TEA STAAR MATHEMATICS UPDATE

JULIE GUTHRIE, DIRECTOR OF MATHEMATICS AND SCIENCE ASSESSMENTS STUDENT ASSESSMENT DIVISION, TEXAS EDUCATION AGENCY IUNE 2015

Implementation of New Mathematic TEKS

New Method to Report Process Skills

Release Test Questions

General STAAR Update

IMPLEMENTATION OF NEW MATHEMATICS TEKS

TEA STAAR MATHEMATICS UPDATE

IMPLEMENTATION TIMELINE FOR GRADES 3–8

- The new TEKS for K-8 mathematics were implemented this past year, the 2014-2015 school year.
- In April, the new STAAR 3–8 mathematics assessments were administered. These tests
 - Assessed the new TEKS as indicated in the new assessed curriculum documents.
 - Were based on the new test blueprints.
 - Used the new reference materials.
 - Do not have performance standards yet.

IMPLEMENTATION TIMELINE FOR GRADES 3–8

- In May, raw score information (e.g., 40 out of 50 questions correct) was reported on Confidential Student Reports, rosters, summary reports, and data files.
- In July, educators committees are convening to recommend new performance standards for STAAR grades 3–8 mathematics assessments.
 - Meet July 14–16 for grades 6–8 and July 21–23 for grades 3–5.
 - Will review specific performance level descriptors.
 - Will experience an actual test and discuss difficulty level of test questions.
 - Will recommend cuts for Level II and Level III.

IMPLEMENTATION TIMELINE FOR GRADES 3–8

- In August, the commissioner is scheduled to approve the new performance standards and a phase-in plan for the performance standards.
 - New performance standards will be on a vertical scale as required by law.
 - New performance standards will establish Level II and Level III scale score cuts for each assessment.

IMPLEMENTATION TIMELINE FOR GRADES 3-8

- In September, new reports and data files will be sent to school districts with the performance standards and phase-in applied. This will include
 - Scale score information
 - Pass/fail status based on phase-in
- After fall reporting is complete, TEA will post
 - New performance standards
 - New phase-in plan
 - New specific performance level descriptors

- The revised TEKS for Algebra I will be implemented next year, the 2015–2016 school year.
- The revised STAAR Algebra I assessment will be implemented next year, the 2015– 2016 school year.

There are minimal changes to the STAAR Algebra I assessment based on the revised TEKS.

• There are no changes to the July 2015 STAAR Algebra I test.

- The December 2015 STAAR Algebra I test will
 - Assess the TEKS as indicated in the original assessed curriculum documents; however only the "overlap" curriculum will be used.
 - Be based on the original test blueprint.
 - Use the original reference materials.

The May 2016 STAAR Algebra I test will

- Assess the revised TEKS as indicated in the revised assessed curriculum document.
 - Only the "overlap" curriculum will be used for scoring purposes.
 - New skills will be addressed in field test questions (not used for scoring purposes).
- Be based on the revised test blueprint.
- Use the revised reference materials.
- Have the same performance standards.

The revised TEKS for Algebra II will be implemented next year, the 2015–2016 school year.

 The revised STAAR Algebra II assessment will be implemented next year, the 2015– 2016 school year.

 There are minimal changes to the STAAR Algebra II assessment based on the revised TEKS.

The May 2016 STAAR Algebra II test will

- Assess the revised TEKS as indicated in the revised assessed curriculum document.
 - Only the "overlap" curriculum will be used for scoring purposes.
 - New skills will be addressed in field test questions (not used for scoring purposes).
- Be based on the revised test blueprint.
- Use the revised reference materials.
- Have the same performance standards.

Based on TEC 39.0238, the STAAR Algebra II test

• Will be administered on a voluntary basis at the district's option.

Will measure postsecondary readiness.

Is not required for high school graduation.

- Based on TEC 39.0238, the STAAR Algebra II test
 - Cannot be used for accountability.
 - Cannot be used for the purpose of teacher evaluations.
 - Cannot be used in determining a student's final course grade or class rank.
 - Cannot be used for college admission purposes.

