**

The mathematics design is based upon the Florida Standards and consists of a total of 16 common 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. Further details have yet to be determined at this time.

Measured Progress was asked to develop new assessment blueprints for mathematics grades 3–8 in order to fully align the Florida Standards Alternate Assessment (FSAA) to the Florida Standards Access Points (FS-AP) for spring 2016. In addition, Florida requested that blueprints be developed to assess high school Algebra 1 and Geometry.

NOTE: The FSAA 15–16 mathematics assessment blueprints can be found in Appendix B.

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
- Florida Standards and Florida Standards Access Points

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

Algebra 1 Reporting Categories:

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

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

Geometry Reporting Categories:

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

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

# 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 item sets.

In developing the test blueprints 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

NOTE: The Florida Standards Alternate Assessment (FSAA) 15–16 science assessment blueprints 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 upon 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 upon 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 addressed 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.

# 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 has more emphasis than Earth and Space Science and Life Science; therefore, the recommendation is 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.

# High School Biology 1

- Two Big Ideas are addressed in the Biology end-of-course exam: Life Science and Nature of Science.
- Life Science is heavily emphasized in 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 each development cycle.

# Florida Standards Alternate Assessment (FSAA) Components



#### Test Booklet

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



#### Response Booklet

Response Booklets are provided for English language arts, mathematics, and science 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 English language arts, 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 independently read. Students may be asked to read anywhere 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 English language arts, mathematics, and science 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: Task Components

Item 2

Task 1		
Materials	Teacher Script	Student Response
Response Booklet: page 21	Here is a picture of three erasers.	A: quarters
Stimulus picture card: Here are three groups of objects.		O B: rulers
3 erasers	Which group has a different number of objects than the number of	<ul> <li>C: books</li> <li>D: No Response</li> </ul>
Picture cards:	erasers?	
(quarters)		Scaffolded Response (when applicable)
(rulers)		O A: quarters
(books)		O B: rulers
		O C: books
		O D: No Response
Task 2		
Materials	Teacher Script	Student Response
Response Booklet: page 23	Here is a package of two paintbrushes.	() A: 2
Stimulus picture card:	Ms. Tandy bought five of these packages.	O B: 10
package of 2 paintbrushes	Here are three numbers.	O C: 50
Number cards:		O D: No Response
2	Read the number cards to the student.	
10	How many paintbrushes did Ms. Tandy buy in all?	
50		
Task 3 Materials		
	Teacher Script	Student Response
Response Booklet: page 25	Here is a picture of three jars of paint.	O A: 3 O B: 15
Stimulus picture card:	Ms. Tandy has twenty students in her class. She puts the students into groups of four. She gives each group three jars of paint.	O C: 20
3 jars of paint		O D: No Response
Number cards:	Here are three numbers.	
3	Read the number cards to the student.	
15 20	How many jars of paint does Ms. Tandy need for her class?	

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 the materials the administrator may need to gather from the classroom are identified. Stimulus and response options will be identified for administrators in order to facilitate administration and standardize labeling of graphics for students with VI. 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 without keying the answer.

The *Teacher Script* column consists of a clear set of directions for setting up the item and a script for what the test administrator should ask the student.

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

# **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 pre-programmed switches, point to one choice, etc.

Items that require a constructed-response or multi-step performance, such as organizing pictures to show the order of events in a story, are often more challenging for this population of students. Therefore, an element of universal design has been incorporated 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. Typically, three options are presented to students when multiple response options are required (see example below).



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

<sup>&</sup>lt;sup>1</sup> 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.
- Multiple-choice items will have one and only one answer.
- Unintentional clues to the correct answer are avoided.
- Most items will be positively worded.
- Response options will have similar length.
- All response options will be similar in grammatical structure and form.

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 Florida Standards Alternate Assessment (FSAA). These accommodated versions include:

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

#### **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) document, found in Appendix E, and the Presentation Rubric found in Appendix E. 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).

The attached DOK and Presentation Rubric have been revised to include examples more reflective of the newly adopted Florida Standards Access Points (FS-AP). The revised versions will be applied to newly developed items in the spring 2016 assessment. Common items developed in prior years of the assessment are not necessarily assigned or developed from the current DOKs or Presentation Rubric.

Items are not written to DOK level 1. Likewise, no items are written to the DOK level 6 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.

Items 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 items should be kept as simple as possible.

To the extent possible, items should involve situations or contexts that can be expected to be familiar to most students and that are age-appropriate. In particular, items 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.

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

#### **Response Options**

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. The unrelated distractors will be a mix of items where the incorrect responses are not at all related (cat, pencil, cup—cat being the 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 (fluency items). 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. In writing, there may also be open-ended questions where the student will be expected to independently provide a response.

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

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 are easily accessible in the classroom whenever

possible. For example, objects like erasers, markers, and pencils will be used instead of cars, dogs, and houses.

Where students are asked to select a single choice from a set of response options, there should be at most three options provided. On occasion students may be given up to six options and asked to address each one, such as in an item that asks a student to recognize examples and non-examples of a given concept (e.g., show six different shapes and ask the student to identify all the shapes that are squares).

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, but at the Task 3 level, they should not come directly from the passage in order to ensure increased complexity.

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 items. Graphics may be excluded when the use of pictures complicate the item. If at all possible, items should be written that can be depicted with a picture.

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 FLA ALT 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.

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..

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 (for some science items, for

example), the graphic labels in the Materials column must be detailed enough to give a clear description of the graphic.

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

Graphics, whenever possible, will be PCS for grades 3–5, a mix of PCS (especially at the Task 1 level) and line art for grades 6–8, and only line art for 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, both for passages and item responses, will be black and white drawings using a heavy weight 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.

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 (e.g., 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 3–5, it may be appropriate for graphics to be somewhat cartoon-like or similar to PCS (e.g., 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 the 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

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, the Review Committee of Practitioners will be relied on 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.

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

Simple content terminology will be used in grades 3–5 and at the Task 1 level in all grades, with more accurate content terminology usage in grade 6 through high school. For example, in grades 3–5 the question may be "What is the story mostly about?" and in grade 6 through high school the question will 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 specifically 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 will be written to describe all text features such as tables, charts, or diagrams. This text is read aloud to all students. This text will be embedded in the teacher script. A secondary layer of alternative text is written to describe pictures/graphics to students with visual impairments. This text will be enclosed on parenthesis in the Materials column.

# **Teacher-Gathered Materials**

All students will have calculators, number lines, and counting blocks available to them for all mathematics items as determined by the teacher. Items should only list any of these tools as teacher-gathered materials if the Access Point is assessing their use. If this is the case, the item needs to indicate its use to the student and the Student Response column should indicate the use as part of the correct response.

Items may presume the use of some readily available classroom materials, such as counters. However, most items should include all necessary materials (e.g., shapes), and other manipulatives (e.g., picture cards) will be provided as graphics on regular paper. Items will refrain from referring to the color of objects, however mathematics items can refer to shapes that can be readily be provided in a tactile format.

#### Mathematics

Mathematics items 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 are the same length?" or "Which triangle has two of the three sides the same length?"

There should be a mix of items 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 longer will include commas.

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

Appendix A

# 2015–2016 Florida Standards Alternate Assessment English Language Arts Blueprints

Grade 3 ELA

Reporting Category	Genre	Number of Items on 15–16 BP	Standard	Spring 2016
Key Ideas and Details	Literary	3	3.RL.1.1	2
			3.RL.1.2	1
			3.RL.1.3	
	Literary	2 or 3	3.RL.2.4	2
			3.RF.3.3	1
			3.RF.4.4	
Craft and			3.RL.2.6	
Structure	Informational	2 or 3	3.L.2.3.a	
			3.L.3.4	1
			3.L.3.5	1
			3.RI.2.5	1
Integration of Knowledge and Ideas	Literary	2 or 3	3.SL.1.2	1
			3.SL.1.3	1
	Informational	2 or 3	3.RI.3.7	1
			3.RI.3.8	1
			3.RI.3.9	
Language and Editing	Informational	3	3.L.1.1	2
			3.L.1.2	1
Grade	4 ELA			
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Reporting Category	Genre	Number of Items on 15–16 BP	Standard	Spring 2016
			4.RI.1.1	2
Key Ideas and Details	Informational	3	4.RI.1.2	
			4.RI.1.3	1
			4.RL.2.4	
	Litorony	2 or 3	4.RF.3.3	1
	, Craft and	2 01 3	4.RF.4.4	1
Craft and Structure			4.RL.2.6	1
			4.L.3.4	
	Informational	2 or 3	4.L.3.5	1
			4.RI.2.5	1
	Litorony	2 or 3	4.RL.3.7	1
Integration of	Literary	2 01 3	4.SL.1.2	1
Knowledge			4.RI.3.7	1
and Ideas	Informational	2 or 3	4.RI.3.8	1
			4.RI.3.9	1
Language and	Litorory	2	4.L.1.1	1
Editing	Literary	3	4.L.1.2	2

Grade 5 ELA

Reporting Category	Genre	Number of Items on 15–16 BP	Standard	Spring 2016
			5.RL.1.1	1
Key Ideas and Details	Literary	3	5.RL.1.2	1
			5.RL.1.3	1
			5.L.3.4	1
	Literary	2 or 3	5.L.3.5	2
			5.RL.2.5	
Craft and Structure	Informational	2 or 3	5.RI.2.4	1
			5.RF.3.3	1
			5.RF.4.4	
			5.RI.2.6	1
	Litorany		5.RL.3.7	1
Integration of	Literary	2 or 3	5.RL.3.9	1
Knowledge and Ideas	Informational	<b>)</b> or )	5.SL.1.2	1
	mormational	2 or 3	5.SL.1.3	1
Language and	Informational	3	5.L.1.1	2
Editing	mormational	3	5.L.1.2	1

Grade	6	ELA
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Reporting Category	Genre	Number of Items on 15–16 BP	Standard	Spring 2016
			6.RI.1.1	2
Key Ideas and Details	Informational	3	6.RI.1.2	1
			6.RI.1.3	
		2 or 3	6.RL.2.4	1
	Literary		6.L.3.4	2
Craft and Structure			6.L.3.5	
		2 or 3	6.RI.2.5	1
	Informational	2 OF 3	6.RI.2.6	2
Integration of	Literary	2 or 3	6.RL.3.9	2
Knowledge	Informational	<b>)</b> an 2	6.SL.1.2	1
and Ideas	informational	2 or 3	6.SL.1.3	1
Language and	nd	2	6.L.1.1	2
Editing Literary 3	5	6.L.1.2	1	

Grade 7 ELA

Reporting Category	Genre	Number of Items on 15–16 BP	Standard	Spring 2016
			7.RL.1.1	2
Key Ideas and Details	Literary	3	7.RL.1.2	
			7.RL.1.3	1
	Litorany	2 or 3	7.RL.2.5	1
	Literary	2 01 5	7.RL.2.6	1
Craft and Structure			7.RI.2.4	1
	Informational	2 or 3	7.L.3.4	2
			7.L.3.5	
Integration of	Literary	2 or 3	7.SL.1.2	2
Knowledge and Ideas	Informational	<b>J</b> 07 J	7.RI.3.8	2
	Informational	2 or 3	7.RI.3.9	1
Language and	Informational	3	7.L.1.1	2
Editing	mormational	5	7.L.1.2	1

Grade	8	ELA
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Reporting Category	Genre	Number of Items on 15–16 BP	Standard	Spring 2016
			8.RI.1.1	1
Key Ideas and Details	Informational	3	8.RI.1.2	2
			8.RI.1.3	
			8.RL.2.4	1
	Literary	2 or 3	8.L.3.4	1
Craft and Structure			8.L.3.5	1
	Informational	2 or 3	8.RI.2.5	1
	Informational	2 01 3	8.RI.2.6	2
Integration of	Literary	2 or 3	8.SL.1.2	2
Knowledge and	Informational	2	8.RI.3.8	1
Ideas	mormational	Informational 2 or 3	8.RI.3.9	1
Language and	Litorony	3	8.L.1.1	1
Editing	Literary	5	8.L.1.2	2

Grade	9	ELA
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Reporting Category	Genre	Number of Items on 15–16 BP	Standard	Spring 2016
			910.RI.1.1	2
Key Ideas and Details	Informational	2 or 3	910.RI.1.2	1
2 0 0 0 0 0			910.RI.1.3	
		3 or 4	910.RI.2.4	1
Craft and	Informational		910.L.3.4	1
Structure			910.RI.2.5	1
			910.RI.2.6	1
	Literary	2 or 3	910.SL.1.2	2
Integration of			910.RI.3.7	1
Knowledge and Ideas	Informational	2 or 3	910.SL.1.2	
			910.RI.3.8	2
Language and	Litorom	2 or 4	910.L.1.1	2
Editing	Literary	3 or 4	910.L.1.2	2

Reporting Category	Genre	Number of Items on 15–16 BP	Standard	Spring 2016
			910.RL.1.1	1
Key Ideas and Details	Literary	2 or 3	910.RL.1.2	2
			910.RL.1.3	
			910.RL.2.4	2
Craft and	Literary	3 or 4	910.L.3.4	1
Structure			910.L.3.5	1
			910.RL.2.5	
	Literary	2 or 3	910.SL.1.2	2
Integration of			910.RI.3.7	1
Knowledge and Ideas	Informational	2 or 3	910.SL.1.3	1
			910.RI.3.8	1
Language and	Informational	3 or 4	910.L.1.1	2
Editing	iniornational	5014	910.L.1.2	2

Appendix B

2015–2016 Florida Standards Alternate Assessment Mathematics Blueprints

# Grade 3 Mathematics

Reporting Category	Number of Items on 15–16 BP	Standard	Spring 2016
		3.0A.1.1	2
		3.OA.2.5	
Operations, Algebraic	7	3.OA.2.6	
Thinking, and Numbers in Base Ten	/	3.OA.4.8	2
		3.NBT.1.1	2
		3.NBT.1.3	1
Numbers and Operations –	3	3.NF.1.1	2
Fractions		3.NF.1.3	1
	6	3.MD.1.1	1
		3.MD.2.3	1
Measurement, Data, and Geometry		3.MD.2.4	1
	U	3.MD.3.6	2
		3.MD.4.8	
		3.G.1.1	1

Grade 4	Mathematics
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Reporting Category	Number of Items on 15–16 BP	Standard	Spring 2016
Or constitution of a d		4.0A.1.1	1
Operations and Algebraic Thinking	3	4.OA.2.4	1
		4.0A.3.5	1
Numbers and		4.NBT.1.2	1
Operations in Base	3	4.NBT.1.3	1
Ten		4.NBT.2.5	1
	4	4.NF.1.1	2
Numbers and		4.NF.1.2	1
Operations – Fractions		4.NF.2.3	1
		4.NF.3.7	
	6	4.MD.1.3	2
Measurement, Data, and Geometry		4.MD.2.4	1
		4.G.1.2	2
		4.G.1.3	1

# Grade 5 Mathematics

Reporting Category	Number of Items on 15–16 BP	Standard	Spring 2016
		5.0A.1.2	1
Operations,		5.OA.2.3	1
Algebraic Thinking,	6	5.NF.1.2	2
and Fractions		5.NF.2.5	2
		5.NF.2.6	
	5	5.NBT.1.3	2
Numbers and Operations in Base Ten		5.NBT.1.4	1
		5.NBT.2.6	1
		5.NBT.2.7	1
	5	5.MD.1.1	1
		5.MD.2.2	1
Measurement, Data, and Geometry		5.MD.3.3	1
		5.MD.3.4	
		5.G.1.1	1
		5.G.2.4	1

# Grade 6 Mathematics

Reporting Category	Number of Items on 15–16 BP	Standard	Spring 2016
Ratio and	2	6.RP.1.1	1
Proportional Relationships	2 or 3	6.RP.1.3	2
		6.EE.1.1	1
Expressions and	5	6.EE.1.4	2
Equations	5	6.EE.2.5	1
		6.EE.3.9	1
Geometry	2 or 3	6.G.1.1	1
Geometry		6.G.1.4	1
Statistics and	2	6.SP.1.2	2
Probability	3 -	6.SP.2.4	1
The Number System	3	6.NS.2.4	
		6.NS.3.6	2
		6.NS.3.8	1

# Grade 7 Mathematics

Reporting Category	Number of Items on 15–16 BP	Standard	Spring 2016
Ratio and		7.RP.1.1	1
Proportional	4	7.RP.1.2	1
Relationships		7.RP.1.3	2
Expressions and	2	7.EE.2.3	2
Equations	3	7.EE.2.4	1
	4	7.G.1.1	1
Geometry		7.G.2.4	
		7.G.2.5	
		7.G.2.6	3
Statistics and		7.SP.2.3	1
Probability	2 or 3	7.SP.3.5	
		7.SP.3.8	1
		7.NS.1.1	
The Number System	2 or 3	7.NS.1.2	2
		7.NS.1.3	1

# Grade 8 Mathematics

Reporting Category	Number of Items on 15–16 BP	Standard	Spring 2016
		8.EE.1.2	1
Expressions and	5	8.EE.1.3	1
Equations	5	8.EE.2.5	2
		8.EE.3.8	1
Functions	4	8.F.1.1	2
		8.F.1.3	2
	4	8.G.1.1	1
Geometry		8.G.1.4	2
		8.G.3.9	1
Statistics &	3	8.SP.1.4	1
Probability and		8.NS.1.1	1
Number System		8.NS.1.2	1

Reporting Category	Number of Items on 15–16 BP	Standard	Spring 2016
Statistics and The	3	912.S-ID.1.2	2
Number System		912.S-ID.3.9	1
Algebra and Modeling	7	912.A-CED.1.1	2
		912.A-CED.1.2	3
		912.A-CED.1.3	2
		912.F-IF.2.4	2
Functions and Modeling	6	912.F-IF.2.5	2
		912.F-IF.2.6	2

# **High School Geometry**

Reporting Category	Number of Items on 15–16 BP	Standard	Spring 2016
		912.G-CO.1.1	2
Congruence,		912.G-CO.1.3	1
Similarity, Right	7	912.G-CO.1.4	1
Triangles, and Trigonometry		912.G-SRT.1.2	1
		912.G-SRT.1.3	1
		912.G-SRT.2.5	1
Circles, Geometric		912.G-C.1.1	1
Measurement,	6	912.G-GMD.1.3	2
and Geometric Properties with		912.G-GMD.2.4	2
Equations		912.G-GPE.2.7	1
		912.G-MG.1.1	1
Modeling with Geometry	3	912.G-MG.1.2	1
		912.G-MG.1.3	1

Appendix C

2015–2016 Florida Standards Alternate Assessment Science Blueprints

# Grade 5 Science

Body of Knowledge	Number of Items on 15–16 BP	Big Idea	Spring 2016
		Big Idea 1: The Practice of Science	2
Nature of Science	2	Big Idea 2: The Characteristics of Scientific Knowledge	1
Nature of Science	3	Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models	
		Big Idea 4: Science and Society	
		Big Idea 5: Earth in Space and Time	
Earth and Space Science	4	Big Idea 6: Earth Structure	
		Big Idea 7: Earth Systems and Patterns	4
	5	Big Idea 8: Properties of Matter	
		Big Idea 9: Changes in Matter	
Dhurical Science		Big Idea 10: Forms of Energy	3
Physical Science		Big Idea 11: Energy Transfer and Transformations	1
		Big Idea 12: Motion of Objects	
		Big Idea 13: Forces and Changes in Motion	1
		Big Idea 14: Organization and Development of Living Organisms	3
		Big Idea 15: Diversity and Evolution of Living Organisms	
Life Science	4	Big Idea 16: Heredity and Reproduction	
		Big Idea 17: Interdependence	1
		Big Idea 18: Matter and Energy Transformations	

## Grade 8 Science

Body of Knowledge	Number of Items on 15–16 BP	Big Idea	Spring 2016
		Big Idea 1: The Practice of Science	1
Nature of Science	3	Big Idea 2: The Characteristics of Scientific Knowledge	
	5	Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models	
		Big Idea 4: Science and Society	2
		Big Idea 5: Earth in Space and Time	3
Earth and Space Science	3	Big Idea 6: Earth Structure	
		Big Idea 7: Earth Systems and Patterns	
		Big Idea 8: Properties of Matter	5
		Big Idea 9: Changes in Matter	2
	-	Big Idea 10: Forms of Energy	
Physical Science	7	Big Idea 11: Energy Transfer and Transformations	
		Big Idea 12: Motion of Objects	
		Big Idea 13: Forces and Changes in Motion	
		Big Idea 14: Organization and Development of Living Organisms	
		Big Idea 15: Diversity and Evolution of Living Organisms	
Life Science	3	Big Idea 16: Heredity and Reproduction	
		Big Idea 17: Interdependence	
		Big Idea 18: Matter and Energy Transformations	3

# High School Biology 1

Reporting Category	Number of Items on 15–16 BP	Standards	Spring 2016
		SC.912.L.14.1	
		SC.912.L.14.3	1
		SC.912.L.16.3	
Molecular and Cellular Biology	5	SC.912.L.18.1	1
		SC.912.L.18.12	1
		SC.912.L.18.9	1
		SC.912.L.16.17	1
	4	SC.912.L.15.1	1
Classification,		SC.912.L.15.13	1
Heredity, and Evolution		SC.912.L.15.6	1
		SC.912.L.16.1	1
		SC.912.L.14.7	2
	_	SC.912.L.16.10	1
Organisms,		SC.912.L.16.13	1
Populations, and Ecosystems	6	SC.912.L.17.5	1
		SC.912.L.17.9	
		SC.912.L.17.20	1
Nature of Science	1	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

2015–2016 Sample Writing Item Level Specifications

# FAA Writing: Item Specifications

# Grades 5/6: W.1.2 and W.2.4

Passage specs	Informational (informative/explanatory): Items will be in response to topic presented in passage. Passage will range from 100-150 words each.							
Item	1 SR	2 SR	3 and 4 SR		5 SR	6 OR		
Access Points Item writers will use this chart to determine which skills to target for each question. Items written to address the EU level for each Access Point.	LAFS.5.W.1.AP.2a Write an introduction that includes context/background information, establishes a central idea or focus about a topic.	LAFS.5.W.1.AP.2b Organize ideas, concepts and information, using strategies such as definition, classification, comparison/contrast and cause/effect. LAFS.5.W.1.AP.2c Support the topic with relevant facts, definitions, concrete details, quotations or other information and examples.	3 and 4 SR LAFS.5.W.1.AP.2d Include formatting (e.g., headings), graphics (e.g., charts, tables) and multimedia appropriate to convey information about the topic.		LAFS.5.W.1.AP.1g Provide a concluding statement or section to summarize the information presented.	LAFS.5.W.2.AP.4a Given a specific purpose, produce a permanent product (e.g., identifies text appropriate to the purpose, identify descriptive sentences, and identify a concluding statement). Student will write a response using his/her primary form of communication to include: – title – introduction – details supporting topic – conclusion Graphic organizer will be provided		
Passage	Read first 2-3 sentences	Read full paragraph	Read fu	II passage		Read full passage		
DOK	2	2/3	3		3	5		
Item Type	Selected Response	Selected Response	Selected Response Selected Response		Selected Response Selected Response		Selected Response	Open Response
Distractor Rule	both unrelated	both unrelated	one related toone related totopic/passagetopic/passageone unrelatedone unrelated		one related to topic/passage one unrelated	n/a		

Appendix E

**Complexity Rubrics** 

#### Depth of Knowledge

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.

1	Attention				
General Performance Verbs: touch look vocalize repeat attend	require doing the command.	xamples: ook at me. isten while I read this story.			

2	Rote Knowledge, Memorize& Recall				
General Performance Verbs: list	<ul> <li>Habitual response—recalls previously heard or learned information.</li> <li>Practiced, rote behavior.</li> <li>No inferences are required for correct answer.</li> <li>Habitual response of common day to day activities or objects.</li> </ul>				
identify state	English Language	<u>Arts</u>			
label recognize record match recall retell	<ul> <li>Matches picture/word to picture/word.</li> <li>Identifies rhyming words.</li> <li>Identifies letters by phonics/sounds or sight.</li> <li>Identifies detail of text of 2-3 simple sentences using verbatim wording.</li> <li>Identifies correct spelling of misspelled word.</li> <li>Identifies misspelled common words.</li> <li>Identifies letters and phonetically regular, high frequency words (self-read).</li> </ul>	Examples: Show me/tell me which can you drink from? (book, cup, pen) what do you read? (book, desk, stapler) which pair of words rhyme?			
	Mathematics				
	<ul> <li>Identifies characteristics (e.g., shape, face, side, corner, angle, etc.) of common objects or shapes.</li> <li>Tells time on a digital clock.</li> <li>Recognizes familiar object added to group of objects.</li> <li>Identifies shapes presented in the same orientation and not a direct match situation.</li> <li>Matches values/numbers on a number line.</li> <li>Recognize expressions with decimal points, exponents, etc.</li> </ul>	Examples: Show me/tell me 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).			
	Science				
	<ul> <li>Identifies object from picture or manipulative choices.</li> <li>Identifies common object when function is described.</li> <li>Recalls function of basic body parts.</li> </ul>	Examples: Show me/tell me what kind of weather is wet? what object gives light? what body part can taste food?			

3	3 Use of Knowledge and Information					
General Performance Verbs: perform	<ul> <li>Engagement of some mental processing beyond habitual response.</li> <li>Simple inferences may be needed.</li> <li>Uses information from a chart or graph to make simple inferences in order to correctly respond.</li> <li>Chooses what comes next in a sequence.</li> </ul>					
tell demonstrate	English Language Arts					
demonstrate follow count locate name read describe define spell	<ul> <li>Indicates comprehension of basic/common words or two to three word sentences.</li> <li>Identifies main idea by applying information gained from text.</li> <li>Identifies detail by making simple inferences.</li> <li>Identifies a relevant or best sentence to add to passage.</li> <li>Self-reads materials/passages.</li> <li>Identifies best word to complete sentence.</li> <li>Identifies initial word in sentence in need of capitalization.</li> <li>Identifies the correct spelling of grade appropriate words presented in sentence.</li> <li>Identifies prefixes/suffixes in words.</li> <li>Identifies incorrectly used common punctuation.</li> <li>Identifies basic punctuation including periods,</li> </ul>	Examples: Show me/tell me 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 group of words has a comma? which piece of evidence supports this clam?				
	commas, and question marks.					
	Tells time on analog clock.     Examples: Show me/tell me					
	<ul> <li>Identifies number sentence/equation that reflects number relationships (no comp.).</li> </ul>	which number sentence can be used to find the circumference of this circle (given dimensions and formula).				
	<ul> <li>Tells measurement with ruler placed on stimulus.</li> <li>Performs basic computation (counting may be a strategy).</li> <li>Identifies # of angles and angle type.</li> </ul>	how many cookies are needed for 5 children to have 2 cookies each? (picture cues of five students holding two cookies each are provided)				
	<ul> <li>Identifies parts of objects or # of objects in group representing simple fractions (1/2, 1/3, 1/4).</li> <li>Matches congruent shapes.</li> </ul>	what is the length of the longest side (hypotenuse) of the triangle? (picture of triangle with a ruler alongside it)				
	<ul><li>Identifies information from a graph.</li><li>Matches number to picture model.</li></ul>	what is half of the number of blocks shown?				
	<ul> <li>Identifies similar shapes when picture cues are rotated, reflected, or translated.</li> <li>Uses place value to round to any place.</li> <li>Locates positive and negative numbers on a number line.</li> </ul>	<ul> <li>which picture is a model of two cubed?</li> <li> which number line shows the point negative four?</li> <li> which point is the <i>y</i>-intercept of this line.</li> </ul>				
	Identifies the y-intercept of a line.					
	Science					
	<ul> <li>Identifies additional attribute from common experience/knowledge (e.g., weather, animals).</li> </ul>	Examples: Show me/tell me what other animals live in the desert? how does someone move a mower? an element is a substance that cannot be broken down intowhich of these is an element?				

4	Comprehension				
General Performance	<ul> <li>Strategic thinking—requires reasoning, planning a sequence of steps.</li> <li>Answer choices summarize and are not verbatim from passage.</li> </ul>				
Verbs: explain	English Language Arts				
conclude group categorize restate review translate describe paraphrase infer summarize illustrate compute classify solve	<ul> <li>FROM INFORMATION THAT IS INFERRED:</li> <li>Identifies theme or message of a story.</li> <li>Identifies main <u>idea</u> by drawing conclusions or making inferences.</li> <li>Identifies elements of a story without definition of the element.</li> <li>Identifies purpose of writing passage.</li> <li>Selects best sentence(s) for middle or end of passage (correct order required).</li> <li>Orders three or more sentences to communicate logical sequence of events.</li> <li>Sorts or groups words or items with categories given.</li> <li>Identifies sentence that best supports topic.</li> <li>Identifies two or more sentences to complete a composition.</li> <li>Identifies correct meaning of words from context sentence.</li> <li>Edits for correct use of subject and verb agreement.</li> <li>Edits for correct use of singular and plural nouns.</li> </ul>	Examples: Show me/tell me 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?			
	<ul> <li>Identifies proper nouns and pronouns within sentences, and book titles in need of capitalization.</li> <li>Identifies correct usage of punctuation.</li> </ul>				
	<ul> <li>Computes math operations with equation, formula, or organizer given. (Requires computation and not one to one counting.)</li> <li>Identifies objects, letters, or objects with line symmetry.</li> <li>Computes area, perimeter, and volume when dimensions are labeled.</li> <li>Identifies patterns with more than two repetitions.</li> <li>Groups objects into three or more groups.</li> <li>Uses information from a graph to make a comparison or claim, or to answer a question.</li> <li>Makes predictions of random selection process.</li> <li>Identifies faces of more than one 3 dimensional object with only one object presented as stimulus.</li> <li>Computes prices of items with tax.</li> <li>Identifies correct number sentence/equation from a group of three viable choices (requires computation).</li> <li>Uses ruler to measure.</li> <li>Reduces fractions.</li> <li>Simplifies expressions that include exponents.</li> <li>Identifies the slope and y-intercept from graphs.</li> <li>Plots or recognizes ordered pairs on a graph.</li> <li>Recognizes similar figures (given information or example of similarity).</li> </ul>	Examples: Show me/tell me 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?			

<u>Science</u>	
<ul> <li>Identifies components of a scientific process.</li> <li>Draws conclusions based on provided information.</li> <li>Generalizes body part functions/processes across species by making inferences.</li> </ul>	Examples: Show me/tell me 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?

5	Applicatio	n			
General Performance Verbs:	<ul> <li>Extended thinking—making connections within and between subject domains, non routine problem solving.</li> <li>Student generates answer without cues.</li> </ul>				
organize collect	English Language	Arts			
apply construct use develop generate interact with text implement	<ul> <li>Makes connections between multiple sources.</li> <li>Compares events in two passages.</li> <li>Generates response.</li> <li>Implements a plan.</li> </ul>	Examples: Show me/tell me 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)			
compare contrast	Mathematics				
	<ul> <li>Computes with no equation and limited numbers presented (i.e., for perimeter, numbers are given on only 2 sides of 4 sided figures).</li> <li>Constructs complex new shape from given shapes.</li> <li>Computes by translating word problems into number problems.</li> <li>Solves real-world problems involving units of measurement.</li> <li>Selects appropriate graphical representations of real-world events.</li> </ul>	Examples: Show me/tell me 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?			
	<u>Science</u>				
	<ul> <li>Explains cause and effect relationships.</li> <li>Orders three or more components of a scientific process.</li> <li>Describes processes of production or reproduction by ordering sentences.</li> </ul>	Examples: Show me/tell me 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?			

6	Analysis Evaluation					
General Performance Verbs: pattern analyze compose predict extend plan judge evaluate interpret cause/effect investigate examine distinguish differentiate generate	<ul> <li>Requires investigation.</li> <li>Student predicts based on information given.</li> <li>Student creates possible alternative outcomes.</li> <li>Student uses multiple sources to answer question without cues/supports.</li> <li>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.</li> </ul>	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?				

#### **Special Considerations**

- Generally, items are <u>not written</u> to DOK level of 1. Likewise, no items are written to the DOK 6 level because of the investigative nature of this level.
- Item graphics should be available as a manipulative as much as possible, **especially** at the participatory level. 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 the labeling of the graphics in the Materials column must be detailed enough to give a clear description of the graphic.
- To accommodate the Braille version of the assessment, items that name the answer must be presented as manipulatives and not read. Word/picture cards being read **must not** name the answer.
- Picture cues are to be provided at all three levels of complexity (Pa, Su, and In), to allow students
  who function at the early-symbolic level to access the items. Graphics may be excluded when the
  use of pictures complicate the item for other students. If at all possible, items should be written that
  can be depicted with a picture. Items may be rejected if a concept cannot be depicted in pictures or
  if a picture adds confusion to the test item.
- For Deaf and Hard of Hearing students, responses to fluency items 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.

# **Presentation Rubric**

	1	2	3	4
	No Scenario Presented:	Limited Scenario Presented:	Moderate Scenario Presented:	Complex Scenario Presented:
Volume of Information	<ul> <li>1 simple sentence stating stimulus, "Here is a" (when applicable)</li> <li>Little to no additional info or instruction beyond standard item template language</li> <li>Minimal response options (no complete sentences or equations)</li> <li>No passage.</li> <li>Here are 3 pics with words. SMTM which one holds water. (no stimulus, 3 word/pic cards)</li> <li>Here are four paper clips. Here are 3 numbers. SMTM half of the paper clips. (stimulus pic strip, 3 number cards)</li> </ul>	<ul> <li>1 sentence describing stimulus/materials or scenario</li> <li>Minimal information provided in 1 simple format (pictograph, organizer, formula)</li> <li>Passage items: simple sentence or short paragraph</li> <li>No scenario, but complete sentences or equations for response options</li> <li>Carlos wants to read a book. SMTM where Carlos would most likely find a book. (no stimulus, 3 word/pic cards)</li> <li>Here is a table that shows the cost of fruit. SMTM which amount shows the cost of 3 oranges. (stimulus table, 3 number cards)</li> </ul>	<i>the car to fall to the ground.</i> (stimulus toy car, 3 word/pic cards)	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 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> . SMTM the order in which energy is used to make meat. (stimulus sent. strip, 3 sentences)
Vocabulary	<ul> <li>Familiar Vocabulary Presented:         <ul> <li>Everyday words and single digit numbers (e.g., round shape, which is a boy, what is one more, which is wet) presented in item</li> <li>No content words used</li> </ul> </li> <li>No Content Words</li> </ul>	<ul> <li>Somewhat Familiar Vocabulary Presented:</li> <li>Everyday words and double digit numbers (and higher) presented in item</li> <li>Minimal basic content words used</li> <li>Examples include units of measure, fractions, conversion formulas, place value, data tables, graphs, pictographs, decimals, equation</li> <li>Basic Content Words (familiar, used with</li> </ul>		<ul> <li>Abstract &amp; Unfamiliar Vocabulary Presented:</li> <li>Mix of everyday words and unfamiliar words presented in item including abstract words</li> <li>Complex content words used</li> <li>t Word (less familiar and more abstract)</li> </ul>
	$\rightarrow$	story, sentence, add, square, cl	aim, simile,	hyperbole, isosceles triangle,
		hundreds place, whole, half, fo		carbon cycle, atom
		heat, light, electricity, gravit		
Context	Familiar Context & Immediate Setting (home and school) class, schedule, media center, lunch, recess, counting objects, kitchen, weather, basic body parts, gravity on everyday objects	Familiar Context & Extended Setting (community) town library/museum, grocery store, volunteering, FL related animals/facts, algebraic terms/expressions	Unfamiliar Context & Extended Setting (global community) animals/facts beyond FL (US/other countries), life cycle, respiratory system, environmental/global issues, internal functions of organs	Unfamiliar & Abstract Context (require student to apply knowledge) inflation, 2D/3D conversion, object translation, personification, carbon cycle, genes, gravity on objects in space

# APPENDIX E—SURVEYS AND RESULTS

Survey Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Overall the training worked well.	0%	0%	5%	52%	43%
<ol> <li>The high level overview of the FSAA— Performance Task and FSAA—Datafolio programs was helpful.</li> </ol>	0%	0%	7%	55%	38%
3. The overview of the FSAA—Performance Task administration procedures were clear.	0%	0%	0%	48%	52%
4. The Scavenger Hunt Activity was helpful.	0%	0%	14%	43%	43%
5. The Open Response Writing Prompt Activity was helpful	0%	0%	7%	43%	50%
6. It was helpful to have the Practice Materials available for practicing administration.	0%	2%	5%	22%	71%
7. The questions I had about the 2016 FSAA were answered.	0%	0%	8%	38%	54%

A total of **52** Florida educators participated in the October 20, 2015 Train the Trainer workshop. Measured Progress received a total of 42 surveys at the end of the training. Between 39–42 individuals provided a rating for the survey questions in Table E-1.

Three things I liked the best about this experience...

- Practice materials.
- Explanations of changes and why; change in presenters; amount of time training (length).
- Handouts; manual; great workshop—clear and helpful.
- Scavenger hunt; preview of materials; online system.
- Very informative and nice set up—staff and trainers very helpful and knowledgeable.
- I liked that you had more than one presenter; practice items.
- Q&A; hands on practice; explanations/examples given.
- The information; the fact that you addressed our questions quickly, and the materials presented.
- Sharing experiences and idea with coordinators from other school districts.
- Practice time.
- Working with partner.
- The changes were explained.
- The training was helpful in explaining new methods of test administration.
- Materials, handouts, activities.
- Gaining experience to practice using practice materials, viewing online practice module, and Q&A session.
- Very helpful. (Note: four responses mirrored this general consideration)

- The improvements in the administration will be well-received by teachers. Think it will simplify for them.
- Hands on materials; questions were answered.
- Q&A; prep and accommodations; professionalism of speakers.
- Practice.
- Information was highly pertinent to my job; lunch was great; speed of training—excellent.
- Hands on experience with materials; Q&A session.
- Practice materials.
- Trainer had a microphone so I could hear them well; going over the PowerPoints and reflection activity with practice materials; lunch.

Three things I would change about this experience...

- Information a lot earlier before the school year begins; getting out practice materials earlier; I am a little worried about teachers being prepared to assess students with fidelity.
- Need more time to complete scavenger hunt.
- Please provide a printed version of the PowerPoint [either prior to or received at the training] so that notes can be recorded throughout the presentation. (*Note: 15 responses mirrored this general consideration. In lieu of this feedback, Measured Progress prepared a printed handout of the PowerPoint slides to Florida educators that participated in the FSAA—Performance Task Train-the-Trainer workshops scheduled for Wednesday, October 21, 2015 and Thursday, October, 22, 2015.*)
- I would have the PowerPoint presentation <u>match</u> the handouts.
- Not all teachers have scanners to be able to scan in the writing response in their classroom or at the school level.
- The "it's not ready yet".....I would like to see them so I can answer all the questions.
- Not sure that the writing data this year will give good feedback. By the time we can get info to teachers, it will be difficult for them to expose/teach children vocabulary and topics before administration. Not a criticism—just a reality.
- Practice materials should have sessions indicated to make sure teachers practice both [administration processes].
- I would like to have seen the Elementary [practice] materials.
- I would have liked practice tests for the EOCs; a high school-aligned ELA practice test, and greater clarification about the writing template upload process.
- Lack of organization—should have more materials for us; you moved all over the test manual hard to follow.
- No changes; good job! (Note: three responses mirrored this general consideration)

Questions I still have ...

- Are there other accessibility items being added to the online system (i.e., change mouse size, mouse contrast, etc.)
- When our general ed [education] students are taking the FSA, we are discouraged from using our computers because of our internet bandwidth. We are in a small district. This could create a problem with our teachers getting on and entering the FSAA responses.
- Feasibility of scanning the writing document—grades 4–7 submit paper; online entry and capacity of systems.
- Scanning the writing prompt?? Don't see how that will work?

Table E-2. 2015–16 FSAA-PT: Train-the-Trainer Survey Responses <sup>†</sup>	for October 21, 2015
-----------------------------------------------------------------------------	----------------------

Survey Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Overall the training worked well.	0%	0%	0%	38%	62%
<ol> <li>The high level overview of the FSAA— Performance Task and FSAA—Datafolio programs was helpful.</li> </ol>	0%	0%	9%	39%	52%
3. The overview of the FSAA—Performance Task administration procedures were clear.	0%	0%	0%	49%	51%
4. The Scavenger Hunt Activity was helpful.	0%	0%	11%	32%	57%
5. The Open Response Writing Prompt Activity was helpful	0%	3%	0%	34%	63%
6. It was helpful to have the Practice Materials available for practicing administration.	0%	0%	0%	29%	71%
7. The questions I had about the 2016 FSAA were answered.	0%	0%	0%	37%	63%

<sup>'</sup>A total of **43** Florida educators participated in the October 21, 2015 Train the Trainer workshop. Measured Progress received a total of 35 surveys at the end of the training. Between 33–35 indivdiuals provided a rating for the survey questions in Table E-2.

Three things I liked the best about this experience...

- Knowing what to expect with test to being planning the assessment; talking to other districts at lunch about common concerns; legal size test.
- Hands on practice materials; ability to ask questions during the training; PowerPoint provided on paper.
- The activities were useful; materials were good; time was well used.
- Knowing that the response booklet was going to be smaller.
- Organization; trainers were very patient.
- Thanks for providing funding.
- Breaking up into three sections over three days as opposed to one day with everyone; hands on activities.
- I enjoyed the hands on interaction with materials and manual.
- Great presenters; very knowledgeable.
- Everyone's patience!!
- Good trainers that get information across.
- Clear, on point, and good materials given the time element. Need the practice materials online PDF will be helpful. Legal size for the auxiliary materials.
- Putting hands on the practice materials and practicing the test.
- Discussion, activities, and background for datafolio.
- Experience practice materials; fast pace; meeting room very comfortable.
- Knowledgeable trainers; questions answered; pace; great job.

- Every presenter so knowledgeable and patient; respectful of our time; Florida Hotel is the perfect site.
- Q&A opportunity although some questions could have bene answered if people wait to hear the information. Handouts. Team of presenters. The new assessment changes are moving in the right direction! Review Q&A at the end.
- Hands on exploration of materials and tools/ideas for training our FSAA staff.
- New stuff.
- Overall presentation by knowledgeable individuals who answer questions "outside the box". Excited about the improvements of the FSAA when compared to prior years of the FSA. Idea of face to face using modules! Easy to present at the district level. The facility worked great. Food was awesome—offer more than just tea or water.
- The pace was good; information was informative.
- Pace; materials; hands on.
- Thorough; knowledge level of presenters; location.

Three things I would change about this experience...

- Have modules available now; be able to take home response booklets today; knowing information about computer needs for evaluation (uploading).
- Shush people who constantly and excessively talk during presentations—I felt unable to shush them without being rude and it was a distraction to my attention and understanding.
- More hands-on practice time.
- Two days.
- It would have been nice to be able to view the modules so we will know what the teachers will be viewing.
- Room where the air [conditioning] works better; provide a compete PowerPoint handout .
- Be able to take practice materials home.
- Brain breaks!
- I would integrate hands on interaction within explanation/manual overview. It would help to demonstrate changes easier.
- I wish we got to take home some practice materials today.
- NOTHING.
- Possibly taking more frequent breaks....however it was great and very knowledgeable.
- Don't change the test.
- Videos of teachers administering items to students would be <u>very</u> helpful.
- Could it [training] be done in one and half or two days? So much good information fast.
- A lot of information; very fast but I realize that it takes time to synthesize!
- Give practice materials (one set to cover all grade levels) to trainers to practice and learn well before we give training at the district level. We love having hard copies.
- Refer to Parking Lot questions; increase the crowd management—too many side conversations—it was distracting.

Questions I still have...

- How is the online entry going to work? Will it be successful?
- I am concerned that the process for uploading open response writing is still unknown.
- I will let you know.
- Will there be administration videos available to incorporate into the training?
- As the implementation occurs, there will be!
- Is it possible (or will it be possible in the near future) to assess students with FSAA and FSA (only in areas where it is appropriate)? For example, level 3 in math, thus FSA—level 1 in ELA, thus FSAA?

Survey Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Overall the training worked well.	0%	0%	2%	25%	73%
<ol> <li>The high level overview of the FSAA— Performance Task and FSAA—Datafolio programs was helpful.</li> </ol>	0%	2%	4%	34%	60%
3. The overview of the FSAA—Performance Task administration procedures were clear.	0%	0%	0%	33%	67%
4. The Scavenger Hunt Activity was helpful.	2%	0%	10%	27%	61%
5. The Open Response Writing Prompt Activity was helpful	0%	0%	6%	29%	65%
6. It was helpful to have the Practice Materials available for practicing administration.	0%	0%	0%	24%	76%
7. The questions I had about the 2016 FSAA were answered.	0%	2%	6%	31%	61%

#### Table E-3. 2015–16 FSAA-PT: Train-the-Trainer Survey Responses<sup>‡</sup> for October 22, 2015

<sup>+</sup> A total of **68** Florida educators participated in the October 22, 2015 Train the Trainer workshop. Measured Progress received a total of 50 surveys at the end of the training. Between 48–50 indivdiuals provided a rating for the survey questions in Table E-3.

Three things I liked the best about this experience...

- Comfortable conference setting; use of the practice test; liked the questions at the end.
- Content was valuable and questions answered.
- The question time. Looking at the practice materials, especially for writing questions.
- The accommodations and meals/beverages are sincerely appreciated. Enjoyed having a variety of presenters.
- Trainers' knowledge, hands-on activities, and questions at the end.
- New, streamlined, and student centered.
- You guys listen to us.
- The sample practice test availability; the activities; the trainers.
- The presentation was clear and precise; the examples.
- Very clear.
- Information was clear; materials were well put together; great presenter.
- I liked getting a chance to view the online part and the practice materials; having a CD with all information.
- The small group setting was more beneficial. Thank you for breaking the training into three days to provide smaller group interaction.
- Practice materials—hands on.
- Manual; explanation of procedures; practice activity.
- The discussion that was had; reviewing the manual; using practice materials.
- Time to view sample materials; examples for open response; explanations for production of the field test.
- Well done; will deliver much as much as presented.
- Q&A; practice materials; PowerPoint notes.
- New information shared.
- Seeing new writing materials; PowerPoint printed to follow along; CD of materials.
- Q&A; practice materials; handouts.
- Very well presented; great materials.
- I enjoyed having the materials to look at and practice with.
- Materials were compact and targeted—we really needed practice materials.
- Q&A time was informative.
- I enjoy the new layout of the FSAA; enjoy group discussion; friendly and knowledgeable staff.
- Speakers provided clear, understandable information.
- Hands on activities; Q&A; training materials provided.
- Using practice materials; having people from FDOE along with Measured Progress; going through the complete administration procedures.
- Very informative; lovely accommodations; clear speakers/presentation.
- Seeing practice materials.
- Examples.
- Going through the manual. Having a chance to look at practice materials.
- Available materials for practice; ability to speak with other districts; representation from the FLDOE.

