Statewide Assessment Update

Florida Organization of Instructional Leaders

May 24, 2022
Topics

• Coordinated Screening and Progress Monitoring System: FAST Updates
• Other Assessments
• Florida Civic Literacy Exam Update
• Concordant and Comparative Score Updates
• Graduation Pathways for ESOL Students
• New Testing Time Reporting Requirement
• Introduction to Computer-Adaptive Testing
Coordinated Screening and Progress Monitoring System: FAST Updates
• Florida Assessment of Student Thinking, or FAST, refers to the new Coordinated Screening and Progress Monitoring (CSPM) System assessments, which are aligned to the Benchmarks in Excellent Student Thinking (B.E.S.T.) Standards.

• FAST assessments include VPK through grade 10 English Language Arts (ELA) and VPK through grade 8 Mathematics.
  • End-of-Course (EOC) assessments are not part of FAST.
FAST Legislative Updates

• During the 2022 Legislative Session, Senate Bill (SB) 1048 was passed and signed into law by Governor Ron DeSantis. Among other measures, the bill provides the following changes to the FAST assessments:
  • Adds grades 9 and 10 to the ELA assessments administered as part of the CSPM system.
  • Identifies the third FAST administration in each school year as the statewide, standardized assessment for students in grades 3 through 8 for Mathematics and grades 3 through 10 for ELA.
  • Requires the results for the FAST ELA and Mathematics assessments be available no later than May 31 each year beginning with the 2023–2024 school year.
CSPM System Procurement Updates

- CSPM system/FAST assessments procurement awarded to Cambium Assessment, Incorporated (CAI), partnered with Renaissance Learning, Incorporated (RL).
- FAST assessments will be administered using the following systems:

<table>
<thead>
<tr>
<th></th>
<th>Renaissance (VPK–Grade 2)</th>
<th>CAI (Grades 3–10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Management/Student Data</td>
<td>Renaissance website</td>
<td>Test Information Distribution Engine (TIDE)</td>
</tr>
<tr>
<td>Online Test Delivery</td>
<td>Supported web browser</td>
<td>Test Delivery System (TDS) with Secure Browser</td>
</tr>
<tr>
<td>Results Reporting</td>
<td>Renaissance Growth Platform (RGP)</td>
<td>Centralized Reporting System (CRS)</td>
</tr>
<tr>
<td>Family Portal</td>
<td></td>
<td>One Family Portal for all assessments</td>
</tr>
</tbody>
</table>
FAST: Administration Schedule

• Per s. 1008.25(8), F.S., FAST assessments will be administered three times per year, the first (PM1) will occur within the first 30 days of school; the second (PM2) will occur in the middle of the school year, and the third (PM3) will occur at the end of the school year.

• The tentative dates for the three windows during the 2022–23 school year are as follows:
  • PM1: August 15–September 30, 2022
  • PM2: December 5, 2022–January 27, 2023
  • PM3: May 1–June 2, 2023
FAST: VPK–Grade 2 Administration

- The FAST VPK and Kindergarten assessments will be aligned to the Florida Early Learning and Developmental Standards: 4 Years Old to Kindergarten. The grades 1 and 2 assessments will be aligned to the Benchmarks in Excellent Student Thinking (B.E.S.T.) Standards.
- Each test will be administered in one session. It is recommended that each student take only one subject test in a day.
- Tests will be computer-adaptive, administered through a secure web browser (headphones required, but only for VPK–2).
FAST: Grades 3–10 Content

• Grades 3–10 FAST ELA Reading and Grades 3–8 FAST Mathematics assessments will be aligned to B.E.S.T. Standards.

• Because all FAST assessments are computer-adaptive, items may become progressively harder as students successfully respond to items, and easier if students answer more questions incorrectly.

• Each PM event is tied to a blueprint for the full grade-level content.

• Many of the same computer-based item types that students are already familiar with will be used on FAST assessments.
FAST: Writing – Planned Approach

• As part of FAST, Writing will be administered in grades 4–10.

• Writing will be reported separately from Reading and will not contribute to an overall ELA score.

• FAST Writing will be computer-based in all assessed grades, and prompts will be in response to text.

• In 2022–23, Writing will be administered as a field test to a representative sample of Florida students during the spring 2023 administration.