- Because the changes to the STAAR Algebra I and II assessments are relatively minimal, the performance standards will not change.
- Students who have already taken a STAAR EOC assessment are at the phase-in 1 performance standard.
- The standard in place when a student first takes a STAAR EOC assessment is the standard that will be maintained on all five STAAR EOC assessments throughout the student's high school career.

TEA STAAR MATHEMATICS UPDATE

The application of mathematical process standards is part of each knowledge statement in the mathematics TEKS.

The mathematical process standards have been added to the TEKS for Algebra I and Algebra II and will be added to the STAAR Algebra I and Algebra II assessments.

The seven process standards are identical across grades and courses within the mathematics TEKS and are listed as the first knowledge statement.

- The student uses mathematical processes to acquire and demonstrate mathematical understanding.
 - A. Apply mathematics to everyday
 - B. Use a problem-solving model
 - C. Select tools to solve problems
 - D. Communicate using multiple representations
 - E. Use representations of mathematical ideas
 - F. Analyze mathematical relationships
 - G. Display, explain, and justify mathematical ideas

 General information, including examples, on how process standards are included in the STAAR mathematics, science, and social studies assessments is available at: <u>Assessing Process Skills</u>.

 For STAAR mathematics, multiple process skills with be incorporated into test questions.

 Process skills will be reported for informational purposes only. They do not contribute to a student's score. Student's are scored on the content standard being assessed.

Reports that show the content standard being assessed and the process skills associated with each test question are available at <u>http://tea.texas.gov/student.assessment/staar/exptested/</u>.

For example, here is part of the spring 2015 STAAR grade 7 math report.

						PROCESS STUDENT EXPECTATIONS							
GRADE	LANGUAGE	SUBJECT	ITEM	RC*	CONTENT STUDENT EXPECTATION	7.1(A)	7.1(B)	7.1(C)	7.1(D)	7.1(E)	7.1(F)	7.1(G)	TEST DATE
7	English	Mathematics	1	2	7.4(B)	x	x				x		Spring 2015
7	English	Mathematics	2	3	7.5(A)		x			x	x		Spring 2015
7	English	Mathematics	3	1	7.6(A)	x	x				x		Spring 2015
7	English	Mathematics	4	2	7.11(A)		x			x	x		Spring 2015
7	English	Mathematics	5	4	7.6(G)	x	x			x	x		Spring 2015
7	English	Mathematics	6	3	7.9(D)		x	х		x	x		Spring 2015
7	English	Mathematics	7	4	7.13(E)	x	x	х			x		Spring 2015
7	English	Mathematics	8	2	7.3(B)	x	x				x		Spring 2015
7	English	Mathematics	9	3	7.9(B)	x	x	х		x	x		Spring 2015
7	English	Mathematics	10	2	7.4(A)	x	x	х	х			x	Spring 2015

TEA STAAR MATHEMATICS UPDATE

June 2015

Here is an example of a STAAR question for grade 4 mathematics.

The model shows a rectangular field with a length of 150 m. The perimeter of the field is 400 m.

150 m

What is the width of the field in meters?

- A 250 m
- B 100 m
- C 125 m
- D 50 m

This question assesses 4.5(D) and incorporates 4.1(A), 4.1(B), 4.1(C), 4.1(E) and 4.1(F).
Tea Staar Mathematics UPDATE

Here is an example of a STAAR question for grade 6 mathematics.



This question assesses 6.3(D) and incorporates 6.1(A), 6.1(B) and 6.1(F).

Here is an example of a STAAR Algebra I question.

What is the solution to the system of equations below?

$$4x - 7y = -2$$

 $12x - 21y = -42$

- A The ordered pair (-1/2, 0) is the solution.
- B The ordered pair (0, 2/7) is the solution.
- C There are an infinite number of solutions.
- D There is no solution.

This question assesses A.5(C) and incorporates A.I(B) and A.I(G).