Three things I would change about this experience...

- More practice as a group for administration of the test/sample practice test. More flow charts. Tracking checklist for type of test needed for next year.
- In the TAM: use of subject/vocabulary should be clearer—NOT for pre-teaching, only for accessibility. Scaffolding should be demonstrated in the same way in Draft TAM for pages 24 and 26. It was frustrating to no have all of the slides presented.
- Have three levels for practice; provide more interaction or movement.
- All timelines on one chart.
- The online data gathering/recording system should have been available.
- More time; access to practice materials; access to TAM.
- Nothing.
- Some of the questions interrupted the flow of the training—no other changes.
- Place reference page number of TAM in the training PowerPoint.
- Include manual pages to reference in PowerPoint; include all PowerPoint slides in our print out; have more concrete answers about expectations for writing for more severe kids.
- Provide more testing practice materials; show various grade bands (grades).
- Better align questions since same question was asked several times.
- Time to discuss with team.
- Allow table to keep the five questions and omit once we feel they are answered.
- Bigger room.
- Get rid of the scavenger hunt/writing prompt activity and allow for team discussion.
- Practice materials draft would be helpful.
- Make the practice booklet/items in the same caliber (quality) as the FSAA. For example, grade 6, item 2, task 2 & 3 are not good.
- This was a great deal of information to try and absorb in one-day training.
- Experience was great, but it seems there's still a lot of information we are waiting on.
- Long day; lots to process!

- Your trainer was lovely but she needs to monitor her presentation style because she said "ok" hundreds of times—sorry but it was distracting; please do not limit your slides—it is confusing and frustrating; for session 2, please put scaffolding into the diagram—teachers will be confused; the chart in the sequence of administration for high school is misleading. Have you considered providing lists of writing vocab ahead of time and providing PCS pictures with words for vocab lists so teachers don't have to search for these?
- Session II scaffolding visual; all PowerPoint slides should be included in printouts; practice
  materials should be take home from training purposes or available online. Errorless testing
  needs to be listed in the manual (prohibited). Uploading guidelines [needed]. We knew at the
  beginning of the last school year that the FAA was going to change. Why, after one full year, are
  we still in development?? It is frustrating!!

Questions I still have ...

- More information on datafolio and high school requirements. Timeline of when all information will be available for training.
- I don't have one question. There is so much effort being put into the writing open response. There were 17 slides for that one specific question. The question doesn't count. Is there any way to simplify this?
- None at this time, thanks!
- All questions answered.
- No question—just concerned about variation in student presentation of open response; will likely be resolved with 2016-17 administration.
- Will ask AAC if needed.
- Same as everyone—levels of performance, etc.
- Could there be a training with the FSA/Assessment Coordinators to see what FSAA looks like even a half hour during their training; just for their information and understanding.
- Will each student have their own booklet and materials OR just booklet. If not materials too, then how are we to "share" the materials if all ELA has to be done first?
- If you know that many students will not respond to the higher level questions—why do you not offer picture choices for them to choose from—as we do this daily?
- How to best provide teacher direction on accessing the open response.
- May we, or may we not, deviate from the script in accordance with the students' IEPs?
- Dates when materials will be available <u>ASAP</u> since I need to schedule training. We really needed this information <u>today</u> since scheduling takes time and our teachers needs this information now to ensure students will perform best.

# **APPENDIX F—DECISION RULES**



# Florida Standards Alternate Assessment Performance Task 15-16

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			
Number and Method (Electronic, Printed, orType of ReportBoth) Report isProvided		c, Printed, or	Brief Description of Contents
	Provided to State	Provided to District	
School Report	Online; FTP	Three Print Copies; Online	Roster of students in a school by assessment Basic student demographic information, Number and percent of items correct by task level
Student Report	Online; FTP	Two Print Gray Scale Copies; Color Online	Basic student demographic information, Number and percent of items correct by task level for tested assessments

В.	Data files				
Type of Data file	Number and Method (E Both) Data are Provide		Brief Description of Contents		
Dala III <del>e</del>	Provided to State	Provided to District			
State Student Data File	FTP	N/A	Basic student demographic information, Session 1 Item Set Scores		
District Student Results	Online	Online	Basic student demographic information, Session 1 Item Set Scores		
State Assessed Summary Data File	FTP	N/A	Number of Assessed and Not Assessed students by tested grade, tested subject, school and district		



District Assessed Summary Data File	Online	Online	Number of Assessed and Not Assessed students 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 03-09, a student is expected to participate in all content area tests required at a student's enrolled grade. Students enrolled in High School have the option to participate in the EOC assessments Algebra I, Geometry, and Biology. 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	Test			Test Con	tent Area		
Enrolled Grade	Grade Level	ELA	Math	Science	Algebra 1 EOC	Geometry EOC	Biology EOC
03	03	Required	Required				
04	04	Required	Required				
05	05	Required	Required	Required			
06	06	Required	Required				
07	07	Required	Required				
08	08	Required	Required	Required			
09	09	Required					
10	09	Optional					
10	10	Required*					
11, 12	09	Optional					
11, 12	10	Optional					
09, 10, 11, 12	High School				Optional	Optional	Optional
		olled in grad e 10 ELA test		ubmit a grad	de 09 ELA	test are not i	equired to



#### B. Student Test Administration

### 1. General Item Task Types

- a. Selected Response: Student selects one option
- b. Multi-Select: Student selects more than on 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 complete the Task 1 question accurately, 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. Item Sets 1-10

b. 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. Item Sets 11-19

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

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

#### 5. Session 3 (ELA-Writing only; Field Test in 15-16)

a. Writing Prompts 1 and 2

b. Each student is administered all 5 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: {<scaffolded indicator>;<final student response>; < student responses 1>; ...<student response n-1> ; <student response n>}

i Student response n = final student response

ii Student response n-1 = scaffolded response, when scaffolded indicatory = "true" (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

d. A task is correct if the final student response matches the correct answer identified in the test meta data

e. A task is incorrect if the final student response is not blank or NULL and it does not match the correct answer identified in the test meta data

Hierarchy	Item Set Score	Score Assignment Rule	Student Attempted Item Set
1	blank	Item set task 1 is not attempted	No
2	0	Task 1 Incorrect	Yes
3	2	Task 1 Correct with Scaffolding	Yes
4	3	Task 1 Correct without Scaffolding and Task 2 Incorrect	Yes
5	6	Task 1 Correct without Scaffolding and Task 2 Correct and Task 3 Incorrect	Yes
6	9	Task 1,2, and 3 Correct	Yes

### ITEM SET SCORE ASSIGNMENT

#### B. 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. Meeting Test Attemptedness

a. A student who attempts 2 or more of the first 10 item sets included on a test meet attemptedness requirements

b. Students who meet attemptedness are assigned a participation status of "Tested" for the assessment

#### 2. Does Not Meet Test Attemptedness and Not Tested

a. A student who attempts exactly one item of the first 10 item sets is identified as "Did not meet attemptedness"

b. A student who attempts 0 items of the first 10 item sets is identified as "Not Tested"

c. If a not tested reason is provided in the testing platform, the not tested reason is used as the participation status. Otherwise, the participation status is "Does Not Meet Attemptedness" or "Not Tested", as applicable.

# 3. The table below summarizes the participation status and its impact on analysis and reporting

#### TEST PARTICIPATION STATUS SUMMARY

			Student Assessment Included					
Meet Attempte d-ness Rule	Testing Platform Not Tested Reason	Participation Status	Stude nt Repor t	Distric t and State Stude nt Test Result s Data	State, District, School Aggregations	School Report – Student Roster		
Yes	Ignore all Not Tested Reasons provided, except for "Deceased", in the testing platform	Tested	Yes	Yes	Yes	Yes		
No	Absent	Absent	No	Yes	Yes	Yes		
No,Yes	Deceased	Excluded from analysis and reporting – Not assigned a test participation status	No	No	No	No		
No	EOC Deferred	EOC Deferred	No	Yes	No	Yes		
No	Extraordinary Exemption	Extraordinary Exemption	No	Yes	No	Yes		



		<u>[</u>				[
No	Home School	Home School	No	Yes	No	Yes
No	Hospitalized	Hospitalized	No	Yes	Yes	Yes
No	LY<1 yr—ELA ONLY	LY<1 yr—ELA ONLY	No	Yes	No	Yes
No	McKay Scholarship	McKay Scholarship	No	Yes	No	Yes
No	Medical Complexity	Medical Complexity	No	Yes	No	Yes
No	Not in Tested Grade	Not in Tested Grade	No	Yes	No	Yes
No	Participating in Datafolio	Participating in Datafolio	No	Yes	No	Yes
No	Participating in FSA ELA/MATH/SCIEN CE	Participating in FSA ELA/MATH/SCIEN CE	No	Yes	No	Yes
No	Test Administration Violation	Test Administration Violation	No	Yes	Yes	Yes
No	Withdrew	Withdrew	No	Yes	No	Yes
No (1 included item attempted )	No reason provided in the testing platform	Did Not Meet Attemptedness	No	Yes	Yes	Yes
No(0 included items attempted	No reason provided in the testing platform or Not Tested	Not Tested	No	Yes	Yes	Yes

## IV. School Type

## SCHOOL TYPE: ASSIGNMENT AND IMPACT

School TypelD	School SubTypelD	School Type Description	Analysis Abbreviation	Impact on Analysis and Reporting
1	1	Public	PUB	No Impact
1	11	Charter	СНА	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
1	24	Adult	ADT	No Impact
1	26	Correctional	COR	No Impact
1	27	Home School	НОМ	No Impact
3	3	Private	PRI	Students enrolled at private schools receive a student report only. Students are excluded from all other reports and data file deliverables

## V. 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
*For ELA an headers	d EOC ELA assessments, replace "ELA" with	"ENGLISH LANGUAGE ARTS" for roster



- 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 student test results identified with a participation status of "Tested" will be included. Therefore, only students with at least one "Tested" participation status will receive a student report.

#### 2. 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. High School grades (09, 10, 11, 12) will be grouped in one PDF for a school

c. Students will be sorted in the PDF by Enrolled Grade, Last Name, First Name, Student ID

#### 3. Only scores from the item sets 01-10 for a test are included.

#### 4. Task 1 Accuracy Scores

- a. Numerator: Number of Included Item Sets scored a 3, 6, or 9
- b. Denominator: 10
- c. Report
  - i [numerator] of 10
  - ii [numerator]/10 rounded to nearest whole number



#### 5. Task 2 Accuracy Scores

- a. Numerator: Number of Included Item Sets scored a 6 or 9
- b. Denominator: Number of Included Item Sets scored a 3, 6, or 9
- c. Report
  - i If denominator = 0, then Print "N/A" and do not print graph
  - ii Otherwise,
    - (a) [numerator] of [denominator]

(b) [numerator]/[denominator] rounded to nearest whole number

#### 6. Task 3 Accuracy Scores

- a. Numerator: Number of Included Item Sets scored a 9
- b. Denominator: Number of Included Item Sets scored a 6 or 9
- c. Report
  - i If denominator = 0, then Print "N/A" and do not print graph
  - ii Otherwise,
    - (a) [numerator] of [denominator]
    - (b) [numerator]/[denominator] rounded to nearest whole number



#### C. School Report Specific Rules: Roster of Students

# 1. Test results will be included for all student tests assigned a test participation status defined above. Private school students are excluded.

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 text printing. Student score section will be blank.

#### 2. 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.

#### VI. Data Deliverables Decision Rules

#### A. State Student Test Results

- 1. Layout: FLAlt1516PerformanceTaskStudentTestResultsLayout.xls
- 2. File Name: FLAlt1516PerformanceTaskStudentTestResults.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. Private school students are excluded.



#### B. District Student Test Results

- 1. Layout: FLAlt1516PerformanceTaskStudentTestResultsLayout.xls
- 2. File Name: FLAIt1516PerformanceTaskStudentTestResults[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, regardless of assigned participation status. Private school students are excluded.

#### C. District Assessed Summary

- 1. Layout: FLAlt1516PerformanceTaskAssessedSummaryLayout.xls
- 2. File Name: FLAIt1516PerformanceTaskAssessedSummary[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. Number of Students Assessed = Number of students with a participation status of Tested for the Assessment included aggregations

10. Number of Students Not Assessed = Number of students with a participation status other than Tested for the Assessment included in aggregations

11. School data will be listed in Alpha order by school name, test grade, test subject



#### D. State Assessed Summary

- 1. Layout: FLAIt1516PerformanceTaskAssessedSummaryLayout.xls
- 2. File Name: FLAlt1516PerformanceTaskAssessedSummary.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. Private school students are excluded

9. Number of Students Assessed = Number of students with a participation status of Tested for the Assessment included in aggregations

10. Number of Students Not Assessed = Number of students with a participation status other than Tested for the Assessment included in District aggregations

11. District data will be listed in Alpha order by District name, SchoolName, test grade, test subject

# VII. Addenda – Define Scope Rerun

When the program made the decision to extend the submission window this past spring, a reporting rerun was added to the scope of work. Only submissions beyond the original April 22<sup>nd</sup> deadline for grades 3-8 and the April 29<sup>th</sup> deadline for HS will be included in the re-run. Student reports will be updated in early fall 2016. They will be printed for students with student report specific data changes. Additionally, a new PDF file will be posted online when the PDF contains a student with student report specific data changes. School level, district level, and state level reports or data files will not be re-run.

1) Addenda – Update Scope Rerun (12/1/2016)

Create a rerun version of the State Student Test Results datafile. The file should follow the same layout as the original State Student Test Results datafile. Include student data rows in the rerun state student file if either (1) or (2) below is true:

2) If a studentID is in second release, but not in the first release (Include all test records for the student regardless if the student tested).



3) If a student's test is identified as tested (PartStatus='1') and either the student's test was included in the first run as not tested (PartStatus not equal to '1') or the student's test was not included in the first run.

# VIII. Addenda – Scaled Scores and Achievement Level Assignment

After the standard setting held Febuary 14-17, 2017 it was requested that student test results identified with a participation status of "Tested" will receive a scaled score and achievement level. A new district level data file deliverable file will be posted online using the updated layout.

### A. District Student Test Results

- 1. Layout: FLAlt1516PerformanceTaskStudentScaledScoreLayout.xls
- 2. File Name: FLAIt1516PerformanceTaskStudentScaledScore[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, regardless of assigned participation status. Private school students are excluded.

# **APPENDIX G—REPORT SHELLS**



ENGLISH LANGUAGE ARTS									
	GID	<b>C</b> 1	Tas	k 1	Tas	Task 2		k 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME103, FNAME103	D030000103	03							А
LNAME138, FNAME138	D030000138	03	8 of 10	80%	4 of 8	50%	1 of 4	25%	
LNAME141, FNAME141	D030000141	03	8 of 10	80%	3 of 8	38%	1 of 3	33%	
LNAME157, FNAME157	D030000157	03	10 of 10	100%	4 of 10	40%	1 of 4	25%	
LNAME5, FNAME5	D030000005	03	6 of 10	60%	5 of 6	83%	3 of 5	60%	
LNAME54, FNAME54	D030000054	03	9 of 10	90%	5 of 9	56%	2 of 5	40%	
LNAME60, FNAME60	D03000060	03	10 of 10	100%	7 of 10	70%	7 of 7	100%	
LNAME61, FNAME61	D03000061	03	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME62, FNAME62	D03000062	03	9 of 10	90%	9 of 9	100%	7 of 9	78%	
LNAME64, FNAME64	D03000064	03	7 of 10	70%	3 of 7	43%	2 of 3	67%	
LNAME97, FNAME97	D03000097	03							Н
LNAME11, FNAME11	D040000011	04	9 of 10	90%	8 of 9	89%	7 of 8	88%	
LNAME142, FNAME142	D040000142	04	5 of 10	50%	1 of 5	20%	0 of 1	0%	
LNAME145, FNAME145	D040000145	04	9 of 10	90%	7 of 9	78%	2 of 7	29%	
LNAME149, FNAME149	D040000149	04	7 of 10	70%	5 of 7	71%	2 of 5	40%	
LNAME43, FNAME43	D040000043	04	8 of 10	80%	6 of 8	75%	3 of 6	50%	
LNAME49, FNAME49	D040000049	04	5 of 10	50%	0 of 5	0%	NA		
LNAME52, FNAME52	D040000052	04	7 of 10	70%	6 of 7	86%	5 of 6	83%	
LNAME57, FNAME57	D040000057	04	7 of 10	70%	6 of 7	86%	5 of 6	83%	
LNAME58, FNAME58	D040000058	04	7 of 10	70%	7 of 7	100%	2 of 7	29%	
LNAME1, FNAME1	D050000001	05	6 of 10	60%	6 of 6	100%	4 of 6	67%	
LNAME104, FNAME104	D050000104	05							N
LNAME112, FNAME112	D050000112	05	0 of 10	0%	NA		NA		
LNAME113, FNAME113	D050000113	05							М
LNAME122, FNAME122	D050000122	05							J

- A = Absent
- B = EOC Deferred C = Extraordinary Exemption D = Home School

- $\begin{array}{rcl} E &=& Hospitalized \\ F &=& LY < 1 \ yr ELA \ only \\ G &=& McKay \ Scholarship \\ H &=& Medical \ Complexity \end{array}$

- I = Not in Tested Grade J = Participating in Datafolio K = Participating in FSA ELA/MATH/SCIENCE L = Test Administration Violation

- $\begin{array}{rcl} M &=& Withdrew \\ N &=& Did \ Not \ Meet \ Attemptedness \\ O &=& Not \ Tested \end{array}$



	ENGLISH LANGUAGE ARTS								
		~ .	Task 1		Task 2		Task 3		Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME127, FNAME127	D050000127	05							A
LNAME167, FNAME167	D050000167	05							D
LNAME173, FNAME173	D050000173	05	6 of 10	60%	4 of 6	67%	2 of 4	50%	
LNAME20, FNAME20	D050000020	05							Е
LNAME35, FNAME35	D050000035	05	8 of 10	80%	1 of 8	13%	1 of 1	100%	
LNAME38, FNAME38	D05000038	05	9 of 10	90%	8 of 9	89%	5 of 8	63%	
LNAME39, FNAME39	D050000039	05	8 of 10	80%	5 of 8	63%	4 of 5	80%	
LNAME45, FNAME45	D050000045	05	10 of 10	100%	6 of 10	60%	2 of 6	33%	
LNAME48, FNAME48	D050000048	05	10 of 10	100%	6 of 10	60%	3 of 6	50%	
LNAME56, FNAME56	D050000056	05	10 of 10	100%	10 of 10	100%	7 of 10	70%	
LNAME175, FNAME175	D060000175	06	9 of 10	90%	7 of 9	78%	4 of 7	57%	
LNAME21, FNAME21	D060000021	06	10 of 10	100%	8 of 10	80%	7 of 8	88%	
LNAME23, FNAME23	D060000023	06	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME30, FNAME30	D06000030	06	10 of 10	100%	8 of 10	80%	8 of 8	100%	
LNAME31, FNAME31	D060000031	06	10 of 10	100%	9 of 10	90%	7 of 9	78%	
LNAME50, FNAME50	D060000050	06	10 of 10	100%	10 of 10	100%	5 of 10	50%	
LNAME131, FNAME131	D070000131	07							Ι
LNAME166, FNAME166	D070000166	07	10 of 10	100%	9 of 10	90%	5 of 9	56%	
LNAME172, FNAME172	D070000172	07	10 of 10	100%	10 of 10	100%	9 of 10	90%	
LNAME2, FNAME2	D07000002	07	9 of 10	90%	2 of 9	22%	1 of 2	50%	
LNAME22, FNAME22	D07000022	07	4 of 10	40%	2 of 4	50%	2 of 2	100%	
LNAME24, FNAME24	D07000024	07	9 of 10	90%	7 of 9	78%	5 of 7	71%	
LNAME26, FNAME26	D07000026	07	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME32, FNAME32	D07000032	07	10 of 10	100%	10 of 10	100%	9 of 10	90%	
LNAME40, FNAME40	D07000040	07	10 of 10	100%	10 of 10	100%	7 of 10	70%	

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 $\begin{array}{rcl} M &=& Withdrew \\ N &=& Did \ Not \ Meet \ Attemptedness \\ O &=& Not \ Tested \end{array}$ 



		ENGI	LISH LANG	UAGE AR	ГS				
		~ .	Tas	k 1	Tas	k 2	Tas	k 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME70, FNAME70	D070000070	07	10 of 10	100%	7 of 10	70%	6 of 7	86%	
LNAME72, FNAME72	D070000072	07	7 of 10	70%	4 of 7	57%	0 of 4	0%	
LNAME81, FNAME81	D07000081	07	10 of 10	100%	9 of 10	90%	6 of 9	67%	
LNAME96, FNAME96	D07000096	07							J
LNAME102, FNAME102	D080000102	08	10 of 10	100%	10 of 10	100%	6 of 10	60%	
LNAME108, FNAME108	D080000108	08							G
LNAME135, FNAME135	D080000135	08	5 of 10	50%	0 of 5	0%	NA		
LNAME143, FNAME143	D080000143	08	10 of 10	100%	9 of 10	90%	5 of 9	56%	
LNAME147, FNAME147	D080000147	08							I
LNAME15, FNAME15	D080000015	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME174, FNAME174	D080000174	08	6 of 10	60%	5 of 6	83%	3 of 5	60%	
LNAME18, FNAME18	D080000018	08	10 of 10	100%	10 of 10	100%	9 of 10	90%	
LNAME19, FNAME19	D080000019	08	10 of 10	100%	10 of 10	100%	9 of 10	90%	
LNAME25, FNAME25	D080000025	08	1 of 10	10%	1 of 1	100%	1 of 1	100%	
LNAME28, FNAME28	D080000028	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME34, FNAME34	D080000034	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME37, FNAME37	D080000037	08	8 of 10	80%	6 of 8	75%	3 of 6	50%	
LNAME68, FNAME68	D080000068	08	1 of 10	10%	0 of 1	0%	NA		
LNAME87, FNAME87	D08000087	08	10 of 10	100%	6 of 10	60%	2 of 6	33%	
LNAME98, FNAME98	D080000098	08	5 of 10	50%	3 of 5	60%	0 of 3	0%	
LNAME99, FNAME99	D080000099	08							Н

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- I = Not in Tested Grade J = Participating in Datafolio K = Participating in FSA ELA/MATH/SCIENCE L = Test Administration Violation

- $\begin{array}{rcl} M &=& Withdrew \\ N &=& Did \ Not \ Meet \ Attemptedness \\ O &=& Not \ Tested \end{array}$



	A	CCESS E	NGLISH LA	NGUAGE	ARTS 1				
		~ .	Tas	sk 1	Tas	k 2	Tas	k 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME12, FNAME12	D090000012	09	6 of 10	60%	2 of 6	33%	1 of 2	50%	
LNAME124, FNAME124	D090000124	09							Н
LNAME129, FNAME129	D090000129	09	3 of 10	30%	1 of 3	33%	0 of 1	0%	
LNAME146, FNAME146	D090000146	09							J
LNAME29, FNAME29	D09000029	09	10 of 10	100%	7 of 10	70%	3 of 7	43%	
LNAME67, FNAME67	D09000067	09	9 of 10	90%	8 of 9	89%	5 of 8	63%	
LNAME75, FNAME75	D09000075	09	9 of 10	90%	5 of 9	56%	3 of 5	60%	
LNAME76, FNAME76	D09000076	09	10 of 10	100%	7 of 10	70%	5 of 7	71%	
LNAME80, FNAME80	D09000080	09	10 of 10	100%	9 of 10	90%	3 of 9	33%	
LNAME86, FNAME86	D09000086	09	6 of 10	60%	2 of 6	33%	1 of 2	50%	

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- I = Not in Tested Grade J = Participating in Datafolio K = Participating in FSA ELA/MATH/SCIENCE L = Test Administration Violation

- $\begin{array}{rcl} M &=& Withdrew \\ N &=& Did \ Not \ Meet \ Attemptedness \\ O &=& Not \ Tested \end{array}$



	Α	CCESS E	NGLISH LA	NGUAGE	ARTS 2				
	CIP	<u> </u>	Tas	k 1	Tas	k 2	Tas	sk 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME107, FNAME107	D100000107	10							G
LNAME114, FNAME114	D100000114	10							М
LNAME117, FNAME117	D100000117	10	0 of 10	0%	NA		NA		
LNAME118, FNAME118	D100000118	10							С
LNAME121, FNAME121	D100000121	10							А
LNAME125, FNAME125	D100000125	10							Н
LNAME130, FNAME130	D100000130	10							F
LNAME132, FNAME132	D100000132	10	1 of 10	10%	1 of 1	100%	0 of 1	0%	
LNAME133, FNAME133	D100000133	10							0
LNAME134, FNAME134	D100000134	10	4 of 10	40%	2 of 4	50%	2 of 2	100%	
LNAME136, FNAME136	D100000136	10							С
LNAME140, FNAME140	D100000140	10	6 of 10	60%	1 of 6	17%	1 of 1	100%	
LNAME144, FNAME144	D100000144	10							J
LNAME148, FNAME148	D100000148	10							В
LNAME159, FNAME159	D100000159	10	6 of 10	60%	3 of 6	50%	1 of 3	33%	
LNAME165, FNAME165	D100000165	10							D
LNAME90, FNAME90	D10000090	10	9 of 10	90%	8 of 9	89%	4 of 8	50%	
LNAME94, FNAME94	D10000094	10							М

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 $\begin{array}{rcl} E &=& Hospitalized \\ F &=& LY < 1 \ yr - ELA \ only \\ G &=& McKay \ Scholarship \\ H &=& Medical \ Complexity \end{array}$ 

- I = Not in Tested Grade J = Participating in Datafolio K = Participating in FSA ELA/MATH/SCIENCE L = Test Administration Violation

- $\begin{array}{rcl} M &=& Withdrew \\ N &=& Did \ Not \ Meet \ Attemptedness \\ O &=& Not \ Tested \end{array}$

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		MATHEMATICS								
	CID	<b>C</b> 1	Tas	k 1	Tas	k 2	Tas	k 3	Not Tested	
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code	
LNAME103, FNAME103	D030000103	03							А	
LNAME138, FNAME138	D030000138	03	3 of 10	30%	2 of 3	67%	1 of 2	50%		
LNAME141, FNAME141	D030000141	03	10 of 10	100%	5 of 10	50%	2 of 5	40%		
LNAME157, FNAME157	D030000157	03	9 of 10	90%	8 of 9	89%	4 of 8	50%		
LNAME5, FNAME5	D030000005	03	9 of 10	90%	5 of 9	56%	2 of 5	40%		
LNAME54, FNAME54	D030000054	03	9 of 10	90%	4 of 9	44%	1 of 4	25%		
LNAME60, FNAME60	D03000060	03	10 of 10	100%	8 of 10	80%	6 of 8	75%		
LNAME61, FNAME61	D03000061	03	10 of 10	100%	9 of 10	90%	5 of 9	56%		
LNAME62, FNAME62	D03000062	03	10 of 10	100%	7 of 10	70%	4 of 7	57%		
LNAME64, FNAME64	D03000064	03	10 of 10	100%	8 of 10	80%	1 of 8	13%		
LNAME97, FNAME97	D03000097	03							Н	
LNAME11, FNAME11	D040000011	04	10 of 10	100%	8 of 10	80%	6 of 8	75%		
LNAME142, FNAME142	D040000142	04	6 of 10	60%	3 of 6	50%	1 of 3	33%		
LNAME145, FNAME145	D040000145	04	8 of 10	80%	6 of 8	75%	2 of 6	33%		
LNAME149, FNAME149	D040000149	04	8 of 10	80%	2 of 8	25%	1 of 2	50%		
LNAME43, FNAME43	D040000043	04	10 of 10	100%	7 of 10	70%	5 of 7	71%		
LNAME49, FNAME49	D040000049	04	7 of 10	70%	1 of 7	14%	0 of 1	0%		
LNAME52, FNAME52	D040000052	04	10 of 10	100%	8 of 10	80%	6 of 8	75%		
LNAME57, FNAME57	D040000057	04	10 of 10	100%	9 of 10	90%	7 of 9	78%		
LNAME58, FNAME58	D040000058	04	10 of 10	100%	4 of 10	40%	2 of 4	50%		
LNAME1, FNAME1	D05000001	05							0	
LNAME104, FNAME104	D050000104	05	2 of 10	20%	0 of 2	0%	NA			
LNAME112, FNAME112	D050000112	05							N	
LNAME113, FNAME113	D050000113	05							М	
LNAME122, FNAME122	D050000122	05							J	

- A = Absent

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 $\begin{array}{rcl} E &=& Hospitalized \\ F &=& LY < 1 \ yr - ELA \ only \\ G &=& McKay \ Scholarship \\ H &=& Medical \ Complexity \end{array}$ 

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			MATHEM	ATICS					
		<b>C</b> 1	Tas	k 1	Tas	k 2	Tas	k 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME127, FNAME127	D050000127	05							А
LNAME167, FNAME167	D050000167	05							D
LNAME173, FNAME173	D050000173	05	7 of 10	70%	2 of 7	29%	0 of 2	0%	
LNAME20, FNAME20	D050000020	05							Е
LNAME35, FNAME35	D050000035	05	4 of 10	40%	1 of 4	25%	0 of 1	0%	
LNAME38, FNAME38	D050000038	05	7 of 10	70%	5 of 7	71%	4 of 5	80%	
LNAME39, FNAME39	D050000039	05	5 of 10	50%	2 of 5	40%	0 of 2	0%	
LNAME45, FNAME45	D050000045	05	7 of 10	70%	4 of 7	57%	2 of 4	50%	
LNAME48, FNAME48	D050000048	05	9 of 10	90%	3 of 9	33%	0 of 3	0%	
LNAME56, FNAME56	D050000056	05	10 of 10	100%	3 of 10	30%	2 of 3	67%	
LNAME175, FNAME175	D060000175	06	9 of 10	90%	4 of 9	44%	3 of 4	75%	
LNAME21, FNAME21	D060000021	06	10 of 10	100%	9 of 10	90%	6 of 9	67%	
LNAME23, FNAME23	D06000023	06	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME30, FNAME30	D06000030	06	9 of 10	90%	9 of 9	100%	8 of 9	89%	
LNAME31, FNAME31	D060000031	06	10 of 10	100%	9 of 10	90%	8 of 9	89%	
LNAME50, FNAME50	D060000050	06	10 of 10	100%	9 of 10	90%	8 of 9	89%	
LNAME131, FNAME131	D070000131	07							Ι
LNAME166, FNAME166	D070000166	07	9 of 10	90%	5 of 9	56%	2 of 5	40%	
LNAME172, FNAME172	D070000172	07	10 of 10	100%	10 of 10	100%	8 of 10	80%	
LNAME2, FNAME2	D07000002	07	7 of 10	70%	3 of 7	43%	1 of 3	33%	
LNAME22, FNAME22	D07000022	07	4 of 10	40%	0 of 4	0%	NA		
LNAME24, FNAME24	D07000024	07	9 of 10	90%	7 of 9	78%	7 of 7	100%	
LNAME26, FNAME26	D07000026	07	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME32, FNAME32	D07000032	07	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME40, FNAME40	D07000040	07	10 of 10	100%	10 of 10	100%	10 of 10	100%	

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			MATHEM	ATICS					
		~ .	Tas	k 1	Tas	k 2	Tas	k 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME70, FNAME70	D070000070	07	9 of 10	90%	6 of 9	67%	5 of 6	83%	
LNAME72, FNAME72	D070000072	07	6 of 10	60%	4 of 6	67%	3 of 4	75%	
LNAME81, FNAME81	D07000081	07	10 of 10	100%	6 of 10	60%	4 of 6	67%	
LNAME96, FNAME96	D07000096	07							J
LNAME102, FNAME102	D080000102	08	10 of 10	100%	10 of 10	100%	7 of 10	70%	
LNAME108, FNAME108	D080000108	08							G
LNAME135, FNAME135	D080000135	08	5 of 10	50%	1 of 5	20%	0 of 1	0%	
LNAME143, FNAME143	D080000143	08	10 of 10	100%	9 of 10	90%	8 of 9	89%	
LNAME147, FNAME147	D080000147	08							Ι
LNAME15, FNAME15	D080000015	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME174, FNAME174	D080000174	08							С
LNAME18, FNAME18	D080000018	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME19, FNAME19	D080000019	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME25, FNAME25	D080000025	08	7 of 10	70%	5 of 7	71%	0 of 5	0%	
LNAME28, FNAME28	D080000028	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME34, FNAME34	D080000034	08	10 of 10	100%	9 of 10	90%	9 of 9	100%	
LNAME37, FNAME37	D080000037	08	10 of 10	100%	7 of 10	70%	5 of 7	71%	
LNAME68, FNAME68	D080000068	08	2 of 10	20%	0 of 2	0%	NA		
LNAME87, FNAME87	D08000087	08	9 of 10	90%	5 of 9	56%	3 of 5	60%	
LNAME98, FNAME98	D080000098	08	5 of 10	50%	2 of 5	40%	0 of 2	0%	
LNAME99, FNAME99	D080000099	08							Н

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		SCIENCE									
	CID	<b>C</b> 1	Tas	k 1	Tas	k 2	Tas	k 3	Not Tested		
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code		
LNAME1, FNAME1	D050000001	05							0		
LNAME104, FNAME104	D050000104	05							0		
LNAME112, FNAME112	D050000112	05							N		
LNAME113, FNAME113	D050000113	05							М		
LNAME122, FNAME122	D050000122	05							J		
LNAME127, FNAME127	D050000127	05							А		
LNAME167, FNAME167	D050000167	05							D		
LNAME173, FNAME173	D050000173	05	4 of 10	40%	1 of 4	25%	0 of 1	0%			
LNAME20, FNAME20	D050000020	05							Е		
LNAME35, FNAME35	D050000035	05	5 of 10	50%	2 of 5	40%	0 of 2	0%			
LNAME38, FNAME38	D050000038	05	10 of 10	100%	5 of 10	50%	2 of 5	40%			
LNAME39, FNAME39	D050000039	05	6 of 10	60%	4 of 6	67%	3 of 4	75%			
LNAME45, FNAME45	D050000045	05	7 of 10	70%	5 of 7	71%	0 of 5	0%			
LNAME48, FNAME48	D050000048	05	9 of 10	90%	7 of 9	78%	4 of 7	57%			
LNAME56, FNAME56	D050000056	05	10 of 10	100%	9 of 10	90%	9 of 9	100%			
LNAME102, FNAME102	D080000102	08	10 of 10	100%	10 of 10	100%	8 of 10	80%			
LNAME108, FNAME108	D080000108	08							G		
LNAME135, FNAME135	D080000135	08	4 of 10	40%	1 of 4	25%	0 of 1	0%			
LNAME143, FNAME143	D080000143	08	10 of 10	100%	9 of 10	90%	7 of 9	78%			
LNAME147, FNAME147	D080000147	08							Ι		
LNAME15, FNAME15	D080000015	08	10 of 10	100%	10 of 10	100%	10 of 10	100%			
LNAME174, FNAME174	D080000174	08							С		
LNAME18, FNAME18	D080000018	08	10 of 10	100%	10 of 10	100%	10 of 10	100%			
LNAME19, FNAME19	D080000019	08	10 of 10	100%	10 of 10	100%	9 of 10	90%			
LNAME25, FNAME25	D080000025	08	2 of 10	20%	1 of 2	50%	1 of 1	100%			

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			SCIEN	CE					
	CID		Tas	sk 1	Tas	sk 2	Tas	k 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME28, FNAME28	D080000028	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME34, FNAME34	D080000034	08	10 of 10	100%	10 of 10	100%	10 of 10	100%	
LNAME37, FNAME37	D080000037	08	10 of 10	100%	4 of 10	40%	3 of 4	75%	
LNAME68, FNAME68	D080000068	08	6 of 10	60%	2 of 6	33%	0 of 2	0%	
LNAME87, FNAME87	D08000087	08	9 of 10	90%	6 of 9	67%	0 of 6	0%	
LNAME98, FNAME98	D080000098	08	7 of 10	70%	4 of 7	57%	1 of 4	25%	
LNAME99, FNAME99	D080000099	08							Н

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		Α	CCESS ALO	GEBRA 1					
		<b>a</b> 1	Tas	sk 1	Tas	k 2	Tas	k 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME129, FNAME129	D090000129	09							I
LNAME117, FNAME117	D100000117	10							0
LNAME118, FNAME118	D100000118	10							С
LNAME121, FNAME121	D100000121	10							A
LNAME125, FNAME125	D100000125	10							Е
LNAME132, FNAME132	D100000132	10	0 of 10	0%	NA		NA		
LNAME133, FNAME133	D100000133	10							N
LNAME144, FNAME144	D100000144	10							J
LNAME165, FNAME165	D100000165	10							D
LNAME94, FNAME94	D10000094	10							М
LNAME161, FNAME161	D110000161	11							J
LNAME93, FNAME93	D110000093	11	4 of 10	40%	0 of 4	0%	NA		
LNAME116, FNAME116	D120000116	12							Н
LNAME139, FNAME139	D120000139	12							K
LNAME163, FNAME163	D120000163	12	5 of 10	50%	1 of 5	20%	0 of 1	0%	
LNAME74, FNAME74	D120000074	12	8 of 10	80%	3 of 8	38%	2 of 3	67%	
LNAME83, FNAME83	D120000083	12	10 of 10	100%	4 of 10	40%	1 of 4	25%	
LNAME84, FNAME84	D12000084	12	10 of 10	100%	8 of 10	80%	4 of 8	50%	

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		A	CCESS GEO	OMETRY					
	CID		Tas	k 1	Tas	k 2	Tas	k 3	Not Tested
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code
LNAME114, FNAME114	D100000114	10							М
LNAME136, FNAME136	D100000136	10							С
LNAME100, FNAME100	D110000100	11	9 of 10	90%	7 of 9	78%	5 of 7	71%	
LNAME101, FNAME101	D110000101	11	8 of 10	80%	3 of 8	38%	2 of 3	67%	
LNAME120, FNAME120	D110000120	11							A
LNAME123, FNAME123	D110000123	11							K
LNAME154, FNAME154	D110000154	11	10 of 10	100%	10 of 10	100%	7 of 10	70%	
LNAME156, FNAME156	D110000156	11							Н
LNAME158, FNAME158	D110000158	11							G
LNAME161, FNAME161	D110000161	11							J
LNAME7, FNAME7	D110000007	11	10 of 10	100%	10 of 10	100%	5 of 10	50%	
LNAME89, FNAME89	D110000089	11	9 of 10	90%	8 of 9	89%	6 of 8	75%	
LNAME91, FNAME91	D110000091	11	6 of 10	60%	3 of 6	50%	1 of 3	33%	
LNAME110, FNAME110	D120000110	12							0
LNAME153, FNAME153	D120000153	12	10 of 10	100%	9 of 10	90%	7 of 9	78%	
LNAME155, FNAME155	D120000155	12	8 of 10	80%	3 of 8	38%	1 of 3	33%	
LNAME160, FNAME160	D120000160	12							N
LNAME3, FNAME3	D120000003	12	10 of 10	100%	8 of 10	80%	6 of 8	75%	
LNAME69, FNAME69	D120000069	12	10 of 10	100%	8 of 10	80%	5 of 8	63%	

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		ACCESS BIOLOGY 1									
		<b>C</b> 1	Tas	k 1	Tas	k 2	Tas	k 3	Not Tested		
Student Name	SID	Grade	Number	%	Number	%	Number	%	Code		
LNAME124, FNAME124	D090000124	09							Н		
LNAME129, FNAME129	D090000129	09							Ι		
LNAME146, FNAME146	D090000146	09							J		
LNAME29, FNAME29	D09000029	09	10 of 10	100%	8 of 10	80%	7 of 8	88%			
LNAME67, FNAME67	D09000067	09	10 of 10	100%	7 of 10	70%	3 of 7	43%			
LNAME117, FNAME117	D100000117	10	4 of 10	40%	1 of 4	25%	0 of 1	0%			
LNAME118, FNAME118	D100000118	10							С		
LNAME125, FNAME125	D100000125	10							Е		
LNAME132, FNAME132	D100000132	10							N		
LNAME136, FNAME136	D100000136	10							С		
LNAME140, FNAME140	D100000140	10	9 of 10	90%	3 of 9	33%	0 of 3	0%			
LNAME159, FNAME159	D100000159	10	8 of 10	80%	5 of 8	63%	2 of 5	40%			
LNAME165, FNAME165	D100000165	10							D		
LNAME90, FNAME90	D10000090	10							0		
LNAME94, FNAME94	D10000094	10							М		
LNAME100, FNAME100	D110000100	11	10 of 10	100%	9 of 10	90%	8 of 9	89%			
LNAME154, FNAME154	D110000154	11	10 of 10	100%	9 of 10	90%	9 of 9	100%			
LNAME161, FNAME161	D110000161	11							J		
LNAME7, FNAME7	D11000007	11	10 of 10	100%	9 of 10	90%	8 of 9	89%			
LNAME71, FNAME71	D110000071	11	8 of 10	80%	3 of 8	38%	2 of 3	67%			
LNAME91, FNAME91	D110000091	11	8 of 10	80%	3 of 8	38%	0 of 3	0%			
LNAME160, FNAME160	D120000160	12	1 of 10	10%	0 of 1	0%	NA				
LNAME163, FNAME163	D120000163	12	3 of 10	30%	0 of 3	0%	NA				
LNAME74, FNAME74	D120000074	12	10 of 10	100%	5 of 10	50%	4 of 5	80%			

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Spring 2016 Florida Standards Alternate Assessment — Performance Task Student and Parent Report

#### Dear Parents and/or Guardians,

This report is a summary of your child'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 child knows and is able to demonstrate in the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science.

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. A scaffolding structure is in place at the Task 1 Level only. Scaffolding is the process of reducing the response options if your child is unable to respond accurately.

For each academic area assessed, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the total number of tasks your child attempted. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the student accuracy information may vary across task levels. *Not Applicable* (NA) will be reflected in the chart below if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

For more information please contact your student's Individual Educational Plan team and classroom teacher.

ELA	4	MATHEMATICS				
Complexity Level	Student Accuracy	Complexity Level	Stud Accu			
TASK 1		TASK 1				
	8 of 10		3 of			
	80%		30%			
TASK 2		TASK 2				
	4 of 8		2 of			
	50%		67%			
TASK 3		TASK 3				
	1 of 4		1 of			
	25%		50%			



# Accuracy Percentages by Performance Task Complexity Levels

Task Level Descriptors				
TASK 1	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>			
TASK 2	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>			
TASK 3	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>			



Spring 2016 Florida Standards Alternate Assessment — Performance Task Student and Parent Report

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For each academic area assessed, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the total number of tasks your child attempted. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the student accuracy information may vary across task levels. *Not Applicable* (NA) will be reflected in the chart below if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

For more information please contact your student's Individual Educational Plan team and classroom teacher.

ELA	ELA MATHEMATIC		ATICS
Complexity Level	Student Accuracy	Complexity Level	Stude Accur
TASK 1		TASK 1	
	8 of 10		10 of
	80%		1000
TASK 2		TASK 2	
	3 of 8		5 of 1
	38%		50%
TASK 3		TASK 3	
	1 of 3		2 of
	33%		40%

# Accuracy Percentages by Performance Task Complexity Levels



Task Level Descriptors				
TASK 1	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>			
TASK 2	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>			
TASK 3	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>			


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For each academic area assessed, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the total number of tasks your child attempted. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the student accuracy information may vary across task levels. *Not Applicable* (NA) will be reflected in the chart below if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

ELA		MATHEMATICS	
Complexity Level	Student Accuracy	Complexity Level	Stude Accur
TASK 1		TASK 1	
	10 of 10		9 of
	100%		90%
ASK 2		TASK 2	
	4 of 10		8 of
	40%		89%
TASK 3		TASK 3	
	1 of 4		4 of
	25%		50%



## Accuracy Percentages by Performance Task Complexity Levels

	Task Level Descriptors				
TASK 1	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>				
TASK 2	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>				
TASK 3	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>				



Student Name:LNAME5, FNAME5SID:D030000005Grade:03District:DA-Demonstration District ASchool:DEM1-Demonstration School 1

#### Dear Parents and/or Guardians,

This report is a summary of your child'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 child knows and is able to demonstrate in the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science.

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. A scaffolding structure is in place at the Task 1 Level only. Scaffolding is the process of reducing the response options if your child is unable to respond accurately.

For each academic area assessed, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the total number of tasks your child attempted. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the student accuracy information may vary across task levels. *Not Applicable* (NA) will be reflected in the chart below if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

ELA		MATHEMATICS	
Complexity Level	Student Accuracy	Complexity Level	Studer Accura
TASK 1		TASK 1	
	6 of 10		9 of 1
	60%		90%
FASK 2		TASK 2	
	5 of 6		5 of 9
	83%		56%
TASK 3		TASK 3	
	3 of 5		2 of 5
	60%		40%



## Accuracy Percentages by Performance Task Complexity Levels

	Task Level Descriptors				
TASK 1	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>				
TASK 2	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>				
TASK 3	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>				



Student Name:LNAME54, FNAME54SID:D030000054Grade:03District:DA-Demonstration District ASchool:DEM1-Demonstration School 1

#### Dear Parents and/or Guardians,

This report is a summary of your child'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 child knows and is able to demonstrate in the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science.

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. A scaffolding structure is in place at the Task 1 Level only. Scaffolding is the process of reducing the response options if your child is unable to respond accurately.

For each academic area assessed, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the total number of tasks your child attempted. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the student accuracy information may vary across task levels. *Not Applicable* (NA) will be reflected in the chart below if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

ELA		MATHEMATICS	
Complexity Level	Student Accuracy	Complexity Level	Stude Accur
TASK 1		TASK 1	
	9 of 10		9 of 1
	90%		90%
TASK 2		TASK 2	
	5 of 9		4 of
	56%		44%
TASK 3		TASK 3	
	2 of 5		1 of -
	40%		25%



	Task Level Descriptors
TASK 1	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>
TASK 2	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>
TASK 3	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>



Student Name:LNAME60, FNAME60SID:D03000060Grade:03District:DA-Demonstration District ASchool:DEM1-Demonstration School 1

#### Dear Parents and/or Guardians,

This report is a summary of your child'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 child knows and is able to demonstrate in the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science.

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. A scaffolding structure is in place at the Task 1 Level only. Scaffolding is the process of reducing the response options if your child is unable to respond accurately.