• Additional information about Writing dates and administration policies is forthcoming.
FAST: Grades 3–10 Administration

• Each subject-area test will be administered in one day. It is recommended that each student take only one subject test in a day.

• PM1 and PM2 will be used for informational purposes only and will not be used in accountability.

• PM3 will be a summative assessment used for accountability purposes.
  • 2022–2023 baseline year; 2023–24 and beyond with new cut scores applied.

• Tests will be computer-adaptive through the Test Delivery System (TDS) secure browser.
FAST: Remote Testing

• Remote testing will be available for FAST assessments (grades 3–8 mathematics and grades 3–10 ELA) during PM1 and PM2 only.

• Remote testing will only be available for students enrolled full-time in a virtual school program or for those students who are hospital/homebound.

• Remote testing will not be available for PM3, grades 5 & 8 Science, EOCs, or retake administrations.

• More information about policies and procedures for remote testing is forthcoming.
FAST: Grades 3–10 Administration Procedures

• While FAST administration procedures are still being finalized, the following general goals are guiding decisions:
  • FAST assessments will be shorter than FSA assessments, with test length and testing times still TBD.
  • As with FSA, students should participate in the FAST assessment that best aligns with the content of the course in which they are receiving instruction (e.g., if an enrolled 6th grader is taking a 7th grade advanced math course, they should take the Grade 7 FAST Mathematics Assessment).
FAST: Training

• Summer 2022 trainings for FAST assessments will be provided as follows:
  • In-person and recorded trainings for public school districts and VPK program administrators/Early Learning Coalitions (ELCs)
  • Remote training sessions for public and non-public VPK programs
  • In-person and recorded trainings for grades K–2
  • In-person and recorded trainings for grades 3–10

• Specific dates for summer 2022 trainings are provided on the following slides.

• Information regarding the registration process, including specific addresses for the in-person trainings, is forthcoming.
FAST: VPK Program Training

• **VPK** training provided by Renaissance:
  - June 13: Pensacola
  - June 14: Panama City Beach
  - June 15: Tallahassee
  - June 16: Lake City
  - June 17: Jacksonville
  - July 11: Tampa
  - July 12: Orlando
  - July 13: Fort Myers
  - July 14: Palm Beach
  - July 15: Miami

• The in-person public VPK program training is intended for district personnel and ELC representatives.

• Individuals will attend one of the following training times:
  - 9:00am–12:00pm local time
  - 1:00pm–4:00pm local time
FAST: VPK Program Training (cont.)

• Live training webinars will be offered for public and non-public VPK teachers and administrators on the following dates:
  • June 7, 9, 21, and 23
  • July 19, 21, 26, and 28
  • August 9 and 11

• The following training times will be available on each day of training:
  • 11:00am–1:00pm EDT (teachers)
  • 2:00pm–4:00pm EDT (VPK program directors)
  • 4:00pm–6:00pm EDT (teachers)
  • 6:00pm–8:00pm EDT (VPK program directors)
FAST: VPK Program Training (cont.)

- In addition to the in-person trainings and live training webinars, on-demand training sessions will be available for VPK teachers and staff via Renaissance U.
- These 2-hour training sessions will be available 24/7.
FAST: K–2 Training

• K–2 training, provided by Renaissance:
  • July 18: Ocala, Orlando, Tampa, and Miami
  • July 19: Tallahassee, Jacksonville, Orlando, Tampa, and Fort Lauderdale
  • July 20: Tallahassee, Jacksonville, Port St. Lucie, Fort Myers, and Fort Lauderdale
  • July 21: Panama City Beach

• District teams will attend the one-day training.
• Each training will take place from 8:30am–3:30pm local time.
FAST: Grades 3–10 Training

• Grades 3–10 trainings, provided by Cambium:
  • June 21: Miami
  • June 22: West Palm Beach
  • June 23: Orlando
  • June 28: Jacksonville
  • June 30: Panama City Beach

• Individuals district personnel will attend one of the following training times:
  • 9:00am–11:30am local time
  • 1:00pm–3:30pm local time
FAST: Sample Test Materials

• The Department will provide Sample Test Materials (STMs) for the FAST assessments.

• STMs will be online only and will be aligned to the B.E.S.T. Standards.