RELEASE TEST QUESTIONS

TEA STAAR MATHEMATICS UPDATE

RELEASE TEST QUESTIONS

- In July 2015, there will be a partial release of test questions for STAAR grades 3–8 mathematics.
- The partial release will include 20–30 test questions per grade.
- It will focus on new student expectations and readiness standards.
- The questions will be available in the chart under "SAMPLE QUESTIONS" posted at: <u>http://tea.texas.gov/Student_Testing_and_Accountability/Testing/State_of_Texas_Ass_essments_of_Academic_Readiness_(STAAR)/STAAR_Released_Test_Questions/.</u>

RELEASE TEST QUESTIONS

- The May 2015 STAAR Algebra I assessment will be released in its entirety in August with other spring tests (reading, writing, science, and social studies) being released.
- The 2016 STAAR grades 3–8 mathematics assessments, as well as the Algebra I assessment, will be released in their entirety in August 2016.
- The questions will be available in the charts under "TEST FORMS" posted at: <u>http://tea.texas.gov/Student_Testing_and_Accountability/Testing/State_of_Texas_Ass_essments_of_Academic_Readiness_(STAAR)/STAAR_Released_Test_Questions/.</u>

GENERAL STAAR UPDATE

TEA STAAR MATHEMATICS UPDATE

TESTING REQUIREMENTS FOR STUDENTS RECEIVING ACCELERATED MATH INSTRUCTION

- Based on federal requirements, students are to be tested annually in mathematics in grades 3–8 and once in high school.
- This means that each student enrolled in grades 3–8 should have a math score for federal accountability purposes.
- If a student is receiving accelerated instruction in mathematics, the student should take the assessment that best matches his/her instruction, if one exists.

TESTING REQUIREMENTS FOR STUDENTS RECEIVING ACCELERATED MATH INSTRUCTION

- Middle school students who are receiving instruction in Algebra I should take the STAAR Algebra I assessment.
 - The results of the STAAR Algebra I assessment can be used to fulfill high school graduation requirements.
 - The commissioner discourages double testing these students (i.e., giving the student the Algebra I assessment and the grade-level assessment).

TESTING REQUIREMENTS FOR STUDENTS RECEIVING ACCELERATED MATH INSTRUCTION

Middle school students who are receiving instruction in a course above Algebra I, for example geometry, do not have an assessment option that matches their instruction.

Because these students are required to have a math score for federal accountability purposes and an assessment that matches their instruction does not exist, they take their grade-level assessment.

2015–2016 STUDENT ASSESSMENT TESTING CALENDAR

Some testing dates were moved for spring 2016 and have later reporting dates. For more information see the testing calendar posted at 2015-2016 School Year.

- Late March/early April
 - Grades 4 and 7 writing
 - Grades 5 and 8 reading and mathematics
 - English I and II

First week in May: Algebra I, biology, and U.S. history

2015–2016 STUDENT ASSESSMENT TESTING CALENDAR

Some testing dates were moved for spring 2016 and have later reporting dates. For more information see the testing calendar posted at 2015-2016 School Year.

- Second week in May
 - Grades 3–8 reading and mathematics, including grades 5 and 8 retests
 - Grades 5 and 8 science
 - Grade 8 social studies
 - English III
 - Algebra II

SENATE BILL 149

- SB 149 changed assessment graduation requirements.
 - Applies to students who have STAAR EOC assessment requirements, not TAKS.
 - Can be used if a student does not pass up to two of the assessments he/she is required to take.
 - Can still use substitute assessments in place of STAAR EOC assessments, now including TSI.
 - For more information, go to: <u>Individual Graduation Committee Frequently Asked</u> <u>Questions</u>.

ADDITIONAL LEGISLATION

- TEA is in the process of analyzing legislation that was recently signed by the governor. Information will be sent to districts as soon as it is available.
 - House Bill 743
 - House Bill 1164
 - House Bill 1613
 - House Bill 2349
 - House Bill 2804

ADDITIONAL INFORMATION

The Student Success Initiative (SSI) grade advancement requirements for mathematics will be reinstated for the 2015–2016 school year. Therefore, there will be three testing opportunities in 2016.

The STAAR Frequently Asked Questions document was posted in February: <u>STAAR</u> <u>Frequently Asked Questions</u>.

QUESTIONS???

- If you have questions,
 - Look on the Student Assessment website: <u>http://tea.texas.gov/student.assessment/</u>
 - Call the Student Assessment Division: 512-463-9536
 - Email the math team: <u>math.test@tea.texas.gov</u>
- **TEA Student Assessment Math Team:**

Carrie Alexander, Donna Fontenot, Karen Grad, Julie Guthrie, Anne Nappa, and Erik Pinter lune 2015