For each academic area assessed, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the total number of tasks your child attempted. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the student accuracy information may vary across task levels. *Not Applicable* (NA) will be reflected in the chart below if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

ELA		MATHEMATICS	
Complexity Level	Student Accuracy	Complexity Level	Studer Accure
TASK 1		TASK 1	
	10 of 10		10 of 1
	100%		100%
TASK 2		TASK 2	
	7 of 10		8 of 1
	70%		80%
TASK 3		TASK 3	
	7 of 7		6 of 8
	100%		75%

## Accuracy Percentages by Performance Task Complexity Levels



Task Level Descriptors				
TASK 1	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>			
TASK 2	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>			
TASK 3	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>			



Student Name:LNAME61, FNAME61SID:D030000061Grade:03District:DA-Demonstration District ASchool:DEM1-Demonstration School 1

#### Dear Parents and/or Guardians,

This report is a summary of your child'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 child knows and is able to demonstrate in the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science.

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. A scaffolding structure is in place at the Task 1 Level only. Scaffolding is the process of reducing the response options if your child is unable to respond accurately.

For each academic area assessed, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the total number of tasks your child attempted. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the student accuracy information may vary across task levels. *Not Applicable* (NA) will be reflected in the chart below if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

ELA		MATHEMATICS	
Complexity Level	Student Accuracy	Complexity Level	Stude Accur
TASK 1		TASK 1	
	10 of 10		10 of
	100%		1009
TASK 2		TASK 2	
	10 of 10		9 of
	100%		90%
TASK 3		TASK 3	
	10 of 10		5 of
	100%		56%



	Task Level Descriptors				
TASK 1	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>				
TASK 2	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>				
TASK 3	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>				

#### Student Name: LNAME61, FNAME61 SID: D030000061



Student Name:LNAME62, FNAME62SID:D030000062Grade:03District:DA-Demonstration District ASchool:DEM1-Demonstration School 1

#### Dear Parents and/or Guardians,

This report is a summary of your child'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 child knows and is able to demonstrate in the Florida Standards Access Points for English Language Arts (ELA) and Mathematics; and the Next Generation Sunshine State Standards Access Points in Science.

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For each academic area assessed, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the total number of tasks your child attempted. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the student accuracy information may vary across task levels. *Not Applicable* (NA) will be reflected in the chart below if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

ELA		MATHEMATICS	
Complexity Level	Student Accuracy	Complexity Level	Studer Accura
FASK 1		TASK 1	
	9 of 10		10 of 1
	90%		100%
TASK 2		TASK 2	
	9 of 9		7 of 1
	100%		70%
TASK 3		TASK 3	
	7 of 9		4 of 7
	78%		57%

## Accuracy Percentages by Performance Task Complexity Levels



	Task Level Descriptors
TASK 1	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>
TASK 2	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>
TASK 3	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>



Student Name:LNAME64, FNAME64SID:D030000064Grade:03District:DA-Demonstration District ASchool:DEM1-Demonstration School 1

#### Dear Parents and/or Guardians,

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ELA	1	MATHEM	ATICS
Complexity Level	Student Accuracy	Complexity Level	Stud Accu
TASK 1		TASK 1	
	7 of 10		10 of
	70%		1009
TASK 2		TASK 2	
	3 of 7		8 of 3
	43%		80%
TASK 3		TASK 3	
	2 of 3		1 of
	67%		13%

## Accuracy Percentages by Performance Task Complexity Levels



	Task Level Descriptors
TASK	<ul> <li>Tasks at this level generally require the student to recall previously learned information or pull words/phrases/shapes directly from the stimulus.</li> <li>The student may be asked to: identify, state, label, recognize, match, recall, or retell information related to the skill being assessed.</li> <li>The setting may reference home and school activities with the use of familiar words or basic content specific words (e.g., class, schedule, sentence, shapes, single digit number, weather, basic body parts).</li> </ul>
TASK	<ul> <li>Tasks at this level generally require the student to make some level of inference or calculation beyond recall.</li> <li>The student may be asked to: demonstrate, follow, count, measure, select, locate, read, spell, describe, or define information related to the skill being assessed.</li> <li>The setting may reference home, school, and/or community with a combination of familiar words and content specific words (e.g., community events, a story, double digit numbers, geometric shapes, animal facts, heat, light, internal function of organs).</li> </ul>
TASK	<ul> <li>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.</li> <li>The student may be asked to: explain, compare/contrast, conclude, categorize, translate, paraphrase, summarize, predict, estimate, compute, solve, or classify information related to the skill being assessed.</li> <li>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., personification, life cycle, respiratory system, 2D/3D conversions, gravity, genes, environmental/global issues, mathematical expressions).</li> </ul>

### **APPENDIX H—PARENT AND TEACHER BROCHURES**



## Understanding the Florida Standards Alternate Assessment (FSAA) and Your Child's Scores

## Information Brochure for Parents

# 2016

Languages included: English Spanish (Español) Haitian Creole (Kreyòl ayisyen)

# How does the Florida Standards Alternate Assessment impact my child?

The Florida Standards Alternate Assessment (FSAA) is designed to provide an option for participation in the state's accountability system in a way that is both meaningful and academically challenging for every student with a significant cognitive disability. Your child's involvement in the assessment can help inform and enhance classroom instruction by providing information on your child's areas of strength and/or areas for improvement. Florida has a standards-driven system for all students. The Florida Standards (Mathematics and English Language Arts) and the Next Generation Sunshine State Standards (Science), along with the corresponding Access Points, drive the curriculum, instructional strategies, and assessment.

#### What are Access Points?

The FSAA is fully aligned to Florida alternate achievement standards, otherwise known as Access Points. Access Points reflect the key concepts of the Florida Standards and the Next Generation Sunshine State Standards 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. For more information about the Access Points, visit the Curriculum Planning and Learning Management System (CPALMS) Web site at http://www.cpalms.org.

#### What Academic Areas are assessed?

Access Points in the following academic areas are assessed at the grade levels indicated.

Grade Level	ELA	Mathematics	Science	Algebra 1 EOC Assessment	Geometry EOC Assessment	Biology EOC Assessment
3	X	x				
4	х	X				
5	х	X	x			
6	Х	X				
7	х	X				
8	х	X	x			
9	Х					
10	Х					
High School				x	x	x

# English

#### What are the Levels of Complexity?

FSAA 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.



- The **Task 1** level of complexity focuses on skills at a beginning academic awareness level, such as recognizing a letter, number, or parts of a whole.
- The **Task 2** level of complexity focuses on skills that require identifying or performing basic academic skills, such as reading words or solving simple math problems.
- The **Task 3** level of complexity focuses on skills that require organizing, comparing, and analyzing, such as summarizing the main idea of a story or solving more complex math problems.

#### What is the FSAA and how is it administered?

- The FSAA is a performance-based assessment. It is designed for students with significant cognitive disabilities for whom participation in the general statewide assessment is inappropriate, even with accommodations.
- The FSAA is administered to each student individually by the student's special education teacher, a certified teacher, or other licensed professional who has worked extensively with the student and is trained in the assessment procedures.
- Students typically select an answer to a question from three response options represented by pictures, text, numbers, and/or symbols in a Response Booklet.
- At the Task 1 level of complexity only, 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 readministered to the student.

#### How will my child's score be reported?

For each academic area, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the **total number of tasks your child attempted**. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the total attempted information may vary across task levels.

MATHEMATICS				
Complexity Level Student Accuracy				
TASK 1 Level	7 of 10 70%			
TASK 2 Level	2 of 7 29%			
TASK 3 Level	1 of 2 50%			

For example, if a student is administered 8 tasks at the Task 3 level and scores correctly on 4, the resulting score at Task 3 would be 4 out of 8, or 50%.

*Not Applicable* (NA) will be reflected in the chart if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

#### How will the assessment results be used?

The FSAA is only one measure of your child's performance and should be viewed in the context of your child's local programs and other measures. Your child's results can be used to:

- identify learning gains,
- assist the IEP team in developing annual goals and objectives,
- inform instructional planning, and
- monitor progress from year to year.

#### How can I get more information?

If you have not received your child's Student Report or would like more information about the FSAA, contact your child's teacher, District Coordinator, or Alternate Assessment Coordinator.

Copies of this brochure can be downloaded from the FLDOE Web site at http://fldoe.org/accountability/assessments/k-12-student-assessment/fl-alternate-assessment.stml.



Pam Stewart Commissioner of Education



## Understanding the Florida Standards Alternate Assessment (FSAA) and Your Child's Scores

## Information Brochure for Parents

# 2016

Languages included: English Spanish (Español) Haitian Creole (Kreyòl ayisyen)

# How does the Florida Standards Alternate Assessment impact my child?

The Florida Standards Alternate Assessment (FSAA) is designed to provide an option for participation in the state's accountability system in a way that is both meaningful and academically challenging for every student with a significant cognitive disability. Your child's involvement in the assessment can help inform and enhance classroom instruction by providing information on your child's areas of strength and/or areas for improvement. Florida has a standards-driven system for all students. The Florida Standards (Mathematics and English Language Arts) and the Next Generation Sunshine State Standards (Science), along with the corresponding Access Points, drive the curriculum, instructional strategies, and assessment.

#### What are Access Points?

The FSAA is fully aligned to Florida alternate achievement standards, otherwise known as Access Points. Access Points reflect the key concepts of the Florida Standards and the Next Generation Sunshine State Standards 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. For more information about the Access Points, visit the Curriculum Planning and Learning Management System (CPALMS) Web site at http://www.cpalms.org.

#### What Academic Areas are assessed?

Access Points in the following academic areas are assessed at the grade levels indicated.

Grade Level	ELA	Mathematics	Science	Algebra 1 EOC Assessment	Geometry EOC Assessment	Biology EOC Assessment
3	X	x				
4	Х	X				
5	Х	X	x			
6	Х	X				
7	Х	X				
8	Х	X	x			
9	Х					
10	Х					
High School				x	x	x

# English

#### What are the Levels of Complexity?

FSAA 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.



- The **Task 1** level of complexity focuses on skills at a beginning academic awareness level, such as recognizing a letter, number, or parts of a whole.
- The **Task 2** level of complexity focuses on skills that require identifying or performing basic academic skills, such as reading words or solving simple math problems.
- The **Task 3** level of complexity focuses on skills that require organizing, comparing, and analyzing, such as summarizing the main idea of a story or solving more complex math problems.

#### What is the FSAA and how is it administered?

- The FSAA is a performance-based assessment. It is designed for students with significant cognitive disabilities for whom participation in the general statewide assessment is inappropriate, even with accommodations.
- The FSAA is administered to each student individually by the student's special education teacher, a certified teacher, or other licensed professional who has worked extensively with the student and is trained in the assessment procedures.
- Students typically select an answer to a question from three response options represented by pictures, text, numbers, and/or symbols in a Response Booklet.
- At the Task 1 level of complexity only, 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 readministered to the student.

#### How will my child's score be reported?

For each academic area, your child will be provided a total of three scores. The three scores will report how your child performed at each level of complexity (Task 1 level, Task 2 level, and Task 3 level) within the 10 item sets that contributed to your child's score. The provided scores will reflect the percentage of tasks your child scored correctly out of the **total number of tasks your child attempted**. Because of the adaptive design of the assessment, where the advancement to the next task is dependent on whether your child responded correctly to the previous task, the total attempted information may vary across task levels.

MATHEMATICS				
Complexity Level Student Accuracy				
TASK 1 Level	7 of 10 70%			
TASK 2 Level	2 of 7 29%			
TASK 3 Level	1 of 2 50%			

For example, if a student is administered 8 tasks at the Task 3 level and scores correctly on 4, the resulting score at Task 3 would be 4 out of 8, or 50%.

*Not Applicable* (NA) will be reflected in the chart if no tasks were administered to your child at the Task 2 or Task 3 levels within a specific content area.

#### How will the assessment results be used?

The FSAA is only one measure of your child's performance and should be viewed in the context of your child's local programs and other measures. Your child's results can be used to:

- identify learning gains,
- assist the IEP team in developing annual goals and objectives,
- inform instructional planning, and
- monitor progress from year to year.

#### How can I get more information?

If you have not received your child's Student Report or would like more information about the FSAA, contact your child's teacher, District Coordinator, or Alternate Assessment Coordinator.

Copies of this brochure can be downloaded from the FLDOE Web site at http://fldoe.org/accountability/assessments/k-12-student-assessment/fl-alternate-assessment.stml.



Pam Stewart Commissioner of Education



## Explicación de la Evaluación Alternativa de Normas de la Florida (FSAA) y puntuaciones de su hijo/a

# Folleto informativo para los padres

# 2016

Idiomas incluidos: English (Inglés) Spanish (Español) Haitian Creole (Kreyòl ayisyen)

# ¿ De qué manera impacta la Evaluación Alternativa de Normas de la Florida a mi hijo/a?

La Evaluación Alternativa de Normas de la Florida (Florida Standards Alternate Assessment, FSAA) está diseñada con el fin de brindar una opción para participar en el sistema de responsabilidad del estado de una manera que sea sustanciosa y que académicamente constituya un desafío para cada estudiante con discapacidad cognitiva significativa. La participación de su hijo/a en la evaluación puede ayudar a informar y mejorar la instrucción en el aula entregando información en las áreas en que su hijo/a tiene fortalezas y en aquellas en que necesita mejorar. Florida posee un sistema guiado por normas para todos los estudiantes. Las Normas de la Florida (Matemáticas y Lengua Inglesa) y las Sunshine State Standards de la Generación del Futuro (Ciencias), junto con los Puntos de acceso correspondientes, rigen el plan de estudios, las estrategias educativas y la evaluación.

#### ¿Qué son los Puntos de acceso?

La FSAA se alinea completamente con las normas alternativas de logros de la Florida, también conocidas como Puntos de acceso. Los Puntos de acceso reflejan los conceptos fundamentales de las Normas de la Florida y de las Sunshine State Standards de la Generación del Futuro con reducidos niveles de complejidad. Ellos aseguran el acceso a la esencia o punto central de las normas que se aplican a todos los estudiantes que cursan el mismo grado. Para obtener más información sobre los Puntos de acceso, visite el sitio web del Sistema de Gestión de la Planificación del Plan de Estudios y del Aprendizaje (Curriculum Planning and Learning Management System, CPALMS) en http://www.cpalms.org.

#### ¿Cuáles son las áreas académicas que se evalúan?

Los Puntos de acceso en las siguientes áreas académicas se evalúan en los niveles de grado indicados.

Nivel de grado	Lengua Inglesa	Matemáticas	Ciencias	Álgebra 1 Evaluación de fin de curso	Geometría Evaluación de fin de curso	Biología Evaluación de fin de curso
3	X	x				
4	X	x				
5	X	x	X			
6	X	x				
7	X	x				
8	X	x	X			
9	Х					
10	Х					
Escuela secundaria				X	x	X

#### ¿En qué consisten los niveles de complejidad?

Los temas de la FSAA están diseñados para administrarse como Conjuntos de temas. Cada Conjunto de temas incluye tres tareas que abordan el Punto de acceso a niveles de complejidad crecientes. Todos los estudiantes comienzan un conjunto de temas en el nivel de Tarea 1 y siguen trabajando en cada nivel de complejidad, hasta que responden una pregunta en forma incorrecta o completan el conjunto de temas hasta el nivel de Tarea 3.



- El nivel de complejidad de **Tarea 1** se concentra en las habilidades a un nivel principiante de conocimiento académico, tales como reconocer las partes de un todo o reconocer una letra o un número.
- El nivel de complejidad de **Tarea 2** se concentra en las habilidades necesarias para identificar o utilizar habilidades académicas básicas, tales como leer palabras o resolver problemas sencillos de matemática.
- El nivel de complejidad de **Tarea 3** se concentra en las habilidades necesarias para la organización, la comparación y el análisis, tales como la identificación de la idea principal de un texto o resolver problemas de matemática más complejos.

#### ¿Qué es la FSAA y cómo se administra?

- La FSAA es una evaluación que se fundamenta en el rendimiento. Está diseñada para estudiantes con discapacidades cognitivas significativas, para los que no es apropiado participar en la evaluación estatal general, aún proporcionándoles ciertas comodidades.
- La FSAA es administrada a cada estudiante de manera individual por el maestro de educación especial del estudiante, un maestro certificado u otro profesional con licencia que haya trabajado extensamente con el estudiante y esté capacitado en los procedimientos de evaluación.
- Los estudiantes normalmente seleccionan una respuesta para una pregunta entre tres opciones de respuesta, representadas por imágenes, texto, números o símbolos en un Folleto de respuesta.
- Únicamente en el nivel de complejidad de Tarea 1 se produce un proceso llamado "andamiaje" cuando un estudiante no puede responder de manera correcta la presentación inicial. Entonces, el número de opciones de respuesta se reduce de tres a dos, y la tarea vuelve a administrarse al estudiante.

#### ¿Cómo se informarán las puntuaciones de mi hijo/a?

Para cada área académica, se le proporcionará a su hijo/a un total de tres puntuaciones. Las tres puntuaciones informarán sobre el rendimiento de su hijo/a en cada nivel de complejidad (nivel de Tarea 1, nivel de Tarea 2 y nivel de Tarea 3) dentro de los 10 conjuntos de temas que contribuyeron a las puntuaciones de su hijo/a. Las puntuaciones proporcionadas reflejarán el porcentaje de tareas que su hijo/a resolvió de manera correcta del **número total de tareas que su hijo/a realizó**. Debido al diseño adaptable de la evaluación, donde el avance a la siguiente tarea depende de si su hijo/a respondió correctamente la tarea anterior, el total de información requerida puede variar en todos los niveles de tarea.

MATEMATICAS				
Nivel de complejidad	Precision del estudiante			
Nivel de TAREA 1	7 de 10 70%			
Nivel de TAREA 2	2 de 7 29%			
Nivel de TAREA 3	1 de 2 50%			

Por ejemplo, si a un estudiante se le administran 8 tareas en el nivel de TAREA 3 y responde correctamente 4, la puntuación resultante de la Tarea 3 sería 4 de 8, o 50 %.

Se colocará *No corresponde* (NC) en la tabla si no se administraron tareas a su hijo/a en los niveles de Tarea 2 y Tarea 3 dentro de un área de contenido específica.

#### ¿Cómo serán utilizados los resultados de la evaluación?

La FSAA es solo una medición del rendimiento de su hijo/a y se debe considerar dentro del contexto de los programas locales y otras mediciones de su hijo/a. Los resultados de su hijo/a se pueden utilizar para:

- identificar logros de aprendizaje;
- asistir al equipo del Plan de Educación Individualizada (IEP) en el desarrollo de objetivos y metas anuales;
- informar sobre la planificación educativa; y
- monitorear el progreso cada año.

#### ¿Cómo puedo obtener más información?

Si no ha recibido el Informe del estudiante de su hijo/a o desea obtener más información sobre la FSAA, comuníquese con el maestro de su hijo/a, el coordinador del distrito o el coordinador de la evaluación alternativa.

Puede descargar copias de este folleto desde sitio web del FLDOE en http:// fldoe.org/accountability/assessments/k-12-student-assessment/fl-alternateassessment.stml.



Pam Stewart Comisionada de Educación



## Esplikasyon sou Evalyasyon Altènatif Estanda Florida (FSAA) ak sou Rezilta Pitit ou

# Bwochi Enfòmasyon pou Paran

# 2016

Lang ki enkli: English (Anglè) Spanish (Español) Haitian Creole (Kreyòl ayisyen)

## Nan ki sans Evalyasyon Altènatif Estanda Florida (Florida Standards Alternate Assessment) gen yon enpak sou pitit mwen?

Objektif Evalyasyon Altènatif Estanda Florida (Florida Standards Alternate Assessment, FSAA) a se pou bay chak elèv ki gen yon gwo andikap entelektyèl, chwa pou patisipe nan sistèm responsabilite leta a, yon fason ki siyifikatif epitou ki egzijan sou plan akademik. Patisipasyon pitit ou nan evalyasyon an ka ede enfôme ak amelyore ansèyman nan salklas la, apatide enfômasyon y ap genyen sou matyè pitit ou maton ladan yo ak/oubyen nan matyè kote li bezwen amelyorasyon. Eta Florida gen yon sistèm ki baze sou estanda pou tout elèv yo. Estanda Florida (Matematik ak Lang ak Literati Anglè) ak Next Generation Sunshine State Standards (Syans), ansanm avèk Pwen Aksè Korespondan yo, se yo ki detèmine fonksyònman pwogram akademik la, estrateji pedagojik la, ak evalyasyon yo.

#### Kisa Pwen Aksè yo ye?

FSAA konfòme l konplètman a estanda reyisit altènatif Florida a, ke yo rele tou Pwen Aksè (Access Points). Pwen Aksè yo reflete konsèp kle Estanda Florida a ak Next Generation Sunshine State Standards la a dè nivo konpleksite ki redwi. Yo asire aksè nan domèn esansyèl oswa nan objektif prensipal estanda ki aplike pou tout elèv nan menm klas la. Pou ka jwenn plis enfòmasyon sou Pwen Aksè yo, ale sou sitwèb Sistèm Planifikasyon Pwogram Akademik ak Jesyon Aprantisaj la (Curriculum Planning and Learning Management System, CPALMS) nan http://www.cpalms.org.

#### Ki Domèn Akademik yo evalye?

Yo evalye Pwen Aksè nan domèn akademik swivan yo nan nivo klas ki endike yo.

Nivo Klas	ELA	Matematik	Syans	Aljèb 1 EOC Evalyasyon	Jewometri EOC Evalyasyon	Byoloji EOC Evalyasyon
3	X	x				
4	Х	x				
5	Х	x	X			
6	Х	X				
7	Х	X				
8	Х	X	X			
9	Х					
10	Х					
Lekòl Segondè				X	X	x

#### Ki Nivo Konpleksite ki genyen?

Yo konsevwa sijè FSAA yo yon fason pou yo administre yo kòm Ansanm Sijè. Chak Ansanm Sijè gen ladann twa aktivite ki adrese Pwen Aksè a nan nivo konpleksite k ap ogmante. Tout elèv yo kòmanse yon ansanm sijè nan nivo Aktivite 1 epi yo kontinye travay nan chak nivo konpleksite jouk yo reponn yon kesyon mal oswa jouk yo konplete ansanm sijè a epi yo rive nan nivo Aktivite 3.



- Nivo konpleksite **Aktivite 1** konsantre sou konpetans nan yon nivo konesans akademik pou debitan, tankou pa egzanp rekonèt yon lèt, yon chif oswa pati nan yon ansanm.
- Nivo konpleksite **Aktivite 2** konsantre sou konpetans ki mande idantifikasyon oswa egzekisyon pèfòmans konpetans akademik debaz, tankou pa egzanp, li mo oswa rezoud pwoblèm matematik ki senp.
- Nivo konpleksite **Aktivite 3** konsantre sou konpetans ki mande pou òganize, fè konparezon, ak analize, tankou pa egzanp fè rezime lide prensipal yon istwa oswa rezoud pwoblèm matematik ki pi konplèks.

#### Kisa FSAA a ye e kijan yo administre l?

- FSAA a se yon evalyasyon ki baze sou pèfòmans. Yo konsevwa l pou elèv ki gwo andikap entelektyèl e ki pa kapab patisipe nan evalyasyon jeneral leta a, menm si yo ta ba yo akomodasyon.
- Se pwofesè edikasyon espesyal elèv la, yon pwofesè sètifye, oswa yon lòt pwofesyonèl lisansye ki travay defason entansif avèk elèv la e ki resevwa fòmasyon nan pwosedi evalyasyon, ki administre FSAA a bay chak elèv endividyèlman.
- Anjeneral, elèv yo chwazi yon repons pou yon kesyon ki ba yo twa repons ochwa ke yo reprezante sou fòm desen, tèks, chif, ak/oswa senbòl nan yon Tiliv Repons.
- Nan nivo konpleksite Aktivite 1 an sèlman, yon pwosesis yo rele "aprantisaj pwogresif" aplike si yon elèv pa kapab bay yon repons kòrèk pou prezantasyon inisyal la. Lè sa a yo diminye sou kantite opsyon repons yo soti nan twa repons pou rive nan de (2) repons, e yo administre aktivite a ankò bay elèv la.

#### Kijan yo pral rapòte rezilta pitit mwen an?

Pou chak domèn akademik, yo pral bay pitit ou yon total twa nòt. Twa nòt sa yo pral rapòte pèfòmans pitit ou nan chak nivo konpleksite (nivo Aktivite 1, nivo Aktivite 2, ak nivo Aktivite 3) sou 10 ansanm sijè ki te kontribye nan nòt pitit ou a. Nòt yo bay yo pral reprezante pousantaj aktivite pitit ou fè nòt kòrèk pou yo a sou **kantite total aktivite pitit ou te eseye fè a**. Etandone evalyasyon an gen yon konsepsyon adapte, kote pwogresyon nan pwochen aktivite a depann de si pitit ou reponn aktivite ki te anvan an kòrèkteman, enfòmasyon sou kantite total li eseye fè a, ka varye pou chak nivo aktivite.

MATEMATIK		
Nivo Konpleksite	Rezilta Pèfòmans Elèv	
Nivo AKTIVITE 1	7 sou 10 70%	
Nivo AKTIVITE 2	2 sou 7 29%	
Nivo AKTIVITE 3	1 sou 2 50%	

Pa egzanp, si yo administre 8 aktivite nan nivo Aktivite 3 pou yon elèv, e li jwenn bon repons lan pou ladan yo, rezilta pou Aktivite 3 a ap 4 sou 8, oswa 50%.

*Pa Aplikab* (NA) pral parèt sou tablo a si yo pat administre okenn aktivite pou pitit ou nan nivo Aktivite 2 oswa nivo Aktivite 3 nan yon matyè byen presi.

#### Kijan yo pral itilize rezilta evalyasyon an?

FSAA a se sèlman yon mwayen pou evalye pèfòmans pitit ou e se pou konsidere l nan kontèks pwogram lokal ak lòt mwayen evalyasyon pou pitit ou a. Yo ka itilize rezilta pitit ou pou:

- idantifye konesans li akeri nan aprantisaj,
- ede ekip IEP a nan devlòpman bi ak objektif anyèl,
- enfòme planifikasyon pedagojik la, e pou
- kontwole pwogrè l ap fè ane apre ane.

#### Kijan mwen ka jwenn plis enfòmasyon?

Si w pa resevwa Kanè Eskolè pitit ou oswa si w ta renmen gen plis enfòmasyon sou FSAA, kontakte pwofesè pitit ou, Kowòdinatè Distri a, oswa Kowòdinatè Evalyasyon Altènatif la.

Ou ka teledechaje kopi bwochi sa a sou sitwèb FLDOE a nan http://fldoe.org/ accountability/assessments/k-12-student-assessment/fl-alternate-assessment.stml.



Pam Stewart Manm Komisyon Edikasyon

#### What assessment results are provided to teachers and parents?

Student Reports, with grade-level information about student performance, are provided to schools to share with parents at the end of each school year. In addition, each school receives a school report that includes all students and their scores.

#### How can teachers use the assessment results?

Students' results can be used to:

- identify students' progress toward learning the knowledge and skills contained in the Florida Standards Access Points and/or the Next Generation Sunshine State Standards Access Points,
- assist the Individual Education Plan (IEP) team in writing the Present Level of Academic Achievement by examining the results in conjunction with other information—progress reports, report cards, and parent and teacher observations—to see what additional instruction is needed and in what areas, and
- improve instructional planning by determining if there is a need to adjust the curriculum or if there is a need for students to be provided with additional supports and learning opportunities.

# How can teachers help parents understand the FSAA and their child's results?

A crosswalk with grade-specific and academic area–specific Access Points can be found on the FLDOE Web site at http://fldoe.org/accountability/assessments/k-12-student-assessment/fl-alternate-assessment.stml.

In addition, the Assessment Planning Resource Guide for Individual Educational Plan (IEP) Teams may also be helpful for parents and can be found on the FSAA Training Portal at https://fsaa-training.onlinehelp.measuredprogress.org/.

Additional copies of this brochure can be downloaded from the FLDOE Web site at http://fldoe.org/accountability/assessments/k-12-student-assessment/fl-alternate-assessment.stml.



Facts About the Florida Standards Alternate Assessment (FSAA)

Information Brochure for Teachers

2016



Pam Stewart Commissioner of Education

#### What is the purpose of the Florida Standards Alternate Assessment?

The Individuals with Disabilities Education Act (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 No Child Left Behind Act of 2001 (NCLB) 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.

To provide an option for participation of all students in the state's accountability system, including those for whom participation in the general statewide assessment is not appropriate, even with accommodations, the state of Florida developed the Florida Standards Alternate Assessment (FSAA). The FSAA is fully aligned to Florida alternate achievement standards, otherwise known as Access Points. It is expected that only students with a significant cognitive disability (SCD), who are eligible under IDEA, will participate in the FSAA.

#### What are Access Points?

Access Points reflect the key concepts of the Florida Standards and the Next Generation Sunshine State Standards 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.

For more information about the Access Points, visit the Curriculum Planning and Learning Management System (CPALMS) Web site at http://www.cpalms.org/.

#### What are the Levels of Complexity?

Each Item Set on the FSAA includes three tasks that address Access Points at increasing levels of complexity.



- The **Task 1** level of complexity focuses on skills at a beginning academic awareness level, such as recognizing a letter, number, or parts of a whole.
- The **Task 2** level of complexity focuses on skills that require identifying or performing basic academic skills, such as reading words or solving simple math problems.
- The **Task 3** level of complexity focuses on skills that require organizing, comparing, and analyzing, such as summarizing the main idea of a story or solving more complex math problems.

#### How will my students' scores be reported?

For each academic area, 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) within the 10 item sets that contributed to your student's score. The provided scores will reflect the percentage of tasks your student scored correctly out of the total number of tasks your student attempted. 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 total attempted information may vary across task levels.

MATHEMATICS		
Complexity Level	Student Accuracy	
TASK 1 Level	7 of 10 70%	
TASK 2 Level	2 of 7 29%	
TASK 3 Level	1 of 2 50%	

*Not Applicable* (NA) will be reflected in the chart if no tasks were administered to your student at the Task 2 or Task 3 levels within a specific content area.

#### Why are Performance Level scores not provided?

Student scores will only report the accuracy achieved at each level of complexity for 2016. The Standard Setting process will occur in 2017 and will determine "cut scores" for 2017 reporting.

### **APPENDIX I—CLASSICAL ITEM STATISTICS**
Item	lten	1	DValue	Item-total	Item	lten	า	DValue	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	266817	1	0.88	0.44	09	221260	2	0.59	0.25
01	268696	2	0.63	0.40	09	221264	3	0.70	0.35
01	266821	3	0.68	0.32	10	266767	1	0.34	0.23
02	265893	1	0.78	0.50	10	266771	2	0.53	0.52
02	265898	2	0.47	0.40	10	266773	3	0.48	0.22
02	265902	3	0.66	0.22	11	265882	1	0.76	0.54
03	266834	1	0.71	0.49	11	265884	2	0.65	0.34
03	266836	2	0.55	0.43	11	265887	3	0.40	0.30
03	266838	3	0.72	0.29	12	265954	1	0.47	0.46
04	267318	1	0.49	0.38	12	265958	2	0.17	0.13
04	267320	2	0.57	0.41	12	265959	3	0.42	0.18
04	267322	3	0.45	0.32	13	265867	1	0.68	0.44
05	262777	1	0.79	0.50	13	265869	2	0.37	0.18
05	262779	2	0.67	0.54	13	265871	3	0.44	0.16
05	262781	3	0.70	0.42	14	265873	1	0.60	0.45
06	266827	1	0.72	0.55	14	265877	2	0.69	0.45
06	266825	2	0.60	0.46	14	265879	3	0.47	0.32
06	266829	3	0.66	0.32	15	265962	1	0.58	0.48
07	179293	1	0.69	0.56	15	265964	2	0.56	0.38
07	179304	2	0.69	0.50	15	265965	3	0.54	0.26
07	179308	3	0.66	0.22	16	265911	1	0.67	0.57
08	265947	1	0.81	0.52	16	265919	2	0.60	0.46
08	265949	2	0.42	0.39	16	265924	3	0.53	0.25
08	265950	3	0.47	0.32					
09	221255	1	0.84	0.49					

Table I-1. 2015–16 FSAA-PT: Classical Item Statistics—ELA Grade 3

Table I-2. 2015–16 FSAA-PT: Classical Item Statistics—ELA Grade 4

Item	lte	em	P-Value	ltem-total	Item	lte	əm	P-Value	ltem-total
Set	Number	Task	P-value	Correlation	Set	Number	Task	P-value	Correlation
01	268896	1	0.50	0.33	01	267475	WRI-MC	0.41	0.41
01	257092	2	0.57	0.41	01	267479	WRI-MC	0.83	0.55
01	257096	3	0.40	0.31	01	267481	WRI-MC	0.78	0.56
01	267432	WRI-MC	0.80	0.56	01	267483	WRI-MC	0.69	0.56
01	267434	WRI-MC	0.70	0.48	01	267485	WRI-MC	0.54	0.34
01	267436	WRI-MC	0.54	0.52	01	267486	WRI-MC	0.74	0.47
01	267438	WRI-MC	0.50	0.32	01	267500	WRI-MC	0.86	0.51
01	267440	WRI-MC	0.53	0.41	01	267502	WRI-MC	0.82	0.55
01	267443	WRI-MC	0.79	0.57	01	267504	WRI-MC	0.74	0.58
01	267445	WRI-MC	0.64	0.49	01	267506	WRI-MC	0.54	0.37
01	267447	WRI-MC	0.70	0.52	01	267508	WRI-MC	0.71	0.47
01	267449	WRI-MC	0.63	0.50	01	267511	WRI-MC	0.81	0.57
01	267451	WRI-MC	0.59	0.45	01	267513	WRI-MC	0.77	0.59
01	267467	WRI-MC	0.84	0.55	01	267515	WRI-MC	0.66	0.59
01	267469	WRI-MC	0.69	0.58	01	267517	WRI-MC	0.46	0.27
01	267471	WRI-MC	0.64	0.47	01	267518	WRI-MC	0.66	0.41
01	267473	WRI-MC	0.74	0.59					continued

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Item		em	P-Value	Item-total	Item	Iter		– P-Value	ltem-total
Set	Number	Task	i valuo	Correlation	Set	Number	Task	i value	Correlation
02	268889	1	0.82	0.57	06	265980	3	0.30	0.16
02	221282	2	0.75	0.43	07	267335	1	0.62	0.47
02	221288	3	0.51	0.33	07	267337	2	0.74	0.35
02	267419A	WRI-WP	0.59	0.53	07	267338	3	0.47	0.30
02	267419B	WRI-WP	0.49	0.51	08	221258	1	0.86	0.50
02	267419C	WRI-WP	0.69	0.64	08	268791	2	0.67	0.55
02	267419D	WRI-WP	0.51	0.52	08	221266	3	0.73	0.38
02	267430A	WRI-WP	0.69	0.36	09	262717	1	0.80	0.53
02	267430B	WRI-WP	0.57	0.37	09	262719	2	0.73	0.51
02	267430C	WRI-WP	0.69	0.41	09	262721	3	0.62	0.47
02	267430D	WRI-WP	0.53	0.39	10	262733	1	0.77	0.52
02	267465A	WRI-WP	0.62	0.46	10	262734	2	0.47	0.38
02	267465B	WRI-WP	0.58	0.51	10	262736	3	0.82	0.35
02	267465C	WRI-WP	0.64	0.47	11	267327	1	0.83	0.56
02	267465D	WRI-WP	0.59	0.48	11	267329	2	0.75	0.42
02	267498A	WRI-WP	0.57	0.55	11	267331	3	0.44	0.30
02	267498B	WRI-WP	0.51	0.50	12	265981	1	0.80	0.53
02	267498C	WRI-WP	0.57	0.49	12	265983	2	0.69	0.21
02	267498D	WRI-WP	0.49	0.52	12	265986	3	0.36	0.23
02	267529A	WRI-WP	0.52	0.52	13	265967	1	0.74	0.50
02	267529B	WRI-WP	0.47	0.52	13	265969	2	0.67	0.39
02	267529C	WRI-WP	0.53	0.54	13	265971	3	0.49	0.19
02	267529D	WRI-WP	0.47	0.45	14	265990	1	0.81	0.58
02	267540A	WRI-WP	0.58	0.50	14	265992	2	0.77	0.46
02	267540B	WRI-WP	0.53	0.54	14	265994	3	0.88	0.38
02	267540C	WRI-WP	0.60	0.54	15	266012	1	0.58	0.41
02	267540D	WRI-WP	0.51	0.50	15	266014	2	0.54	0.28
03	244335	1	0.88	0.49	15	268793	3	0.50	0.26
03	244337	2	0.82	0.52	16	266003	1	0.85	0.51
03	244338	3	0.87	0.32	16	266006	2	0.31	0.46
04	244384	1	0.81	0.55	16	266009	3	0.38	0.21
04	244386	2	0.83	0.48					
04	244388	3	0.64	0.33					
05	266781	1	0.47	0.42					
05	266783	2	0.68	0.38					
05	266785	3	0.83	0.33					
06	265972	1	0.85	0.52					
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265975

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0.40

0.24

Item Set         Item         P-Value         Item-total Correlation         Item         Item         Item           01         181684         1         0.88         0.51         02         267540D         WRI-WP           01         181688         2         0.69         0.42         02         267579A         WRI-WP           01         181692         3         0.68         0.35         02         267579B         WRI-WP           01         267479         WRI-MC         0.84         0.55         02         267579C         WRI-WP           01         267481         WRI-MC         0.79         0.60         02         267579D         WRI-WP           01         267483         WRI-MC         0.67         0.48         02         267575A         WRI-WP           01         267485         WRI-MC         0.67         0.48         02         267675A         WRI-WP           01         267485         WRI-MC         0.59         0.46         02         267675B         WRI-WP           01         267500         WRI-MC         0.73         0.56         02         267675D         WRI-WP           01         267500	P-Value 0.54 0.66 0.55 0.58 0.63 0.58 0.61 0.56 0.65	Item-total Correlation 0.49 0.52 0.53 0.54 0.56 0.56 0.56 0.54 0.50 0.53
01         181684         1         0.88         0.51         02         267540D         WRI-WP           01         181688         2         0.69         0.42         02         267579A         WRI-WP           01         181692         3         0.68         0.35         02         267579A         WRI-WP           01         267479         WRI-MC         0.84         0.55         02         267579C         WRI-WP           01         267481         WRI-MC         0.79         0.60         02         267579D         WRI-WP           01         267483         WRI-MC         0.67         0.48         02         267579D         WRI-WP           01         267485         WRI-MC         0.67         0.48         02         267675A         WRI-WP           01         267485         WRI-MC         0.59         0.46         02         267675B         WRI-WP           01         267486         WRI-MC         0.73         0.56         02         267675C         WRI-WP           01         267500         WRI-MC         0.73         0.53         02         267675D         WRI-WP           01         267502	0.66 0.60 0.55 0.58 0.63 0.58 0.61 0.56	0.49 0.52 0.53 0.54 0.56 0.56 0.56 0.54 0.50
0118168820.690.4202267579AWRI-WP0118169230.680.3502267579BWRI-WP01267479WRI-MC0.840.5502267579CWRI-WP01267481WRI-MC0.790.6002267579DWRI-WP01267483WRI-MC0.670.4802267675AWRI-WP01267485WRI-MC0.590.4602267675BWRI-WP01267486WRI-MC0.730.5602267675CWRI-WP01267500WRI-MC0.850.5302267675DWRI-WP01267502WRI-MC0.790.5202267685AWRI-WP	0.66 0.60 0.55 0.58 0.63 0.58 0.61 0.56	0.52 0.53 0.54 0.56 0.56 0.54 0.50
0118169230.680.3502267579BWRI-WP01267479WRI-MC0.840.5502267579CWRI-WP01267481WRI-MC0.790.6002267579DWRI-WP01267483WRI-MC0.670.4802267675AWRI-WP01267485WRI-MC0.590.4602267675BWRI-WP01267486WRI-MC0.730.5602267675CWRI-WP01267500WRI-MC0.850.5302267675DWRI-WP01267502WRI-MC0.790.5202267685AWRI-WP	0.60 0.55 0.58 0.63 0.58 0.61 0.56	0.53 0.54 0.56 0.56 0.54 0.50
01267479WRI-MC0.840.5502267579CWRI-WP01267481WRI-MC0.790.6002267579DWRI-WP01267483WRI-MC0.670.4802267675AWRI-WP01267485WRI-MC0.590.4602267675BWRI-WP01267486WRI-MC0.730.5602267675CWRI-WP01267500WRI-MC0.850.5302267675DWRI-WP01267502WRI-MC0.790.5202267685AWRI-WP	0.55 0.58 0.63 0.58 0.61 0.56	0.54 0.56 0.56 0.54 0.50
01267481WRI-MC0.790.6002267579DWRI-WP01267483WRI-MC0.670.4802267675AWRI-WP01267485WRI-MC0.590.4602267675BWRI-WP01267486WRI-MC0.730.5602267675CWRI-WP01267500WRI-MC0.850.5302267675DWRI-WP01267502WRI-MC0.790.5202267685AWRI-WP	0.58 0.63 0.58 0.61 0.56	0.56 0.56 0.54 0.50
01267483WRI-MC0.670.4802267675AWRI-WP01267485WRI-MC0.590.4602267675BWRI-WP01267486WRI-MC0.730.5602267675CWRI-WP01267500WRI-MC0.850.5302267675DWRI-WP01267502WRI-MC0.790.5202267685AWRI-WP	0.63 0.58 0.61 0.56	0.56 0.54 0.50
01267485WRI-MC0.590.4602267675BWRI-WP01267486WRI-MC0.730.5602267675CWRI-WP01267500WRI-MC0.850.5302267675DWRI-WP01267502WRI-MC0.790.5202267685AWRI-WP	0.58 0.61 0.56	0.54 0.50
01267486WRI-MC0.730.5602267675CWRI-WP01267500WRI-MC0.850.5302267675DWRI-WP01267502WRI-MC0.790.5202267685AWRI-WP	0.61 0.56	0.50
01267500WRI-MC0.850.5302267675DWRI-WP01267502WRI-MC0.790.5202267685AWRI-WP	0.56	
01 267502 WRI-MC 0.79 0.52 02 267685A WRI-WP		0.00
		0.57
	0.59	0.57
01 267506 WRI-MC 0.52 0.46 02 267685C WRI-WP	0.62	0.52
01 267508 WRI-MC 0.72 0.46 02 267685D WRI-WP	0.53	0.43
01 267511 WRI-MC 0.84 0.53 03 245011 1	0.87	0.54
01 267513 WRI-MC 0.83 0.61 03 245013 2	0.77	0.54
01 267515 WRI-MC 0.75 0.58 03 245015 3	0.82	0.39
01 267517 WRI-MC 0.49 0.33 04 266063 1	0.85	0.57
01 267518 WRI-MC 0.70 0.47 04 266065 2	0.74	0.54
01 267542 WRI-MC 0.85 0.55 04 266066 3	0.38	0.33
01 267544 WRI-MC 0.79 0.57 05 268836 1	0.82	0.59
01 267546 WRI-MC 0.75 0.56 05 257519 2	0.53	0.21
01 267548 WRI-MC 0.50 0.40 05 257521 3	0.64	0.45
01 267549 WRI-MC 0.70 0.41 06 266051 1	0.65	0.43
01 267552 WRI-MC 0.84 0.57 06 266053 2	0.81	0.54
01 267554 WRI-MC 0.77 0.53 06 266055 3	0.65	0.34
01 267556 WRI-MC 0.78 0.56 07 266843 1	0.83	0.55
01 267558 WRI-MC 0.51 0.44 07 266845 2	0.82	0.50
01 267559 WRI-MC 0.61 0.38 07 268838 3	0.51	0.37
01 267581 WRI-MC 0.84 0.53 08 266105 1	0.78	0.55
01 267616 WRI-MC 0.62 0.55 08 266107 2	0.57	0.34
01 267623 WRI-MC 0.62 0.55 08 266109 3	0.65	0.34
01 267627 WRI-MC 0.54 0.45 09 245017 1	0.87	0.54
01 267631 WRI-MC 0.70 0.36 09 245019 2	0.60	0.34
02 98981 1 0.80 0.56 09 268839 3	0.67	0.23
02 98984 2 0.79 0.43 10 266791 1	0.81	0.56
02 268973 3 0.69 0.31 10 268737 2	0.60	0.43
02 267498A WRI-WP 0.58 0.63 10 266797 3	0.64	0.34
02 267498B WRI-WP 0.53 0.56 11 266057 1	0.83	0.56
02 267498C WRI-WP 0.58 0.59 11 266059 2	0.59	0.44
02 267498D WRI-WP 0.52 0.57 11 266061 3	0.37	0.13
02 267529A WRI-WP 0.57 0.51 12 266096 1	0.74	0.60
02 267529B WRI-WP 0.51 0.55 12 266098 2	0.51	0.29
02 267529C WRI-WP 0.57 0.50 12 266101 3	0.49	0.25
02 267529D WRI-WP 0.51 0.49 13 266085 1	0.78	0.51
02 267540A WRI-WP 0.61 0.52 13 266087 2	0.62	0.30
02 267540B WRI-WP 0.56 0.50 <u>13 266089 3</u>	0.37	0.20
02 267540C WRI-WP 0.65 0.55		continued

ltem	lte	m	– P-Value	ltem-total		
Set	Number	Task	- r-value	Correlation		
14	266090	1	0.75	0.52		
14	266092	2	0.59	0.37		
14	266094	3	0.53	0.37		
15	266067	1	0.78	0.58		
15	266069	2	0.31	0.25		
15	266073	3	0.40	0.35		

Item	ltei	т	- P-Value	ltem-total		
Set	Number	Task	- r-value	Correlation		
16	266076	1	0.83	0.52		
16	267267	2	0.63	0.48		
16	266082	3	0.62	0.22		