• Online practice sessions for FAST assessments will not be required for students.

• STMs may not have a sample of every item type for the 2022–23 school year, but the Department will continue to add item types as they are available.
FAST: Resources

• All resources for FAST assessments will be **online only**.
• Resources will be available on a dedicated website that will go live over this summer.
• FAST VPK–2 assessments will primarily rely on current Renaissance resources as well as a Florida-specific policy guide.
• Resources for grades 3–10 FAST assessments will mirror current FSA resources (e.g., TIDE User Guide, Accommodations Guide).
FAST: Resources (cont.)

• The Department is working to provide the following resources for FAST assessments:
  • Fact Sheets
  • Understanding Reports document
  • Updated Statewide Assessment Program Guide
  • Test Item Specifications/Test Design Summary & Blueprints
  • Achievement Level Descriptions
## FAST: VPK–2 Accommodations

<table>
<thead>
<tr>
<th>2022–23 Accommodations</th>
<th>Star Reading</th>
<th>Star Math</th>
<th>Star Early Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCAG 2.0 AA</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>JAWS screen reader &amp; braille support</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Keyboard support</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Extended time</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pause &amp; resume</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Highlighter</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Line Reader</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Answer masking / answer eliminator</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Read aloud</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Calculator</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Glossary</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Color overlay</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Enlarge text / zoom</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
FAST: Grades 3–10 Accommodations

• There will be paper-based and text-to-speech accommodations for FAST assessments in grades 3–10 for spring 2023.

• Current accessibility features in TDS will be available for all students (highlighter, notepad, zoom, etc.).

• Beginning with 2023–24, the following accommodations will be available for FAST assessments:
  • Paper-based fixed forms
  • Refreshable braille
In late summer/early fall 2023, the Department will conduct Standard Setting activities:

- Convene educator panels and a reactor panel to receive recommendations for new achievement level standards for the FAST assessments, as well as the new B.E.S.T.-aligned Algebra 1 and Geometry EOC assessments.

- Submit proposed achievement level scores, including the passing score, to the President of the Senate and the Speaker of the House of Representatives at least 45 days before submission to the State Board of Education for review.

- Commissioner submits recommended achievement level scores to the State Board of Education.

- State Board of Education votes whether to accept the recommended achievement level scores.
FAST: Scoring (cont.)

• Following Standard Setting, FAST scores beginning with the 2023–2024 school year will be based on the FAST scale.

• As with FSA, a Level 3 achievement level on the FAST assessments will be considered passing.
  • However, SB 1048 revised the definition of a Level 3 score from a “satisfactory performance” to “grade-level performance.”
To aid equitable and inclusive representation on Florida’s K-12 statewide assessment program committees, please
1) update your user profile, including making sure that your area(s) of certification are correct and current
2) nominate diverse educators for committee participation

FYI: FDOE logo will replace FSA logo
FAST: Reporting

• For grades 3–10, scores will be reported on Cambium’s Centralized Reporting System (CRS).
  • This is the reporting site that is currently being used for Adaptive Progress Monitoring (APM) and the Florida Civic Literacy Exam (FCLE).

• For VPK–2, scores will be reported on the Renaissance Growth Platform.
FAST: Graduation and Promotion Requirements

• Assessment requirements for graduation are still required by state law.
  • Students attempting to meet graduation requirements in 2022–23 will be able to use linked scores to the FSA scale for Grade 10 FAST ELA (PM3) and B.E.S.T. Algebra 1.

• The requirement that grade 3 students receive a Level 2 or higher on the ELA assessment in order to be promoted to grade 4 will remain in place.
  • SB 1048 provides that, in addition to existing good cause exemptions, a student may be promoted to grade 4 for the 2023–24 school year if the student demonstrates an acceptable level of performance through means reasonably calculated by the school district to provide reliable evidence of the student’s performance.
Other Assessments
Other Statewide, Standardized Assessments

- In addition to the CSPM System, the following tests will be administered in the 2022–23 school year in the same format as they have been in the past:
  - FSA ELA and Algebra 1 Retakes (fall and spring)
  - Algebra 1 and Geometry EOC Assessments aligned to the B.E.S.T. Standards (winter, spring, summer)
  - Biology 1, Civics, and U.S. History EOC Assessments (fall, winter, spring, summer)
  - Grades 5 and 8 Science Assessments (spring, will remain paper-based)
  - FCLE
  - ACT/SAT
- Online management and results reporting for these assessments will not change from the current systems in use (TIDE and PearsonAccess Next).
Other Assessments

• APM will no longer be available beginning with the 2022–23 school year.