Table I-4. 2015–16 FSAA-PT: Classical Item Statistics—ELA Grade 6

Item	Ite	em		Item-total	Item	lte	əm		Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	267342	1	0.72	0.55	02	267351	1	0.63	0.55
01	267344	2	0.76	0.41	02	267353	2	0.62	0.35
01	267346	3	0.54	0.37	02	267355	3	0.51	0.26
01	267542	WRI-MC	0.82	0.54	02	267579A	WRI-WP	0.64	0.55
01	267544	WRI-MC	0.79	0.54	02	267579B	WRI-WP	0.59	0.53
01	267546	WRI-MC	0.69	0.55	02	267579C	WRI-WP	0.53	0.58
01	267548	WRI-MC	0.52	0.41	02	267579D	WRI-WP	0.55	0.59
01	267549	WRI-MC	0.69	0.46	02	267675A	WRI-WP	0.68	0.53
01	267552	WRI-MC	0.88	0.50	02	267675B	WRI-WP	0.63	0.49
01	267554	WRI-MC	0.76	0.54	02	267675C	WRI-WP	0.64	0.49
01	267556	WRI-MC	0.82	0.51	02	267675D	WRI-WP	0.59	0.49
01	267558	WRI-MC	0.60	0.47	02	267685A	WRI-WP	0.69	0.62
01	267559	WRI-MC	0.66	0.47	02	267685B	WRI-WP	0.61	0.61
01	267581	WRI-MC	0.80	0.51	02	267685C	WRI-WP	0.61	0.57
01	267616	WRI-MC	0.66	0.54	02	267685D	WRI-WP	0.53	0.56
01	267623	WRI-MC	0.65	0.59	02	267709A	WRI-WP	0.56	0.53
01	267627	WRI-MC	0.59	0.44	02	267709B	WRI-WP	0.50	0.51
01	267631	WRI-MC	0.67	0.42	02	267709C	WRI-WP	0.53	0.55
01	267689	WRI-MC	0.84	0.55	02	267709D	WRI-WP	0.46	0.51
01	267691	WRI-MC	0.79	0.60	02	267765A	WRI-WP	0.57	0.51
01	267693	WRI-MC	0.63	0.48	02	267765B	WRI-WP	0.52	0.47
01	267695	WRI-MC	0.71	0.55	02	267765C	WRI-WP	0.58	0.55
01	267697	WRI-MC	0.60	0.37	02	267765D	WRI-WP	0.51	0.53
01	267784	WRI-MC	0.80	0.54	02	267782A	WRI-WP	0.55	0.39
01	267786	WRI-MC	0.74	0.57	02	267782B	WRI-WP	0.58	0.46
01	267790	WRI-MC	0.66	0.49	02	267782C	WRI-WP	0.64	0.42
01	267792	WRI-MC	0.73	0.45	02	267782D	WRI-WP	0.56	0.45
01	267795	WRI-MC	0.35	0.30	03	267285	1	0.91	0.42
01	267799	WRI-MC	0.78	0.53	03	267287	2	0.70	0.44
01	267802	WRI-MC	0.75	0.49	03	267289	3	0.83	0.45
01	267804	WRI-MC	0.61	0.46	04	267359	1	0.77	0.60
01	267806	WRI-MC	0.62	0.39	04	267361	2	0.53	0.39
01	267809	WRI-MC	0.59	0.45					continued

Item	lte	т	DValue	Item-total	ltem	Ite	m	DValua	ltem-total
Set	Number	Task	- P-Value	Correlation	Set	Number	Task	- P-Value	Correlation
04	267363	3	0.40	0.19	11	266135	1	0.69	0.57
05	266852	1	0.83	0.55	11	266137	2	0.59	0.40
05	266854	2	0.55	0.18	11	266139	3	0.37	0.09
05	266856	3	0.67	0.36	12	266162	1	0.81	0.53
06	267368	1	0.83	0.57	12	266165	2	0.62	0.51
06	267370	2	0.81	0.52	12	266168	3	0.49	0.24
06	267372	3	0.36	0.24	13	266198	1	0.56	0.46
07	182850	1	0.84	0.54	13	266200	2	0.64	0.46
07	268900	2	0.58	0.47	13	267269	3	0.80	0.37
07	182867	3	0.68	0.33	14	266147	1	0.83	0.56
08	267400	1	0.68	0.51	14	266151	2	0.65	0.27
08	267402	2	0.48	0.29	14	266155	3	0.36	0.33
08	267403	3	0.58	0.13	15	266172	1	0.74	0.50
09	263023	1	0.81	0.53	15	266176	2	0.64	0.41
09	263025	2	0.69	0.43	15	266185	3	0.65	0.50
09	263027	3	0.61	0.36	16	266141	1	0.85	0.51
10	267311	1	0.76	0.51	16	266143	2	0.65	0.39
10	267313	2	0.59	0.46	16	266145	3	0.43	0.34
10	267314	3	0.43	0.32					

Table I-5. 2015–16 FSAA-PT: Classical Item Statistics—ELA Grade 7

Item	lte	əm	DValua	Item-total	Item	lte	em	DValua	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	183800	1	0.83	0.55	01	267826	WRI-MC	0.72	0.59
01	183803	2	0.52	0.35	01	267828	WRI-MC	0.54	0.27
01	183808	3	0.53	0.29	01	267830	WRI-MC	0.48	0.38
01	267689	WRI-MC	0.86	0.54	01	267833	WRI-MC	0.80	0.56
01	267691	WRI-MC	0.81	0.65	01	267837	WRI-MC	0.77	0.56
01	267693	WRI-MC	0.63	0.53	01	267844	WRI-MC	0.61	0.54
01	267695	WRI-MC	0.75	0.49	01	267850	WRI-MC	0.59	0.34
01	267697	WRI-MC	0.63	0.38	01	267856	WRI-MC	0.49	0.39
01	267721	WRI-MC	0.88	0.49	02	245649	1	0.89	0.48
01	267723	WRI-MC	0.81	0.63	02	245651	2	0.62	0.48
01	267727	WRI-MC	0.38	0.18	02	245653	3	0.69	0.37
01	267729	WRI-MC	0.62	0.35	02	267709A	WRI-WP	0.60	0.47
01	267737	WRI-MC	0.64	0.50	02	267709B	WRI-WP	0.54	0.46
01	267784	WRI-MC	0.84	0.60	02	267709C	WRI-WP	0.58	0.49
01	267786	WRI-MC	0.80	0.60	02	267709D	WRI-WP	0.51	0.50
01	267790	WRI-MC	0.67	0.56	02	267765A	WRI-WP	0.59	0.55
01	267792	WRI-MC	0.76	0.52	02	267765B	WRI-WP	0.54	0.49
01	267795	WRI-MC	0.41	0.28	02	267765C	WRI-WP	0.59	0.48
01	267799	WRI-MC	0.84	0.59	02	267765D	WRI-WP	0.52	0.50
01	267802	WRI-MC	0.81	0.52	02	267766A	WRI-WP	0.58	0.50
01	267804	WRI-MC	0.64	0.50	02	267766B	WRI-WP	0.56	0.53
01	267806	WRI-MC	0.69	0.35	02	267766C	WRI-WP	0.57	0.52
01	267809	WRI-MC	0.72	0.46	02	267766D	WRI-WP	0.53	0.56
01	267810	WRI-MC	0.79	0.59	02	267782A	WRI-WP	0.55	0.47
01	267813	WRI-MC	0.81	0.49					continued

Item	lte	em	DValue	Item-total	Item	Iter	n	DValue	ltem-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	- P-Value	Correlation
02	267782B	WRI-WP	0.62	0.58	09	257775	1	0.85	0.54
02	267782C	WRI-WP	0.70	0.55	09	257777	2	0.64	0.54
02	267782D	WRI-WP	0.62	0.58	09	257779	3	0.57	0.30
02	267801A	WRI-WP	0.58	0.47	10	266290	1	0.82	0.50
02	267801B	WRI-WP	0.56	0.47	10	266292	2	0.47	0.27
02	267801C	WRI-WP	0.61	0.51	10	266294	3	0.77	0.41
02	267801D	WRI-WP	0.52	0.47	11	266296	1	0.84	0.58
02	267877A	WRI-WP	0.54	0.49	11	266298	2	0.73	0.45
02	267877B	WRI-WP	0.51	0.55	11	266300	3	0.69	0.20
02	267877C	WRI-WP	0.52	0.52	12	266313	1	0.61	0.51
02	267877D	WRI-WP	0.46	0.54	12	266315	2	0.59	0.28
03	266920	1	0.79	0.63	12	267265	3	0.47	0.27
03	266922	2	0.81	0.44	13	266308	1	0.83	0.50
03	266924	3	0.67	0.24	13	266310	2	0.52	0.46
04	263097	1	0.85	0.55	13	266312	3	0.72	0.43
04	263099	2	0.67	0.57	14	266325	1	0.84	0.53
04	263101	3	0.75	0.35	14	266327	2	0.58	0.28
05	183790	1	0.75	0.52	14	266329	3	0.64	0.41
05	183792	2	0.88	0.52	15	266302	1	0.87	0.52
05	183796	3	0.77	0.37	15	266304	2	0.58	0.59
06	268825	1	0.84	0.52	15	266306	3	0.84	0.40
06	263093	2	0.39	0.44	16	266319	1	0.64	0.46
06	263095	3	0.57	0.33	16	266321	2	0.63	0.31
07	263103	1	0.80	0.58	16	267266	3	0.33	0.20
07	268814	2	0.66	0.45					
07	263107	3	0.57	0.38					
08	267393	1	0.86	0.48					
08	267395	2	0.75	0.50					
08	267397	3	0.41	0.23					

Table I-6. 2015–16 FSAA-PT: Classical Item Statistics—ELA Grade 8

Item	lte	əm	P-Value	Item-total	Item	Ite	əm	P-Value	ltem-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-value	Correlation
01	257838	1	0.88	0.45	01	267844	WRI-MC	0.52	0.53
01	268845	2	0.52	0.41	01	267850	WRI-MC	0.56	0.38
01	268882	3	0.62	0.30	01	267856	WRI-MC	0.49	0.44
01	267721	WRI-MC	0.84	0.56	01	267896	WRI-MC	0.85	0.48
01	267723	WRI-MC	0.80	0.60	01	267898	WRI-MC	0.82	0.58
01	267727	WRI-MC	0.42	0.34	01	267900	WRI-MC	0.59	0.39
01	267729	WRI-MC	0.61	0.44	01	267902	WRI-MC	0.56	0.38
01	267737	WRI-MC	0.63	0.50	01	267904	WRI-MC	0.59	0.35
01	267810	WRI-MC	0.81	0.64	01	267907	WRI-MC	0.83	0.58
01	267813	WRI-MC	0.82	0.56	01	267909	WRI-MC	0.83	0.44
01	267826	WRI-MC	0.73	0.61	01	267911	WRI-MC	0.51	0.52
01	267828	WRI-MC	0.62	0.43	01	267913	WRI-MC	0.73	0.40
01	267830	WRI-MC	0.56	0.44	01	267915	WRI-MC	0.48	0.31
01	267833	WRI-MC	0.79	0.55	01	267947	WRI-MC	0.90	0.42
01	267837	WRI-MC	0.76	0.54					continued

Item	Ite	əm	DValue	ltem-total	Item	lte	m	DValue	ltem-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	- P-Value	Correlation
01	267949	WRI-MC	0.81	0.54	06	266894	1	0.83	0.51
01	267951	WRI-MC	0.75	0.61	06	266896	2	0.88	0.51
01	267953	WRI-MC	0.60	0.54	06	266898	3	0.48	0.37
01	267954	WRI-MC	0.62	0.24	07	266928	1	0.77	0.60
02	266911	1	0.82	0.58	07	266930	2	0.70	0.41
02	266913	2	0.70	0.39	07	266932	3	0.40	0.19
02	266915	3	0.67	0.36	08	266351	1	0.85	0.51
02	267766A	WRI-WP	0.60	0.59	08	266353	2	0.73	0.52
02	267766B	WRI-WP	0.59	0.64	08	266355	3	0.35	0.35
02	267766C	WRI-WP	0.60	0.62	09	263148	1	0.84	0.48
02	267766D	WRI-WP	0.56	0.60	09	263150	2	0.61	0.56
02	267801A	WRI-WP	0.57	0.52	09	268851	3	0.42	0.21
02	267801B	WRI-WP	0.55	0.56	10	268577	1	0.86	0.53
02	267801C	WRI-WP	0.59	0.59	10	268579	2	0.48	0.38
02	267801D	WRI-WP	0.51	0.53	10	268581	3	0.62	0.20
02	267877A	WRI-WP	0.54	0.60	11	263167	1	0.64	0.50
02	267877B	WRI-WP	0.51	0.62	11	263169	2	0.72	0.51
02	267877C	WRI-WP	0.52	0.62	11	268734	3	0.70	0.40
02	267877D	WRI-WP	0.46	0.60	12	267227	1	0.77	0.61
02	267944A	WRI-WP	0.61	0.54	12	267229	2	0.64	0.34
02	267944B	WRI-WP	0.58	0.57	12	267231	3	0.49	0.38
02	267944C	WRI-WP	0.65	0.48	13	266356	1	0.74	0.47
02	267944D	WRI-WP	0.57	0.56	13	266358	2	0.43	0.25
02	267972A	WRI-WP	0.57	0.52	13	266359	3	0.42	0.39
02	267972B	WRI-WP	0.53	0.55	14	266339	1	0.46	0.35
02	267972C	WRI-WP	0.55	0.53	14	266341	2	0.41	0.30
02	267972D	WRI-WP	0.52	0.57	14	266343	3	0.46	0.40
02	267987A	WRI-WP	0.61	0.48	15	268497	1	0.82	0.56
02	267987B	WRI-WP	0.54	0.59	15	268499	2	0.68	0.40
02	267987C	WRI-WP	0.51	0.55	15	268849	3	0.66	0.38
02	267987D	WRI-WP	0.48	0.56	16	266345	1	0.73	0.62
03	268847	1	0.80	0.61	16	266347	2	0.79	0.41
03	257820	2	0.83	0.37	16	266349	3	0.64	0.28
03	257822	3	0.61	0.24					
04	267376	1	0.74	0.58					
04	267378	2	0.84	0.54					
04	267380	3	0.70	0.30					
05	263162	1	0.81	0.57					
05	263164	2	0.56	0.32					
05	263166	3	0.58	0.41					

lter	т	– P-Value	ltem-total	 Item	lte	əm	- P-Value	
ımber	Task	- P-Value	Correlation	 Set	Number	Task	- P-Value	
8689	1	0.85	0.55	02	268235A	WRI-WP	0.53	
8691	2	0.67	0.48	02	268235B	WRI-WP	0.46	

Table I-7. 2016–16 FSAA-PT: Classical Item Statistics—ELA Grade 9

Item	Ite	əm	- P-Value	ltem-total	Item	Ite	em	- P-Value	Item-total
Set	Number	Task	- r-value	Correlation	Set	Number	Task	- r-value	Correlation
01	268689	1	0.85	0.55	02	268235A	WRI-WP	0.53	0.46
01	268691	2	0.67	0.48	02	268235B	WRI-WP	0.46	0.44
01	268693	3	0.56	0.25	02	268235C	WRI-WP	0.48	0.41
01	267896	WRI-MC	0.86	0.50	02	268235D	WRI-WP	0.44	0.46
01	267898	WRI-MC	0.84	0.60	02	268258A	WRI-WP	0.58	0.50
01	267900	WRI-MC	0.54	0.41	02	268258B	WRI-WP	0.53	0.56
01	267902	WRI-MC	0.46	0.35	02	268258C	WRI-WP	0.55	0.54
01	267904	WRI-MC	0.57	0.37	02	268258D	WRI-WP	0.50	0.56
01	267907	WRI-MC	0.84	0.61	02	268268A	WRI-WP	0.58	0.45
01	267909	WRI-MC	0.82	0.53	02	268268B	WRI-WP	0.52	0.49
01	267911	WRI-MC	0.54	0.41	02	268268C	WRI-WP	0.53	0.47
01	267913	WRI-MC	0.71	0.44	02	268268D	WRI-WP	0.51	0.50
01	267915	WRI-MC	0.48	0.25	03	246785	1	0.66	0.48
01	267947	WRI-MC	0.87	0.48	03	246789	2	0.62	0.47
01	267949	WRI-MC	0.80	0.57	03	246791	3	0.44	0.17
01	267951	WRI-MC	0.73	0.63	04	266410	1	0.82	0.58
01	267953	WRI-MC	0.65	0.55	04	266412	2	0.48	0.24
01	267954	WRI-MC	0.60	0.29	04	266414	3	0.58	0.13
01	268227	WRI-MC	0.84	0.57	05	263363	1	0.84	0.53
01	268229	WRI-MC	0.82	0.57	05	263365	2	0.65	0.43
01	268231	WRI-MC	0.62	0.40	05	263367	3	0.70	0.37
01	268233	WRI-MC	0.46	0.21	06	266416	1	0.85	0.59
01	268234	WRI-MC	0.53	0.40	06	266418	2	0.84	0.52
01	268242	WRI-MC	0.88	0.47	06	266420	3	0.53	0.28
01	268246	WRI-MC	0.82	0.58	07	267294	1	0.86	0.20
01	268249	WRI-MC	0.37	0.14	07	267296	2	0.46	0.40
01	268252	WRI-MC	0.60	0.43	07	267298	3	0.40	0.40
01	268254	WRI-MC	0.56	0.46	08	266382	1	0.75	0.51
01	268260	WRI-MC	0.86	0.49	08	266384	2	0.58	0.34
01	268262	WRI-MC	0.80	0.49	08	266386	2	0.36	0.34
01	268264	WRI-MC	0.78	0.29	08	263351	1	0.80	0.22
01	268266	WRI-MC	0.59	0.29	09	263353	2	0.80	0.34
01	268267	WRI-MC	0.59	0.48	09	263355	2 3	0.72	0.40
02	266860	1	0.85	0.40	10	183973	1	0.78	0.53
02	266862		0.85	0.34	10	183982		0.62	0.33
02	266864	2 3	0.75	0.44	10	183994	2 3	0.62	0.48
02 02	267944A 267944B	WRI-WP WRI-WP	0.63 0.61	0.46 0.51	11 11	266405 266406	1 2	0.67 0.81	0.43 0.37
		WRI-WP WRI-WP			11 11				
02	267944C		0.69	0.38	11 12	266408	3	0.36	0.12
02	267944D		0.60	0.48	12	266399	1	0.81	0.60
02	267972A	WRI-WP	0.61	0.57	12	266401	2	0.52	0.27
02	267972B	WRI-WP	0.53	0.59	12	266403	3	0.54	0.13
02	267972C	WRI-WP	0.55	0.56	13	267303	1	0.86	0.52
02	267972D	WRI-WP	0.52	0.57	13	267305	2	0.62	0.36
02	267987A	WRI-WP	0.59	0.50	13	267307	3	0.68	0.41
02	267987B	WRI-WP	0.54	0.54	14	266376	1	0.85	0.53
02	267987C	WRI-WP	0.51	0.49	14	266378	2	0.61	0.38
02	267987D	WRI-WP	0.48	0.49					continued

Item	lten	ו	P-Value	ltem-total
Set	Number	Task	r-value	Correlation
14	266380	3	0.49	0.35
15	266387	1	0.78	0.57
15	266389	2	0.31	0.30
15	266391	3	0.48	0.21
16	266393	1	0.64	0.40
16	266395	2	0.38	0.28
16	266397	3	0.48	0.11

Table I-8. 2015–16 FSAA-PT: Classical Item Statistics—ELA Grade 10

Item	lt	em		Item-total	Item	Ite	em		ltem-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	246983	1	0.65	0.50	02	266870	2	0.91	0.39
01	246987	2	0.82	0.54	02	266872	3	0.75	0.42
01	246992	3	0.41	0.21	02	268235A	WRI-WP	0.52	0.45
01	268227	WRI-MC	0.85	0.56	02	268235B	WRI-WP	0.45	0.39
01	268229	WRI-MC	0.83	0.61	02	268235C	WRI-WP	0.50	0.31
01	268231	WRI-MC	0.70	0.41	02	268235D	WRI-WP	0.43	0.38
01	268233	WRI-MC	0.56	0.31	02	268258A	WRI-WP	0.62	0.46
01	268234	WRI-MC	0.55	0.40	02	268258B	WRI-WP	0.54	0.49
01	268242	WRI-MC	0.88	0.46	02	268258C	WRI-WP	0.59	0.48
01	268246	WRI-MC	0.81	0.63	02	268258D	WRI-WP	0.53	0.49
01	268249	WRI-MC	0.35	0.20	02	268268A	WRI-WP	0.60	0.53
01	268252	WRI-MC	0.60	0.38	02	268268B	WRI-WP	0.53	0.53
01	268254	WRI-MC	0.53	0.49	02	268268C	WRI-WP	0.54	0.49
01	268260	WRI-MC	0.84	0.53	02	268268D	WRI-WP	0.51	0.50
01	268262	WRI-MC	0.77	0.54	02	268282A	WRI-WP	0.54	0.42
01	268264	WRI-MC	0.67	0.29	02	268282B	WRI-WP	0.47	0.48
01	268266	WRI-MC	0.55	0.50	02	268282C	WRI-WP	0.44	0.43
01	268267	WRI-MC	0.49	0.40	02	268282D	WRI-WP	0.44	0.51
01	268270	WRI-MC	0.76	0.50	02	268315A	WRI-WP	0.57	0.54
01	268272	WRI-MC	0.62	0.60	02	268315B	WRI-WP	0.66	0.66
01	268274	WRI-MC	0.59	0.53	02	268315C	WRI-WP	0.60	0.61
01	268276	WRI-MC	0.69	0.54	02	268315D	WRI-WP	0.61	0.66
01	268277	WRI-MC	0.59	0.46	02	268570A	WRI-WP	0.49	0.35
01	268298	WRI-MC	0.91	0.47	02	268570B	WRI-WP	0.56	0.60
01	268302	WRI-MC	0.89	0.55	02	268570C	WRI-WP	0.53	0.49
01	268304	WRI-MC	0.84	0.56	02	268570D	WRI-WP	0.52	0.57
01	268310	WRI-MC	0.63	0.48	03	267385	1	0.80	0.54
01	268314	WRI-MC	0.70	0.44	03	267387	2	0.35	0.18
01	268317	WRI-MC	0.89	0.50	03	267389	3	0.63	0.29
01	268319	WRI-MC	0.83	0.56	04	267199	1	0.85	0.54
01	268325	WRI-MC	0.71	0.56	04	267201	2	0.77	0.42
01	268328	WRI-MC	0.67	0.57	04	267203	3	0.71	0.45
01	268331	WRI-MC	0.62	0.47	05	257967	1	0.75	0.49
02	266868	1	0.86	0.56					continued

Item	lte	т	- P-Value	Item-total	Item	Ite	т	– P-Value	Item-total
Set	Number	Task	- P-Value	Correlation	Set	Number	Task	- P-Value	Correlation
05	257970	2	0.68	0.45	11	266476	2	0.76	0.40
05	257969	3	0.72	0.42	11	268812	3	0.61	0.34
06	266456	1	0.71	0.61	12	266450	1	0.75	0.51
06	266458	2	0.44	0.25	12	266452	2	0.45	0.33
06	266460	3	0.41	0.24	12	266454	3	0.36	0.16
07	266884	1	0.75	0.63	13	266439	1	0.88	0.50
07	266886	2	0.79	0.39	13	266441	2	0.65	0.47
07	266888	3	0.69	0.37	13	266443	3	0.56	0.24
08	257956	1	0.83	0.54	14	266462	1	0.85	0.54
08	257960	2	0.71	0.42	14	266464	2	0.56	0.24
08	257958	3	0.52	0.29	14	266466	3	0.51	0.27
09	257972	1	0.84	0.59	15	266480	1	0.81	0.57
09	257974	2	0.46	0.34	15	266482	2	0.62	0.39
09	257976	3	0.62	0.28	15	266484	3	0.62	0.35
10	266902	1	0.85	0.55	16	267164	1	0.83	0.54
10	266904	2	0.64	0.50	16	267166	2	0.74	0.35
10	266906	3	0.68	0.28	16	267168	3	0.49	0.39
11	266474	1	0.74	0.51					

Item	lten	ו	DValue	Item-total	-	ltem	lten	າ	DValue	Item-total
Set	Number	Task	P-Value	Correlation		Set	Number	Task	P-Value	Correlation
01	179089	1	0.75	0.58		09	256331	2	0.55	0.49
01	179095	2	0.80	0.55		09	256333	3	0.55	0.35
01	179099	3	0.61	0.44		10	266579	1	0.79	0.45
02	261859	1	0.72	0.49		10	266581	2	0.71	0.54
02	261861	2	0.70	0.39		10	266583	3	0.45	0.37
02	261863	3	0.53	0.36		11	265024	1	0.87	0.51
03	267245	1	0.84	0.51		11	265026	2	0.36	0.22
03	267247	2	0.53	0.44		11	265028	3	0.52	0.36
03	267249	3	0.29	0.13		12	265041	1	0.82	0.55
04	179019	1	0.81	0.60		12	265043	2	0.42	0.19
04	179043	2	0.76	0.52		12	265045	3	0.50	0.32
04	179045	3	0.37	0.16		13	261837	1	0.75	0.42
05	256353	1	0.75	0.54		13	261839	2	0.52	0.45
05	256355	2	0.71	0.59		13	261841	3	0.51	0.29
05	256357	3	0.47	0.34		14	265035	1	0.47	0.42
06	268827	1	0.71	0.58		14	265037	2	0.50	0.39
06	179140	2	0.67	0.55		14	265039	3	0.46	0.27
06	179141	3	0.75	0.35		15	261871	1	0.77	0.58
07	245946	1	0.75	0.57		15	261873	2	0.85	0.48
07	245948	2	0.22	0.17		15	261875	3	0.84	0.46
07	245950	3	0.64	0.40		16	265030	1	0.78	0.57
08	261865	1	0.74	0.58		16	265032	2	0.79	0.38
08	261867	2	0.82	0.53		16	265034	3	0.47	0.29
08	261869	3	0.89	0.33						
09	268831	1	0.81	0.53						

Table I-9. 2015–16 FSAA-PT: Classical Item Statistics—Mathematics Grade 3

Table I-10. 2015–16 FSAA-PT: Classical Item Statistics—Mathematics Grade 4

ltem	Iten	า	P-Value	ltem-total	ltem	lten	า	P-Value	ltem-total
Set	Number	Task	P-value	Correlation	Set	Number	Task	P-Value	Correlation
01	256383	1	0.66	0.46	06	256381	3	0.38	0.25
01	256385	2	0.57	0.42	07	223540	1	0.74	0.57
01	256387	3	0.56	0.42	07	223545	2	0.65	0.34
02	261883	1	0.84	0.54	07	223547	3	0.41	0.21
02	261885	2	0.57	0.41	08	268891	1	0.81	0.53
02	261886	3	0.49	0.28	08	223564	2	0.75	0.48
03	261905	1	0.73	0.49	08	223567	3	0.55	0.40
03	261907	2	0.59	0.39	09	151617	1	0.85	0.52
03	261909	3	0.75	0.36	09	151619	2	0.64	0.47
04	256372	1	0.87	0.47	09	151622	3	0.67	0.36
04	268415	2	0.59	0.36	10	245486	1	0.83	0.50
04	268417	3	0.45	0.37	10	245488	2	0.59	0.43
05	256365	1	0.85	0.51	10	245489	3	0.31	0.20
05	256367	2	0.51	0.40	11	265051	1	0.87	0.48
05	268895	3	0.43	0.32	11	265053	2	0.86	0.43
06	256377	1	0.63	0.47	11	265055	3	0.55	0.33
06	256379	2	0.45	0.14					continued

Item	lten	า	D. Valua	Item-total	ltem	lten	ו	D Value	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
12	265068	1	0.75	0.53	14	265066	3	0.31	0.07
12	265070	2	0.62	0.40	15	265057	1	0.80	0.54
12	265072	3	0.36	0.29	15	265059	2	0.57	0.41
13	261899	1	0.82	0.51	15	265061	3	0.56	0.32
13	261901	2	0.42	0.14	16	256392	1	0.74	0.54
13	261903	3	0.21	0.15	16	256394	2	0.45	0.40
14	265062	1	0.49	0.36	16	256396	3	0.41	0.31
14	265064	2	0.61	0.56					

Table I-11. 2015–16 FSAA-PT: Classical Item Statistics—Mathematics Grade 5

Item	lten	า	P-Value	Item-total	Item	lten	ו	P-Value	Item-total
Set	Number	Task	P-value	Correlation	Set	Number	Task	P-value	Correlation
01	256498	1	0.69	0.38	09	256508	3	0.86	0.25
01	256500	2	0.65	0.22	10	266564	1	0.83	0.49
01	256502	3	0.44	0.27	10	266566	2	0.72	0.44
02	262530	1	0.67	0.51	10	266568	3	0.58	0.31
02	262533	2	0.40	0.25	11	265243	1	0.52	0.43
02	262535	3	0.57	0.43	11	265245	2	0.63	0.42
03	262565	1	0.82	0.51	11	265247	3	0.73	0.48
03	262567	2	0.67	0.46	12	265194	1	0.82	0.47
03	262569	3	0.57	0.35	12	265196	2	0.53	0.47
04	256466	1	0.78	0.57	12	265198	3	0.33	0.06
04	256468	2	0.39	0.32	13	265233	1	0.87	0.43
04	256470	3	0.62	0.45	13	265235	2	0.59	0.42
05	262542	1	0.84	0.50	13	265236	3	0.68	0.18
05	262544	2	0.70	0.46	14	256492	1	0.77	0.56
05	262546	3	0.37	0.28	14	256494	2	0.60	0.42
06	268965	1	0.75	0.50	14	256496	3	0.46	0.27
06	256473	2	0.67	0.47	15	265238	1	0.79	0.55
06	256474	3	0.32	0.14	15	265240	2	0.81	0.45
07	262553	1	0.82	0.53	15	265242	3	0.40	0.14
07	262555	2	0.43	0.24	16	265200	1	0.77	0.53
07	262557	3	0.55	0.07	16	265215	2	0.56	0.42
08	256480	1	0.76	0.51	16	265231	3	0.32	0.07
08	268418	2	0.64	0.35					
08	256484	3	0.43	0.29					
09	256504	1	0.73	0.52					
09	256506	2	0.29	0.38					

ltem	lterr	ו	DValue	Item-total	Item	lten	า	D Valua	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	256526	1	0.69	0.46	09	265389	2	0.71	0.50
01	256528	2	0.54	0.39	09	265391	3	0.39	0.30
01	256530	3	0.63	0.24	10	265375	1	0.80	0.56
02	267260	1	0.72	0.54	10	265377	2	0.65	0.48
02	267262	2	0.59	0.38	10	265379	3	0.43	0.13
02	267263	3	0.62	0.31	11	265361	1	0.68	0.55
03	262594	1	0.81	0.54	11	265363	2	0.59	0.37
03	262596	2	0.83	0.48	11	265365	3	0.54	0.39
03	262598	3	0.66	0.43	12	265381	1	0.86	0.49
04	262577	1	0.63	0.50	12	265383	2	0.76	0.33
04	262579	2	0.78	0.57	12	265385	3	0.75	0.32
04	262581	3	0.79	0.31	13	265403	1	0.79	0.52
05	262611	1	0.85	0.51	13	265405	2	0.48	0.33
05	262613	2	0.83	0.52	13	265407	3	0.54	0.37
05	262615	3	0.68	0.42	14	265392	1	0.78	0.53
06	256538	1	0.49	0.42	14	265394	2	0.77	0.50
06	256540	2	0.80	0.54	14	265396	3	0.39	0.31
06	256542	3	0.66	0.45	15	265366	1	0.69	0.54
07	262571	1	0.72	0.59	15	265368	2	0.63	0.39
07	262573	2	0.38	0.34	15	265370	3	0.56	0.33
07	262575	3	0.41	0.39	16	265397	1	0.72	0.50
08	265371	1	0.85	0.45	16	265399	2	0.64	0.50
08	265373	2	0.49	0.31	16	265401	3	0.75	0.46
08	265374	3	0.47	0.43					
09	265387	1	0.68	0.55					

 Table I-12. 2015–16 FSAA-PT: Classical Item Statistics—Mathematics Grade 6

Table I-13. 2015–16 FSAA-PT: Classical Item Statistics—Mathematics Grade 7

ltem	lten	ו	P-Value	Item-total	Item	lten	ו	P-Value	ltem-total
Set	Number	Task	P-value	Correlation	Set	Number	Task	P-value	Correlation
01	262858	1	0.57	0.41	06	257346	3	0.34	0.22
01	262860	2	0.69	0.51	07	266622	1	0.88	0.39
01	262862	3	0.72	0.35	07	266624	2	0.76	0.43
02	266629	1	0.90	0.41	07	268745	3	0.65	0.44
02	266631	2	0.73	0.47	08	265676	1	0.82	0.47
02	266632	3	0.65	0.39	08	265678	2	0.60	0.30
03	180162	1	0.75	0.49	08	265680	3	0.43	0.33
03	268453	2	0.74	0.38	09	245396	1	0.87	0.44
03	180168	3	0.57	0.40	09	245403	2	0.51	0.44
04	257325	1	0.73	0.40	09	245405	3	0.43	0.26
04	257327	2	0.51	0.37	10	262864	1	0.65	0.45
04	257329	3	0.43	0.31	10	268960	2	0.62	0.38
05	244055	1	0.93	0.34	10	262868	3	0.71	0.43
05	244057	2	0.29	0.32	11	265654	1	0.84	0.45
05	244059	3	0.69	0.45	11	265656	2	0.41	0.37
06	257342	1	0.71	0.49	11	265658	3	0.57	0.36
06	257344	2	0.63	0.47					continue

ltem	lterr	ו	D.Value	ltem-total	ltem	lten	ו	D Value	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
12	265671	1	0.76	0.53	14	265670	3	0.34	0.11
12	265673	2	0.71	0.39	15	265660	1	0.68	0.46
12	265675	3	0.25	0.12	15	265662	2	0.44	0.39
13	265688	1	0.90	0.43	15	265664	3	0.68	0.26
13	265690	2	0.61	0.30	16	265682	1	0.59	0.31
13	265692	3	0.55	0.22	16	265684	2	0.61	0.41
14	265666	1	0.72	0.54	16	265686	3	0.33	0.17
14	265668	2	0.73	0.44					

Table I-14. 2015–16 FSAA-PT: Classical Item Statistics—Mathematics Grade 8

Item	lten	า	P-Value	ltem-total	Item	lten	ו	P-Value	ltem-total
Set	Number	Task	P-value	Correlation	Set	Number	Task	P-value	Correlation
01	262890	1	0.68	0.42	09	265722	3	0.69	0.41
01	268860	2	0.62	0.44	10	262902	1	0.86	0.51
01	262894	3	0.70	0.42	10	262904	2	0.76	0.52
02	179076	1	0.88	0.50	10	262906	3	0.79	0.40
02	179079	2	0.73	0.19	11	265730	1	0.83	0.52
02	179081	3	0.45	0.28	11	265732	2	0.75	0.51
03	257357	1	0.65	0.51	11	267271	3	0.64	0.37
03	257359	2	0.85	0.53	12	265708	1	0.84	0.57
03	257360	3	0.78	0.35	12	265710	2	0.72	0.46
04	267252	1	0.87	0.53	12	265711	3	0.82	0.33
04	267254	2	0.72	0.40	13	265742	1	0.67	0.46
04	267256	3	0.45	0.35	13	265744	2	0.65	0.40
05	262914	1	0.67	0.47	13	265746	3	0.49	0.22
05	262916	2	0.71	0.49	14	265724	1	0.84	0.62
05	262918	3	0.58	0.36	14	265726	2	0.67	0.44
06	266571	1	0.83	0.56	14	265728	3	0.37	0.08
06	266573	2	0.80	0.35	15	265712	1	0.86	0.58
06	266575	3	0.75	0.37	15	265714	2	0.48	0.33
07	267236	1	0.90	0.52	15	265716	3	0.61	0.31
07	267238	2	0.83	0.42	16	265736	1	0.79	0.59
07	267240	3	0.59	0.35	16	265738	2	0.82	0.50
08	268854	1	0.71	0.52	16	267273	3	0.78	0.34
08	262928	2	0.72	0.35					
08	262930	3	0.58	0.41					
09	265718	1	0.80	0.59					
09	265720	2	0.66	0.42					

Item	lterr	ו	DValue	Item-total	Item	lten	ו	DValue	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	243643	1	0.68	0.57	09	220676	2	0.79	0.47
01	243651	2	0.58	0.46	09	220687	3	0.75	0.52
01	243654	3	0.59	0.25	10	256179	1	0.78	0.58
02	220693	1	0.85	0.53	10	256182	2	0.47	0.29
02	268967	2	0.77	0.61	10	256184	3	0.74	0.58
02	220702	3	0.87	0.46	11	220769	1	0.87	0.52
03	262240	1	0.74	0.63	11	220771	2	0.85	0.57
03	262241	2	0.79	0.55	11	220776	3	0.59	0.36
03	268858	3	0.52	0.29	12	243737	1	0.85	0.55
04	268841	1	0.85	0.54	12	243742	2	0.86	0.61
04	268969	2	0.81	0.57	12	243745	3	0.71	0.51
04	268128	3	0.77	0.60	13	256037	1	0.80	0.62
05	262252	1	0.83	0.60	13	256039	2	0.72	0.56
05	262256	2	0.91	0.52	13	256041	3	0.34	0.20
05	262257	3	0.66	0.50	14	262258	1	0.73	0.53
06	243705	1	0.86	0.60	14	262259	2	0.82	0.57
06	243708	2	0.74	0.44	14	262262	3	0.70	0.51
06	243712	3	0.49	0.42	15	243754	1	0.87	0.55
07	256232	1	0.73	0.61	15	243759	2	0.76	0.64
07	256234	2	0.76	0.57	15	243761	3	0.64	0.48
07	256236	3	0.52	0.32	16	256043	1	0.87	0.54
08	268971	1	0.80	0.61	16	256045	2	0.42	0.10
08	220632	2	0.85	0.58	16	256047	3	0.66	0.59
08	268843	3	0.59	0.36					
09	220671	1	0.85	0.53					

 Table I-15. 2015–16 FSAA-PT: Classical Item Statistics—Science Grade 5

Table I-16. 2015–16 FSAA-PT: Classical Item Statistics—Science Grade 8

Item	o /		D Value	ltem-total	Item	lten	า	D Volue	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlatior
01	222907	1	0.89	0.49	06	245082	3	0.62	0.33
01	222909	2	0.74	0.52	07	268874	1	0.70	0.48
01	222911	3	0.46	0.22	07	262656	2	0.82	0.55
02	245073	1	0.74	0.58	07	268978	3	0.61	0.40
02	245075	2	0.69	0.38	08	256716	1	0.68	0.52
02	245077	3	0.48	0.30	08	256720	2	0.85	0.52
03	256698	1	0.67	0.59	08	256722	3	0.68	0.23
03	256702	2	0.67	0.37	09	245056	1	0.88	0.50
03	268976	3	0.82	0.53	09	245058	2	0.58	0.44
04	222934	1	0.80	0.55	09	245060	3	0.60	0.16
04	222940	2	0.56	0.45	10	262672	1	0.61	0.42
04	222947	3	0.40	0.25	10	262674	2	0.59	0.50
05	268870	1	0.73	0.64	10	262676	3	0.30	0.21
05	262650	2	0.93	0.43	11	268833	1	0.82	0.59
05	268872	3	0.35	0.25	11	222902	2	0.49	0.35
06	245078	1	0.90	0.49	11	268876	3	0.70	0.37
06	245080	2	0.73	0.53					continu

ltem	lten	า	P-Value	ltem-total	Item	lten	า	P-Value	ltem-total
Set	Number	Task	F-value	Correlation	Set	Number	Task	P-value	Correlation
12	256736	1	0.86	0.54	14	262664	3	0.48	0.25
12	256738	2	0.51	0.21	15	222968	1	0.84	0.56
12	256740	3	0.53	0.23	15	222972	2	0.75	0.42
13	256756	1	0.84	0.57	15	222977	3	0.61	0.26
13	268878	2	0.59	0.42	16	245062	1	0.79	0.58
13	256763	3	0.45	0.08	16	245064	2	0.79	0.54
14	262660	1	0.84	0.58	16	268880	3	0.88	0.35
14	262662	2	0.72	0.50					

Table I-17. 2015–16 FSAA-PT: Classical Item Statistics—Algebra 1 Grade HS

ltem			DValua	Item-total	Item	lten	า	DValue	ltem-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	265831	1	0.79	0.50	09	265913	3	0.35	0.28
01	265834	2	0.37	0.19	10	265839	1	0.80	0.50
01	265837	3	0.44	0.27	10	265841	2	0.32	0.20
02	266654	1	0.75	0.54	10	265843	3	0.43	0.19
02	266656	2	0.72	0.37	11	265934	1	0.84	0.49
02	266658	3	0.69	0.35	11	265936	2	0.63	0.52
03	265880	1	0.78	0.48	11	265938	3	0.61	0.27
03	265885	2	0.49	0.17	12	268664	1	0.74	0.59
03	265890	3	0.52	0.29	12	263283	2	0.68	0.36
04	263287	1	0.71	0.57	12	263285	3	0.59	0.30
04	263289	2	0.42	0.34	13	265895	1	0.85	0.48
04	263291	3	0.65	0.36	13	265900	2	0.53	0.41
05	266660	1	0.81	0.52	13	265904	3	0.43	0.24
05	266662	2	0.55	0.41	14	257693	1	0.80	0.48
05	266664	3	0.50	0.32	14	257696	2	0.63	0.41
06	265926	1	0.78	0.51	14	257697	3	0.54	0.31
06	265928	2	0.61	0.48	15	266700	1	0.75	0.53
06	265931	3	0.48	0.19	15	266702	2	0.67	0.42
07	265857	1	0.76	0.39	15	266703	3	0.77	0.30
07	265859	2	0.60	0.54	16	266683	1	0.81	0.42
07	265860	3	0.50	0.30	16	266685	2	0.57	0.48
08	257723	1	0.65	0.57	16	266686	3	0.73	0.48
08	257725	2	0.66	0.45					
08	257726	3	0.68	0.32					
09	265906	1	0.73	0.54					
09	265910	2	0.66	0.44					

Item	lten	า	D \/_/	Item-total	Item	lten			Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	245928	1	0.90	0.52	09	265546	2	0.69	0.44
01	246478	2	0.51	0.41	09	265548	3	0.58	0.37
01	245932	3	0.59	0.41	10	266984	1	0.88	0.54
02	183669	1	0.90	0.52	10	266986	2	0.84	0.59
02	183674	2	0.31	0.03	10	266988	3	0.55	0.36
02	183679	3	0.17	0.30	11	265594	1	0.92	0.49
03	245877	1	0.82	0.61	11	265596	2	0.72	0.53
03	245881	2	0.59	0.33	11	265598	3	0.75	0.39
03	245882	3	0.66	0.48	12	267008	1	0.80	0.55
04	245922	1	0.91	0.53	12	267010	2	0.77	0.55
04	245924	2	0.94	0.41	12	267012	3	0.56	0.34
04	245926	3	0.45	0.20	13	267043	1	0.79	0.60
05	224615	1	0.91	0.51	13	267045	2	0.69	0.44
05	268862	2	0.76	0.52	13	267047	3	0.82	0.27
05	224621	3	0.82	0.47	14	266996	1	0.92	0.49
06	224592	1	0.90	0.50	14	266998	2	0.54	0.34
06	224599	2	0.90	0.41	14	267000	3	0.66	0.37
06	224606	3	0.65	0.52	15	267026	1	0.89	0.53
07	268883	1	0.74	0.63	15	267028	2	0.58	0.27
07	268885	2	0.74	0.14	15	267030	3	0.50	0.34
07	263511	3	0.51	0.39	16	267032	1	0.93	0.43
08	266990	1	0.87	0.57	16	267034	2	0.85	0.47
08	266992	2	0.73	0.49	16	267036	3	0.57	0.50
08	266994	3	0.69	0.40					
09	265544	1	0.88	0.54					

 Table I-18. 2015–16 FSAA-PT: Classical Item Statistics—Biology Grade HS

Table I-19. 2015–16 FSAA-PT: Classical Item Statistics—Geometry Grade HS

Item	lten	า	P-Value	ltem-total	Item	lten	า	P-Value	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	P-Value	Correlation
01	266775	1	0.68	0.46	06	266601	3	0.69	0.48
01	266779	2	0.73	0.50	07	257669	1	0.88	0.53
01	266787	3	0.77	0.43	07	257671	2	0.77	0.47
02	266804	1	0.80	0.52	07	257673	3	0.40	0.22
02	266806	2	0.72	0.58	08	266585	1	0.81	0.47
02	266808	3	0.76	0.37	08	266587	2	0.48	0.25
03	266761	1	0.87	0.56	08	266589	3	0.47	0.19
03	266764	2	0.59	0.45	09	266544	1	0.86	0.59
03	266769	3	0.60	0.34	09	266546	2	0.71	0.42
04	257663	1	0.78	0.55	09	266548	3	0.62	0.28
04	257665	2	0.79	0.58	10	266737	1	0.87	0.52
04	257667	3	0.30	0.11	10	266739	2	0.90	0.40
05	266556	1	0.89	0.56	10	266741	3	0.41	0.28
05	266558	2	0.93	0.40	11	257717	1	0.92	0.47
05	266560	3	0.93	0.25	11	257719	2	0.52	0.40
06	266597	1	0.84	0.54	11	257721	3	0.75	0.48
06	266599	2	0.63	0.28					continued

ltem	lterr	ז	P-Value	Item-total	Item	lten	า	P-Value	Item-total
Set	Number	Task	P-Value	Correlation	Set	Number	Task	F-value	Correlation
12	257711	1	0.77	0.54	14	266530	3	0.50	0.21
12	257713	2	0.60	0.38	15	266795	1	0.89	0.55
12	257715	3	0.65	0.34	15	266799	2	0.94	0.43
13	266810	1	0.85	0.58	15	266801	3	0.76	0.26
13	266812	2	0.63	0.51	16	266732	1	0.41	0.21
13	266814	3	0.64	0.34	16	266733	2	0.85	0.49
14	266526	1	0.81	0.46	16	266735	3	0.69	0.40
14	266528	2	0.64	0.51					

#### **APPENDIX J—SUMMARY CLASSICAL STATISTICS**

ELA										
	Tuno	Number	p-	Value	Discr	rimination				
Grade	Туре	of Items	Mean	Standard Deviation	Mean	Standard Deviation				
	1	16	0.68	0.15	0.48	0.08				
	2	16	0.55	0.14	0.39	0.12				
3	3	16	0.56	0.12	0.28	0.07				
	All	48	0.59	0.14	0.38	0.12				
	1	16	0.75	0.13	0.50	0.07				
	2	16	0.65	0.15	0.40	0.10				
	3	16	0.58	0.20	0.30	0.08				
4	WRI-MC	30	0.68	0.12	0.49	0.09				
	WRI-WP	24	0.56	0.07	0.49	0.06				
	All	102	0.64	0.15	0.45	0.11				
	1	16	0.80	0.06	0.54	0.04				
	2	16	0.64	0.13	0.40	0.11				
	3	16	0.57	0.14	0.31	0.08				
5	WRI-MC	30	0.71	0.12	0.50	0.07				
	WRI-WP	24	0.58	0.04	0.53	0.04				
	All	102	0.66	0.13	0.47	0.11				
	1	16	0.77	0.09	0.53	0.04				
	2	16	0.63	0.08	0.40	0.09				
	3	16	0.54	0.15	0.31	0.11				
6	WRI-MC	30	0.69	0.11	0.49	0.07				
	WRI-WP	24	0.58	0.06	0.52	0.06				
	All	102	0.64	0.13	0.46	0.11				
	1	16	0.81	0.08	0.53	0.04				
7	2	16	0.63	0.13	0.43	0.11				
						continued				

Table J-1. 2015–16 FSAA-PT: Summary Classical Item Statistics— ELA

	Туре	Number	p-	Value	Discr	imination
Grade	Туре	of Items	Mean	Standard Deviation	Mean	Standard Deviation
	3	16	0.62	0.14	0.32	0.08
	WRI-MC	30	0.69	0.14	0.48	0.12
7	WRI-WP	24	0.56	0.05	0.51	0.04
	All	102	0.66	0.14	0.46	0.11
	1	16	0.77	0.10	0.53	0.07
	2	16	0.66	0.15	0.41	0.09
	3	16	0.55	0.12	0.32	0.08
8	WRI-MC	30	0.68	0.14	0.48	0.10
	WRI-WP	24	0.56	0.05	0.57	0.04
	All	102	0.64	0.14	0.47	0.11
	1	16	0.80	0.08	0.53	0.05
	2	16	0.60	0.14	0.38	0.08
	3	16	0.56	0.14	0.27	0.12
9	WRI-MC	30	0.67	0.15	0.45	0.12
	WRI-WP	24	0.54	0.06	0.50	0.05
	All	102	0.63	0.15	0.44	0.13
	1	16	0.80	0.06	0.55	0.04
	2	16	0.65	0.16	0.38	0.10
	3	16	0.58	0.12	0.31	0.08
10	WRI-MC	30	0.70	0.14	0.48	0.10
	WRI-WP	24	0.53	0.06	0.49	0.09
	All	102	0.65	0.15	0.45	0.11

	Туре	Number	p-	Value	Discr	imination
Grade	туре	of Items	Mean	Standard Deviation	Mean	Standard Deviation
	1	16	0.76	0.09	0.53	0.06
	2	16	0.62	0.18	0.43	0.13
3	3	16	0.55	0.16	0.33	0.09
	All	48	0.64	0.17	0.43	0.13
	1	16	0.77	0.10	0.50	0.05
	2	16	0.59	0.11	0.39	0.11
4	3	16	0.46	0.14	0.29	0.09
	All	48	0.61	0.17	0.39	0.12
	1	16	0.76	0.08	0.50	0.05
	2	16	0.58	0.14	0.39	0.09
5	3	16	0.51	0.16	0.25	0.13
	All	48	0.62	0.17	0.38	0.14
	1	16	0.74	0.10	0.52	0.04
	2	16	0.65	0.14	0.43	0.09
6	3	16	0.58	0.13	0.35	0.09
	All	48	0.66	0.14	0.43	0.10
	1	16	0.77	0.11	0.44	0.06
	2	16	0.60	0.14	0.40	0.06
7	3	16	0.52	0.16	0.30	0.11
	All	48	0.63	0.17	0.38	0.10
	1	16	0.79	0.09	0.53	0.05
	2	16	0.72	0.09	0.42	0.09
8	3	16	0.63	0.14	0.33	0.09
	All	48	0.71	0.13	0.43	0.11

# Table J-2. 2015–16 FSAA-PT: Summary Classical Item Statistics— Mathematics

	Туре	Number	p-	Value	Discr	imination
Grade	туре	of Items	Mean	Standard Deviation	Mean	Standard Deviation
	1	16	0.81	0.06	0.57	0.04
	2	16	0.74	0.14	0.51	0.14
5	3	16	0.63	0.13	0.43	0.12
	All	48	0.73	0.13	0.50	0.12
	1	16	0.79	0.09	0.54	0.06
	2	16	0.69	0.13	0.45	0.09
8	3	16	0.56	0.16	0.28	0.10
	All	48	0.68	0.16	0.42	0.14

Table J-3. 2015–16 FSAA-PT: Summary Classical Item Statistics— Science

Table J-4. 2015–16 FSAA-PT: Summary Classical Item Statistics— Algebra 1

	Type	Number	p-	Value	Discrimination		
Grade	Туре	of Items	Mean	Standard Deviation	Mean	Standard Deviation	
	1	16	0.77	0.05	0.51	0.05	
	2	16	0.57	0.12	0.39	0.11	
HS	3	16	0.56	0.12	0.30	0.07	
	All	48	0.63	0.14	0.40	0.12	

Table J-5. 2015–16 FSAA-PT: Summary Classical Item Statistics— Biology

	Туре	Number	p-	Value	Discrimination		
Grade	туре	of Items	Mean	Standard Deviation	Mean	Standard Deviation	
	1	16	0.87	0.06	0.54	0.05	
	2	16	0.70	0.16	0.40	0.15	
HS	3	16	0.60	0.16	0.38	0.08	
	All	48	0.72	0.17	0.44	0.12	

		G	eometry				
	Tupo	Number	p-	Value	Discrimination		
Grade	Туре	of Items	Mean	Standard Deviation	Mean	Standard Deviation	
	1	16	0.81	0.12	0.51	0.09	
	2	16	0.71	0.14	0.44	0.09	
HS	3	16	0.62	0.17	0.31	0.11	
	All	48	0.71	0.16	0.42	0.12	

Table J-6. 2015–16 FSAA-PT: Summary Classical Item Statistics— Geometry

#### **APPENDIX K—DIFFERENTIAL ITEM FUNCTIONING RESULTS**

	Gro	oup	Item	Number		Number "Low	"		Number "Higl	h"
Grade	Reference	Focal	Туре	of Items	Total	Favorii	ng	Total	Favori	ng
	Relefence	1 0001	туре	or norms	TOLAI	Reference	Focal	TOLAI	Reference	Focal
			1	16	1	0	1	0	0	0
	Male	Female	2	16	3	2	1	0	0	0
			3	14	2	2	0	0	0	0
			1	16	1	1	0	0	0	0
		Black	2	16	2	0	2	0	0	0
	White –		3	14	2	2	0	2	1	1
			1	16	1	0	1	0	0	0
3		Hispanic	2	16	2	0	2	0	0	0
			3	14	4	2	2	1	1	0
	Non Limited English	Limited English Proficient	1	16	1	0	1	0	0	0
			2	15	1	1	0	0	0	0
	Proficient	Tonoicitt	3	11	3	3	0	1	1	0
	Not Economically Disadvantaged	Economically	1	16	0	0	0	0	0	0
		Disadvantaged	2	16	2	1	1	0	0	0
		Disadvariaged	3	15	0	0	0	0	0	0
	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
			1	16	0	0	0	0	0	0
		Black	2	16	2	0	2	0	0	0
	White		3	16	2	0	2	0	0	0
	WINC		1	16	1	1	0	0	0	0
4		Hispanic	2	16	1	1	0	0	0	0
			3	16	4	2	2	0	0	0
	Non Limited	Limited English	1	16	1	1	0	0	0	0
	English	Limited English Proficient	2	16	4	3	1	0	0	0
	Proficient	ronoiont	3	12	4	1	3	0	0	0
	Not Economically	Economically	1	16	0	0	0	0	0	0
	Disadvantaged		2	16	0	0	0	0	0	0
	Disadvantaged	Disadvantaged	3	16	1	0	1	0	0	0

### Table K-1. 2015–16 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—ELA

Appendix K—Differential Item Functioning Results

Gro	oup	140	Number		<u>Number "L</u> ow	/"		<u>Number "H</u> ig	h"
Deference	Facal			Total	Favorii	ng	Total	Favor	ing
Relefence	rocai	турс	UI ILEITIS	Totai	Reference	Focal	TOLAT	Reference	Focal
		1	16	0	0	0	0	0	0
Male	Female	2	16	1	1	0	0	0	0
		3	16	0	0	0	0	0	0
		1	16	0	0	0	0	0	0
	Black	2	16	2	0	2	0	0	0
W/bito		3	16	1	1	0	1	1	0
		1	16	0	0	0	0	0	0
	Hispanic	2	16	3	1	2	0	0	0
		3	16	2	2	0	1	1	0
English	Limited English	1	16	0	0	0	0	0	0
		2	16	3	1	2	0	0	0
Proficient	Troncient	3	15	2	2	0	1	0	1
Not Economically Disadvantaged	Economically Disadvantaged	1	16	0	0	0	0	0	0
		2	16	0	0	0	0	0	0
	Disauvantageu	3	16	1	1	0	0	0	0
		1	16	0	0	0	0	0	0
Male	Female	2	16	3	2	1	0	0	0
		3	16	1	1	0	0	0	0
	Black	1	16	0	0	0	0	0	0
		2	16	1	0	1	0	0	0
\//hito		3	16	2	0	2	0	0	0
WING		1	16	1	0	1	0	0	0
	Hispanic	2	16	2	1	1	0	0	0
		3	16	4	3	1	0	0	0
Non Limited	Limited English	1	16	1	0	1	0	0	0
English		2	16	3	1	2	0	0	0
Proficient	Tronoient	3	13	3	1	2	1	1	0
	Economically	1	16	0	0	0	0	0	0
		2	16	0	0	0	0	0	0
Disadvantaged	Distavantageu	3	16	0	0	0	0	0	0
		1	16	0	0	0	0	0	0
Male	Female	2	16	1	0	1	0	0	0
maio		3	16	1	0	1	0	0	0
	Reference         Male         White         White         Non Limited         English         Proficient         Not Economically         Disadvantaged         Male         White         Non Limited         English         Proficient         Non Limited         English         Proficient         Non Limited         English         Proficient	MaleFemaleMaleBlackWhiteBlackHispanicHispanicNon Limited English ProficientLimited English ProficientNot Economically DisadvantagedEconomically DisadvantagedMaleFemaleMaleBlackMaleHispanicMaleEconomically DisadvantagedMaleEconomically 	ReferenceFocalItem TypeMaleFemale1MaleFemale2MaleFemale2WhiteBlack2White11Hispanic12Non Limited English Proficient12Not Economically Disadvantaged12MaleFemale2MaleFemale2Not Economically Disadvantaged1MaleFemale2MaleLimited English Proficient1MaleFemale2Not Limited English Proficient1MaleLimited English Proficient1Not Economically Disadvantaged11AMaleEconomically Disadvantaged1MaleFemale2MaleFemale1MaleFemale1MaleFemale1MaleFemale1MaleFemale1MaleFemale1MaleFemale1MaleFemale1MaleFemale1MaleTopologically Topologically1MaleFemale1	Reference         Focal         Item         Number           Male         Focal         Type         of Items           Male         Female         1         16           Male         Female         2         16           Male         Female         2         16           Male         Female         2         16           Male         Black         2         16           White         Black         2         16           Male         Limited English         1         16           Proficient         1         16         16           Non Limited         Limited English         1         16           Proficient         Economically         1         16           Male         Female         1         16           Male         Female         1         16           Male         Female         2         16           Male         Female         1         16           Male         Limited English         1         16           Male         Limited English         1         16           Male         Limited English         1         1	Reference         Focal         Type         Number of Items         Total           Male         Female         1         16         0           Male         Female         2         16         1           Male         Black         2         16         2           Male         Hispanic         1         16         0           Male         Limited English Proficient         1         16         0           Not Economically Disadvantaged         1         16         0         1           Male         Female         1         16         0           Male         Female         2         16         3           Male         Female         1         16         0           Male         Economically Proficient         1         16         1           Male         Limited English Proficient         1         16	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Reference         Focal         Item         Number of Items         Favoring           Male         Focal         7ype         of Items         Total         Reference         Focal           Male         Female         2         16         1         1         0         0           Male         Female         2         16         1         1         0         0         0           White         Black         2         16         2         0         2         0         2           White         Black         2         16         3         1         2         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""><td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td></td<>	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

Grade         Reference         Focal         Item Type         Number of Items         Total         Favoring Reference         Total           White         1         16         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< th=""><th colspan="2">Number "High"</th></t<>	Number "High"	
White         Black         1         16         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <th0< th=""><th>, Fav</th><th>oring</th></th0<>	, Fav	oring
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Referenc	e Focal
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0	0
$7 \frac{1}{16} \frac{16}{2} \frac{0}{2} \frac{0}{2} \frac{0}{2} \frac{0}{3} \frac{16}{2} \frac{2}{2} \frac{0}{2} \frac{2}{0} \frac{2}{2} \frac{0}{3} \frac{16}{2} \frac{2}{2} \frac{0}{2} \frac{2}{0} \frac{2}{2} \frac{0}{2} \frac{16}{3} \frac{1}{2} \frac{16}{3} \frac{1}{3} \frac{1}{2} \frac{2}{0} \frac{16}{3} \frac{1}{3} \frac{1}{2} \frac{2}{0} \frac{16}{3} \frac{1}{3} \frac{1}{2} \frac{2}{0} \frac{16}{3} \frac{1}{3} \frac{1}{2} \frac{2}{0} \frac{16}{3} \frac{1}{3} \frac{1}{2} \frac{16}{0} \frac{1}{3} \frac{1}{1} \frac{16}{0} \frac{0}{0} \frac{0}{0} \frac{0}{0} \frac{0}{0} \frac{0}{0} \frac{1}{0} \frac{1}{3} \frac{16}{3} \frac{1}{1} \frac{1}{1} \frac{10}{0} \frac{0}{0} \frac{1}{3} \frac{16}{3} \frac{1}{1} \frac{1}{0} \frac{0}{0} 0$	0	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0	0
Non Limited English Proficient         Limited English Proficient         1         16         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	0	0
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Not Economically Disadvantaged         Economically Disadvantaged         2         16         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	0	0
Disadvantaged         Disadvantaged         2         16         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td>0</td> <td>0</td>	0	0
Male         Female         2         16         1         1         0         0	0	0
Male         Female         2         16         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	0	0
3 16 3 2 1 0	0	0
	0	0
1 16 0 0 0	0	0
	0	0
Black 2 16 2 0 2 0	0	0
White <u>3 16 3 2 1 0</u>	0	0
1 16 0 0 0 0	0	0
8 Hispanic 2 16 1 0 1 0	0	0
3 16 5 4 1 0	0	0
Non Limited Limited English 1 16 1 0 1 0	0	0
English Proficient 2 14 5 3 2 0	0	0
Proficient 3 3 0 0 0 0	0	0
Not Economically Economically 1 16 0 0 0	0	0
Not Economically Economically 2 16 0 0 0 0 0 0	0	0
	0	0
1 16 0 0 0	0	0
Male Female 2 16 1 1 0 0	0	0
9 3 16 2 1 1 0	0	0
1 16 0 0 0 0	0	0
White Black 2 16 2 1 1 0	0	0
3 16 1 0 1 0	0	0
		continued

	Gro	oup				Number "Low	"		Number "Higi	h"
Grade	Reference	Food	ltem Type	Number of Items	Total	Favorii	ng	Total	Favori	ng
	Relefence	Focal	туре	UI ILEITIS	Total	Reference	Focal	Total	Reference           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0	Focal
			1	16	2	1	1	0	0	0
9	White	Hispanic	2	16	1	0	1	0	0	0
			3	16	1	0	1	0	0	0
	Non Limited	Limited English	1	16	2	0	2	1	1	0
	English	Limited English Proficient	2	10	5	2	3	0	0	0
9	Proficient	Troncient	1	16	0	0	0	0	0	0
9		Economically	2	16	0	0	0	0	0	0
	Not Economically Disadvantaged		3	16	1	1	0	0	0	0
	Disadvariaged	Disadvariaged	1	16	2	1	1	0	0	0
	Male Femal		1	16	0	0	0	0	0	0
		Female	2	16	0	0	0	0	0	0
			3	16	2	1	1	0	0	0
			1	16	0	0	0	0	0	0
		Black	2	16	2	1	1	0	0	0
	White		3	16	2	0	2	0	0	0
	WINE		1	16	0	0	0	0	0	0
10		Hispanic	2	16	0	0	0	0	0	0
			3	16	3	2	1	0	0	0
	Non Limited	Limited English	1	16	3	1	2	0	0	0
	English	Proficient	2	3	2	1	1	0	0	0
	Proficient	. Tonolon	1	16	0	0	0	0	0	0
	Not Economically	Economically	2	16	0	0	0	0	0	0
	Disadvantaged	Economically Disadvantaged	3	16	0	0	0	0	0	0
	Disas variagou	Dicad Vallagou	1	16	0	0	0	0	0	0

	Gro	oup	ltom	Number		Number "Low	/"		Number "Higl	า"
Grade	Deference	Facal	Item	Number of Items	Tatal	Favori	ng	Tatal	Favori	ng
	Reference	Focal	Туре	or nems	Total	Reference	Focal	Total	Reference	Focal
			1	16	0	0	0	0	0	0
	Male	Female	2	16	1	1	0	0	0	0
			3	15	3	3	0	0	0	0
			1	16	0	0	0	0	0	0
		Black	2	16	2	0	2	0	0	0
	White		3	15	3	1	2	0	0	0
	White		1	16	1	0	1	0	0	0
3		Hispanic	2	16	5	3	2	0	0	0
			3	15	3	1	2	2	1	1
	Non Limited English Proficient	Limited English	1	16	0	0	0	0	0	0
			2	16	2	1	1	0	0	0
	Proficient	Troncient	3	13	3	1	2	0	0	0
	Not Economically Disadvantaged	Economically	1	16	0	0	0	0	0	0
		Disadvantaged	2	16	0	0	0	0	0	0
		Disadvaritaged	3	16	0	0	0	0	0	0
			1	16	0	0	0	0	0	0
	Male	Female	2	16	0	0	0	0	0	0
			3	16	3	1	2	0	0	0
			1	16	0	0	0	0	0	0
		Black	2	16	0	0	0	0	0	0
	White		3	16	4	1	3	2	0	2
	vvnite		1	16	0	0	0	0	0	0
4		Hispanic	2	16	3	0	3	0	0	0
			3	16	5	2	3	1	0	1
	Non Limited		1	16	0	0	0	0	0	0
	English	Limited English	2	16	2	0	2	0	0	0
	Proficient	Proficient	3	13	3	2	1	0	0	0
			1	16	0	0	0	0	0	0
	Not Economically	Economically	2	16	0	0	0	0	0	0
	Disadvantaged	Disadvantaged	3	16	0	0	0	0	0	0
			~	. •	~	~	v	v		ontinu o

### Table K-2. 2015–16 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—Math

continued

	Gro	oup	lians	Numerica		Number "Low	/"		Number "Hig	h"
Grade	Deference	Focal	ltem Type	Number of Items	Total	Favorii	ng	Total	Favori	ing
	Reference	rocai	туре	or nems	Total	Reference	Focal	Total	Reference	Foca
			1	16	0	0	0	0	0	0
	Male	Female	2	16	0	0	0	0	0	0
			3	16	4	2	2	0	0	0
			1	16	1	0	1	0	0	0
		Black	2	16	3	0	3	0	0	0
	White		3	16	4	4	0	0	0	0
	vviile	Hispanic	1	16	1	0	1	0	0	0
5			2	16	1	0	1	0	0	0
			3	16	3	1	2	1	1	0
	Non Limited	Limited English Proficient	1	16	2	1	1	0	0	0
	English		2	16	1	1	0	0	0	0
	Proficient	Tronoicint	3	12	0	0	0	0	0	0
	Not Economically Disadvantaged	Economically	1	16	0	0	0	0	0	0
		Disadvantaged	2	16	0	0	0	0	0	0
		Disadvariaged	3	16	1	1	0	0	0	0
	Male		1	16	0	0	0	0	0	0
		Female	2	16	2	0	2	0	0	0
			3	16	3	3	0	0	0	0
		Black	1	16	1	1	0	0	0	0
			2	16	0	0	0	0	0	0
	White		3	16	3	1	2	0	0	0
	White		1	16	1	1	0	0	0	0
6		Hispanic	2	16	1	0	1	0	0	0
			3	16	3	1	2	1	1	0
	Non Limited	Limited English	1	16	1	1	0	0	0	0
	English	Proficient	2	16	2	1	1	0	0	0
	Proficient		3	9	1	1	0	1	0	1
	Not Economically	Economically	1	16	0	0	0	0	0	0
	Disadvantaged	Disadvantaged	2	16	0	0	0	0	0	0
			3	16	1	1	0	0	0	0
			1	16	0	0	0	0	0	0
7	Male	Female	2	16	1	1	0	0	0	0
			3	16	2	0	2	0	0	0

	Gro	oup				Number "Low	"		Number "Higl	'n"
Grade	Reference	Food	ltem Type	Number of Items	Total	Favorii	ng	Total	Favori	ng
7 — N N 8 W	Relefence	Focal	туре	UI ILEITIS	Total	Reference	Focal	TOTAL	Reference	Focal
			1	16	0	0	0	0	0	0
		Black	2	16	1	1	0	0	0	0
	White		3	16	2	1	1	1	0	1
			1	16	0	0	0	0	0	0
		Hispanic	2	16	2	1	1	0	0	0
7			3	16	3	2	1	0	0	0
'	Non Limited	Limited English	1	16	1	1	0	0	0	0
	English Proficient	Limited English Proficient	2	16	4	1	3	1	0	1
			3	6	3	0	3	0	0	0
	Not Economically Disadvantaged	Economically Disadvantaged	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	0	0	0	0	0	0
			1	16	0	0	0	0	0	0
	Male	Female	2	16	0	0	0	0	0	0
			3	16	1	1	0	0	0	0
			1	16	0	0	0	0	0	0
		Black	2	16	1	0	1	0	0	0
8	White		3	16	3	0	3	0	0	0
0	WINE		1	16	0	0	0	0	0	0
		Hispanic	2	16	1	0	1	0	0	0
			3	16	0	0	0	0	0	0
	Not Economically	Economically	1	16	4	2	2	0	0	0
	Disadvantaged	Disadvantaged	2	15	2	1	1	0	0	0
		Liouurunugou	3	7	0	0	0	0	0	0

	Gro	oup	ltom	Numahar		Number "Low	"		Number "High"		
Grade	Reference	Focal	ltem Type	Number of Items	Total	Favorii Reference	ng Focal	Total	Favorir         Reference         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	ng Focal	
			1	16	0	0	0	0	0	0	
	Male	Female	2	16	1	1	0	0	0	0	
			3	16	2	1	1	0	0	0	
			1	16	0	0	0	0	0	0	
		Black	2	16	0	0	0	0	0	0	
	White ——		3	16	1	1	0	0	0	0	
	WINE		1	16	0	0	0	0	0	0	
5		Hispanic	2	16	0	0	0	0	0	0	
			3	16	1	1	0	0	0	0	
	Non Limited English Proficient	Limited English	1	16	1	0	1	0	0	0	
		Proficient	2	16	1	1	0	0	0	0	
		Tronoient	3	15	2	2	0	0	0	0	
	Not Economically	Economically	1	16	0	0	0	0	0	0	
	Disadvantaged	Disadvantaged	2	16	0	0	0	0	Favoring           Reference         Favoring           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0	0	
	Diodavantagoa	Diodavantagoa	3	16	0	0	0	0		0	
			1	16	0	0	0	0	0	0	
	Male	Female	2	16	0	0	0	0	0	0	
			3	16	1	1	0	0	0	0	
			1	16	0	0	0	0	0	0	
		Black	2	16	1	0	1	0	0	0	
8	White		3	16	2	0	2	0	0	0	
U	· · · · · · · · · · · · · · · · · · ·		1	16	0	0	0	0	0	0	
		Hispanic	2	16	3	2	1	0	0	0	
			3	16	4	1	3	0		0	
	Not Economically	Economically	1	16	0	0	0	0		0	
	Disadvantaged	Disadvantaged	2	15	5	4	1	0		0	
	= .022 . 2	=	3	5	2	1	1	0	0	0	

# Table K-3. 2015–16 FSAA-PT: Number of Items Classified as "Low" or "High" DIFOverall and by Group Favored—Science

	Group				Number "Low"			Number "High"		
Grade	Reference	Focal	ltem Type	Number of Items	Total	Favoring		Total	Favoring	
					Total	Reference	Focal	Total	Reference	Focal
HS	Male	Female	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	1	0	1	0	0	0
	White	Black	1	16	1	0	1	0	0	0
			2	16	2	1	1	0	0	0
			3	16	3	0	3	0	0	0
		Hispanic	1	16	0	0	0	0	0	0
			2	16	3	2	1	0	0	0
			3	13	3	0	3	1	1	0
	Non Limited English Proficient	Limited English Proficient	1	16	0	0	0	0	0	0
			2	16	0	0	0	0	0	0
			3	16	0	0	0	0	0	0
	Not Economically Disadvantaged	Economically Disadvantaged	1	16	0	0	0	0	0	0
			2	16	1	1	0	0	0	0
			3	16	1	0	1	0	0	0

# Table K-4. 2015–16 FSAA-PT: Number of Items Classified as "Low" or "High" DIFOverall and by Group Favored—Algebra 1

### Table K-5. 2015–16 FSAA-PT: Number of Items Classified as "Low" or "High" DIFOverall and by Group Favored—Biology

Grade	Group		ltom	Number	Number "Low"				Number "High"		
	Reference	Focal	— Item Type	Number of Items	Total ·	Favoring		Total	Favoring		
			туре			Reference	Focal	Totar	Reference	Focal	
HS	Male	Female	1	16	0	0	0	0	0	0	
			2	16	2	2	0	0	0	0	
			3	16	1	0	1	0	0	0	
	White	Black	1	16	1	1	0	0	0	0	
			2	16	0	0	0	0	0	0	
		C							ontinued		
	Gro	oup		Number		Number "Low	"	Number "High"			
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Grade	Reference	Facal	ltem Type	Number - of Items	Total	Favorii	ng	Total	Favori	ng	
	Relefence	Focal	туре	UI ILEITIS	Total	Reference	Focal	Total	Reference	Focal	
	White	Black	3	16	0	0	0	0	0	0	
			1	16	0	0	0	0	0	0	
	White	Hispanic	2	16	1	0	1	0	0	0	
			3	16	6	1	5	1	1	0	
HS	Non Limited	Linsited English	1	16	0	0	0	0	0	0	
115	English	Limited English Proficient	2	16	0	0	0	0	0	0	
	Proficient	Troncient	3	16	0	0	0	0	0	0	
-		Foonomically	3	16	0	0	0	0	0	0	
	Not Economically Disadvantaged	Economically Disadvantaged	1	16	0	0	0	0	0	0	
	Disadvantaged	Disadvantageu	2	16	1	0	1	0	0	0	

Table K-6. 2015–16 FSAA-PT: Number of Items Classified as "Low" or "High" DIF Overall and by Group Favored—Geometry

	Gro	oup	11	N /		Number "Low	"		Number "Higi	h"
Grade	Deference	Facal	ltem Type	Number of Items	Total	Favorii	ng	Total	Favori	ng
	Reference	Focal	туре	UI ILEITIS	Totai	Reference	Focal	Total	Reference	Focal
			1	16	0	0	0	0	0	0
	Male	Female	2	15	1	1	0	0	0	0
			3	6	2	1	1	0	0	0
			1	16	1	0	1	0	0	0
		Black	2	15	3	2	1	0	0	0
	White		3	5	2	1	1	0	0	0
	WIIILE		1	16	4	3	1	0	0	0
HS		Hispanic	2	15	5	5	0	1	0	1
			3	3	0	0	0	0	0	0
	Non Limited	Linsited English	1	16	1	0	1	0	0	0
	English	Limited English Proficient	2	16	1	1	0	0	0	0
_	Proficient	Troncient	3	16	4	3	1	0	0	0
		Foonomically	1	16	0	0	0	0	0	0
	Not Economically Disadvantaged	Economically Disadvantaged	2	15	1	1	0	0	0	0
	Disadvantaged	Disadvantaged	3	6	2	1	1	0	0	0

# **APPENDIX L—IRT PARAMETERS**

Item	а	SE(a)	b	SE(b)	Item	а	SE(a)	b	SE(b)
Number	a	3E(a)	D	3E(D)	Number	a	3E(a)	D	3E(D)
266817	1.44044	0.07369	-1.38327	0.03799	221260	0.33996	0.03007	-0.40442	0.08937
268696	0.64538	0.03592	-0.4027	0.04661	221264	0.68477	0.05182	-0.51568	0.07168
266821	0.58879	0.04582	-0.43812	0.07704	266767	0.29629	0.02475	1.4431	0.13556
265893	1.22319	0.05399	-0.9948	0.03196	266771	0.77901	0.05468	0.15112	0.05834
265898	0.64104	0.0369	0.38775	0.0434	266773	0.33788	0.05351	1.00307	0.16328
265902	0.40531	0.04753	-0.37283	0.14151	265882	1.35931	0.05743	-0.85863	0.02718
266834	0.98993	0.04287	-0.79174	0.03357	265884	0.58938	0.0391	-0.40512	0.05983
266836	0.70477	0.04063	0.08719	0.04226	265887	0.54593	0.04497	1.02765	0.07198
266838	0.58062	0.05551	-0.44659	0.10756	265954	0.71362	0.03223	0.1377	0.0357
267318	0.50191	0.02763	0.08102	0.04778	265958	0.24724	0.04021	4.30987	0.60824
267320	0.65217	0.04471	0.04927	0.05644	265959	0.37233	0.07292	1.31052	0.24248
267322	0.55871	0.0564	0.96065	0.0843	265867	0.78062	0.03588	-0.71406	0.03927
262777	1.33793	0.05919	-1.01124	0.03016	265869	0.26409	0.03072	1.57511	0.17428
262779	1.27472	0.0585	-0.25476	0.02718	265871	0.27915	0.04517	1.04005	0.18291
262781	1.11629	0.07001	-0.03926	0.0403	265873	0.69659	0.03246	-0.3986	0.0381
266827	1.23477	0.05084	-0.72979	0.02737	265877	0.80473	0.04816	-0.40012	0.05198
266825	0.86952	0.04653	-0.01808	0.03679	265879	0.57035	0.049	0.77358	0.06613
266829	0.69858	0.05856	0.02811	0.06699	265962	0.78947	0.03451	-0.29014	0.03342
179293	1.20401	0.04877	-0.63601	0.02678	265964	0.57059	0.04056	0.11272	0.05803
179304	1.18396	0.06084	-0.23304	0.03263	265965	0.45701	0.04943	0.45974	0.09321
179308	0.50404	0.05026	-0.19644	0.1002	265911	1.24677	0.04951	-0.55314	0.02529
265947	1.72025	0.07649	-0.97938	0.02456	265919	0.92822	0.05071	0.04285	0.03596
265949	0.64984	0.03717	0.62857	0.04528	265924	0.48057	0.04956	0.56222	0.07769
265950	0.55506	0.05227	0.84247	0.07573					
221255	1.57147	0.07366	-1.14649	0.02944					

Table L-1. 2015–16 FSAA-PT: IRT Parameters—ELA Grade 3

Table L-2. 2015–16 FSAA-PT: IRT Parameters—ELA Grade 4

ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
268896	0.4362	0.02572	-0.01677	0.05291	265980	0.30571	0.04224	2.19274	0.25278
257092	0.60517	0.04044	-0.00042	0.05831	267335	0.72419	0.03255	-0.4996	0.0374
257096	0.52831	0.05201	1.19631	0.09196	267337	0.58851	0.04206	-0.86486	0.08611
268889	1.70836	0.07552	-1.05186	0.02504	267338	0.5395	0.04424	0.67424	0.0646
221282	0.93037	0.04939	-0.68956	0.04421	221258	1.50975	0.07251	-1.28195	0.03246
221288	0.61698	0.04158	0.43912	0.04844	268791	1.20654	0.05239	-0.34881	0.02697
244335	1.62844	0.08266	-1.37057	0.03315	221266	0.84448	0.05637	-0.34436	0.05667
244337	1.4894	0.07156	-0.85864	0.0303	262717	1.29143	0.05579	-1.0293	0.03044
244338	0.96077	0.06729	-1.0845	0.07619	262719	1.15807	0.05553	-0.48177	0.03255
244384	1.33044	0.05831	-1.0735	0.03062	262721	1.08769	0.06069	0.15493	0.03343
244386	1.31267	0.06817	-0.86454	0.03817	262733	1.18292	0.04966	-0.91142	0.03037
244388	0.68177	0.04455	-0.17198	0.05196	262734	0.57688	0.03509	0.43954	0.04753
266781	0.60038	0.02887	0.13958	0.04042	262736	0.77394	0.07104	-0.75371	0.10788
266783	0.55152	0.04153	-0.51161	0.08485	267327	1.63243	0.07344	-1.10871	0.02689
266785	0.62827	0.06157	-1.0561	0.14958	267329	0.88703	0.04732	-0.69318	0.04516
265972	1.65625	0.07744	-1.19301	0.02827	267331	0.55855	0.03964	0.7657	0.05657
265975	0.36959	0.02916	0.92871	0.084	265981	1.31506	0.05728	-1.05528	0.03053

ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
265983	0.35069	0.03207	-1.15684	0.13846	268793	0.42874	0.04626	0.60588	0.09615
265986	0.38167	0.03613	1.33124	0.11381	266003	1.592	0.07418	-1.19807	0.02922
265967	0.963	0.04189	-0.91507	0.03587	266006	0.92537	0.04292	0.88094	0.03721
265969	0.66738	0.0397	-0.48528	0.0543	266009	0.41063	0.0543	1.60186	0.13823
265971	0.33414	0.03763	0.62282	0.09545	267511	1.70836	0.18049	-1.05114	0.06132
265990	1.63988	0.07066	-0.9976	0.02495	267513	1.64919	0.16617	-0.91452	0.05801
265992	1.03111	0.05426	-0.68177	0.04155	267515	1.36823	0.12808	-0.55453	0.05626
265994	1.22512	0.08611	-0.87776	0.06378	267517	0.42113	0.05881	0.19699	0.13669
266012	0.6003	0.02934	-0.37237	0.04214	267518	0.69954	0.0785	-0.77048	0.10368
266014	0.40194	0.03417	0.1248	0.07624					

Table L-3. 2015–16 FSAA-PT: IRT Parameters—ELA Grade 5

ltem Number	а	SE(a)	b	SE(b)	Item Number	а	SE(a)	b	SE(b)
181684	1.69146	0.08616	-1.34146	0.03139	266096	1.38747	0.05558	-0.78821	0.02504
181688	0.74005	0.03908	-0.61907	0.04556	266098	0.45059	0.03326	0.286	0.05914
181692	0.68279	0.04605	-0.37764	0.05992	266101	0.43119	0.04391	0.68344	0.08683
98981	1.37371	0.06002	-1.05787	0.02933	266085	1.07433	0.04746	-1.04714	0.03538
98984	0.93767	0.05142	-0.86514	0.05001	266087	0.46023	0.03282	-0.40644	0.06914
268973	0.64097	0.04495	-0.41192	0.0657	266089	0.37404	0.03795	1.37634	0.12117
245011	1.79793	0.08829	-1.24648	0.02759	266090	1.05714	0.04486	-0.88956	0.03258
245013	1.36303	0.06211	-0.6506	0.02878	266092	0.58331	0.03602	-0.13806	0.05125
245015	1.08072	0.06721	-0.65542	0.05231	266094	0.68597	0.04988	0.43956	0.05313
266063	1.97841	0.09393	-1.13988	0.02364	266067	1.52158	0.06347	-0.92141	0.02497
266065	1.37509	0.06217	-0.51796	0.0271	266069	0.42913	0.03292	1.48658	0.10138
266066	0.69268	0.04417	0.97374	0.05061	266073	0.58455	0.05738	1.16193	0.09221
268836	1.68641	0.07427	-1.0406	0.02482	266076	1.35786	0.062	-1.17242	0.03209
257519	0.31874	0.02896	0.01926	0.0802	267267	0.89363	0.04271	-0.26026	0.03405
257521	0.82151	0.05443	-0.12319	0.05176	266082	0.4049	0.03984	-0.22771	0.10321
266051	0.65955	0.03159	-0.67695	0.04348	267581	1.57402	0.17476	-1.10155	0.06712
266053	1.2541	0.06811	-0.80159	0.04077	267616	1.10233	0.10237	-0.37182	0.06335
266055	0.60302	0.04563	-0.15307	0.06774	267623	1.13541	0.10502	-0.38897	0.06223
266843	1.53031	0.06909	-1.12417	0.02826	267627	0.76879	0.07854	-0.11305	0.08017
266845	1.30799	0.06544	-0.82216	0.03586	267631	0.65707	0.07818	-0.88822	0.12045
268838	0.71606	0.04306	0.37164	0.04054					
266105	1.27473	0.05412	-0.97002	0.02941					
266107	0.51716	0.03389	-0.08844	0.05432					
266109	0.65418	0.05125	-0.13121	0.06713					
245017	1.8982	0.0928	-1.21468	0.02583					
245019	0.5246	0.03287	-0.31686	0.05421					
268839	0.42487	0.04035	-0.59192	0.11324					
266791	1.52651	0.06611	-1.02285	0.02644					
268737	0.75691	0.03973	-0.14489	0.03861					
266797	0.63501	0.04903	-0.06711	0.0654					
266057	1.62061	0.0741	-1.13778	0.02734					
266059	0.79662	0.03953	-0.10927	0.03542					
266061	0.26365	0.03577	1.78601	0.19841					

Table L-4. 2015–16 FSAA-PT: IRT Parameters—ELA Grade 6

ltom					ltom				
ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
267342	1.07487	0.04432	-0.78445	0.03045	267314	0.62312	0.04868	0.95364	0.06015
267344	0.79203	0.04681	-0.75981	0.05881	266135	1.1535	0.04567	-0.65128	0.02719
267346	0.6964	0.04638	0.35482	0.04728	266137	0.66754	0.04	0.01047	0.0463
267351	1.00553	0.03989	-0.48121	0.0285	266139	0.23736	0.03816	2.0177	0.25511
267353	0.51983	0.03725	-0.2262	0.06825	266162	1.3722	0.06099	-1.09236	0.03005
267355	0.47148	0.04653	0.58582	0.07755	266165	1.04002	0.04721	-0.15344	0.02972
267285	1.43855	0.08009	-1.57194	0.04396	266168	0.45132	0.04204	0.68026	0.07145
267287	0.76138	0.03856	-0.71674	0.04498	266198	0.67739	0.03069	-0.2492	0.03697
267289	1.30761	0.07773	-0.69992	0.04262	266200	0.76663	0.04584	-0.18447	0.0498
267359	1.68167	0.06948	-0.86132	0.0225	267269	0.78564	0.0687	-0.54965	0.09714
267361	0.65293	0.03777	0.19743	0.04181	266147	1.84119	0.0835	-1.06073	0.02357
267363	0.37203	0.04369	1.29711	0.11908	266151	0.42358	0.03291	-0.67822	0.08686
266852	1.55119	0.07019	-1.11275	0.02776	266155	0.58913	0.043	1.06394	0.06762
266854	0.24065	0.02711	-0.24195	0.11401	266172	0.97122	0.04214	-0.91555	0.03545
266856	0.66767	0.05183	-0.41128	0.06891	266176	0.66493	0.03817	-0.31351	0.0496
267368	1.89965	0.08643	-1.05519	0.02295	266185	1.11167	0.06638	0.08832	0.03846
267370	1.57512	0.07667	-0.68878	0.02861	266141	1.51505	0.07166	-1.21955	0.03065
267372	0.46415	0.038	1.24778	0.08347	266143	0.68388	0.03726	-0.46083	0.04661
182850	1.68849	0.07848	-1.14598	0.02669	266145	0.61946	0.04278	0.7946	0.05482
268900	0.84811	0.04055	-0.06798	0.03325	267784	1.49579	0.15628	-1.05278	0.06385
182867	0.68245	0.05121	-0.18924	0.06733	267786	1.35511	0.13045	-0.83528	0.06153
267400	0.88687	0.0377	-0.69607	0.03415	267790	0.91542	0.09064	-0.66182	0.078
267402	0.42214	0.0329	0.476	0.06642	267792	0.84871	0.09134	-0.97834	0.0969
267403	0.24264	0.03902	-0.21344	0.20482	267795	0.48098	0.06399	0.83095	0.15369
263023	1.38168	0.06085	-1.06748	0.02939					
263025	0.80718	0.04233	-0.49138	0.04329					
263027	0.70211	0.04623	0.04375	0.05157					
267311	1.08582	0.0467	-0.95785	0.03317					
267313	0.85179	0.04231	-0.06468	0.03556					

ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
	4 40004	0.00000	4 47040	0.00000		0.00700	0.00504	0.00007	0.07050
183800	1.49894	0.06682	-1.17012	0.02902	266294	0.83793	0.06524	-0.63297	0.07656
183803	0.53576	0.03226	0.15848	0.0474	266296	1.79952	0.08173	-1.15113	0.025
183808	0.50824	0.04459	0.38523	0.06962	266298	0.90396	0.04583	-0.61069	0.04114
245649	1.56755	0.08141	-1.46564	0.03553	266300	0.37308	0.0388	-0.85512	0.14802
245651	0.83233	0.03822	-0.30611	0.03447	266313	0.81312	0.0337	-0.41059	0.03293
245653	0.73369	0.04922	-0.27658	0.05836	266315	0.43134	0.03518	-0.15106	0.07869
266920	1.79052	0.07481	-0.95443	0.02252	267265	0.44189	0.04514	0.82663	0.08765
266922	1.06358	0.05862	-0.8004	0.04646	266308	1.23034	0.0554	-1.22208	0.03505
266924	0.47413	0.04101	-0.46208	0.09243	266310	0.77199	0.03739	0.14525	0.03491
263097	1.6447	0.07571	-1.21372	0.02787	266312	0.95733	0.06628	-0.15699	0.0538
263099	1.25479	0.05373	-0.30542	0.02613	266325	1.43344	0.06413	-1.18895	0.03041
263101	0.87339	0.05998	-0.35219	0.05823	266327	0.39633	0.03001	-0.29819	0.07161
183790	0.91726	0.03978	-0.97319	0.03799	266329	0.762	0.05167	-0.12446	0.05279
183792	1.58829	0.08848	-1.01209	0.03865	266302	1.75724	0.08424	-1.26953	0.02764
183796	0.85306	0.05441	-0.59697	0.05894	266304	1.26207	0.05138	-0.04266	0.02376
268825	1.4245	0.06498	-1.23552	0.03158	266306	1.17727	0.08339	-0.49085	0.05995
263093	0.77246	0.03763	0.6665	0.03819	266319	0.71274	0.03182	-0.60029	0.03917
263095	0.64153	0.05754	0.43785	0.06707	266321	0.5019	0.03601	-0.35489	0.07107
263103	1.46418	0.0612	-1.0085	0.02678	267266	0.36184	0.04174	1.80015	0.16093
268814	0.86569	0.04354	-0.32284	0.03812	267721	1.5115	0.18897	-1.35726	0.08698
263107	0.73404	0.04892	0.278	0.04693	267723	1.89891	0.20346	-0.93783	0.05605
267393	1.28024	0.0607	-1.34523	0.03725	267727	0.3269	0.0543	1.00895	0.22337
267395	1.07	0.04961	-0.67762	0.03541	267729	0.54685	0.06787	-0.55829	0.1258
267397	0.42822	0.03628	0.97989	0.07706	267737	0.83152	0.08526	-0.48216	0.086
257775	1.63486	0.07414	-1.1836	0.02742					
257777	1.11648	0.04877	-0.22104	0.02791					
257779	0.60555	0.04567	0.2946	0.05495					
266290	1.17587	0.0515	-1.14252	0.03441					
266292	0.36937	0.02916	0.43494	0.06889					

# Table L-6. 2015–16 FSAA-PT: IRT Parameters—ELA Grade 8

ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
257838	1.41125	0.07269	-1.44759	0.03899	263166	0.72843	0.04884	0.16737	0.05147
268845	0.65212	0.03305	0.04703	0.03878	266894	1.273	0.05752	-1.1732	0.03333
268882	0.50535	0.04163	-0.12166	0.07988	266896	1.89401	0.1022	-0.99497	0.03035
266911	1.77992	0.07817	-1.04031	0.02352	266898	0.72067	0.04042	0.46786	0.03906
266913	0.70193	0.04043	-0.5853	0.05155	266928	1.58006	0.06463	-0.88844	0.02354
266915	0.68562	0.04644	-0.23546	0.05794	266930	0.78003	0.04375	-0.49223	0.04728
268847	1.75305	0.07468	-0.97358	0.02284	266932	0.35359	0.03711	1.27134	0.11168
257820	0.85448	0.05308	-1.10656	0.06833	266351	1.4735	0.06877	-1.22911	0.03112
257822	0.422	0.03632	-0.25235	0.08253	266353	1.18874	0.05377	-0.5521	0.03035
267376	1.27616	0.05161	-0.83925	0.02697	266355	0.71736	0.04423	1.08629	0.0519
267378	1.53265	0.079	-0.75052	0.03379	263148	1.3201	0.06103	-1.2277	0.0338
267380	0.65521	0.04771	-0.37838	0.06845	263150	1.17478	0.04974	-0.1537	0.02591
263162	1.68007	0.0729	-1.03001	0.02438	268851	0.4097	0.04017	1.10355	0.08802
263164	0.49447	0.03245	-0.07195	0.05409	268577	1.7963	0.0842	-1.17458	0.0257

ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
268579	0.60716	0.03321	0.30087	0.0421	266343	0.64786	0.06453	0.9934	0.0872
268581	0.37258	0.04022	-0.23435	0.12248	268497	1.6127	0.07098	-1.07418	0.02588
263167	0.81624	0.03469	-0.55302	0.03397	268499	0.71954	0.03974	-0.51889	0.04759
263169	0.98185	0.0524	-0.41885	0.04141	268849	0.70804	0.04761	-0.20279	0.05634
268734	0.86533	0.06042	-0.11329	0.05555	266345	1.46069	0.05704	-0.73598	0.02326
267227	1.6449	0.06666	-0.85494	0.02249	266347	0.88176	0.0524	-0.78854	0.0572
267229	0.5921	0.0377	-0.35261	0.05604	266349	0.52462	0.04243	-0.16511	0.07435
267231	0.70568	0.0474	0.5672	0.04813	267907	1.80095	0.18856	-1.05651	0.05811
266356	0.88607	0.03929	-0.94953	0.03852	267909	0.98803	0.1127	-1.33729	0.11187
266358	0.34957	0.02947	0.78872	0.0841	267911	0.91656	0.08612	-0.02457	0.06766
266359	0.72646	0.05773	0.84037	0.06253	267913	0.72306	0.08118	-0.98361	0.11378
266339	0.49958	0.02644	0.20919	0.04735	267915	0.46151	0.05902	0.16014	0.12055
266341	0.43838	0.03682	0.96149	0.08692					