• ACT/SAT:
  • S. 1008.22(3)(c), F.S., requires districts, alternative schools, and Department of Juvenile Justice (DJJ) programs to administer either the SAT or ACT to grade 11 students.
  • Districts will choose either the SAT or ACT for all schools in their district to administer to all grade 11 students under contracts managed and paid for directly by the state.
  • Under the state contracts, all results must be college reportable.
  • Districts may continue to provide non-college-reportable administrations at their own expense.
Florida Civic Literacy Exam (FCLE) Updates
Updates to the FCLE

• The revised version of the FCLE addresses the same content as the previous version, and is shorter, with 80 test items, rather than 100.

• The passing score is currently anticipated to remain 60%.
FCLE Supplemental Guide and Sample Test

- On April 1, 2022, the Department posted the FCLE Supplemental Guide and FCLE Sample Items.

- The purpose of these sample test materials is to orient faculty and students to the nature of the test content and test questions on the FCLE.

- The content included in the Supplemental Guide is not intended to replace associated coursework or other preparation methods required to demonstrate civic literacy, as described in Florida Statute.

- The sample questions and answers are not intended to demonstrate the length of the actual test.

- Student performance on the sample test should not be used as a predictor of performance on the actual test.
The Future of the FCLE

• Develop additional test items.
• Increase the number of available test forms.
• Field testing and data collection.
• Standard setting to recommend and establish passing scores.
• Test revision and research consistent with best practices and standards.
• Continued collaboration with stakeholders.
Concordant and Comparative Score Updates
Concordant and Comparative Score Updates

• On February 9, 2022, the State Board of Education approved an amendment to Rule 6A-1.09422, Florida Administrative Code, which allows this year’s seniors to continue to be able to use concordant and comparative scores that were aligned to the previous assessments.

• Students graduating in the 2021–22 school year will be able to use a lower score on the SAT EBRW, the SAT Reading Subtest, or the ACT Reading test to meet with grade 10 ELA assessment requirement, as well as the PERT Mathematics test to meet their Algebra 1 assessment requirement.

• More information regarding current statewide assessment requirements and concordant/comparative scores can be found in the Graduation Requirements for Florida’s Statewide Assessments document.
Concordant and Comparative Score Updates (cont.)

Table 3: Grade 10 ELA Concordant Scores

<table>
<thead>
<tr>
<th>Grade 10 FSA ELA or Grade 10 FCAT 2.0 Reading</th>
<th>Available for all students who entered grade 9 in 2010–11 and beyond:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT Evidence-Based Reading and Writing (EBRW)</td>
<td>480</td>
</tr>
<tr>
<td>ACT English and Reading subtests</td>
<td>18</td>
</tr>
</tbody>
</table>

Available only for students who entered grade 9 prior to 2019–20:

| SAT EBRW | 430 |
| SAT Reading Subtest | 24 |
| ACT Reading | 19 |

1 Administered in March 2016 or beyond. The combined score for the EBRW must come from the same administration of the Reading and Writing subtests.
2 The average of the English and Reading subtests. If the average of the two subject test scores results in a decimal (1.5), the score shall be rounded up to the next whole number. The scores for the English and Reading subject tests are not required to come from the same test administration.
3 Administered in March 2016 or beyond. Students who entered grade 9 prior to 2019–20 may also use a concordant score of 430 on the SAT Critical Reading if administered prior to March 2016.
4 On February 9, 2022, the SBE amended Rule 6A-1.09422, F.A.C., to delay the implementation of concordant and comparative scores aligned to the FSA by one year. Therefore, scores that were previously only available to students who entered grade 9 prior to 2018–19 are now available to students who entered grade 9 prior to 2019–20.

Table 4: Algebra 1 EOC Comparative Scores

<table>
<thead>
<tr>
<th>Algebra 1 EOC (FSA or NGSS)</th>
<th>Available for all students who entered grade 9 in 2010–11 and beyond:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSAT/NMSQT Math</td>
<td>480</td>
</tr>
<tr>
<td>SAT Math</td>
<td>420</td>
</tr>
<tr>
<td>ACT Math</td>
<td>16</td>
</tr>
<tr>
<td>FSA Geometry EOC</td>
<td>499</td>
</tr>
</tbody>
</table>

Available only for students who entered grade 9 prior to 2019–20:

| PERT Mathematics | 97 |

1 Administered in 2015 or beyond. Students who entered grade 9 in 2010–11 and beyond may also use a comparative score of 39 on PSAT/NMSQT Math if it was earned prior to 2015.
2 Administered in March 2016 or beyond. Students who entered grade 9 in 2010–11 and beyond may also use a comparative score of 380 on SAT Math if it was earned prior to March 2016.
3 Students eligible for either the FSA Algebra 1 EOC alternate passing score of 489 or the FSA Geometry EOC passing score of 492, as defined by Rule 6A-1.09422(6)(4), F.A.C., may use the alternate passing score of 492 on the FSA Geometry EOC as an Algebra 1 EOC comparative score. See the Scholar Diploma Designation section on the next page for eligibility criteria.
4 On February 9, 2022, the SBE amended Rule 6A-1.09422, F.A.C., to delay the implementation of concordant and comparative scores aligned to the FSA by one year. Therefore, scores that were previously only available to students who entered grade 9 prior to 2018–19 are now available to students who entered grade 9 prior to 2019–20.
Graduation Pathways for ESOL Students
SB 1108

• During the 2021 Legislative Session, the House and Senate passed SB 1108, which was signed into law by Governor DeSantis.

• Among other measures, this bill authorized students enrolled in an English Speakers of Other Languages (ESOL) program for less than two years to satisfy the grade 10 ELA assessment requirement for graduation through satisfactory performance on formative assessments, in accordance with State Board Rule.
In March 2022, the State Board of Education adopted an amendment to Rule 6A-1.09422, F.A.C., which specifies the following:

(b) Beginning with the 2022-23 school year, meets the requirement to pass the statewide, standardized grade 10 ELA assessment by satisfactorily demonstrating grade-level expectations on a formative assessment that generates a score or metric that can be interpreted as a measure of grade 10 level achievement in ELA.

(c) Formative assessments that may be used for this purpose are:
   1. Benchmark assessments included as part of an instructional materials adoption;
   2. Portfolios of independently-produced student work; and
   3. Assessments developed or purchased by districts in order to monitor academic progress.

(d) A portfolio used to meet the requirements of this subsection must meet the following criteria:
   1. Be selected by the student’s teacher;
   2. Be an accurate picture of the student’s ability and only include student work that has been independently produced in the classroom;
   3. Include evidence that the standards assessed by the grade 10 statewide, standardized assessment in ELA have been met, and such evidence may include chapter or unit tests from the district’s/school’s adopted core reading curriculum that are aligned with the ELA content standards, or teacher-prepared assessments;
   4. Be an organized collection of evidence of the student’s mastery of the ELA content standards that are assessed by the grade 10 statewide, standardized assessment in ELA; and
   5. Be signed by the teacher and the principal as an accurate assessment of the required skills.

(e) By October 1st of each year, districts must report to the Department of Education the formative assessments they are using for this purpose and the score or metric that is used on the assessment to demonstrate that grade-level expectations have been met.

(f) This rule shall not preclude native language support from being provided as needed and beneficial to students’ access to ELA curriculum and accelerating their English language learning.
Plan Submission

• By October 1, 2022, districts should submit to the Department their plan for this requirement for the 2022–2023 school year.

• Plans should be submitted to Assessment@fldoe.org.
New Testing Time Reporting Requirement
Testing Time Reporting

• **SB 2524 (2022)** requires that, annually until January 1, 2025, the Department must collect from each school district, by grade level, the range and median number of minutes per school year, including as a percentage of net instructional time, students in prekindergarten through grade 5 spend on district- and state-required assessments.