Table L-7. 2015–16 FSAA-PT: IRT Parameters—ELA Grade 9

ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
268689	1.5471	0.06868	-1.22592	0.02936	183994	0.67686	0.04642	0.60087	0.04791
268691	0.99689	0.04593	-0.38067	0.03199	266405	0.62016	0.03007	-0.8099	0.04819
268693	0.4416	0.03878	0.19079	0.07065	266406	0.66736	0.04399	-1.22805	0.08703
266860	1.48356	0.06609	-1.24614	0.03072	266408	0.22378	0.03149	2.03933	0.2525
266862	0.85978	0.04338	-0.66011	0.04295	266399	1.69516	0.06987	-1.00686	0.02416
266864	1.19752	0.0788	-0.81493	0.05714	266401	0.41858	0.03128	0.18212	0.05921
246785	0.77744	0.03335	-0.64351	0.0367	266403	0.25638	0.03672	0.09434	0.14209
246789	0.8626	0.04495	-0.08751	0.03864	267303	1.48845	0.06816	-1.30811	0.03201
246791	0.34527	0.04195	1.10648	0.11002	267305	0.57084	0.03328	-0.39544	0.05123
266410	1.55154	0.0651	-1.08252	0.02681	267307	0.82834	0.0523	-0.23736	0.0497
266412	0.34624	0.02915	0.41848	0.07113	266376	1.48924	0.0657	-1.22161	0.03012
266414	0.26016	0.03871	-0.30077	0.17166	266378	0.64537	0.03552	-0.2618	0.04388
263363	1.35158	0.05943	-1.23196	0.03265	266380	0.67116	0.04521	0.52439	0.04848
263365	0.77779	0.03936	-0.37045	0.03966	266387	1.39706	0.05566	-0.9303	0.02667
263367	0.82658	0.05394	-0.24592	0.05194	266389	0.4988	0.03455	1.38255	0.08296
266416	1.93465	0.08582	-1.13429	0.0236	266391	0.36642	0.05179	0.81357	0.12445
266418	1.67984	0.08175	-0.77766	0.02883	266393	0.60234	0.02916	-0.64406	0.04563
266420	0.52862	0.03814	0.29899	0.0508	266395	0.43221	0.03383	1.02734	0.08217
267294	2.03914	0.09456	-1.19978	0.02364	266397	0.24076	0.04073	0.83087	0.18548
267296	0.6448	0.03427	0.39896	0.0398	268227	1.68627	0.17813	-1.16643	0.06309
267298	1.37104	0.08576	0.05721	0.03499	268229	1.48173	0.15257	-1.14181	0.06846
266382	0.97906	0.04097	-0.95583	0.03551	268231	0.64169	0.07035	-0.57036	0.10113
266384	0.55439	0.03419	-0.11906	0.05186	268233	0.32008	0.05033	0.31811	0.17501
266386	0.41554	0.04148	1.41915	0.11148	268234	0.65235	0.06929	-0.15434	0.09027
263351	1.20617	0.05013	-1.05741	0.03193					
263353	0.72745	0.04114	-0.67592	0.05376					
263355	0.93415	0.06146	-0.57029	0.05769					
183973	1.4492	0.06269	-1.17854	0.02989					
183982	0.8951	0.04219	-0.19202	0.03241					

Item Number	а	SE(a)	b	SE(b)	Item Number	а	SE(a)	b	SE(b)
246983	0.79496	0.03428	-0.62698	0.03657	266906	0.57687	0.0477	-0.3162	0.0818
246987	1.31954	0.07202	-0.74951	0.04163	266474	0.91941	0.04004	-0.95981	0.03798
246992	0.40722	0.04054	1.14407	0.09233	266476	0.73318	0.04411	-0.86927	0.064
266868	1.63126	0.07745	-1.26002	0.02914	268812	0.66685	0.04514	-0.01272	0.05422
266870	1.23166	0.07773	-1.41334	0.06151	266450	0.98514	0.04224	-0.96111	0.0359
266872	0.95999	0.05099	-0.58011	0.04297	266452	0.49443	0.03299	0.54852	0.05623
267385	1.21142	0.05249	-1.08929	0.03272	266454	0.32347	0.04523	1.7657	0.19094
267387	0.2527	0.02845	1.75767	0.18835	266439	1.511	0.07486	-1.37239	0.03372
267389	0.48943	0.05341	-0.24877	0.10998	266441	0.86102	0.04049	-0.38382	0.03587
267199	1.50093	0.07098	-1.28006	0.0315	266443	0.43694	0.03853	0.13728	0.0749
267201	0.8011	0.0441	-0.93237	0.05522	266462	1.55472	0.07294	-1.25194	0.03004
267203	1.01069	0.05539	-0.30709	0.03962	266464	0.32038	0.02838	-0.26377	0.08561
257967	0.86305	0.03874	-1.01944	0.04142	266466	0.46294	0.04211	0.32896	0.07183
257970	0.73495	0.04012	-0.5032	0.04972	266480	1.41771	0.06098	-1.067	0.02857
257969	0.97055	0.06298	-0.2244	0.04879	266482	0.67291	0.03769	-0.23557	0.04517
266456	1.29166	0.05044	-0.72671	0.02607	266484	0.6853	0.0499	0.04999	0.05638
266458	0.38876	0.03311	0.77754	0.07593	267164	1.31265	0.05886	-1.18506	0.03266
266460	0.43938	0.04989	1.17609	0.10944	267166	0.62039	0.03874	-0.90809	0.07027
266884	1.5017	0.05996	-0.83131	0.02438	267168	0.74387	0.04454	0.45664	0.04215
266886	0.78183	0.04865	-0.85712	0.06588	268317	1.82397	0.23947	-1.38308	0.07221
266888	0.84455	0.05421	-0.20505	0.04984	268319	1.64893	0.1871	-1.15551	0.06508
257956	1.37972	0.06246	-1.20219	0.03178	268325	1.14374	0.11071	-0.73052	0.07025
257960	0.77053	0.04111	-0.63852	0.04817	268328	1.11305	0.1051	-0.58727	0.06853
257958	0.5432	0.04056	0.38191	0.0559	268331	0.8114	0.08171	-0.47028	0.0846
257972	1.93591	0.08904	-1.12375	0.02346					
257974	0.53257	0.03298	0.43897	0.04913					
257976	0.50359	0.04809	-0.09851	0.09132					
266902	1.54901	0.07154	-1.21938	0.02943					
266904	0.95409	0.04396	-0.26045	0.03255					

Table L-9. 2015–16 FSAA-PT: IRT Parameters—Mathematics Grade 3

ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
179089	1.40039	0.05896	-0.83614	0.02614	256353	1.16401	0.05018	-0.87522	0.03081
179095	1.63203	0.08306	-0.56519	0.02896	256355	1.47544	0.06958	-0.33267	0.0268
179099	1.05799	0.06149	0.18521	0.03357	256357	0.6888	0.04971	0.74626	0.04902
261859	0.85551	0.03957	-0.90668	0.04032	268827	1.2635	0.05165	-0.69846	0.02646
261861	0.69735	0.04301	-0.5774	0.05685	179140	1.2371	0.06113	-0.18032	0.03025
261863	0.64732	0.04608	0.35944	0.0536	179141	0.85011	0.06713	-0.23249	0.06751
267245	1.52226	0.07317	-1.18964	0.03105	245946	1.35968	0.05727	-0.83453	0.02671
267247	0.77111	0.03885	0.08765	0.03558	245948	0.30703	0.03437	2.90867	0.28486
267249	0.27938	0.03941	2.60789	0.29532	245950	0.6717	0.07616	-0.03863	0.10417
179019	1.96572	0.08929	-0.96909	0.02199	261865	1.25342	0.05259	-0.80155	0.02795
179043	1.49675	0.07285	-0.50303	0.02733	261867	1.64528	0.08757	-0.62442	0.03066
179045	0.33897	0.03691	1.48487	0.13064	261869	1.17545	0.09291	-0.86479	0.07607
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ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
268831	1.48502	0.06644	-1.0159	0.02783	261837	0.74057	0.03731	-1.09954	0.05129
256331	0.92857	0.04467	0.07405	0.03155	261839	0.73776	0.03904	0.15442	0.03955
256333	0.67331	0.05203	0.45691	0.05547	261841	0.50804	0.04773	0.58067	0.07492
266579	0.9778	0.04603	-1.10687	0.04103	265035	0.62984	0.03022	0.13553	0.03974
266581	1.22782	0.05784	-0.4622	0.03085	265037	0.58447	0.04215	0.47709	0.06104
266583	0.70709	0.04749	0.76656	0.04798	265039	0.47092	0.05581	1.06408	0.10585
265024	1.72202	0.08731	-1.26315	0.03023	261871	1.33362	0.0574	-0.90499	0.02819
265026	0.34983	0.02909	1.25381	0.10778	261873	1.37462	0.07852	-0.86825	0.04149
265028	0.51384	0.04676	0.36893	0.08498	261875	1.51784	0.0912	-0.55879	0.03867
265041	1.6352	0.07525	-1.066	0.02681	265030	1.46035	0.06338	-0.93171	0.02672
265043	0.28216	0.0286	0.99539	0.11432	265032	0.82027	0.0503	-0.90586	0.06225
265045	0.51514	0.04788	0.4613	0.07964	265034	0.50447	0.03886	0.59454	0.06042

Table L-10. 2015–16 FSAA-PT: IRT Parameters—Mathematics Grade 4

ltem Number	а	SE(a)	b	SE(b)	Item Number	а	SE(a)	b	SE(b)
256383	0.76477	0.0347	-0.67795	0.03845	151622	0.75349	0.05146	-0.17094	0.05469
256385	0.69595	0.04059	-0.00262	0.04458	245486	1.38773	0.06287	-1.17139	0.03197
256387	0.80981	0.05842	0.41871	0.05044	245488	0.77569	0.03942	-0.15042	0.03682
261883	1.73403	0.0784	-1.11995	0.02618	245489	0.36444	0.03901	1.91101	0.15977
261885	0.71352	0.0379	-0.0542	0.0381	265051	1.54821	0.07573	-1.3357	0.03346
261886	0.48635	0.04194	0.58844	0.06896	265053	1.3275	0.0724	-1.06832	0.04155
261905	0.90896	0.04033	-0.8965	0.03735	265055	0.61226	0.03803	0.09591	0.04528
261907	0.61555	0.03742	-0.14574	0.04918	265068	1.14818	0.04851	-0.89723	0.031
261909	0.75379	0.05903	-0.48023	0.07673	265070	0.6858	0.0392	-0.20639	0.04549
256372	1.47228	0.0719	-1.34615	0.03501	265072	0.51756	0.04456	1.30883	0.08589
268415	0.588	0.03382	-0.25112	0.04658	261899	1.29341	0.0582	-1.15244	0.03326
268417	0.63079	0.04239	0.65399	0.05453	261901	0.21603	0.026	1.15319	0.15579
256365	1.56111	0.07203	-1.19973	0.0299	261903	0.31261	0.04349	3.0329	0.36152
256367	0.69481	0.03614	0.179	0.03776	265062	0.49203	0.02689	0.08534	0.04779
268895	0.55062	0.0443	0.92372	0.06938	265064	1.0639	0.06039	-0.02146	0.03834
256377	0.75442	0.03393	-0.56124	0.03695	265066	0.23335	0.04228	2.85987	0.39881
256379	0.20058	0.02751	0.97119	0.16128	265057	1.39533	0.05974	-1.00369	0.02846
256381	0.40016	0.04709	1.25005	0.13433	265059	0.70434	0.03847	-0.02021	0.0397
223540	1.39743	0.05653	-0.79249	0.02529	265061	0.59803	0.04662	0.3082	0.06082
223545	0.57322	0.03867	-0.39143	0.06119	256392	1.18615	0.04894	-0.8122	0.02886
223547	0.36868	0.03956	1.19264	0.10987	256394	0.6711	0.03823	0.51129	0.04298
268891	1.40763	0.06107	-1.04573	0.02903	256396	0.56399	0.05307	1.13998	0.07992
223564	1.15543	0.05742	-0.56646	0.03391					
223567	0.79791	0.04819	0.31585	0.03981					
151617	1.5551	0.07153	-1.19291	0.02983					

0.87013 0.04293

-0.32561

0.03546

151619

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ltem Number	а	SE(a)	b	SE(b)		ltem Number	а	SE(a)	b	SE(b
256498	0.56669	0.03144	-1.00676	0.06006		256506	0.58178	0.03713	1.35863	0.0733
256500	0.30307	0.03025	-1.07885	0.14935		256508	0.65082	0.09518	-1.12347	0.2386
256502	0.38292	0.0355	0.75849	0.09444		266564	1.34559	0.06224	-1.14708	0.0326
262530	0.99254	0.04167	-0.6175	0.03002		266566	0.96793	0.04918	-0.60099	0.038
262533	0.34135	0.03136	1.08106	0.10187		266568	0.56008	0.04083	0.05855	0.0583
262535	0.72995	0.06107	0.30643	0.06755		265243	0.63164	0.03028	-0.11939	0.0383
262565	1.46625	0.06681	-1.10248	0.02958		265245	0.67641	0.04371	-0.19568	0.0564
262567	0.97522	0.04778	-0.38999	0.03358		265247	0.92835	0.06883	-0.1595	0.0637
262569	0.6841	0.04655	0.19606	0.04905		265194	1.16797	0.05461	-1.16482	0.0369
256466	1.83723	0.07783	-0.86686	0.02137		265196	0.8896	0.04203	0.07775	0.031
256468	0.48258	0.03324	0.92698	0.06693		265198	0.18611	0.03259	2.90978	0.4278
256470	0.84149	0.06603	0.14777	0.05877		265233	1.24152	0.06313	-1.39064	0.042
262542	1.62098	0.07602	-1.15466	0.02863		265235	0.69262	0.03614	-0.2299	0.0397
262544	1.00361	0.04922	-0.49622	0.0341		265236	0.31573	0.0362	-0.98477	0.1840
262546	0.50064	0.03875	1.19846	0.07815		256492	1.59294	0.06684	-0.86379	0.0236
268965	1.07895	0.04742	-0.92338	0.03311		256494	0.83589	0.04418	-0.08372	0.0356
256473	0.98927	0.04972	-0.33489	0.03462		256496	0.47125	0.04208	0.81004	0.0739
256474	0.26465	0.03585	2.29423	0.25169		265238	1.6036	0.0693	-0.95	0.0248
262553	1.63536	0.07321	-1.04043	0.02603		265240	1.38144	0.07247	-0.72409	0.034
262555	0.34932	0.02923	0.75507	0.08209		265242	0.26389	0.03248	1.42954	0.1553
262557	0.17662	0.03195	-0.18096	0.24147		265200	1.40239	0.05963	-0.90313	0.0266
256480	1.11426	0.04871	-0.92314	0.03227		265215	0.74518	0.04023	0.04143	0.0378
268418	0.58217	0.03726	-0.41769	0.05763		265231	0.18615	0.03294	3.01411	0.4504
256484	0.48961	0.04104	0.88108	0.07373						
256504	1.19822	0.04989	-0.77233	0.02788						

Table L-11. 2015–16 FSAA-PT: IRT Parameters—Mathematics Grade 5

Table L-12. 2015–16 FSAA-PT: IRT Parameters—Mathematics Grade 6

ltem Number	а	SE(a)	b	SE(b)	Item Number	а	SE(a)	b	SE(b)
256526	0.75552	0.03512	-0.83361	0.04202	256542	0.91112	0.06394	0.07386	0.05193
256528	0.57003	0.03559	0.09264	0.05063	262571	1.43588	0.05672	-0.7045	0.02371
256530	0.37916	0.04312	-0.27556	0.13344	262573	0.6016	0.0377	0.9354	0.05561
267260	1.08901	0.04521	-0.78652	0.03033	262575	0.75162	0.06366	1.12503	0.06707
267262	0.64654	0.03905	-0.08646	0.04716	265371	1.19554	0.05786	-1.32657	0.04023
267263	0.58486	0.04851	0.0407	0.07181	265373	0.44666	0.02993	0.27668	0.05625
262594	1.45451	0.06431	-1.07553	0.02871	265374	0.76777	0.05184	0.596	0.05115
262596	1.39988	0.07235	-0.84731	0.03584	265387	1.062	0.04306	-0.63616	0.02889
262598	0.97132	0.05386	-0.1142	0.03649	265389	1.12018	0.05851	-0.34339	0.0357
262577	0.78337	0.03439	-0.52449	0.03533	265391	0.62435	0.04775	1.14098	0.06343
262579	1.38384	0.07349	-0.5331	0.03508	265375	1.62114	0.06931	-0.96549	0.02469
262581	0.7174	0.0622	-0.66541	0.09897	265377	0.97633	0.0479	-0.23689	0.03282
262611	1.62116	0.07587	-1.18877	0.02874	265379	0.26459	0.03542	1.24669	0.1442
262613	1.69719	0.08351	-0.78765	0.02793	265361	1.07225	0.04339	-0.63621	0.02867
262615	1.02867	0.05653	-0.18457	0.03526	265363	0.5926	0.0383	-0.06732	0.05321
256538	0.57843	0.02852	0.05621	0.0415	265365	0.68958	0.05127	0.49007	0.05609
256540	1.19262	0.07343	-0.69761	0.04815	265381	1.58969	0.07664	-1.26041	0.03088
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ltem Number	а	SE(a)	b	SE(b)	Item Number	а	SE(a)	b	SE(b)
265383	0.57636	0.03878	-1.13535	0.08444	265396	0.59247	0.0423	1.02674	0.06042
265385	0.71938	0.05064	-0.70365	0.06903	265366	1.06644	0.04348	-0.67285	0.02924
265403	1.25141	0.05446	-1.02892	0.03124	265368	0.67113	0.0408	-0.20174	0.05001
265405	0.48903	0.03237	0.37607	0.05379	265370	0.59009	0.04724	0.33557	0.06359
265407	0.66929	0.05199	0.41068	0.05898	265397	0.95582	0.04135	-0.84716	0.03478
265392	1.22947	0.05261	-0.96988	0.03052	265399	0.93566	0.04747	-0.20114	0.03572
265394	1.2262	0.06082	-0.5958	0.03429	265401	1.12242	0.07394	-0.18386	0.04727

Table L-13. 2015–16 FSAA-PT: IRT Parameters—Mathematics Grade 7

ltem Number	а	SE(a)	b	SE(b)	Item Number	а	SE(a)	b	SE(b)
262858	0.57354	0.02901	-0.35774	0.0432	245405	0.41917	0.04006	1.00586	0.08951
262860	0.93282	0.05184	-0.36764	0.04338	262864	0.73918	0.03382	-0.62381	0.03832
262862	0.7152	0.05919	-0.30111	0.07953	268960	0.5931	0.03838	-0.23854	0.05635
266629	1.47492	0.07877	-1.52053	0.0419	262868	0.84401	0.0604	-0.24172	0.06125
266631	1.10135	0.05029	-0.64508	0.03153	265654	1.1589	0.05505	-1.26987	0.03993
266632	0.82479	0.0476	-0.16953	0.0427	265656	0.58352	0.03303	0.61126	0.04859
180162	0.98761	0.04363	-0.94503	0.03589	265658	0.58941	0.04993	0.28325	0.07111
268453	0.73951	0.04446	-0.77979	0.05901	265671	1.29503	0.05424	-0.87727	0.02784
180168	0.7525	0.0466	0.17412	0.04474	265673	0.81932	0.04574	-0.52199	0.0464
257325	0.69219	0.03484	-1.06867	0.05205	265675	0.27632	0.03699	2.90105	0.32148
257327	0.5594	0.03389	0.183	0.0489	265688	1.66578	0.08644	-1.40973	0.0349
257329	0.52094	0.04566	0.92065	0.07747	265690	0.44946	0.03064	-0.50286	0.0652
244055	1.24009	0.07396	-1.8241	0.06191	265692	0.34472	0.03442	-0.03358	0.09425
244057	0.48715	0.02994	1.31387	0.08113	265666	1.21103	0.04939	-0.74194	0.02719
244059	0.72355	0.06007	-0.31145	0.08247	265668	0.97771	0.05283	-0.49851	0.04151
257342	0.96862	0.04171	-0.80492	0.03354	265670	0.2463	0.03496	2.20794	0.25514
257344	0.89732	0.0461	-0.16343	0.03615	265660	0.82004	0.03653	-0.71628	0.0367
257346	0.41683	0.04243	1.6769	0.12556	265662	0.58933	0.03637	0.61365	0.05114
266622	1.07401	0.05669	-1.56249	0.05358	265664	0.44499	0.05055	-0.36669	0.14172
266624	0.95598	0.04782	-0.83159	0.04128	265682	0.42351	0.02612	-0.51042	0.05995
268745	0.97755	0.05149	-0.16194	0.03595	265684	0.6563	0.04083	-0.23052	0.05241
265676	1.1993	0.05478	-1.15522	0.03564	265686	0.30269	0.04081	2.07781	0.22584
265678	0.50348	0.03328	-0.31532	0.0579					
265680	0.53742	0.04123	0.82484	0.06699					
245396	1.52796	0.07469	-1.30868	0.03383					
245403	0.75981	0.03693	0.11904	0.03429					

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ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
262890	0.61527	0.03084	-0.89083	0.0515	265720	0.78392	0.04256	-0.33613	0.04177
268860	0.75813	0.04183	-0.20127	0.04251	265722	0.9431	0.06013	-0.11468	0.04505
262894	0.87476	0.06071	-0.14863	0.05536	262902	1.44381	0.06617	-1.28224	0.03322
179076	1.39121	0.06759	-1.43121	0.03817	262904	1.27242	0.05926	-0.63012	0.03062
179079	0.30777	0.03027	-1.76259	0.19367	262906	1.098	0.0666	-0.50454	0.04559
179081	0.45972	0.03423	0.58168	0.06557	265730	1.18389	0.05298	-1.22584	0.03708
257357	0.81046	0.03493	-0.60833	0.03548	265732	1.1762	0.05648	-0.61085	0.03345
257359	1.35405	0.0769	-0.8702	0.04403	267271	0.75497	0.04802	-0.07237	0.04706
257360	0.82577	0.05912	-0.56119	0.06913	265708	1.56532	0.06853	-1.14368	0.02854
267252	1.48146	0.06937	-1.32796	0.03369	265710	0.9321	0.0474	-0.55864	0.03932
267254	0.78187	0.04171	-0.71081	0.04751	265711	0.9001	0.06516	-0.77348	0.07221
267256	0.64454	0.04036	0.61525	0.04753	265742	0.72788	0.03314	-0.72232	0.04086
262914	0.7396	0.03349	-0.7307	0.04049	265744	0.65657	0.04001	-0.3394	0.05331
262916	0.96235	0.0512	-0.45691	0.04108	265746	0.43049	0.04161	0.65206	0.08007
262918	0.69942	0.04957	0.27256	0.05157	265724	2.25649	0.10304	-1.08117	0.02142
266571	1.41747	0.06234	-1.17502	0.03131	265726	0.90067	0.04562	-0.36477	0.03582
266573	0.7148	0.04508	-1.12362	0.07418	265728	0.2043	0.03189	2.08912	0.27821
266575	0.80124	0.05069	-0.648	0.0593	265712	1.8961	0.08697	-1.18511	0.02557
267236	1.8409	0.09444	-1.42106	0.03097	265714	0.51805	0.03213	0.32913	0.04834
267238	0.99155	0.05393	-1.11173	0.05152	265716	0.59555	0.05	-0.0169	0.06991
267240	0.67866	0.03976	-0.05043	0.04299	265736	1.42884	0.05904	-0.97286	0.02757
268854	0.9217	0.03914	-0.81086	0.03521	265738	1.40453	0.07309	-0.74045	0.03542
262928	0.61928	0.04111	-0.75411	0.07162	267273	0.89026	0.05928	-0.56164	0.0591
262930	0.83463	0.05164	0.19045	0.04265					
265718	1.47729	0.06119	-0.98075	0.02704					

Table L-14. 2015–16 FSAA-PT: IRT Parameters—Mathematics Grade 8

Table L-15. 2015–16 FSAA-PT: IRT Parameters—Science Grade 5

2436510.80710.043280.083340.039042562321.275480.05076-0.772782436540.47720.048130.224880.089052562341.28490.06287-0.461652206931.384220.06604-1.260730.033232562360.714290.049190.556272689671.539120.06921-0.643790.02632689711.527620.06576-1.007732207021.377820.08668-0.726190.048462206321.68750.08628-0.808292622401.389880.05587-0.822640.025222688430.751170.045210.146742622411.298930.06549-0.587040.035212206711.389460.06681-1.276232688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692					- Taramete					
2436510.80710.043280.083340.039042562321.275480.05076-0.772782436540.47720.048130.224880.089052562341.28490.06287-0.461652206931.384220.06604-1.260730.033232562360.714290.049190.556272689671.539120.06921-0.643790.02632689711.527620.06576-1.007732207021.377820.08668-0.726190.048462206321.68750.08628-0.808292622401.389880.05587-0.822640.025222688430.751170.045210.146742622411.298930.06549-0.587040.035212206711.389460.06681-1.276232688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	SE(b)	b	SE(a)	а		SE(b)	b	SE(a)	а	
2436540.47720.048130.224880.089052562341.28490.06287-0.461652206931.384220.06604-1.260730.033232562360.714290.049190.556272689671.539120.06921-0.643790.02632689711.527620.06576-1.007732207021.377820.08668-0.726190.048462206321.68750.08628-0.808292622401.389880.05587-0.822640.025222688430.751170.045210.146742622411.298930.06549-0.587040.035212206711.389460.06681-1.276232688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.03715	0.4866	0.04658	0.84541	243712	0.02915	-0.64609	0.0418	1.04949	243643
2206931.384220.06604-1.260730.033232562360.714290.049190.556272689671.539120.06921-0.643790.02632689711.527620.06576-1.007732207021.377820.08668-0.726190.048462206321.68750.08628-0.808292622401.389880.05587-0.822640.025222688430.751170.045210.146742622411.298930.06549-0.587040.035212206711.389460.06681-1.276232688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.02635	-0.77278	0.05076	1.27548	256232	0.03904	0.08334	0.04328	0.8071	243651
2689671.539120.06921-0.643790.02632689711.527620.06576-1.007732207021.377820.08668-0.726190.048462206321.68750.08628-0.808292622401.389880.05587-0.822640.025222688430.751170.045210.146742622411.298930.06549-0.587040.035212206711.389460.06681-1.276232688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.03345	-0.46165	0.06287	1.2849	256234	0.08905	0.22488	0.04813	0.4772	243654
2207021.377820.08668-0.726190.048462206321.68750.08628-0.808292622401.389880.05587-0.822640.025222688430.751170.045210.146742622411.298930.06549-0.587040.035212206711.389460.06681-1.276232688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.04496	0.55627	0.04919	0.71429	256236	0.03323	-1.26073	0.06604	1.38422	220693
2622401.389880.05587-0.822640.025222688430.751170.045210.146742622411.298930.06549-0.587040.035212206711.389460.06681-1.276232688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.02574	-1.00773	0.06576	1.52762	268971	0.0263	-0.64379	0.06921	1.53912	268967
2622411.298930.06549-0.587040.035212206711.389460.06681-1.276232688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.03076	-0.80829	0.08628	1.6875	220632	0.04846	-0.72619	0.08668	1.37782	220702
2688580.567680.042860.49840.053552206760.988940.05105-0.895392688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.04145	0.14674	0.04521	0.75117	268843	0.02522	-0.82264	0.05587	1.38988	262240
2688411.470860.07112-1.272140.032022206871.21860.06349-0.386022689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.03356	-1.27623	0.06681	1.38946	220671	0.03521	-0.58704	0.06549	1.29893	262241
2689691.45840.06942-0.813020.030442561791.345840.05677-0.967452681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.04456	-0.89539	0.05105	0.98894	220676	0.05355	0.4984	0.04286	0.56768	268858
2681281.929330.0967-0.30560.023952561820.443050.031410.456652622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.03561	-0.38602	0.06349	1.2186	220687	0.03202	-1.27214	0.07112	1.47086	268841
2622521.820180.0835-1.096610.02382561841.429450.09472-0.154292622562.08530.12557-1.059610.031612207691.529540.07698-1.33692	0.02777	-0.96745	0.05677	1.34584	256179	0.03044	-0.81302	0.06942	1.4584	268969
262256 2.0853 0.12557 -1.05961 0.03161 220769 1.52954 0.07698 -1.33692	0.0596	0.45665	0.03141	0.44305	256182	0.02395	-0.3056	0.0967	1.92933	268128
	0.04053	-0.15429	0.09472	1.42945	256184	0.0238	-1.09661	0.0835	1.82018	262252
262257 1.12078 0.05441 -0.12798 0.02999 220771 1.88852 0.09504 -0.91915	0.03292	-1.33692	0.07698	1.52954	220769	0.03161	-1.05961	0.12557	2.0853	262256
	0.02638	-0.91915	0.09504	1.88852	220771	0.02999	-0.12798	0.05441	1.12078	262257
243705 2.37127 0.11967 -1.15803 0.02045 220776 0.72148 0.04151 0.01841	0.04138	0.01841	0.04151	0.72148	220776	0.02045	-1.15803	0.11967	2.37127	243705
243708 0.86221 0.0448 -0.68904 0.04426 243737 1.59368 0.07673 -1.23835	0.02928	-1.23835	0.07673	1.59368	243737	0.04426	-0.68904	0.0448	0.86221	243708
	continued									

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ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
243742	2.24815	0.11603	-0.86607	0.02314	262262	1.28777	0.06947	-0.07	0.03237
243745	1.28145	0.0639	-0.23419	0.02963	243754	1.83733	0.09142	-1.24544	0.02645
256037	1.79672	0.07832	-0.99285	0.0226	243759	1.81589	0.07934	-0.54534	0.02189
256039	1.32982	0.06058	-0.38909	0.02791	243761	1.19678	0.06191	0.10259	0.02924
256041	0.44396	0.04073	1.52092	0.10244	256043	1.66552	0.0826	-1.27832	0.0293
262258	0.945	0.04065	-0.8912	0.03547	256045	0.20141	0.02472	1.1688	0.16421
262259	1.40044	0.07157	-0.75248	0.0352	256047	1.10971	0.07026	-0.23518	0.04506

# Table L-16. 2015–16 FSAA-PT: IRT Parameters—Science Grade 8

Item Number	а	SE(a)	b	SE(b)	Item Number	а	SE(a)	b	SE(b)
222907	1.81941	0.0967	-1.40606	0.03039	245060	0.28867	0.03601	-0.37996	0.1499
222909	1.1269	0.05038	-0.665	0.03192	262672	0.63694	0.02995	-0.50902	0.0414
222911	0.37922	0.03406	0.69438	0.07578	262674	0.87895	0.04612	0.00578	0.03873
245073	1.22634	0.04896	-0.83249	0.02775	262676	0.43646	0.04899	1.9733	0.14995
245075	0.66197	0.03992	-0.52336	0.05745	268833	1.79394	0.07873	-1.07215	0.02356
245077	0.5556	0.04302	0.63843	0.05847	222902	0.54163	0.03292	0.31514	0.04713
256698	1.14539	0.04407	-0.60306	0.02664	268876	0.70649	0.05601	-0.30687	0.07411
256702	0.61479	0.04034	-0.38079	0.06156	256736	1.82441	0.08738	-1.23264	0.02595
268976	1.56944	0.10425	-0.32865	0.04137	256738	0.27704	0.0267	0.08418	0.08649
222934	1.32349	0.0561	-1.04396	0.02926	256740	0.37334	0.03884	0.18822	0.09148
222940	0.83696	0.04079	0.0574	0.03358	256756	1.8746	0.08594	-1.14242	0.02381
222947	0.4747	0.04383	1.21117	0.08557	268878	0.76269	0.03832	-0.10953	0.0363
268870	1.4858	0.05763	-0.76985	0.02344	256763	0.23809	0.03338	1.09056	0.14932
262650	1.66525	0.10946	-1.14577	0.04983	262660	1.95186	0.08907	-1.11778	0.02275
268872	0.50814	0.03791	1.22322	0.07484	262662	1.10531	0.05175	-0.50891	0.03259
245078	2.07193	0.11397	-1.39579	0.02739	262664	0.47286	0.03854	0.62744	0.06219
245080	1.16266	0.05106	-0.6264	0.03015	222968	1.5816	0.0705	-1.14258	0.02711
245082	0.61936	0.04156	-0.11207	0.05433	222972	0.84523	0.04556	-0.77197	0.04871
268874	0.79416	0.03527	-0.83342	0.03956	222977	0.47478	0.03796	-0.18513	0.0739
262656	1.28879	0.06692	-0.82129	0.03934	245062	1.39234	0.05762	-0.97824	0.02708
268978	0.83894	0.05118	0.11072	0.04138	245064	1.29567	0.06339	-0.66848	0.0344
256716	0.88053	0.03674	-0.67776	0.03369	268880	1.10388	0.07891	-0.88092	0.07144
256720	1.30516	0.07228	-0.8754	0.04396					
256722	0.45969	0.04206	-0.53741	0.10771					
245056	1.79059	0.08985	-1.32015	0.02833					
245058	0.73666	0.03613	-0.16332	0.03678					

ltem Number	а	SE(a)	b	SE(b)	_	Item Number	а	SE(a)	b	SE(b)			
265831	1.2039	0.05334	-1.04067	0.03261	-	265910	0.85964	0.04627	-0.28975	0.04046			
265834	0.28292	0.0285	1.38514	0.13987		265913	0.54533	0.04519	1.37787	0.08283			
265837	0.45678	0.04778	0.84624	0.10057		265839	1.28826	0.05672	-1.0334	0.03078			
266654	1.16465	0.04966	-0.89697	0.03059		265841	0.29823	0.02943	1.78711	0.16528			
266656	0.64942	0.04158	-0.72331	0.06552		265843	0.34945	0.04716	0.99055	0.14259			
266658	0.71118	0.05174	-0.33068	0.06323		265934	1.41362	0.06688	-1.22175	0.03294			
265880	1.02425	0.04668	-1.07081	0.03786		265936	1.07929	0.04859	-0.22943	0.02843			
265885	0.23423	0.02672	0.4052	0.10915		265938	0.49492	0.04349	-0.04053	0.07802			
265890	0.45191	0.04402	0.28468	0.08349		268664	1.46374	0.05924	-0.76763	0.024			
263287	1.25317	0.05057	-0.70847	0.02622		263283	0.6872	0.04286	-0.43074	0.05406			
263289	0.54098	0.03605	0.73238			263285	0.5014	0.04253	0.07442	0.07377			
263291	0.61092	0.05676	0.01636			265895	1.47789	0.07095	-1.24729	0.03254			
266660	1.42782	0.064	-1.08501	0.02947		265900	0.68904	0.03586	0.08084	0.03824			
266662	0.69658	0.03736	0.00534	0.02947 0.03939		265904	0.40353	0.0398	1.03683	0.09501			
266664	0.55606	0.04545	0.57581	0.06285		257693	1.06308	0.04906	-1.13097	0.03833			
265926	1.2103	0.05262	-0.98101	0.03123		257696	0.69998	0.03825	-0.33894	0.04482			
265928	0.92959	0.04564	-0.13434	0.03311		257697	0.52259	0.04193	0.32567	0.06405			
265931	0.3677	0.03979	0.7512	0.09065		266700	1.12849	0.04803	-0.87329	0.03094			
265857	0.6745	0.03572	-1.22962	0.05946		266702	0.72892	0.04171	-0.39947	0.04834			
265859	1.03686	0.04794	-0.14433	0.03062		266703	0.67612	0.05665	-0.67937	0.09493			
265860	0.56433	0.046	0.63898	0.06181		266683	0.87769	0.0438	-1.28966	0.05012			
257723	1.1392	0.04508	-0.51859	0.02619		266685	0.81735	0.03987	-0.08013	0.03518			
257725	0.82247	0.04773	-0.1908	0.0443		266686	1.03984	0.06701	-0.21666	0.0489			
257726	0.62749	0.05409	-0.15315	0.08152	1								
265906	1.19002	0.04924	-0.78945	0.02836									

Table L-17. 2015–16 FSAA-PT: IRT Parameters—Algebra 1 Grade HS

Table L-18. 2015–16 FSAA-PT: IRT Parameters—Biology Grade HS

2464780.701360.032280.091770.034852688831.467260.05548-0.8142459320.761420.048010.209770.047872688850.198120.02878-2.8391836691.867780.09538-1.42190.02842635110.763820.045250.3441836740.128110.021093.785420.613162669902.008160.09513-1.2741836790.610750.059662.160840.15562669921.004540.04548-0.6312458771.768570.07386-1.07220.02272669940.824520.04701-0.2732458810.522350.03157-0.209150.052092655441.821960.08844-1.3512458821.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.169246821.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.03895265					•	 		, eraae		
2464780.701360.032280.091770.034852688831.467260.05548-0.8142459320.761420.048010.209770.047872688850.198120.02878-2.8391836691.867780.09538-1.42190.02842635110.763820.045250.3441836740.128110.021093.785420.613162669902.008160.09513-1.2741836790.610750.059662.160840.15562669921.004540.04548-0.6312458771.768570.07386-1.07220.02272669940.824520.04701-0.2732458810.522350.03157-0.209150.052092655441.821960.08844-1.351245821.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692468221.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.03895265		а	SE(a)	b	SE(b)		а	SE(a)	b	SE(b)
2459320.761420.048010.209770.047872688850.198120.02878-2.8391836691.867780.09538-1.42190.02842635110.763820.045250.3441836740.128110.021093.785420.613162669902.008160.09513-1.2741836790.610750.059662.160840.15562669921.004540.04548-0.6312458771.768570.07386-1.07220.02272669940.824520.04701-0.2732458810.522350.03157-0.209150.052092655441.821960.08844-1.3512458221.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692246211.265270.06721-0.661590.038952655961.104560.04543-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	928 1.	.85488	0.0948	-1.42585	0.02866	224606	1.15007	0.04885	-0.25004	0.02693
1836691.867780.09538-1.42190.02842635110.763820.045250.3441836740.128110.021093.785420.613162669902.008160.09513-1.2741836790.610750.059662.160840.15562669921.004540.04548-0.6312458771.768570.07386-1.07220.02272669940.824520.04701-0.2732458810.522350.03157-0.209150.052092655441.821960.08844-1.3512458821.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	478 0.	.70136	0.03228	0.09177	0.03485	268883	1.46726	0.05548	-0.81481	0.02296
1836740.128110.021093.785420.613162669902.008160.09513-1.2741836790.610750.059662.160840.15562669921.004540.04548-0.6312458771.768570.07386-1.07220.02272669940.824520.04701-0.2732458810.522350.03157-0.209150.052092655441.821960.08844-1.3512458821.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	932 0.	.76142	0.04801	0.20977	0.04787	268885	0.19812	0.02878	-2.83948	0.46772
1836790.610750.059662.160840.15562669921.004540.04548-0.6312458771.768570.07386-1.07220.02272669940.824520.04701-0.2732458810.522350.03157-0.209150.052092655441.821960.08844-1.3512458821.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	669 1.	.86778	0.09538	-1.4219	0.0284	263511	0.76382	0.04525	0.34407	0.04077
2458771.768570.07386-1.07220.02272669940.824520.04701-0.2732458810.522350.03157-0.209150.052092655441.821960.08844-1.3512458821.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	674 0.	).12811	0.02109	3.78542	0.61316	266990	2.00816	0.09513	-1.27476	0.02361
2458810.522350.03157-0.209150.052092655441.821960.08844-1.3512458821.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	679 0.	.61075	0.05966	2.16084	0.1556	266992	1.00454	0.04548	-0.63128	0.03424
2458821.022190.05833-0.055080.039522655460.824880.03843-0.5872459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	877 1.	.76857	0.07386	-1.0722	0.0227	266994	0.82452	0.04701	-0.27327	0.04561
2459222.272050.12434-1.437680.024952655480.665150.039540.1192459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	881 0.	.52235	0.03157	-0.20915	0.05209	265544	1.82196	0.08844	-1.35172	0.0271
2459241.805560.11546-1.449880.043282669841.71690.08189-1.3432459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	882 1.	.02219	0.05833	-0.05508	0.03952	265546	0.82488	0.03843	-0.58745	0.03844
2459260.332220.02690.594940.074932669861.962610.09162-0.8792246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	922 2.	2.27205	0.12434	-1.43768	0.02495	265548	0.66515	0.03954	0.11901	0.04625
2246152.003610.10781-1.468560.028282669880.659270.037630.1692688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	924 1.	.80556	0.11546	-1.44988	0.04328	266984	1.7169	0.08189	-1.34332	0.02814
2688621.145530.04984-0.782550.031472655942.019560.11284-1.5162246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	926 0.	.33222	0.0269	0.59494	0.07493	266986	1.96261	0.09162	-0.87977	0.02376
2246211.265270.06721-0.661590.038952655961.104560.0459-0.6302245921.735970.0909-1.488660.032112655980.773860.04643-0.582	615 2.	2.00361	0.10781	-1.46856	0.02828	266988	0.65927	0.03763	0.16962	0.04051
224592 1.73597 0.0909 -1.48866 0.03211 265598 0.77386 0.04643 -0.582	862 1.	.14553	0.04984	-0.78255	0.03147	265594	2.01956	0.11284	-1.51622	0.02966
	621 1.	.26527	0.06721	-0.66159	0.03895	265596	1.10456	0.0459	-0.63048	0.02914
	592 1.	.73597	0.0909	-1.48866	0.03211	265598	0.77386	0.04643	-0.58214	0.05739
224599 1.1676 0.0668 -1.45472 0.05528 267008 1.18706 0.04966 -1.111	599 1	1.1676	0.0668	-1.45472	0.05528	267008	1.18706	0.04966	-1.11159	0.03166
										continued

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ltem Number	а	SE(a)	b	SE(b)	ltem Number	а	SE(a)	b	SE(b)
267010	1.26447	0.05717	-0.65189	0.03134	267000	0.65354	0.04355	-0.2964	0.06158
267012	0.72028	0.04283	0.26042	0.04153	267026	1.71709	0.08467	-1.39907	0.0296
267043	1.43212	0.05756	-1.01234	0.02571	267028	0.41535	0.02754	-0.35397	0.06281
267045	0.80308	0.04026	-0.46583	0.0419	267030	0.52704	0.03667	0.38074	0.05881
267047	0.59845	0.04973	-1.1641	0.12732	267032	1.72134	0.1033	-1.68397	0.04061
266996	2.0142	0.11203	-1.51134	0.02955	267034	1.22008	0.05973	-1.21887	0.03953
266998	0.50423	0.02795	-0.07051	0.04658	267036	1.03482	0.04413	0.02578	0.02746

# Table L-19. 2015–16 FSAA-PT: IRT Parameters—Geometry Grade HS

ltem Number	а	SE(a)	b	SE(b)	Item Number	а	SE(a)	b	SE(b)
266775	0.67664	0.03916	-0.81073	0.05634	266548	0.55188	0.05121	-0.10607	0.07909
266779	1.0259	0.06708	-0.52974	0.05013	266737	1.38638	0.0803	-1.39442	0.04478
266787	1.10272	0.08835	-0.32649	0.05973	266739	1.14553	0.08413	-1.40783	0.07554
266804	1.04253	0.05608	-1.15106	0.0477	266741	0.50313	0.04177	0.75055	0.07183
266806	1.43083	0.08051	-0.40653	0.03315	257717	1.75652	0.12449	-1.65393	0.0465
266808	1.11362	0.08707	-0.26755	0.05521	257719	0.64264	0.03989	0.0376	0.04776
266761	1.6214	0.09293	-1.3225	0.03789	257721	1.15206	0.08751	-0.34266	0.05493
266764	0.83649	0.04913	-0.1342	0.04126	257711	1.07373	0.05562	-1.01253	0.04305
266769	0.70237	0.05972	0.1245	0.06432	257713	0.63817	0.04538	-0.14416	0.05726
257663	1.09786	0.05673	-1.01682	0.04241	257715	0.73147	0.06651	-0.02527	0.07159
257665	1.71198	0.10243	-0.5731	0.03367	266810	1.57355	0.08601	-1.22235	0.03642
257667	0.29771	0.04489	2.22168	0.27015	266812	1.11754	0.06161	-0.19956	0.03389
266556	1.83324	0.11237	-1.3987	0.03642	266814	0.73412	0.0624	0.03443	0.06447
266558	1.40644	0.11144	-1.51036	0.07417	266526	0.84906	0.04999	-1.34592	0.06362
266560	0.89881	0.09293	-1.77887	0.15832	266528	1.01907	0.05761	-0.26744	0.03849
266597	1.31236	0.07221	-1.27458	0.04308	266530	0.38717	0.04727	0.57952	0.0993
266599	0.45255	0.03903	-0.54209	0.08841	266795	1.79495	0.11095	-1.42395	0.03766
266601	1.03686	0.07211	-0.23671	0.05103	266799	1.88709	0.14861	-1.39482	0.05301
257669	1.52752	0.08982	-1.39827	0.04171	266801	0.50526	0.04792	-1.19975	0.13391
257671	0.98659	0.05999	-0.80557	0.05135	266732	0.23166	0.02693	0.92967	0.15542
257673	0.42352	0.0436	0.99362	0.0975	266733	1.03875	0.09379	-1.24611	0.08787
266585	0.89294	0.05107	-1.27745	0.05842	266735	0.75763	0.07293	-0.39984	0.08653
266587	0.35997	0.03505	0.33695	0.08647					
266589	0.33546	0.04763	0.66395	0.13437					
266544	1.82447	0.10282	-1.23648	0.03302					
266546	0.85358	0.05383	-0.55546	0.05106					

ltem Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267465A	0.49867	0.04345	-0.57376	0.06905	0	0	0.9317	0.19929	0.28467	0.14599	-1.21637	0.13543
267465B	0.62934	0.0472	-0.27564	0.05612	0	0	0.7743	0.15125	0.65865	0.11795	-1.43295	0.11698
267465C	0.61706	0.0379	-0.47044	0.06209	0	0	0.09651	0.20246	1.72323	0.16285	-1.81974	0.11456
267465D	0.56802	0.04594	-0.3215	0.05878	0	0	0.63977	0.16271	0.56388	0.13198	-1.20365	0.12419
267430A	0.41752	0.04097	-1.05536	0.09683	0	0	0.84073	0.29119	0.43635	0.1919	-1.27709	0.15234
267430B	0.52546	0.03212	-0.05681	0.08207	0	0	1.45469	0.21104	1.48128	0.13857	-2.93597	0.19933
267430C	0.51044	0.0445	-0.93127	0.07887	0	0	0.82379	0.24678	0.5856	0.15944	-1.40939	0.12643
267430D	0.50345	0.03407	0.11481	0.0777	0	0	1.62016	0.1908	1.06499	0.13251	-2.68515	0.20744
267419A	0.65337	0.055	-0.39195	0.05662	0	0	0.77589	0.15087	0.38558	0.12131	-1.16147	0.11615
267419B	0.68423	0.04862	0.20979	0.05905	0	0	1.2472	0.13154	0.79883	0.10638	-2.04603	0.16247
267419C	0.89877	0.07113	-0.71491	0.04532	0	0	0.38765	0.1204	0.0252	0.10799	-0.41285	0.08749
267419D	0.6152	0.04812	0.05031	0.05886	0	0	0.85636	0.14252	0.66624	0.12307	-1.5226	0.14438
267498A	0.73613	0.05608	-0.23438	0.05547	0	0	1.15175	0.13972	0.45165	0.10226	-1.6034	0.11576
267498B	0.71436	0.0482	0.23709	0.06082	0	0	1.35959	0.13537	1.00841	0.10363	-2.368	0.17479
267498C	0.63598	0.04345	-0.15295	0.06456	0	0	1.03163	0.16672	1.04318	0.12333	-2.07481	0.14256
267498D	0.72219	0.04919	0.30917	0.05699	0	0	1.14244	0.12586	0.9764	0.10458	-2.11884	0.16463
267540A	0.74701	0.05037	-0.16179	0.05436	0	0	0.92766	0.14041	0.83774	0.10372	-1.7654	0.11397
267540B	0.87928	0.05737	0.10963	0.04962	0	0	1.14023	0.1127	0.81884	0.08536	-1.95907	0.12389
267540C 267540D	0.78689 0.8063	0.05732 0.05303	-0.28867 0.32141	0.0511 0.05439	0 0	0	0.9324 1.34669	0.13472 0.11798	0.5507 0.96581	0.09763 0.08951	-1.4831 -2.3125	0.10018 0.16314