• To gather this information, the Department will propose an amendment of the uniform assessment calendar template, incorporated by [Rule 6A-1.094224, F.A.C.](https://www.fl行政rules.org), to the State Board of Education.
Introduction to Computer-Adaptive Testing
CAT stands for Computer-Adaptive Testing

- Computer
- Adaptive
- Testing
Computer

• Administered online

• Online delivery is more efficient compared to traditional paper-and-pencil tests.
  • Item types can go beyond the traditional Multiple-Choice items and may include interactive test questions even with videos or audio. Allows students to work on more engaging test questions.
  • Logistics of test administration is streamlined, eliminating tracking, labeling, and packing & shipping test and answer books.

• Expedited Score Reporting
Adaptive

- The questions (or items) are chosen for each student so that the test is neither too hard nor too easy.
- Tailored testing with more engaging questions.
Adaptive
Testing

• Assessments are designed to assess how well a student masters the expectations of his or her grade level.
• Developed based on certain test content specifications, measuring specific knowledge, skills, and abilities.
So, how can CAT do that?

- Bank of test items ("item bank")
- Content specifications ("blueprint")
- Item selection algorithm (programming)
- Algorithm constraints (rules)
Bank of Test Items

- Includes a large number of questions written to measure every standard in a grade level.
- Many questions measuring the same skills and knowledge that students are expected to know.
- Multiple item types with varying difficulties and cognitive complexities.
- All items are placed onto the same score scale.
Content Specifications

- The blueprint primarily establishes a link between skills and reporting categories within a test.
- It is one of the major drivers of the item selection algorithm.
- It dictates several test characteristics, such as
  - the minimum and maximum number of questions required from each reporting category;
  - the cognitive complexities (or DOKs); and
  - item types, etc.
- In other words, it sets the rules.

<table>
<thead>
<tr>
<th>Reporting Category</th>
<th>Grade 6 SOL</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Computer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptive Test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(CAT) Format</td>
</tr>
<tr>
<td>Number and Number Sense</td>
<td>6.1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>6.2a-b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.2c-d*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.3a-c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Computation and Estimation</td>
<td>6.6a*</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>6.6b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.8*</td>
<td></td>
</tr>
<tr>
<td>Measurement and Geometry</td>
<td>6.9</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>6.10a-d</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.11a-b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.13</td>
<td></td>
</tr>
<tr>
<td>Probability, Statistics,</td>
<td>6.14a-c</td>
<td>17</td>
</tr>
<tr>
<td>Patterns, Functions, and</td>
<td>6.15a-b</td>
<td></td>
</tr>
<tr>
<td>Algebra</td>
<td>6.16a-b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.19a-c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.20</td>
<td></td>
</tr>
</tbody>
</table>
Item Selection Algorithm

• Focuses on selection of questions from the test bank to match the specified content so the structure of the test is similar for every student.

• Selects the precise questions based on the individual student’s responses to the previous questions in the test.

• In other words, it tailors the test for each student so students can demonstrate their abilities in an engaging fashion.
Item Selection Algorithm
Item Selection Algorithm

• Tests start with an item with a predetermined difficulty level.

• It may be based on average difficulty for the grade level, or it may be based on the information known about the student based on previous test performance.

• Students receive questions based on individual responses to previous questions. The computer program (algorithm) quickly selects a new question after reviewing how well the student performed on all of the previous questions.

• Based on the responses, the program selects a question that fits the blueprint and gives the best information about what students know.
Item Selection Algorithm

• If the student continues answering questions correctly, questions covering the blueprint will continue to get more challenging.

• If the student starts missing the answers to questions, the program will start to select questions that are easier.

• In other words, the program adapts to how the student is performing.

• Because the program knows which questions are harder and which are easier, several students may have answered a similar number of questions correctly, but the student who has answered more challenging questions correctly will achieve a higher score.

• A student’s score is based on the difficulty of the items that were right or wrong, not on the total number of correct items.
Benefits of the Algorithm

• Maximizes the blueprint representation
  • Question Type (selected response versus constructed response)
  • Reading Length (short, medium, long)
  • Cognitive complexity (low, medium, high)

• Minimizes the measurement error by choosing appropriate questions (proper difficulty) for each student where they can demonstrate their knowledge and skills at their respective levels.
Minimizing measurement error also means:

• Maximizing the reliability for the overall scale score.
• Maximizing the reliability for the subscores (reporting category scores).
• No raw scores available in CAT.