Table L-20. 2016–17 FSAA-PT: IRT Parameters—ELA Writing Prompt Grade 4

Table L-21. 2016–17 FSAA-PT: IRT Parameters—ELA Writing Prompt Grade 5

Item Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267498A	0.88918	0.06174	-0.31164	0.04534	0	0	0.91088	0.1143	0.54691	0.08726	-1.45779	0.08735
267498B	0.75647	0.04801	0.04398	0.05394	0	0	1.24534	0.12469	0.82562	0.09403	-2.07095	0.13323
267498C	0.82896	0.05207	-0.23599	0.05083	0	0	1.03143	0.12819	0.85706	0.09368	-1.88849	0.10454
267498D	0.74861	0.05024	0.03704	0.05149	0	0	1.10396	0.11941	0.66887	0.09508	-1.77283	0.12216
267540A	0.80957	0.05078	-0.33792	0.05376	0	0	0.86734	0.1441	1.044	0.10347	-1.91134	0.10671

ltem Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267540B	0.76738	0.04612	-0.03493	0.05541	0	0	0.86097	0.13906	1.33786	0.10834	-2.19883	0.13528
267540C	0.74516	0.0568	-0.60414	0.05308	0	0	0.6167	0.15247	0.66089	0.11294	-1.27759	0.09417
267540D	0.73581	0.04375	0.14598	0.05642	0	0	0.85074	0.13869	1.50952	0.11265	-2.36026	0.1578
267529A	0.75835	0.0453	-0.11122	0.0581	0	0	0.92147	0.14669	1.32869	0.10999	-2.25016	0.13853
267529B	0.8677	0.05639	0.23531	0.05277	0	0	1.34936	0.11212	1.02469	0.08484	-2.37405	0.17045
267529C	0.62216	0.04146	-0.22468	0.06187	0	0	0.83731	0.16474	1.09017	0.12453	-1.92748	0.13536
267529D	0.70201	0.04485	0.22148	0.05752	0	0	1.09464	0.13187	1.17171	0.10543	-2.26635	0.1695
267579A	0.6449	0.05588	-0.60103	0.06164	0	0	0.57927	0.17911	0.55127	0.13407	-1.13054	0.10914
267579B	0.6663	0.05461	-0.31954	0.05723	0	0	0.76916	0.15523	0.54235	0.1201	-1.3115	0.11449
267579C	0.65308	0.05316	-0.24736	0.05804	0	0	1.45284	0.15422	-0.26056	0.11097	-1.19229	0.12657
267579D	0.74923	0.05785	-0.17887	0.05224	0	0	0.79604	0.13387	0.59358	0.10666	-1.38963	0.1089
267675A	0.76501	0.05796	-0.49342	0.052	0	0	0.49646	0.14764	0.78225	0.11649	-1.27871	0.09633
267675B	0.7781	0.05394	-0.25458	0.05202	0	0	0.70149	0.13655	0.88845	0.10781	-1.58994	0.10745
267675C	0.53954	0.04666	-0.45351	0.066	0	0	0.65481	0.18696	0.58985	0.14708	-1.24466	0.13414
267675D	0.71736	0.04975	-0.12863	0.0537	0	0	0.62939	0.13966	0.97632	0.11533	-1.60571	0.11914

Table L-22. 2016–17 FSAA-PT: IRT Parameters—ELA Writing Prompt Grade 6

Item Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267579A	0.68149	0.0523	-0.55689	0.05139	0	0	0.28232	0.14937	0.7326	0.12477	-1.01492	0.099
267579B	0.66004	0.05047	-0.36839	0.05156	0	0	0.4957	0.14109	0.66112	0.11851	-1.15682	0.1077
267579C	0.76151	0.05747	-0.18061	0.04855	0	0	1.26785	0.11524	-0.02592	0.09054	-1.24193	0.10811
267579D	0.77449	0.05615	-0.21209	0.046	0	0	0.62733	0.1162	0.62413	0.09932	-1.25146	0.09948
267675A	0.64619	0.0504	-0.58319	0.0591	0	0	0.13018	0.18391	1.00336	0.15005	-1.13355	0.10283
267675B	0.5997	0.04253	-0.34774	0.0608	0	0	0.16098	0.1874	1.32699	0.1552	-1.48797	0.11691
267675C	0.5237	0.04344	-0.49441	0.06805	0	0	0.29867	0.20351	0.89608	0.16385	-1.19475	0.12804
267675D	0.55722	0.0389	-0.18228	0.0631	0	0	0.23045	0.18771	1.38738	0.15743	-1.61783	0.13181
267685A	0.75147	0.05431	-0.72697	0.05048	0	0	0.53313	0.13723	-0.68612	0.13368	0.15299	0.11815

ltem Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267685B	0.828	0.06642	-0.37272	0.04551	0	0	0.44785	0.12119	0.36932	0.10506	-0.81717	0.09016
267685C	0.87431	0.05867	-0.32002	0.04805	0	0	0.52266	0.13292	0.99497	0.10662	-1.51763	0.09226
267685D	0.73733	0.05733	-0.06285	0.05169	0	0	0.94644	0.12542	0.4449	0.10167	-1.39134	0.11578
267709A	0.68409	0.05534	-0.2515	0.05729	0	0	1.14791	0.14544	0.34204	0.1082	-1.48995	0.12391
267709B	0.76494	0.05496	0.17364	0.05715	0	0	1.45208	0.12463	0.68427	0.09397	-2.13634	0.15974
267709C	0.7896	0.06273	-0.10412	0.05115	0	0	1.13669	0.11912	0.28653	0.09447	-1.42322	0.1157
267709D	0.77857	0.05701	0.41558	0.05599	0	0	1.51199	0.11291	0.70347	0.0922	-2.21546	0.18489
267765A	0.74578	0.04788	-0.09326	0.05536	0	0	0.95253	0.13951	0.99375	0.10531	-1.94629	0.12211
267765B	0.67664	0.04242	0.31012	0.06192	0	0	1.23747	0.14154	1.29388	0.10957	-2.53134	0.18536
267765C	0.71805	0.05373	-0.24193	0.05111	0	0	0.57326	0.1368	0.6939	0.1131	-1.26715	0.10443
267765D	0.76945	0.04834	0.25121	0.05384	0	0	1.05275	0.12276	1.10623	0.0992	-2.15898	0.15062

Table L-23. 2016–17 FSAA-PT: IRT Parameters—ELA Writing Prompt Grade 7

Item Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267709A	0.60498	0.04339	-0.44693	0.06222	0	0	1.32455	0.17801	0.46747	0.11401	-1.79202	0.12082
267709B	0.67238	0.04193	0.03411	0.06279	0	0	1.65011	0.151	0.80864	0.09798	-2.45875	0.16089
267709C	0.62288	0.04482	-0.35989	0.06001	0	0	1.36344	0.16612	0.38955	0.10867	-1.753	0.12105
267709D	0.76938	0.04884	0.22552	0.0573	0	0	1.71907	0.12599	0.74691	0.08489	-2.46598	0.17265
267765A	0.81055	0.05283	-0.2625	0.04929	0	0	0.89502	0.12626	0.81169	0.0958	-1.70671	0.09935
267765B	0.74189	0.04446	0.06575	0.05554	0	0	1.10887	0.13163	1.17095	0.10095	-2.27982	0.14274
267765C	0.56878	0.04333	-0.35586	0.0602	0	0	0.66429	0.16762	0.77213	0.13291	-1.43643	0.12307
267765D	0.71521	0.04532	0.13028	0.05459	0	0	1.14959	0.1261	0.94466	0.09924	-2.09425	0.1415
267782A	0.42858	0.03441	-0.37958	0.0743	0	0	1.76453	0.21546	-1.20326	0.17501	-0.56127	0.18756
267782B	0.67587	0.05057	-0.3855	0.05729	0	0	0.59134	0.16274	0.81654	0.12674	-1.40787	0.10652
267782C	0.58591	0.05136	-0.79392	0.06869	0	0	0.46963	0.19474	0.16195	0.15309	-0.63158	0.11715
267782D	0.71516	0.05651	-0.42622	0.05527	0	0	0.83575	0.15276	0.47452	0.11323	-1.31027	0.10108
267877A	0.52355	0.03662	-0.37689	0.06322	0	0	1.60931	0.1711	-1.32141	0.15511	-0.2879	0.16534

ltem Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267877B	0.7648	0.05828	-0.05524	0.0522	0	0	1.47545	0.11996	-0.08867	0.093	-1.38678	0.11764
267877C	0.7129	0.05144	-0.01893	0.05678	0	0	1.3581	0.13305	0.52254	0.09926	-1.88064	0.13321
267877D	0.79423	0.05792	0.28776	0.05309	0	0	1.53257	0.10789	0.29218	0.08823	-1.82476	0.14423
267766A	0.65899	0.05003	-0.40346	0.05697	0	0	0.86454	0.15254	0.66711	0.1156	-1.53165	0.11669
267766B	0.78406	0.05793	-0.31533	0.05072	0	0	1.04766	0.12689	0.49285	0.09466	-1.54052	0.10589
267766C	0.78238	0.0524	-0.30726	0.05239	0	0	0.88549	0.13446	0.88585	0.10162	-1.77135	0.11038
267766D	0.82617	0.06064	-0.17805	0.0492	0	0	1.21443	0.11519	0.36036	0.08681	-1.57479	0.1097

# Table L-24. 2016–17 FSAA-PT: IRT Parameters—ELA Writing Prompt Grade 8

Item Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267801A	0.50222	0.03692	-0.44959	0.06055	0	0	1.16162	0.16653	-1.10347	0.15804	-0.05816	0.15862
267801B	0.74998	0.05314	-0.15949	0.05013	0	0	0.98351	0.12382	0.56306	0.09645	-1.54657	0.10799
267801C	0.76169	0.05761	-0.35892	0.04784	0	0	0.68671	0.12609	0.48886	0.10198	-1.17558	0.09451
267801D	0.72802	0.04875	0.07204	0.05305	0	0	1.18656	0.12231	0.69966	0.09547	-1.88622	0.13204
267877A	0.72407	0.05482	-0.31512	0.04867	0	0	0.97356	0.11892	-0.6408	0.1167	-0.33276	0.1201
267877B	0.97307	0.07533	-0.09344	0.04264	0	0	0.99265	0.09324	0.22074	0.07929	-1.21339	0.09433
267877C	1.10233	0.07484	-0.03678	0.0412	0	0	0.94371	0.08935	0.66967	0.07436	-1.61338	0.09777
267877D	1.07006	0.07613	0.23633	0.0438	0	0	1.33899	0.0841	0.44395	0.07001	-1.78294	0.12751
267766A	0.91233	0.06509	-0.34243	0.04606	0	0	0.91097	0.12005	0.53037	0.08785	-1.44134	0.08533
267766B	1.05386	0.07813	-0.31399	0.04086	0	0	1.0138	0.10118	0.22947	0.07441	-1.24327	0.07539
267766C	1.01463	0.07081	-0.30298	0.04323	0	0	0.97641	0.10899	0.49503	0.07913	-1.47144	0.0805
267766D	0.91877	0.06289	-0.12164	0.04695	0	0	1.1799	0.11222	0.48822	0.08091	-1.66812	0.09839
267987A	0.46078	0.03638	-0.48257	0.06578	0	0	0.4424	0.18753	-0.68776	0.18768	0.24536	0.17065
267987B	0.8592	0.06204	-0.0789	0.04741	0	0	1.11399	0.11173	0.40634	0.08519	-1.52032	0.10271
267987C	0.8819	0.05687	0.29697	0.05177	0	0	1.34242	0.10989	0.99661	0.08422	-2.33903	0.16203
267987D	0.76911	0.0559	0.24369	0.05252	0	0	1.42201	0.11228	0.32313	0.08925	-1.74514	0.13794
267944A	0.74578	0.04979	-0.32857	0.04983	0	0	0.12922	0.15105	1.22183	0.12965	-1.35105	0.09911

ltem Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267944B	0.8046	0.05246	-0.19873	0.04706	0	0	0.31155	0.13148	1.08671	0.11319	-1.39826	0.09875
267944C	0.5029	0.03791	-0.5113	0.06234	0	0	-1.03569	0.24382	1.72655	0.22807	-0.69086	0.13037
267944D	0.75685	0.04838	-0.17324	0.04827	0	0	0.06902	0.14479	1.31743	0.12877	-1.38644	0.1032

Table L-25. 2016–17 FSAA-PT: IRT Parameters—ELA Writing Prompt Grade 9

Item Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
267987A	0.45709	0.03232	-0.45864	0.06018	0	0	0.254	0.17264	-0.79222	0.18835	0.53822	0.17141
267987B	0.71428	0.04898	-0.13219	0.04972	0	0	0.89383	0.12289	0.61391	0.09888	-1.50773	0.11036
267987C	0.68153	0.04008	0.27829	0.05778	0	0	1.20839	0.1309	1.30658	0.10307	-2.51497	0.17895
267987D	0.58935	0.04392	0.13716	0.05549	0	0	0.95881	0.13104	0.52119	0.11441	-1.48	0.14245
267972A	0.91533	0.06462	-0.29474	0.04515	0	0	0.74381	0.11955	0.58048	0.09116	-1.32429	0.08286
267972B	1.09616	0.07285	0.01483	0.04078	0	0	0.99812	0.09227	0.49036	0.07099	-1.48848	0.08748
267972C	0.91369	0.05967	-0.01579	0.04523	0	0	0.79592	0.11005	0.72157	0.08783	-1.51748	0.09658
267972D	0.9675	0.06513	0.07656	0.04329	0	0	0.93161	0.09901	0.54344	0.079	-1.47506	0.09691
267944A	0.5269	0.03711	-0.46483	0.06678	0	0	0.01915	0.21284	1.5589	0.17585	-1.57805	0.12998
267944B	0.66742	0.04582	-0.39235	0.05523	0	0	0.28963	0.16376	1.17807	0.13476	-1.4677	0.10763
267944C	0.37731	0.03219	-0.83953	0.08913	0	0	-1.14235	0.31167	1.59786	0.28183	-0.45551	0.16843
267944D	0.59941	0.04106	-0.31496	0.05836	0	0	0.11186	0.17782	1.37529	0.15125	-1.48716	0.11985
268258A	0.68462	0.04828	-0.22379	0.05208	0	0	0.33971	0.14669	0.98457	0.12417	-1.32427	0.10935
268258B	0.93271	0.0615	-0.01978	0.04389	0	0	0.80226	0.10316	0.70068	0.08443	-1.50294	0.09939
268258C	0.82446	0.0559	-0.11276	0.04602	0	0	0.53958	0.11844	0.81206	0.10014	-1.35164	0.09911
268258D	0.91224	0.06348	0.07942	0.04303	0	0	0.78164	0.09788	0.56104	0.08405	-1.34268	0.10143
268235A	0.57397	0.04835	-0.14712	0.05908	0	0	1.08082	0.14987	0.10058	0.12388	-1.1814	0.13798
268235B	0.62492	0.04546	0.37625	0.06121	0	0	1.47807	0.13115	0.57145	0.1073	-2.04952	0.1841
268235C	0.53127	0.04245	0.15109	0.06527	0	0	1.26866	0.15419	0.41111	0.12826	-1.67977	0.17121
268235D	0.63357	0.04738	0.44861	0.06038	0	0	1.50204	0.12469	0.42504	0.1062	-1.92708	0.18565

ltem Number	а	SE(a)	b	SE(b)	D0	SE(D0)	D1	SE(D1)	D2	SE(D2)	D3	SE(D3)
268258A	0.56761	0.04034	-0.58942	0.06658	0	0	0.60581	0.19452	1.1649	0.1471	-1.77071	0.12783
268258B	0.68453	0.04552	-0.15958	0.05856	0	0	1.12026	0.14251	0.9182	0.10818	-2.03846	0.13837
268258C	0.62269	0.04345	-0.40967	0.06067	0	0	0.7408	0.16544	1.02478	0.12817	-1.76558	0.12536
268258D	0.67536	0.04565	-0.0742	0.05851	0	0	1.17067	0.13855	0.8611	0.10722	-2.03177	0.14486
268235A	0.53094	0.04831	-0.14999	0.06356	0	0	0.98097	0.162	0.15976	0.13903	-1.14073	0.15577
268235B	0.52536	0.04238	0.38165	0.07098	0	0	1.51843	0.15463	0.5587	0.13078	-2.07712	0.22081
268235C	0.35573	0.03468	0.05859	0.08718	0	0	0.84619	0.23316	0.75799	0.20567	-1.60418	0.23697
268235D	0.51996	0.04175	0.56394	0.07316	0	0	1.67497	0.15229	0.62157	0.1312	-2.29654	0.25513
268268A	0.6018	0.04739	-0.32349	0.05713	0	0	0.45581	0.16068	0.67472	0.13465	-1.13053	0.11515
268268B	0.71278	0.04679	0.09553	0.05466	0	0	1.05294	0.12969	0.82703	0.1027	-1.87998	0.13078
268268C	0.64959	0.04083	0.09452	0.05852	0	0	0.86468	0.14609	1.15234	0.11787	-2.01703	0.14143
268268D	0.69682	0.04344	0.24266	0.05651	0	0	1.04816	0.13133	1.06648	0.10623	-2.11464	0.15112
268570A	0.30197	0.03102	-0.03111	0.09756	0	0	1.45079	0.26085	-0.88445	0.24941	-0.56634	0.27777
268570B	0.82616	0.06139	-0.19229	0.05043	0	0	1.0225	0.12332	0.49009	0.09505	-1.51259	0.10324
268570C	0.67949	0.04181	0.21408	0.06387	0	0	1.05385	0.15178	1.46714	0.12037	-2.52099	0.18383
268570D	0.77222	0.05364	0.07385	0.0541	0	0	1.12302	0.12373	0.70082	0.09833	-1.82384	0.1308
268282A	0.52554	0.04572	-0.07914	0.0648	0	0	1.20483	0.17037	0.08794	0.13427	-1.29278	0.14991
268282B	0.77727	0.05705	0.28642	0.05307	0	0	1.50654	0.11455	0.17178	0.08815	-1.67833	0.13829
268282C	0.73491	0.0546	0.9131	0.06236	0	0	2.11226	0.11858	0.83643	0.0897	-2.94868	0.34119
268282D	0.86676	0.06237	0.45434	0.04999	0	0	1.50414	0.09941	0.23684	0.0801	-1.74097	0.14617

Table L-26. 2016–17 FSAA-PT: IRT Parameters—ELA Writing Prompt Grade 10

# APPENDIX M—SUBGROUP RELIABILITY

# **Part I: 2015–16 FSAA-PT: Cronbach's** $\alpha$ Reliability for Subgroups

Grade	Group	Number of Students	Reliability
	All Students	2,798	0.94
	Male	1,132	0.95
	Female	595	0.93
	Hispanic	585	0.94
	American Indian / Alaska Native	4	N/A
	Asian	36	0.94
3	Black Non-Hispanic	506	0.94
3	Pacific Islander	1	N/A
	White Non-Hispanic	520	0.94
	Multiracial	75	0.93
	Economically Disadvantaged	982	0.94
	Not Economically Disadvantaged	1,816	0.94
	Limited English Proficient	261	0.94
	Non Limited English Proficient	2,537	0.94
	All Students	2,912	0.95
	Male	1,544	0.95
	Female	749	0.95
	Hispanic	697	0.95
	, American Indian / Alaska Native	6	N/A
	Asian	52	0.93
	Black Non-Hispanic	680	0.95
4	Pacific Islander	6	N/A
	White Non-Hispanic	777	0.94
	Multiracial	75	0.96
	Economically Disadvantaged	1,256	0.95
	Not Economically Disadvantaged	1,656	0.95
	Limited English Proficient	284	0.93
	Non Limited English Proficient	2,628	0.94
	All Students	,	0.95
		2,918	
	Male	1,711	0.95
	Female	767	0.95
	Hispanic	791	0.95
	American Indian / Alaska Native	9	N/A
	Asian	56	0.95
5	Black Non-Hispanic	755	0.95
C C	Pacific Islander	5	N/A
	White Non-Hispanic	778	0.95
	Multiracial	84	0.94
	Economically Disadvantaged	1,357	0.95
	Not Economically Disadvantaged	1,561	0.95
	Limited English Proficient	257	0.94
	Non Limited English Proficient	2,661	0.95
6	All Students	2,907	0.95
6	Male	1,629	0.95
			continue

### Table M-1. 2015–16 FSAA-PT: Subgroup Reliabilities— ELA

Grade	Group	Number of Students	Reliability
	Female	794	0.95
	Hispanic	720	0.95
	American Indian / Alaska Native	10	0.96
	Asian	40	0.94
	Black Non-Hispanic	735	0.95
6	Pacific Islander	4	N/A
6	White Non-Hispanic	835	0.95
	Multiracial	79	0.95
	Economically Disadvantaged	1,396	0.95
	Not Economically Disadvantaged	1,511	0.95
	Limited English Proficient	214	0.94
	Non Limited English Proficient	2,693	0.95
	All Students	2,958	0.95
	Male	1,758	0.95
	Female	821	0.95
	Hispanic	736	0.95
7	, American Indian / Alaska Native	5	N/A
	Asian	64	0.96
	Black Non-Hispanic	774	0.94
	Pacific Islander	6	N/A
	White Non-Hispanic	917	0.95
	Multiracial	77	0.95
	Economically Disadvantaged	1,477	0.95
	Not Economically Disadvantaged	1,481	0.96
	Limited English Proficient	179	0.95
	Non Limited English Proficient	2,779	0.95
	All Students	2,985	0.95
	Male	1,700	0.95
	Female	871	0.95
	Hispanic	711	0.95
	American Indian / Alaska Native	13	0.95
	Asian	60	0.94
		744	
8	Black Non-Hispanic		0.95
	Pacific Islander	1	N/A
	White Non-Hispanic	954	0.95
	Multiracial	88	0.95
	Economically Disadvantaged	1,432	0.95
	Not Economically Disadvantaged	1,553	0.95
	Limited English Proficient	151	0.94
	Non Limited English Proficient	2,834	0.95
	All Students	3,054	0.94
	Male Female	1,711 856	0.94 0.94
	Hispanic	691	0.94
9	American Indian / Alaska Native	11	0.95
	Asian	49	0.94
	Black Non-Hispanic	777	0.94
	Pacific Islander	1	N/A
			continued

Grade	Group	Number of Students	Reliability
	White Non-Hispanic	981	0.95
	Multiracial	57	0.94
9	Economically Disadvantaged	1,504	0.94
9	Not Economically Disadvantaged	1,550	0.95
	Limited English Proficient	122	0.93
	Non Limited English Proficient	2,932	0.94
	All Students	2,881	0.95
	Male	1,630	0.95
	Female	840	0.95
	Hispanic	646	0.95
	American Indian / Alaska Native	11	0.91
	Asian	44	0.94
10	Black Non-Hispanic	766	0.95
10	Pacific Islander	3	N/A
	White Non-Hispanic	926	0.95
	Multiracial	74	0.97
	Economically Disadvantaged	1,499	0.95
	Not Economically Disadvantaged	1,382	0.95
	Limited English Proficient	113	0.95
	Non Limited English Proficient	2,768	0.95

#### Table M-2. 2015–16 FSAA-PT: Subgroup Reliabilities— Mathematics

Wathematics						
Grade	Group	Number of Students	Reliability			
	All Students	2,781	0.95			
	Male	1,131	0.96			
	Female	590	0.95			
	Hispanic	583	0.95			
	American Indian / Alaska Native	4	N/A			
	Asian	36	0.95			
2	Black Non-Hispanic	504	0.95			
3	Pacific Islander	1	N/A			
	White Non-Hispanic	518	0.96			
	Multiracial	75	0.94			
	Economically Disadvantaged	981	0.95			
	Not Economically Disadvantaged	1,800	0.95			
	Limited English Proficient	261	0.95			
	Non Limited English Proficient	2,520	0.95			
	All Students	2,904	0.94			
	Male	1,542	0.94			
4	Female	744	0.93			
4	Hispanic	697	0.94			
	American Indian / Alaska Native	6	N/A			
	Asian	52	0.93			
			continued			

Grade	Group	Number of	Reliability
	Black Non-Hispanic	Students 678	0.94
	Pacific Islander	6	0.94 N/A
	White Non-Hispanic	772	0.94
	Multiracial	75	0.94
4	Economically Disadvantaged	1,255	0.94
	Not Economically Disadvantaged	1,649	0.94
	Limited English Proficient	284	0.93
	Non Limited English Proficient	2,620	0.94
	All Students	2,904	0.94
	Male	1,700	0.94
	Female	765	0.94
	Hispanic	787	0.94
	American Indian / Alaska Native	9	N/A
	Asian	56	0.94
	Black Non-Hispanic	752	0.94
5	Pacific Islander	5	0.34 N/A
	White Non-Hispanic	773	0.94
	Multiracial	83	0.93
	Economically Disadvantaged	1,350	0.94
	Not Economically Disadvantaged	1,554	0.94
	Limited English Proficient	255	0.93
	Non Limited English Proficient	2,649	0.94
	All Students	2,899	0.95
	Male	1,631	0.95
	Female	790	0.95
	Hispanic	724	0.95
	American Indian / Alaska Native	11	0.97
	Asian	39	0.95
	Black Non-Hispanic	729	0.95
6	Pacific Islander	4	N/A
	White Non-Hispanic	837	0.95
	Multiracial	77	0.95
	Economically Disadvantaged	1,399	0.95
	Not Economically Disadvantaged	1,500	0.95
	Limited English Proficient	215	0.95
	Non Limited English Proficient	2,684	0.95
	All Students	2,004	0.94
	Male	1,756	0.94
	Female	821	0.93
	Hispanic	740	0.94
	American Indian / Alaska Native	5	N/A
	Asian	65	0.95
7	Black Non-Hispanic	774	0.93
	Pacific Islander	5	0.95 N/A
	White Non-Hispanic	911	0.93
	Multiracial	77	0.93
	Economically Disadvantaged	1,477	0.92
	Not Economically Disadvantaged	1,478	0.93
	Not Economically Disadvantaged	1,-110	continued

Grade	Group	Number of Students	Reliability
7	Limited English Proficient	182	0.92
1	Non Limited English Proficient	2,773	0.94
	All Students	2,970	0.95
	Male	1,693	0.95
	Female	867	0.95
	Hispanic	710	0.96
	American Indian / Alaska Native	13	0.93
	Asian	59	0.94
8	Black Non-Hispanic	741	0.95
0	Pacific Islander	1	N/A
	White Non-Hispanic	947	0.96
	Multiracial	89	0.96
	Economically Disadvantaged	1,430	0.95
	Not Economically Disadvantaged	1,540	0.95
	Limited English Proficient	153	0.94
	Non Limited English Proficient	2,817	0.95

#### Table M-3. 2015–16 FSAA-PT: Subgroup Reliabilities— Science

		Number of	
Grade	Group	Students	Reliability
	All Students	2,901	0.97
	Male	1,696	0.97
	Female	768	0.97
	Hispanic	786	0.97
	American Indian / Alaska Native	9	N/A
	Asian	56	0.96
5	Black Non-Hispanic	754	0.97
Э	Pacific Islander	5	N/A
	White Non-Hispanic	770	0.97
	Multiracial	84	0.96
	Economically Disadvantaged	1,352	0.97
	Not Economically Disadvantaged	1,549	0.97
	Limited English Proficient	255	0.96
	Non Limited English Proficient	2,646	0.97
	All Students	2,969	0.95
	Male	1,692	0.95
	Female	868	0.95
	Hispanic	710	0.95
	American Indian / Alaska Native	13	0.96
	Asian	60	0.95
8	Black Non-Hispanic	744	0.95
0	Pacific Islander	1	N/A
	White Non-Hispanic	945	0.95
	Multiracial	87	0.96
	Economically Disadvantaged	1,427	0.95
	Not Economically Disadvantaged	1,542	0.95
	Limited English Proficient	152	0.94
	Non Limited English Proficient	2,817	0.95

Grade	Group	Number of Students	Reliability
	All Students	2,876	0.94
	Male	923	0.94
	Female	458	0.93
	Hispanic	293	0.94
	American Indian / Alaska Native	6	N/A
	Asian	28	0.93
HS	Black Non-Hispanic	438	0.94
по	Pacific Islander	0	N/A
	White Non-Hispanic	568	0.94
	Multiracial	48	0.95
	Economically Disadvantaged	773	0.94
	Not Economically Disadvantaged	2,103	0.95
	Limited English Proficient	44	0.87
	Non Limited English Proficient	2,832	0.95

# Table M-4. 2015–16 FSAA-PT: Subgroup Reliabilities— Algebra I

#### Table M-5. 2015–16 FSAA-PT: Subgroup Reliabilities— Biology

ыыоду		
Group	Number of Students	Reliability
All Students	3,223	0.95
Male	1,178	0.95
Female	599	0.95
Hispanic	440	0.95
American Indian / Alaska Native	7	N/A
Asian	30	0.94
Black Non-Hispanic	563	0.95
Pacific Islander	1	N/A
White Non-Hispanic	689	0.95
Multiracial	47	0.96
Economically Disadvantaged	1,013	0.95
Not Economically Disadvantaged	2,210	0.95
Limited English Proficient	82	0.94
Non Limited English Proficient	3,141	0.95
	Group All Students Male Female Hispanic American Indian / Alaska Native Asian Black Non-Hispanic Pacific Islander White Non-Hispanic Multiracial Economically Disadvantaged Not Economically Disadvantaged Limited English Proficient	GroupNumber of StudentsAll Students3,223Male1,178Female599Hispanic440American Indian / Alaska Native7Asian30Black Non-Hispanic563Pacific Islander1White Non-Hispanic689Multiracial47Economically Disadvantaged1,013Not Economically Disadvantaged2,210Limited English Proficient82

		Number of	
Grade	Group	Students	Reliability
	All Students	1,928	0.95
	Male	366	0.94
	Female	171	0.94
	Hispanic	167	0.95
	American Indian / Alaska Native	4	N/A
	Asian	8	N/A
HS	Black Non-Hispanic	163	0.94
по	Pacific Islander	2	N/A
	White Non-Hispanic	182	0.93
	Multiracial	11	0.82
	Economically Disadvantaged	387	0.94
	Not Economically Disadvantaged	1,541	0.95
	Limited English Proficient	36	0.96
	Non Limited English Proficient	1,892	0.95

# Table M-6. 2015–16 FSAA-PT: Subgroup Reliabilities— Geometry

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	All Students	2,798	0.89259	0.30650
	Male	1,132	0.90078	0.30971
	Female	595	0.88134	0.29576
	Hispanic	585	0.89212	0.30328
	American Indian / Alaska Native	4	N/A	N/A
	Asian	36	0.90714	0.30143
2	Black Non-Hispanic	506	0.89131	0.30956
3	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	520	0.90034	0.30389
	Multiracial	75	0.88762	0.29272
	Economically Disadvantaged	982	0.89317	0.30730
	Not Economically Disadvantaged	1,816	0.89218	0.30608
	LEP	261	0.87977	0.30729
	Non-LEP	2,537	0.89356	0.30642
	All Students	2,912	0.92113	0.26402
	Male	1,544	0.92112	0.26049
	Female	749	0.92622	0.26249
	Hispanic	697	0.92550	0.26006
	American Indian / Alaska Native	6	N/A	N/A
	Asian	52	0.90026	0.23177
4	Black Non-Hispanic	680	0.92187	0.26775
4	Pacific Islander	6	N/A	N/A
	White Non-Hispanic	777	0.92053	0.25738
	Multiracial	75	0.92979	0.27258
	Economically Disadvantaged	1,256	0.92203	0.26805
	Not Economically Disadvantaged	1,656	0.92008	0.26092
	LEP	284	0.90490	0.27122
	Non-LEP	2,628	0.92244	0.26323
	All Students	2,918	0.92367	0.25968
	Male	1,711	0.92634	0.26037
	Female	767	0.92671	0.25461
	Hispanic	791	0.92909	0.25577
	American Indian / Alaska Native	9	N/A	N/A
	Asian	56	0.93478	0.22267
5	Black Non-Hispanic	755	0.92163	0.26745
Э	Pacific Islander	5	N/A	N/A
	White Non-Hispanic	778	0.92747	0.25623
	Multiracial	84	0.91211	0.25060
	Economically Disadvantaged	1,357	0.92542	0.26488
	Not Economically Disadvantaged	1,561	0.92164	0.25508
	LEP	257	0.90445	0.26384
	Non-LEP	2,661	0.92508	0.25928
	All Students	2,907	0.92598	0.25662
~	Male	1,629	0.93007	0.25768
6	Female	794	0.92435	0.25014
	Hispanic	720	0.93048	0.25050
	•			continued

# Table M-7. 2015–16 FSAA-PT: Subgroup Reliabilities— ELA

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	American Indian / Alaska Native	10	0.94923	0.25252
	Asian	40	0.92321	0.23552
	Black Non-Hispanic	735	0.92738	0.25936
	Pacific Islander	4	N/A	N/A
•	White Non-Hispanic	835	0.92791	0.25639
6	Multiracial	79	0.91939	0.25748
	Economically Disadvantaged	1,396	0.92647	0.2618 <sup>,</sup>
	Not Economically Disadvantaged	1,511	0.92478	0.25174
	LEP	214	0.91249	0.2584
	Non-LEP	2,693	0.92682	0.25648
	All Students	2,958	0.92555	0.2567
	Male	1,758	0.92634	0.2521
	Female	821	0.92319	0.2570
	Hispanic	736	0.93007	0.2576
	American Indian / Alaska Native	730 5	0.93007 N/A	0.25060 N/A
	Asian	5 64	0.94235	0.2510
	Black Non-Hispanic	64 774		
7	Pacific Islander	6	0.91486	0.2577
			N/A	N/A
	White Non-Hispanic	917	0.92738	0.25268
	Multiracial	77	0.92208	0.2579
	Economically Disadvantaged	1,477	0.92119	0.25823
	Not Economically Disadvantaged	1,481	0.92934	0.25529
	LEP	179	0.90782	0.27238
	Non-LEP	2,779	0.92627	0.25573
	All Students	2,985	0.92849	0.25074
	Male	1,700	0.92736	0.24786
	Female	871	0.93283	0.24913
	Hispanic	711	0.93070	0.24372
	American Indian / Alaska Native	13	0.90544	0.23998
	Asian	60	0.91653	0.22192
8	Black Non-Hispanic	744	0.92436	0.25684
0	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	954	0.93132	0.24664
	Multiracial	88	0.92757	0.24774
	Economically Disadvantaged	1,432	0.92516	0.25209
	Not Economically Disadvantaged	1,553	0.93116	0.24949
	LEP	151	0.91712	0.25160
	Non-LEP	2,834	0.92901	0.25069
	All Students	3,054	0.91872	0.26628
	Male	1,711	0.92065	0.26448
	Female	856	0.91993	0.2607
	Hispanic	691	0.92253	0.26114
	American Indian / Alaska Native	11	0.90607	0.27692
9	Asian	49	0.93199	0.24026
	Black Non-Hispanic	777	0.91271	0.26064
	Pacific Islander	1	N/A	0.2000- N/A
	White Non-Hispanic	981	0.92252	0.26812
	Multiracial	57	0.91390	0.25685
	mannuolui	51		continue

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	Economically Disadvantaged	1,504	0.91506	0.26688
9	Not Economically Disadvantaged	1,550	0.92198	0.26569
9	LEP	122	0.90500	0.24986
	Non-LEP	2,932	0.91911	0.26694
	All Students	2,881	0.91877	0.26609
10	Male	1,630	0.92108	0.26318
	Female	840	0.92185	0.26400
	Hispanic	646	0.92326	0.25668
	American Indian / Alaska Native	11	0.86453	0.25561
	Asian	44	0.91650	0.21649
10	Black Non-Hispanic	766	0.92023	0.26660
10	Pacific Islander	3	N/A	N/A
	White Non-Hispanic	926	0.91689	0.26698
	Multiracial	74	0.93991	0.27393
	Economically Disadvantaged	1,499	0.91933	0.26667
	Not Economically Disadvantaged	1,382	0.91821	0.26545
	LEP	113	0.91729	0.25444
	Non-LEP	2,768	0.91880	0.26655

# Table M-8. 2015–16 FSAA-PT: Subgroup Reliabilities— Mathematics

		Wathema		
Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	All Students	2,781	0.90834	0.28707
	Male	1,131	0.91381	0.29168
	Female	590	0.90623	0.26980
	Hispanic	583	0.90845	0.28689
	American Indian / Alaska Native	4	N/A	N/A
	Asian	36	0.91307	0.26076
3	Black Non-Hispanic	504	0.90760	0.28982
5	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	518	0.91847	0.28049
	Multiracial	75	0.89992	0.26339
	Economically Disadvantaged	981	0.90873	0.28939
	Not Economically Disadvantaged	1,800	0.90810	0.28580
	LEP	261	0.89898	0.29731
	Non-LEP	2,520	0.90901	0.28599
	All Students	2,904	0.89697	0.30136
	Male	1,542	0.90194	0.30224
	Female	744	0.89195	0.29148
	Hispanic	697	0.90030	0.29962
	American Indian / Alaska Native	6	N/A	N/A
4	Asian	52	0.88709	0.27615
	Black Non-Hispanic	678	0.90210	0.30842
	Pacific Islander	6	N/A	N/A
	White Non-Hispanic	772	0.89331	0.29060
	Multiracial	75	0.89933	0.30345
	Economically Disadvantaged	1,255	0.89966	0.30608
				continued

Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	Not Economically Disadvantaged	1,649	0.89431	0.29772
4	LEP	284	0.88179	0.31325
	Non-LEP	2,620	0.89806	0.30005
	All Students	2,904	0.89324	0.30553
	Male	1,700	0.89647	0.30828
	Female	765	0.89405	0.29744
	Hispanic	787	0.90254	0.3044
	American Indian / Alaska Native	9	N/A	N/A
	Asian	56	0.90673	0.2792
_	Black Non-Hispanic	752	0.88126	0.3145
5	Pacific Islander	5	N/A	N/A
	White Non-Hispanic	773	0.89892	0.2993
	Multiracial	83	0.87884	0.2915
	Economically Disadvantaged	1,350	0.89456	0.3100
	Not Economically Disadvantaged	1,554	0.89157	0.3015
	LEP	255	0.86962	0.3133
	Non-LEP	2,649	0.89490	0.3047
	All Students	2,899	0.90765	0.2882
	Male	1,631	0.91040	0.2884
	Female			
		790	0.90295	0.2769
	Hispanic American Indian / Alaska Native	724	0.91056	0.2833
		11	0.93098	0.3020
	Asian Black Non Llinnenin	39	0.91138	0.2779
6	Black Non-Hispanic	729	0.90527	0.2874
	Pacific Islander	4	N/A	N/A
	White Non-Hispanic	837	0.90983	0.2842
	Multiracial	77	0.89482	0.2803
	Economically Disadvantaged	1,399	0.90487	0.29149
	Not Economically Disadvantaged	1,500	0.90951	0.2852
	LEP	215	0.89210	0.2951
	Non-LEP	2,684	0.90844	0.2877
	All Students	2,955	0.88528	0.3160
	Male	1,756	0.88548	0.3143
	Female	821	0.88212	0.3116
	Hispanic	740	0.88921	0.31398
	American Indian / Alaska Native	5	N/A	N/A
	Asian	65	0.91310	0.3187
7	Black Non-Hispanic	774	0.87908	0.3175 <sup>,</sup>
1	Pacific Islander	5	N/A	N/A
	White Non-Hispanic	911	0.88258	0.3096
	Multiracial	77	0.87169	0.31069
	Economically Disadvantaged	1,477	0.87840	0.31636
	Not Economically Disadvantaged	1,478	0.89130	0.3157
	LEP	182	0.85457	0.33267
	Non-LEP	2,773	0.88618	0.31493
	All Students	2,970	0.89917	0.30013
8	Male	1,693	0.90141	0.2978
	Female	867	0.90277	0.2954
				continue
Grade	Group	Number of Students	IRT Marginal Reliability	SEM
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	Hispanic	710	0.90414	0.29386
	American Indian / Alaska Native	13	0.85636	0.27459
	Asian	59	0.88914	0.25910
	Black Non-Hispanic	741	0.89636	0.30543
	Pacific Islander	1	N/A	N/A
8	White Non-Hispanic	947	0.90399	0.29498
	Multiracial	89	0.90416	0.29982
	Economically Disadvantaged	1,430	0.89638	0.30078
	Not Economically Disadvantaged	1,540	0.90165	0.29953
	LEP	153	0.86506	0.30272
	Non-LEP	2,817	0.90043	0.29999

		Science	9	
Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	All	2,901	0.91422	0.28069
	Male	1,696	0.91536	0.28404
	Female	768	0.91979	0.26948
	Hispanic	786	0.91855	0.27205
	American Indian / Alaska Native	9	N/A	N/A
	Asian	56	0.92791	0.22516
5	Black Non-Hispanic	754	0.90886	0.29702
5	Pacific Islander	5	N/A	N/A
	White Non-Hispanic	770	0.92008	0.27303
	Multiracial	84	0.91368	0.28050
	Economically Disadvantaged	1,352	0.91318	0.29029
	Not Economically Disadvantaged	1,549	0.91479	0.27204
	LEP	255	0.89021	0.29688
	Non-LEP	2,646	0.91581	0.27908
	All	2,969	0.89886	0.29995
	Male	1,692	0.89995	0.29729
	Female	868	0.90388	0.29600
	Hispanic	710	0.90511	0.28830
	American Indian / Alaska Native	13	0.87536	0.32093
	Asian	60	0.89688	0.25187
8	Black Non-Hispanic	744	0.89569	0.30705
Ũ	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	945	0.90121	0.29692
	Multiracial	87	0.89921	0.30186
	Economically Disadvantaged	1,427	0.89486	0.30257
	Not Economically Disadvantaged	1,542	0.90219	0.29750
	LEP	152	0.87687	0.30157
	Non-LEP	2,817	0.89980	0.29986

Table M-9. 2015–16 FSAA-PT: Subgroup Reliabilities— Science

		Algebra	1	
Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	All	2,876	0.89643	0.30207
	Male	923	0.89100	0.29923
	Female	458	0.87650	0.28391
	Hispanic	293	0.88329	0.29131
	American Indian / Alaska Native	6	N/A	N/A
	Asian	28	0.88263	0.27036
HS	Black Non-Hispanic	438	0.88724	0.29766
115	Pacific Islander	0	N/A	N/A
	White Non-Hispanic	568	0.88720	0.29401
	Multiracial	48	0.90858	0.29791
	Economically Disadvantaged	773	0.88261	0.29795
	Not Economically Disadvantaged	2,103	0.90061	0.30358
	LEP	44	0.77968	0.28144
	Non-LEP	2,832	0.89718	0.30238

#### Table M-10. 2015–16 FSAA-PT: Subgroup Reliabilities— Algebra 1

Table M-11. 2015–16 FSAA-PT: Subgroup Reliabilities—

		Biology	<b>y</b>	
Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	All	3,223	0.89501	0.30586
	Male	1,178	0.89259	0.30021
	Female	599	0.90424	0.28988
	Hispanic	440	0.90030	0.28595
	American Indian / Alaska Native	7	N/A	N/A
	Asian	30	0.91019	0.23688
HS	Black Non-Hispanic	563	0.89174	0.30322
110	Pacific Islander	1	N/A	N/A
	White Non-Hispanic	689	0.89521	0.30026
	Multiracial	47	0.91493	0.29189
	Economically Disadvantaged	1,013	0.89201	0.30296
	Not Economically Disadvantaged	2,210	0.89633	0.30719
	LEP	82	0.88548	0.27954
	Non-LEP	3,141	0.89515	0.30652

		Geomet	i y	
Grade	Group	Number of Students	IRT Marginal Reliability	SEM
	All	1,928	0.89004	0.31071
	Male	366	0.86493	0.31510
	Female	171	0.88050	0.30721
	Hispanic	167	0.88561	0.29998
	American Indian / Alaska Native	4	N/A	N/A
	Asian	8	N/A	N/A
HS	Black Non-Hispanic	163	0.87364	0.30130
110	Pacific Islander	2	N/A	N/A
	White Non-Hispanic	182	0.84514	0.33274
	Multiracial	11	0.69389	0.32948
	Economically Disadvantaged	387	0.86977	0.30878
	Not Economically Disadvantaged	1,541	0.89405	0.31119
	LEP	36	0.91225	0.30281
	Non-LEP	1,892	0.88955	0.31085

Table M-12. 2015–16 FSAA-PT: Subgroup Reliabilities— Geometry

## APPENDIX N—SUMMARY INTERRATER CONSISTENCY STATISTICS

			by Grade	—ELA		
Grade	ltem	Number of Included Scores	Percent Exact	Percent Adjacent	Percent Third Score	Correlatior
	267419A	94	84.04	15.96	0.00	0.93
	267419B	94	74.47	25.53	0.00	0.83
	267419C	94	93.62	6.38	0.00	0.97
	267419D	94	82.98	17.02	0.00	0.92
	267430A	101	82.18	17.82	0.00	0.91
	267430B	101	75.25	24.75	0.00	0.79
	267430C	101	83.17	16.83	0.00	0.90
	267430D	101	83.17	14.85	1.98	0.80
	267465A	109	89.91	8.26	1.83	0.92
	267465B	109	88.07	11.01	0.92	0.93
	267465C	109	93.58	6.42	0.00	0.96
4	267465D	109	84.40	13.76	1.83	0.89
4	267498A	96	85.42	14.58	0.00	0.93
	267498B	96	86.46	13.54	0.00	0.91
	267498C	96	91.67	8.33	0.00	0.95
	267498D	96	84.38	15.63	0.00	0.90
	267529A	100	90.00	10.00	0.00	0.91
	267529B	100	86.00	13.00	1.00	0.85
	267529C	100	88.00	12.00	0.00	0.92
	267529D	100	86.00	14.00	0.00	0.90
	267540A	106	85.85	14.15	0.00	0.90
	267540B	106	86.79	13.21	0.00	0.92
	267540C	106	90.57	9.43	0.00	0.95
	267540D	106	89.62	10.38	0.00	0.93
	267498A	109	80.73	18.35	0.92	0.89
	267498B	109	85.32	13.76	0.92	0.90
	267498C	109	89.91	10.09	0.00	0.94
	267498D	109	84.40	13.76	1.83	0.89
5	267529A	101	88.12	9.90	1.98	0.87
	267529B	101	86.14	12.87	0.99	0.88
	267529C	101	81.19	18.81	0.00	0.89
	267529D	101	76.24	22.77	0.99	0.83
	267540A	103	90.29	9.71	0.00	0.93
	267540B	103	87.38	12.62	0.00	0.92
						continued

#### Table N-1. 2015–16 FSAA-PT: Summary Interrater Consistency Statistics Item-level by Grade by Grade—ELA

Grade	Item	Number of Included Scores	Percent Exact	Percent Adjacent	Percent Third Score	Correlatior
	267540C	103	88.35	11.65	0.00	0.93
	267540D	103	79.61	19.42	0.97	0.85
	267579A	96	84.38	15.63	0.00	0.92
	267579B	96	75.00	25.00	0.00	0.88
	267579C	96	90.63	9.38	0.00	0.95
	267579D	96	72.92	26.04	1.04	0.84
5	267675A	98	79.59	19.39	1.02	0.86
5	267675B	98	86.73	13.27	0.00	0.92
	267675C	98	78.57	21.43	0.00	0.89
	267675D	98	77.55	22.45	0.00	0.85
	267685A	100	92.00	7.00	1.00	0.96
	267685B	100	84.00	16.00	0.00	0.92
	267685C	100	84.00	16.00	0.00	0.90
	267685D	100	83.00	16.00	1.00	0.89
	267579A	109	76.15	21.10	2.75	0.84
	267579B	109	68.81	29.36	1.83	0.82
	267579C	109	83.49	16.51	0.00	0.91
	267579D	109	77.98	22.02	0.00	0.90
	267675A	102	86.27	13.73	0.00	0.93
	267675B	102	84.31	15.69	0.00	0.92
	267675C	102	83.33	16.67	0.00	0.92
	267675D	102	72.55	26.47	0.98	0.87
	267685A	92	88.04	9.78	2.17	0.92
	267685B	92	92.39	7.61	0.00	0.96
	267685C	92	88.04	11.96	0.00	0.91
6	267685D	92	84.78	13.04	2.17	0.82
0	267709A	92	83.70	15.22	1.09	0.89
	267709B	92	82.61	17.39	0.00	0.86
	267709C	92	79.35	20.65	0.00	0.88
	267709D	92	79.35	19.57	1.09	0.84
	267765A	101	87.13	12.87	0.00	0.93
	267765B	101	91.09	8.91	0.00	0.94
	267765C	101	79.21	20.79	0.00	0.89
	267765D	101	89.11	10.89	0.00	0.94
	267782A	100	95.00	5.00	0.00	0.97
	267782B	100	86.00	14.00	0.00	0.92
	267782C	100	80.00	19.00	1.00	0.90
	267782D	100	85.00	15.00	0.00	0.93

Grade	ltem	Number of Included Scores	Percent Exact	Percent Adjacent	Percent Third Score	Correlatio
	267709A	109	82.57	17.43	0.00	0.90
	267709B	109	82.57	17.43	0.00	0.86
	267709C	109	72.48	27.52	0.00	0.83
	267709D	109	78.90	21.10	0.00	0.82
	267765A	108	87.96	12.04	0.00	0.93
	267765B	108	85.19	13.89	0.93	0.89
	267765C	108	72.22	27.78	0.00	0.86
	267765D	108	82.41	16.67	0.93	0.86
	267766A	99	83.84	16.16	0.00	0.89
	267766B	99	76.77	23.23	0.00	0.85
	267766C	99	85.86	14.14	0.00	0.90
7	267766D	99	78.79	21.21	0.00	0.87
1	267782A	96	94.79	5.21	0.00	0.97
	267782B	96	88.54	11.46	0.00	0.94
	267782C	96	78.13	21.88	0.00	0.91
	267782D	96	83.33	16.67	0.00	0.91
	267801A	90	96.67	3.33	0.00	0.99
	267801B	90	76.67	23.33	0.00	0.86
	267801C	90	77.78	22.22	0.00	0.89
	267801D	90	80.00	20.00	0.00	0.87
	267877A	99	95.96	4.04	0.00	0.98
	267877B	99	86.87	13.13	0.00	0.94
	267877C	99	81.82	18.18	0.00	0.89
	267877D	99	83.84	16.16	0.00	0.90
	267766A	101	86.14	13.86	0.00	0.91
	267766B	101	85.15	14.85	0.00	0.91
	267766C	101	79.21	20.79	0.00	0.86
	267766D	101	78.22	21.78	0.00	0.85
	267801A	110	93.64	6.36	0.00	0.98
	267801B	110	79.09	20.91	0.00	0.88
0	267801C	110	82.73	16.36	0.91	0.90
8	267801D	110	74.55	25.45	0.00	0.83
	267877A	97	96.91	3.09	0.00	0.99
	267877B	97	83.51	16.49	0.00	0.92
	267877C	97	83.51	16.49	0.00	0.89
	267877D	97	89.69	10.31	0.00	0.93
	267944A	101	93.07	5.94	0.99	0.95
	267944B	101	80.20	19.80	0.00	0.90
	2013440	101	00.20	10.00	0.00	continu

Grade	ltem	Number of Included Scores	Percent Exact	Percent Adjacent	Percent Third Score	Correlation
	267944C	101	70.30	27.72	1.98	0.85
	267944D	101	81.19	18.81	0.00	0.90
	267972A	106	82.08	15.09	2.83	0.84
	267972B	106	86.79	13.21	0.00	0.91
8	267972C	106	73.58	24.53	1.89	0.81
	267972D	106	68.87	28.30	2.83	0.77
	267987A	104	93.27	6.73	0.00	0.98
	267987B	104	83.65	16.35	0.00	0.91
	267987C	104	84.62	15.38	0.00	0.89
	267944A	105	82.86	12.38	4.76	0.75
	267944B	105	79.05	18.10	2.86	0.81
	267944C	105	80.95	17.14	1.90	0.89
	267944D	105	84.76	15.24	0.00	0.92
	267972A	103	82.52	16.50	0.97	0.90
	267972B	103	84.47	15.53	0.00	0.91
	267972C	103	81.55	17.48	0.97	0.88
	267972D	103	86.41	12.62	0.97	0.88
	267987A	111	85.59	13.51	0.90	0.94
	267987B	111	66.67	31.53	1.80	0.79
	267987C	111	75.68	23.42	0.90	0.83
9	267987D	111	70.27	27.03	2.70	0.80
9	268235A	102	92.16	7.84	0.00	0.96
	268235B	102	86.27	13.73	0.00	0.91
	268235C	102	78.43	21.57	0.00	0.88
	268235D	102	85.29	14.71	0.00	0.90
	268258A	99	83.84	13.13	3.03	0.86
	268258B	99	79.80	19.19	1.01	0.88
	268258C	99	79.80	19.19	1.01	0.87
	268258D	99	84.85	14.14	1.01	0.87
	268268A	103	79.61	16.50	3.88	0.85
	268268B	103	81.55	17.48	0.97	0.87
	268268C	103	83.50	16.50	0.00	0.89
	268268D	103	85.44	14.56	0.00	0.90
	268235A	93	94.62	4.30	1.08	0.95
	268235B	93	83.87	15.05	1.08	0.88
10	268235C	93	87.10	12.90	0.00	0.94
	268235D	93	92.47	7.53	0.00	0.95
	268258A	103	92.23	7.77	0.00	0.95
						continue

Grade	ltem	Number of Included Scores	Percent Exact	Percent Adjacent	Percent Third Score	Correlation
	268258B	103	84.47	15.53	0.00	0.88
	268258C	103	77.67	21.36	0.97	0.83
	268258D	103	83.50	14.56	1.94	0.83
	268268A	104	81.73	16.35	1.92	0.87
	268268B	104	77.88	22.12	0.00	0.86
	268268C	104	79.81	19.23	0.96	0.86
	268268D	104	77.88	17.31	4.81	0.78
	268282A	98	80.61	16.33	3.06	0.82
10	268282B	98	77.55	20.41	2.04	0.80
10	268282C	98	83.67	14.29	2.04	0.83
	268282D	98	87.76	10.20	2.04	0.85
	268315A	94	90.43	8.51	1.06	0.95
	268315B	94	84.04	14.89	1.06	0.92
	268315C	94	78.72	20.21	1.06	0.87
	268315D	94	81.91	18.09	0.00	0.92
	268570A	96	94.79	5.21	0.00	0.98
	268570B	96	85.42	14.58	0.00	0.92
	268570C	96	89.58	10.42	0.00	0.94

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## APPENDIX O—DECISION ACCURACY AND CONSISTENCY

Contont	Orrada		Kanna		Conditiona	al on Level	
Content	Grade	Overall	Kappa	Level 1	Level 2	Level 3	Level 4
	3	0.75 (0.66)	0.54	0.84 (0.74)	0.68 (0.58)	0.73 (0.64)	0.84 (0.74)
	4	0.79 (0.71)	0.6	0.86 (0.77)	0.71 (0.61)	0.79 (0.73)	0.86 (0.77)
	5	0.79 (0.71)	0.61	0.86 (0.78)	0.73 (0.64)	0.78 (0.70)	0.86 (0.78)
ELA	6	0.80 (0.72)	0.61	0.86 (0.78)	0.74 (0.64)	0.78 (0.70)	0.86 (0.78)
ELA	7	0.80 (0.72)	0.61	0.86 (0.78)	0.74 (0.64)	0.78 (0.70)	0.86 (0.78)
	8	0.79 (0.71)	0.61	0.86 (0.78)	0.74 (0.65)	0.74 (0.65)	0.88 (0.81)
	9	0.80 (0.72)	0.6	0.85 (0.76)	0.73 (0.63)	0.80 (0.74)	0.85 (0.75)
	10	0.78 (0.70)	0.59	0.86 (0.78)	0.69 (0.58)	0.77 (0.69)	0.86 (0.78)
	3	0.76 (0.67)	0.56	0.86 (0.78)	0.65 (0.55)	0.72 (0.62)	0.85 (0.77)
	4	0.75 (0.66)	0.54	0.85 (0.77)	0.59 (0.48)	0.74 (0.65)	0.84 (0.74)
Mathematica	5	0.74 (0.65)	0.53	0.85 (0.76)	0.64 (0.53)	0.70 (0.61)	0.84 (0.75)
Mathematics	6	0.76 (0.67)	0.56	0.86 (0.78)	0.65 (0.55)	0.72 (0.62)	0.85 (0.77)
	7	0.73 (0.64)	0.51	0.85 (0.76)	0.60 (0.49)	0.69 (0.60)	0.84 (0.73)
	8	0.74 (0.66)	0.54	0.85 (0.77)	0.58 (0.47)	0.70 (0.60)	0.86 (0.77)
Calanaa	5	0.78 (0.69)	0.58	0.85 (0.75)	0.74 (0.65)	0.71 (0.61)	0.87 (0.79)
Science	8	0.77 (0.68)	0.56	0.83 (0.72)	0.75 (0.67)	0.74 (0.65)	0.84 (0.74)
Algebra 1	HS	0.77 (0.68)	0.56	0.83 (0.71)	0.73 (0.64)	0.76 (0.68)	0.84 (0.74)
Biology	HS	0.77 (0.69)	0.56	0.82 (0.70)	0.71 (0.62)	0.77 (0.70)	0.84 (0.74)
Geometry	HS	0.77 (0.68)	0.55	0.83 (0.72)	0.71 (0.61)	0.77 (0.70)	0.82 (0.70)

Table O-1. 2015–16 FSAA-PT: Summary of Decision Accuracy (and Consistency) Results by Subject and Grade—Overall and Conditional on Performance Level

					Cutpoint					
		Level 1/ Level 2			Leve	l 2/ Level 3	}	Leve	I 3/ Level 4	1
Content	Grade	Accuracy	Fa	alse	Accuracy	Fa	lse	Accuracy	Fa	alse
		(Consistency)	Positive	Negative	(Consistency)	Positive	Negative	(Consistency)	Positive	Negative
	3	0.93 (0.90)	0.03	0.04	0.90 (0.85)	0.05	0.05	0.93 (0.90)	0.04	0.03
	4	0.94 (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 (0.88)	0.04	0.04	0.94 (0.92)	0.03	0.02
ELA	6	0.94 (0.92)	0.02	0.03	0.91 (0.88)	0.04	0.04	0.94 (0.92)	0.03	0.02
ELA	7	0.94 (0.92)	0.02	0.03	0.91 (0.88)	0.04	0.04	0.94 (0.92)	0.03	0.02
	8	0.94 (0.92)	0.02	0.03	0.92 (0.88)	0.04	0.04	0.93 (0.90)	0.04	0.03
	9	0.94 (0.92)	0.02	0.03	0.91 (0.87)	0.04	0.05	0.94 (0.92)	0.03	0.02
	10	0.94 (0.91)	0.03	0.04	0.91 (0.88)	0.04	0.05	0.94 (0.91)	0.04	0.03
	3	0.93 (0.89)	0.03	0.04	0.90 (0.87)	0.05	0.05	0.93 (0.90)	0.04	0.03
	4	0.92 (0.89)	0.03	0.05	0.90 (0.86)	0.05	0.05	0.93 (0.90)	0.04	0.03
Mathematics	5	0.92 (0.89)	0.03	0.05	0.90 (0.86)	0.05	0.05	0.93 (0.89)	0.04	0.03
mainematics	6	0.93 (0.89)	0.03	0.04	0.90 (0.87)	0.05	0.05	0.93 (0.90)	0.04	0.03
	7	0.91 (0.88)	0.04	0.05	0.89 (0.85)	0.05	0.05	0.92 (0.89)	0.05	0.03
	8	0.92 (0.89)	0.03	0.05	0.90 (0.86)	0.05	0.05	0.92 (0.89)	0.05	0.03
Science	5	0.94 (0.92)	0.02	0.03	0.91 (0.87)	0.05	0.05	0.93 (0.90)	0.04	0.03
Science	8	0.94 (0.92)	0.02	0.04	0.90 (0.86)	0.05	0.05	0.93 (0.91)	0.04	0.03
Algebra 1	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
Biology	HS	0.94 (0.92)	0.02	0.03	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 (0.85)	0.05	0.05	0.94 (0.91)	0.04	0.02

Table O-2. 2015–16 FSAA-PT: Summary of Decision Accuracy (and Consistency) Results by Subject and Grade—Overall and Conditional on Cutpoint

## **APPENDIX P—CUMULATIVE SCALE SCORE DISTRIBUTIONS**

#### Figure P-1. 2015–16 FSAA-PT: Cumulative Scale Score Distribution Plots Top: ELA Grade 3 Bottom: ELA Grade 4

Cumulative Scale Score Distributions: English Language Arts Grade 3



Cumulative Scale Score Distributions: English Language Arts Grade 4



#### Figure P-2. 2015–16 FSAA-PT: Cumulative Scale Score Distribution Plots Top: ELA Grade 5 Bottom: ELA Grade 6



Cumulative Scale Score Distributions: English Language Arts Grade 5

Cumulative Scale Score Distributions: English Language Arts Grade 6





Cumulative Scale Score Distributions: English Language Arts Grade 7

Cumulative Scale Score Distributions: English Language Arts Grade 8





Cumulative Scale Score Distributions: English Language Arts Grade 9

Cumulative Scale Score Distributions: English Language Arts Grade 10





Cumulative Scale Score Distributions: Mathematics Grade 4





Cumulative Scale Score Distributions: Mathematics Grade 6



#### Figure P-7. 2015–16 FSAA-PT: Cumulative Scale Score Distribution Plots Top: Mathematics Grade 7 Bottom: Mathematics Grade 8



Cumulative Scale Score Distributions: Mathematics Grade 8





Cumulative Scale Score Distributions: Science Grade 5







Cumulative Scale Score Distributions: Biology Grade HS



#### Figure P-10. 2015–16 FSAA-PT: Cumulative Scale Score Distribution Plots Geometry



## **APPENDIX Q—WRITING RUBRIC STATISTICS**

	Table Q-1. 2015–16 FSAA-F1. Writing Rubric Statistics by item Number—ELA									
Grade	Item ID	Dimension	Dim	Max	Avg.	Total	P0	P1	P2	P3
_	_	Title	1	3.00	1.73	0.60	16.16	20.69	37.28	25.86
	267419	Introduction	2	3.00	1.44	0.59	19.40	25.22	47.20	8.19
	_31713	Supporting Details	3	3.00	2.02	0.69	15.30	15.30	21.98	47.41
		Conclusion	4	3.00	1.48	0.59	21.98	22.84	40.30	14.87
		Title	1	3.00	2.01	0.42	9.80	16.00	37.40	36.80
	267430	Introduction	2	3.00	1.66	0.44	11.60	18.20	62.60	7.60
	_07-100	Supporting Details	3	3.00	2.00	0.47	9.40	15.00	41.80	33.80
		Conclusion	4	3.00	1.54	0.45	14.40	25.00	52.80	7.80
		Title	1	3.00	1.80	0.53	13.74	20.99	36.45	28.82
	267465	Introduction	2	3.00	1.69	0.59	16.60	19.08	43.13	21.18
	_07-100	Supporting Details	3	3.00	1.86	0.54	13.55	7.82	57.44	21.18
4		Conclusion	4	3.00	1.70	0.56	17.75	19.08	38.17	25.00
•		Title	1	3.00	1.69	0.62	12.14	24.28	45.92	17.66
	267498	Introduction	2	3.00	1.53	0.58	15.01	23.40	55.41	6.18
	_0, 100	Supporting Details	3	3.00	1.70	0.57	12.36	18.54	55.85	13.25
		Conclusion	4	3.00	1.46	0.60	19.21	22.74	50.99	7.06
		Title	1	3.00	1.55	0.60	15.37	20.70	57.58	6.35
	267529	Introduction	2	3.00	1.40	0.59	15.78	32.17	48.77	3.28
	201020	Supporting Details	3	3.00	1.55	0.61	15.16	28.69	41.80	14.34
		Conclusion	4	3.00	1.40	0.52	20.29	24.18	50.61	4.92
		Title	1	3.00	1.73	0.59	12.42	18.22	53.62	15.73
	267540	Introduction	2	3.00	1.59	0.63	14.29	21.33	55.49	8.90
	201040	Supporting Details	3	3.00	1.78	0.63	11.59	19.88	47.62	20.91
		Conclusion	4	3.00	1.52	0.60	15.11	23.40	56.11	5.38
		Title	1	3.00	1.71	0.69	14.72	18.74	47.04	19.50
	267498	Introduction	2	3.00	1.54	0.63	16.06	22.18	53.15	8.60
	201730	Supporting Details	3	3.00	1.69	0.65	13.38	17.02	56.60	13.00
		Conclusion	4	3.00	1.51	0.64	18.36	23.14	47.23	11.28
	_	Title	1	3.00	1.71	0.59	11.85	14.14	65.28	8.73
	267529	Introduction	2	3.00	1.53	0.62	14.55	22.25	59.04	4.16
	201 028	Supporting Details	3	3.00	1.71	0.57	13.10	17.26	54.89	14.76
		Conclusion	4	3.00	1.52	0.57	17.26	20.37	55.93	6.44
		Title	1	3.00	1.79	0.58	10.73	13.97	60.53	14.78
	267540	Introduction	2	3.00	1.67	0.56	14.17	13.97	62.96	8.91
5	201 340	Supporting Details	3	3.00	1.93	0.60	11.13	14.57	44.74	29.55
		Conclusion	4	3.00	1.60	0.56	16.60	13.97	62.75	6.68
		Title	1	3.00	1.93	0.56	12.36	15.18	39.26	33.19
	267579	Introduction	2	3.00	1.75	0.59	14.97	19.09	41.65	24.30
	201319	Supporting Details	3	3.00	1.62	0.59	13.02	34.06	31.24	21.69
		Conclusion	4	3.00	1.68	0.62	16.49	19.52	43.82	20.17
		Title	1	3.00	1.84	0.61	14.98	13.29	44.94	26.79
	067675	Introduction	2	3.00	1.69	0.60	16.46	15.40	50.63	17.51
	267675	Supporting Details	3	3.00	1.76	0.55	16.24	18.35	38.82	26.58
		Conclusion	4	3.00	1.62	0.60	19.20	15.82	48.95	16.03
	267685	Title	1	3.00	1.91	0.63	12.58	27.84	15.46	44.12
	_						-			ntinued

Table Q-1. 2015–16 FSAA-PT: Writing Rubric Statistics by Item Number—ELA

Grade	Item ID	Dimension	Dim	Max	Avg.	CorrW Total	P0	P1	P2	P3
		Introduction	2	3.00	1.74	0.63	13.20	21.65	42.89	22.27
5	267685	Supporting Details	3	3.00	1.84	0.58	10.31	13.40	58.56	17.73
		Conclusion	4	3.00	1.57	0.50	15.67	22.47	51.13	10.72
		Title	1	3.00	1.87	0.61	15.87	13.38	38.62	32.12
	007570	Introduction	2	3.00	1.73	0.61	17.78	17.02	39.58	25.62
	267579	Supporting Details	3	3.00	1.54	0.64	15.49	32.89	33.27	18.36
		Conclusion	4	3.00	1.63	0.65	19.50	18.55	41.30	20.65
		Title	1	3.00	1.99	0.61	13.09	10.02	41.72	35.17
	067675	Introduction	2	3.00	1.84	0.59	15.13	10.63	48.88	25.36
	267675	Supporting Details	3	3.00	1.89	0.57	14.31	13.70	40.29	31.70
		Conclusion	4	3.00	1.75	0.58	17.18	12.27	49.28	21.27
		Title	1	3.00	2.06	0.66	13.52	20.39	13.09	53.00
	267695	Introduction	2	3.00	1.81	0.67	17.38	16.74	33.48	32.40
	267685	Supporting Details	3	3.00	1.80	0.64	13.73	11.80	54.72	19.74
6		Conclusion	4	3.00	1.58	0.63	17.38	24.25	41.42	16.95
0		Title	1	3.00	1.66	0.60	13.33	26.22	41.56	18.89
	267709	Introduction	2	3.00	1.49	0.59	14.89	28.44	49.33	7.33
	207709	Supporting Details	3	3.00	1.57	0.64	15.56	28.44	39.56	16.44
		Conclusion	4	3.00	1.37	0.60	18.44	30.89	45.56	5.11
		Title	1	3.00	1.67	0.60	14.08	17.14	56.33	12.45
	267765	Introduction	2	3.00	1.53	0.56	16.53	19.59	58.37	5.51
	20//00	Supporting Details	3	3.00	1.72	0.63	17.14	16.73	42.65	23.47
		Conclusion	4	3.00	1.51	0.62	18.37	18.98	55.71	6.94
		Title	1	3.00	1.61	0.47	13.70	37.42	22.90	25.97
	267782	Introduction	2	3.00	1.72	0.57	15.95	16.36	47.85	19.84
	201102	Supporting Details	3	3.00	1.88	0.53	16.77	16.16	29.24	37.83
		Conclusion	4	3.00	1.66	0.56	17.18	19.43	43.35	20.04
		Title	1	3.00	1.76	0.54	10.36	22.60	47.83	19.21
	267709	Introduction	2	3.00	1.58	0.54	11.68	25.42	56.12	6.78
	201103	Supporting Details	3	3.00	1.71	0.56	11.11	24.67	46.33	17.89
		Conclusion	4	3.00	1.50	0.57	12.99	28.44	54.24	4.33
		Title	1	3.00	1.74	0.63	12.69	17.12	53.85	16.35
	267765	Introduction	2	3.00	1.61	0.59	14.23	17.88	60.38	7.50
	201100	Supporting Details	3	3.00	1.77	0.56	14.62	17.88	43.85	23.65
		Conclusion	4	3.00	1.54	0.59	16.35	21.73	53.46	8.46
		Title	1	3.00	1.72	0.56	14.08	19.67	46.58	19.67
7	267766	Introduction	2	3.00	1.66	0.60	13.87	22.98	46.58	16.56
	201100	Supporting Details	3	3.00	1.70	0.58	13.66	17.18	55.07	14.08
		Conclusion	4	3.00	1.56	0.62	14.70	27.74	44.31	13.25
		Title	1	3.00	1.59	0.51	14.70	37.89	20.91	26.50
	267782	Introduction	2	3.00	1.80	0.62	15.11	14.29	45.76	24.84
	201102	Supporting Details	3	3.00	2.04	0.60	13.04	14.70	27.95	44.31
		Conclusion	4	3.00	1.81	0.63	13.87	17.81	42.03	26.29
		Title	1	3.00	1.68	0.51	16.52	31.09	20.43	31.96
	267801	Introduction	2	3.00	1.62	0.54	15.43	22.61	46.74	15.22
		Supporting Details	3	3.00	1.75	0.57	15.00	21.09	37.39	26.52
									CO	ntinued

			Dim	Max	Avg.	CorrW Total	P0	P1	P2	P3
_	267801	Conclusion	4	3.00	1.50	0.54	15.87	25.00	51.96	7.17
		Title	1	3.00	1.59	0.57	14.14	41.16	16.42	28.27
7	267877	Introduction	2	3.00	1.49	0.63	14.76	36.59	33.26	15.38
	20/0//	Supporting Details	3	3.00	1.55	0.60	14.76	27.23	46.57	11.43
		Conclusion	4	3.00	1.36	.36 0.62 18.30 35.34 38.88 7	7.48			
		Title	1	3.00	1.78	0.63	12.50	18.15	48.39	20.97
	267766	Introduction	2	3.00	1.74	0.68	12.70	22.98	41.53	22.78
	201100	Supporting Details	3	3.00	1.75	0.66	12.30	18.95	49.80	18.95
_		Conclusion	4	3.00	1.63	0.64	13.31	23.39	50.00	13.31
		Title	1	3.00	1.69	0.58	15.56	33.66	17.12	33.66
	267801	Introduction	2	3.00	1.64	0.65	15.18	22.37	46.11	16.34
	207001	Supporting Details	3	3.00	1.76	0.67	15.18	18.68	40.66	25.49
_		Conclusion	4	3.00	1.53	0.62	16.34	24.71	49.03	9.92
		Title	1	3.00	1.53	0.64	22.06	31.96	17.11	28.87
	267877	Introduction	2	3.00	1.44	0.67	22.47	26.60	35.26	15.67
	201011	Supporting Details	3	3.00	1.47	0.67	21.86	19.18	49.28	9.69
8 -		Conclusion	4	3.00	1.30	0.66	22.68	30.10	41.86	5.36
0		Title	1	3.00	1.81	0.63	16.36	9.94	50.52	23.19
	267944	Introduction	2	3.00	1.71	0.66	18.01	11.80	50.93	19.25
	207944	Supporting Details	3	3.00	1.92	0.57	19.67	6.63	35.82	37.89
_		Conclusion	4	3.00	1.71	0.66	19.67	9.73	50.93	19.67
		Title	1	3.00	1.69	0.56	14.56	17.09	52.82	15.53
	267972	Introduction	2	3.00	1.57	0.61	14.76	20.78	56.89	7.57
	201912	Supporting Details	3	3.00	1.63	0.59	16.12	17.09	54.95	11.84
_		Conclusion	4	3.00	1.53	0.64	17.67	21.36	51.26	9.71
		Title	1	3.00	1.79	0.55	19.31	22.76	17.28	40.65
	267987	Introduction	2	3.00	1.60	0.66	15.04	25.20	44.51	15.24
	201001	Supporting Details	3	3.00	1.51	0.62	15.85	21.75	57.93	4.47
		Conclusion	4	3.00	1.41	0.63	17.68	33.13	40.04	9.15
		Title	1	3.00	1.83	0.54	15.57	10.18	49.50	24.75
	267944	Introduction	2	3.00	1.80	0.59	15.97	11.38	49.50	23.15
	201011	Supporting Details	3	3.00	2.02	0.47	17.17	7.78	30.94	44.11
-		Conclusion	4	3.00	1.75	0.57	17.96	10.98	48.70	22.36
		Title	1	3.00	1.77	0.61	14.57	15.99	47.57	21.86
	267972	Introduction	2	3.00	1.56	0.64	17.21	21.46	49.60	11.74
		Supporting Details	3	3.00	1.60	0.61	18.22	17.41	50.81	13.56
-		Conclusion	4	3.00	1.52	0.62	19.23	21.46	47.37	11.94
9		Title	1	3.00	1.71	0.53	23.84	21.68	14.52	39.96
	267987	Introduction	2	3.00	1.57	0.59	19.00	21.15	43.73	16.13
	201001	Supporting Details	3	3.00	1.48	0.54	19.00	19.18	56.81	5.02
-		Conclusion	4	3.00	1.40	0.55	24.01	25.63	36.92	13.44
		Title	1	3.00	1.53	0.55	19.24	28.06	32.87	19.84
	268235	Introduction	2	3.00	1.33	0.55	21.44	31.26	40.48	6.81
		Supporting Details	3	3.00	1.40	0.52	21.24	29.46	37.07	12.22
-		Conclusion	4	3.00	1.27	0.56	23.05	33.87	36.47	6.61
	268258	Title	1	3.00	1.68	0.58	19.43	13.77	45.75	21.05

Grade	Item ID	Dimension	Dim	Max	Avg.	CorrW Total	P0	P1	P2	P3
		Introduction	2	3.00	1.55	0.65	19.64	18.62	49.19	12.55
	268258	Supporting Details	3	3.00	1.61	0.63	20.45	15.59	46.76	17.21
		Conclusion	4	3.00	1.46	0.65	23.08	21.26	42.71	12.96
9		Title	1	3.00	1.68	0.52	16.93	21.26	38.39	23.43
	268268	Introduction	2	3.00	1.50	0.57	16.14	25.39	50.59	7.87
	200200	Supporting Details	3	3.00	1.53	0.55	17.13	21.46	52.95	8.46
		Conclusion	4	3.00	1.46	0.58	18.50	22.83	52.56	6.10
		Title	1	3.00	1.48	0.52	21.79	27.35	31.84	19.02
	268235	Introduction	2	3.00	1.28	0.48	23.50	32.26	37.18	7.05
	200233	Supporting Details	3	3.00	1.42	0.41	24.79	24.36	35.04	15.81
		Conclusion	4	3.00	1.22	0.48	24.57	33.97	36.32	5.13
		Title	1	3.00	1.78	0.49	14.77	13.57	50.50	21.16
	268258	Introduction	2	3.00	1.56	0.54	17.17	20.16	52.10	10.58
	200200	Supporting Details	3	3.00	1.69	0.53	16.57	15.77	50.10	17.56
		Conclusion	4	3.00	1.51	0.54	18.36	21.96	49.90	9.78
		Title	1	3.00	1.77	0.59	17.06	16.27	38.89	27.78
	268268	Introduction	2	3.00	1.55	0.61	17.26	21.23	50.60	10.91
	200200	Supporting Details	3	3.00	1.58	0.58	17.66	17.46	53.97	10.91
10		Conclusion	4	3.00	1.51	0.59	18.65	19.84	53.57	7.94
10		Title	1	3.00	1.57	0.50	16.80	28.84	34.65	19.71
	268282	Introduction	2	3.00	1.38	0.57	17.22	35.89	38.17	8.71
	200202	Supporting Details	3	3.00	1.29	0.53	17.84	36.72	44.19	1.24
		Conclusion	4	3.00	1.30	0.59	19.50	36.93	37.55	6.02
		Title	1	3.00	1.64	0.57	21.12	23.92	24.35	30.60
	268315	Introduction	2	3.00	1.91	0.70	16.59	12.07	35.34	35.99
	200315	Supporting Details	3	3.00	1.74	0.66	18.10	10.99	50.00	20.91
		Conclusion	4	3.00	1.76	0.70	18.53	14.66	39.01	27.80
		Title	1	3.00	1.44	0.41	21.65	34.42	22.51	21.43
	268570	Introduction	2	3.00	1.65	0.65	15.15	21.86	45.89	17.10
	2000/0	Supporting Details	3	3.00	1.56	0.56	16.88	16.02	61.26	5.84
		Conclusion	4	3.00	1.52	0.63	17.75	22.94	48.92	10.39

Grade	Item ID	Dimension	Dim	Title	Introduction	Supporting Details	Conclusion
		Title	1	1.00	0.74	0.76	0.70
	267419	Introduction	2	0.74	1.00	0.73	0.75
	201410	Supporting Details	3	0.76	0.73	1.00	0.71
		Conclusion	4	0.70	0.75	0.71	1.00
		Title	1	1.00	0.64	0.66	0.60
	267430	Introduction	2	0.64	1.00	0.65	0.70
	207 100	Supporting Details	3	0.66	0.65	1.00	0.64
		Conclusion	4	0.60	0.70	0.64	1.00
		Title	1	1.00	0.68	0.65	0.63
	267465	Introduction	2	0.68	1.00	0.69	0.78
	201400	Supporting Details	3	0.65	0.69	1.00	0.72
04		Conclusion	4	0.63	0.78	0.72	1.00
04		Title	1	1.00	0.71	0.69	0.68
	267498	Introduction	2	0.71	1.00	0.68	0.75
	207430	Supporting Details	3	0.69	0.68	1.00	0.70
		Conclusion	4	0.68	0.75	0.70	1.00
		Title	1	1.00	0.75	0.69	0.70
	267529	Introduction	2	0.75	1.00	0.70	0.76
	201323	Supporting Details	3	0.69	0.70	1.00	0.68
		Conclusion	4	0.70	0.76	0.68	1.00
		Title	1	1.00	0.77	0.72	0.73
	267540	Introduction	2	0.77	1.00	0.74	0.78
	267540	Supporting Details	3	0.72	0.74	1.00	0.74
		Conclusion	4	0.73	0.78	0.74	1.00
		Title	1	1.00	0.75	0.72	0.76
	267498	Introduction	2	0.75	1.00	0.74	0.74
	207490	Supporting Details	3	0.72	0.74	1.00	0.71
		Conclusion	4	0.76	0.74	0.71	1.00
		Title	1	1.00	0.73	0.69	0.68
	267529	Introduction	2	0.73	1.00	0.69	0.74
	207529	Supporting Details	3	0.69	0.69	1.00	0.67
		Conclusion	4	0.68	0.74	0.67	1.00
		Title	1	1.00	0.71	0.71	0.70
	267540	Introduction	2	0.71	1.00	0.71	0.77
F	267540	Supporting Details	3	0.71	0.71	1.00	0.69
5		Conclusion	4	0.70	0.77	0.69	1.00
		Title	1	1.00	0.76	0.63	0.68
	067570	Introduction	2	0.76	1.00	0.67	0.77
	267579	Supporting Details	3	0.63	0.67	1.00	0.70
		Conclusion	4	0.68	0.77	0.70	1.00
		Title	1	1.00	0.77	0.63	0.75
	007075	Introduction	2	0.77	1.00	0.70	0.77
	267675	Supporting Details	3	0.63	0.70	1.00	0.71
		Conclusion	4	0.75	0.77	0.71	1.00
	007005	Title	1	1.00	0.70	0.62	0.57
	267685	Introduction	2	0.70	1.00	0.67	0.69
							continuec

Grade	Item ID	Dimension	Dim	Title	Introduction	Supporting Details	Conclusion
5	267685	Supporting Details	3	0.62	0.67	1.00	0.67
0	201000	Conclusion	4	0.57	0.69	0.67	1.00
		Title	1	1.00	0.75	0.68	0.70
	267579	Introduction	2	0.75	1.00	0.70	0.76
	201010	Supporting Details	3	0.68	0.70	1.00	0.74
		Conclusion	4	0.70	0.76	0.74	1.00
		Title	1	1.00	0.79	0.68	0.74
	267675	Introduction	2	0.79	1.00	0.70	0.80
	201013	Supporting Details	3	0.68	0.70	1.00	0.73
		Conclusion	4	0.74	0.80	0.73	1.00
		Title	1	1.00	0.73	0.66	0.63
	267685	Introduction	2	0.73	1.00	0.74	0.76
	201000	Supporting Details	3	0.66	0.74	1.00	0.72
6		Conclusion	4	0.63	0.76	0.72	1.00
0		Title	1	1.00	0.74	0.70	0.70
	267709	Introduction	2	0.74	1.00	0.76	0.75
	201103	Supporting Details	3	0.70	0.76	1.00	0.80
		Conclusion	4	0.70	0.75	0.80	1.00
		Title	1	1.00	0.76	0.74	0.75
	267765	Introduction	2	0.76	1.00	0.74	0.78
	201105	Supporting Details	3	0.74	0.74	1.00	0.81
		Conclusion	4	0.75	0.78	0.81	1.00
		Title	1	1.00	0.63	0.58	0.54
	267782	Introduction	2	0.63	1.00	0.74	0.74
	201102	Supporting Details	3	0.58	0.74	1.00	0.78
		Conclusion	4	0.54	0.74	0.78	1.00
		Title	1	1.00	0.71	0.69	0.66
	267709	Introduction	2	0.71	1.00	0.70	0.71
	201103	Supporting Details	3	0.69	0.70	1.00	0.75
		Conclusion	4	0.66	0.71	0.75	1.00
		Title	1	1.00	0.78	0.74	0.74
	267765	Introduction	2	0.78	1.00	0.77	0.78
	201103	Supporting Details	3	0.74	0.77	1.00	0.79
		Conclusion	4	0.74	0.78	0.79	1.00
		Title	1	1.00	0.74	0.71	0.68
	267766	Introduction	2	0.74	1.00	0.74	0.74
7	201100	Supporting Details	3	0.71	0.74	1.00	0.77
		Conclusion	4	0.68	0.74	0.77	1.00
		Title	1	1.00	0.57	0.56	0.55
	267782	Introduction	2	0.57	1.00	0.71	0.75
	201102	Supporting Details	3	0.56	0.71	1.00	0.76
		Conclusion	4	0.55	0.75	0.76	1.00
		Title	1	1.00	0.64	0.63	0.58
	267801	Introduction	2	0.64	1.00	0.80	0.79
	201001	Supporting Details	3	0.63	0.80	1.00	0.83
		Conclusion	4	0.58	0.79	0.83	1.00
	267877	Title	1	1.00	0.72	0.65	0.66
							continued

Grade	Item ID	Dimension	Dim	Title	Introduction	Supporting Details	Conclusion
		Introduction	2	0.72	1.00	0.75	0.79
7	267877	Supporting Details	3	0.65	0.75	1.00	0.76
		Conclusion	4	0.66	0.79	0.76	1.00
		Title	1	1.00	0.76	0.76	0.75
	067766	Introduction	2	0.76	1.00	0.76	0.77
	267766	Supporting Details	3	0.76	0.76	1.00	0.78
		Conclusion	4	0.75	0.77	0.78	1.00
		Title	1	1.00	0.67	0.62	0.61
	007004	Introduction	2	0.67	1.00	0.79	0.79
	267801	Supporting Details	3	0.62	0.79	1.00	0.80
		Conclusion	4	0.61	0.79	0.80	1.00
		Title	1	1.00	0.74	0.74	0.70
	007077	Introduction	2	0.74	1.00	0.82	0.81
	267877	Supporting Details	3	0.74	0.82	1.00	0.85
		Conclusion	4	0.70	0.81	0.85	1.00
8		Title	1	1.00	0.80	0.72	0.78
		Introduction	2	0.80	1.00	0.76	0.79
	267944	Supporting Details	3	0.72	0.76	1.00	0.81
		Conclusion	4	0.78	0.79	0.81	1.00
		Title	1	1.00	0.68	0.65	0.67
		Introduction	2	0.68	1.00	0.79	0.80
	267972	Supporting Details	3	0.65	0.79	1.00	0.81
		Conclusion	4	0.67	0.80	0.81	1.00
		Title	1	1.00	0.72	0.69	0.61
		Introduction	2	0.72	1.00	0.82	0.78
	267987	Supporting Details	3	0.69	0.82	1.00	0.77
		Conclusion	4	0.61	0.78	0.77	1.00
		Title	1	1.00	0.77	0.71	0.75
		Introduction	2	0.77	1.00	0.77	0.80
	267944	Supporting Details	3	0.71	0.77	1.00	0.79
		Conclusion	4	0.75	0.80	0.79	1.00
		Title	1	1.00	0.80	0.75	0.77
		Introduction	2	0.80	1.00	0.82	0.83
	267972	Supporting Details	3	0.75	0.82	1.00	0.83
		Conclusion	4	0.77	0.83	0.83	1.00
		Title	1	1.00	0.67	0.67	0.60
		Introduction	2	0.67	1.00	0.83	0.78
9	267987	Supporting Details	3	0.67	0.83	1.00	0.78
		Conclusion	4	0.60	0.78	0.78	1.00
		Title	1	1.00	0.80	0.77	0.77
		Introduction	2	0.80	1.00	0.86	0.83
	268235	Supporting Details	3	0.00	0.86	1.00	0.83
		Conclusion	4	0.77	0.83	0.83	1.00
		Title	1	1.00	0.78	0.76	0.75
		Introduction	2	0.78	1.00	0.83	0.75
	268258	Supporting Details	2 3	0.78	0.83	1.00	0.81
		Conclusion	3 4	0.76	0.83	0.85	0.85 1.00
		CONCluSION	4	0.75	0.01	0.00	1.00

Grade	Item ID	Dimension	Dim	Title	Introduction	Supporting Details	Conclusion
		Title	1	1.00	0.71	0.70	0.68
9	268268	Introduction	2	0.71	1.00	0.82	0.80
9	200200	Supporting Details	3	0.70	0.82	1.00	0.86
		Conclusion	4	0.68	0.80	0.86	1.00
		Title	1	1.00	0.77	0.77	0.75
	268235	Introduction	2	0.77	1.00	0.80	0.83
	200233	Supporting Details	3	0.77	0.80	1.00	0.85
		Conclusion	4	0.75	0.83	0.85	1.00
		Title	1	1.00	0.77	0.75	0.74
	268258	Introduction	2	0.77	1.00	0.83	0.81
	200200	Supporting Details	3	0.75	0.83	1.00	0.80
		Conclusion	4	0.74	0.81	0.80	1.00
		Title	1	1.00	0.70	0.70	0.69
	260260	Introduction	2	0.70	1.00	0.82	0.78
	268268	Supporting Details	3	0.70	0.82	1.00	0.83
10		Conclusion	4	0.69	0.78	0.83	1.00
10		Title	1	1.00	0.78	0.73	0.72
	260202	Introduction	2	0.78	1.00	0.83	0.82
	268282	Supporting Details	3	0.73	0.83	1.00	0.81
		Conclusion	4	0.72	0.82	0.81	1.00
		Title	1	1.00	0.65	0.60	0.63
	268315	Introduction	2	0.65	1.00	0.84	0.84
	200315	Supporting Details	3	0.60	0.84	1.00	0.85
		Conclusion	4	0.63	0.84	0.85	1.00
		Title	1	1.00	0.52	0.52	0.52
	060570	Introduction	2	0.52	1.00	0.80	0.77
	268570	Supporting Details	3	0.52	0.80	1.00	0.80
		Conclusion	4	0.52	0.77	0.80	1.00

Grade	Dimension	Dim	Max	Avg.	SD
	Title	1	3	1.75	0.94
0.4	Introduction	2	3	1.55	0.86
04	Supporting Details	3	3	1.82	0.95
	Conclusion	4	3	1.52	0.91
	Title	1	3	1.81	0.95
05	Introduction	2	3	1.65	0.90
05	Supporting Details	3	3	1.76	0.92
	Conclusion	4	3	1.58	0.91
	Title	1	3	1.81	1.01
00	Introduction	2	3	1.69	0.96
06	Supporting Details	3	3	1.74	1.00
	Conclusion	4	3	1.59	0.95
	Title	1	3	1.68	0.98
07	Introduction	2	3	1.63	0.89
07	Supporting Details	3	3	1.75	0.96
	Conclusion	4	3	1.54	0.88
	Title	1	3	1.71	1.04
08	Introduction	2	3	1.62	0.94
08	Supporting Details	3	3	1.67	0.96
	Conclusion	4	3	1.52	0.91
	Title	1	3	1.70	1.04
09	Introduction	2	3	1.55	0.94
09	Supporting Details	3	3	1.60	0.97
	Conclusion	4	3	1.47	0.96
	Title	1	3	1.62	1.04
10	Introduction	2	3	1.55	0.95
10	Supporting Details	3	3	1.55	0.93
	Conclusion	4	3	1.47	0.93

Table Q-3. 2015–16 FSAA-PT: Writing Rubric Statistics Summary by Item Number—ELA

## **APPENDIX R—ACHIEVEMENT LEVEL DISTRIBUTIONS**

Grade	Achievement Level	2015—16
	1	18.05
	2	28.48
3	3	36.03
	4	17.44
	1	18.23
	2	25.24
4	3	38.12
	4	18.41
	1	20.08
	2	26.56
5	3	35.64
	4	17.72
	1	20.43
	2	26.97
6	3	33.75
	4	18.85
	1	20.08
	2	26.74
7	3	34.31
	4	18.86
	1	18.16
	2	26.73
8	3	30.62
	4	24.49
		continued

Table R-1. 2015–16 FSAA-PT: Achievement Level Distribution
by Grade—ELA

Grade	Achievement Level	2015—16
	1	17.81
	2	25.57
9	3	41.72
	4	14.90
	1	21.73
	2	22.80
10	3	35.44
	4	20.03

by Grade—Mathematics		
Grade	Level	2015—16
3	1	24.45
	2	24.96
	3	30.67
	4	19.92
	1	24.45
	2	22.07
4	3	35.74
	4	17.73
5	1	23.17
	2	26.89
	3	31.16
	4	18.77
	1	24.08
	2	24.46
	3	32.46
	4	19.01
	1	24.06
	2	25.45
7	3	31.71
	4	18.78
8	1	21.72
	2	22.79
	3	33.23
	4	22.26

## Table R-2. 2015–16 FSAA-PT: Achievement Level Distribution by Grade—Mathematics

by Grade Gelenies		
Grade	Achievement Level	2015—16
5	1	16.68
	2	29.68
	3	30.68
	4	22.96
8	1	16.94
	2	31.05
	3	35.13
	4	16.87

## Table R-3. 2015–16 FSAA-PT: Achievement Level Distribution by Grade—Science

Table R-4. 2015–16 FSAA-PT: Achievement Level Distribution by Grade—Algebra 1

Grade	Achievement Level	2015—16
	1	13.28
	2	31.12
HS	3	38.42
	4	17.18

# Table R-5. 2015–16 FSAA-PT: Achievement Level Distribution by Grade—Biology

1 14. 2 27.	40
2 27.	
	18
HS 3 38.	85
4 19.	58

Achievement Level	2015—16
1	17.17
2	29.72
3	39.89
4	13.23
	Level 1 2 3

 Table R-6. 2015–16 FSAA-PT: Achievement Level Distribution

 by Grade—Geometry