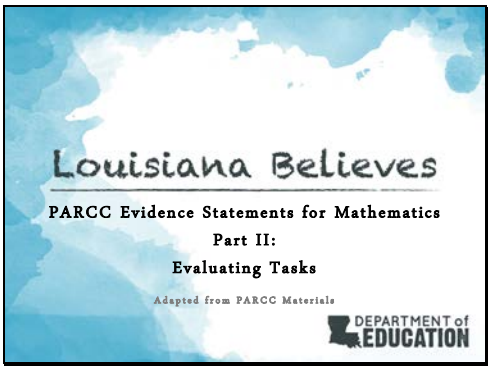
Slide 1



This presentation is the second of two Training Modules designed to assist educators in understanding Evidence Statements for mathematics. The Part I training module focuses on the basics of Evidence Statements. This module focuses on using Evidence Statements to evaluate tasks. As Part I serves as the foundation for Part II, it is recommended that participants engage in Part I training before Part II training and/or know how to read and interpret Evidence Statements.

The notes are designed so that they may be used as a facilitator's guide.

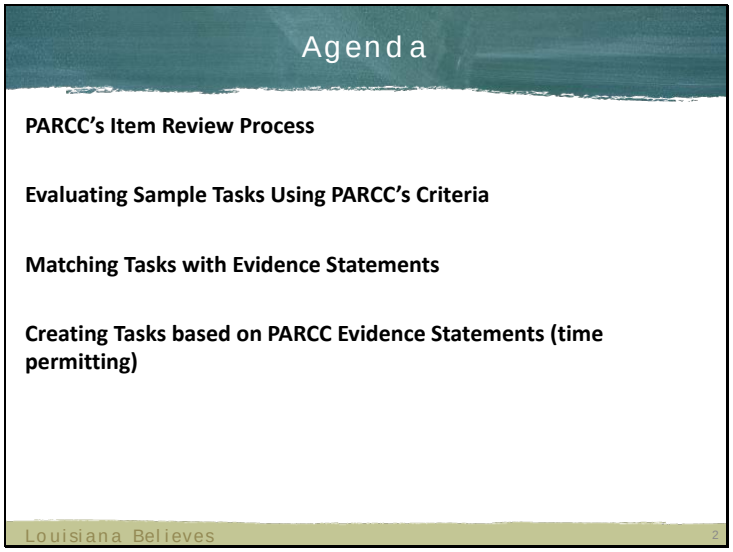
This presentation was created with the intent of using digital materials; therefore, information has been copied from Evidence Statements and provided in the slides. It may be beneficial for participants to have printed copies of the Common Core State Standards for Mathematics and the Evidence Tables for the targeted audience.

The documents to be used by participants when completing activities in this presentation include:
Grade 4 Math EOY Evidence Tables
Grade 7 Math EOY Evidence Tables
Both are available at http://www.parcconline.org/assessment-blueprints-test-specs.

Facilitators will need to copy each of the following for the activity. Note that the Key Cards should be cut apart and put in random order. Otherwise, the cards will be in the same order as the tasks are presented in the task set.
Grade 4: Task Set and Group Recording Sheet (one for each group of 3-4 participants)*
Grade 4: Evidence Statement Key Cards (one for each group of 3-4 participants)*
Grade 7: Task Set and Group Recording Sheet (one for each group of 3-4 participants)*
Grade 7: Evidence Statement Key Cards (one for each group of 3-4 participants)*
The facilitator will need a copy of the answer sheet for each task set.
The above materials are available online in the Teacher Leader Library at http://www.louisianabelieves.com/resources/library/louisiana-teacher-leaders.

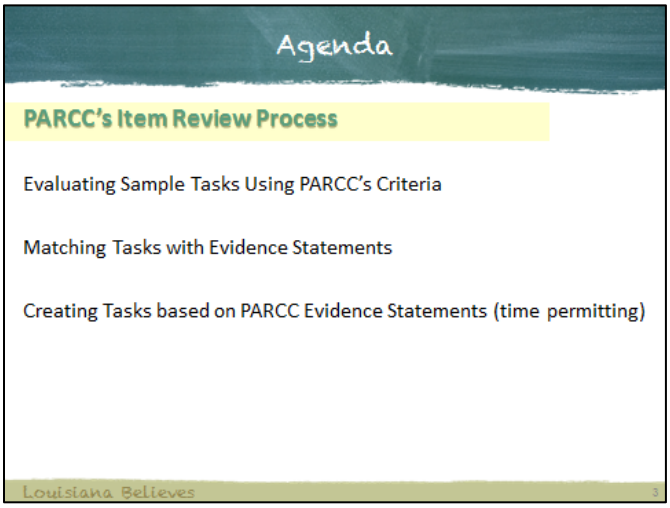
*As presented, task sets were divided with about ½ of the participants completing the Grade 4 activity and the other half completing the Grade 7 activity.

Slide 2



Read the slide.

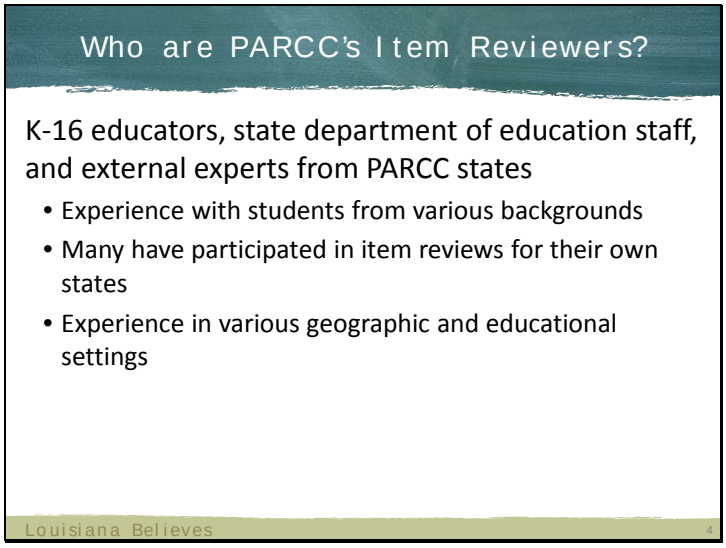
Slide 3



This section highlights the process used by PARCC to review items for its summative assessments. If classroom tasks are to be aligned with PARCC assessments, the same criteria should be used to evaluate and create tasks for classroom use.

Let's get started.

Slide 4

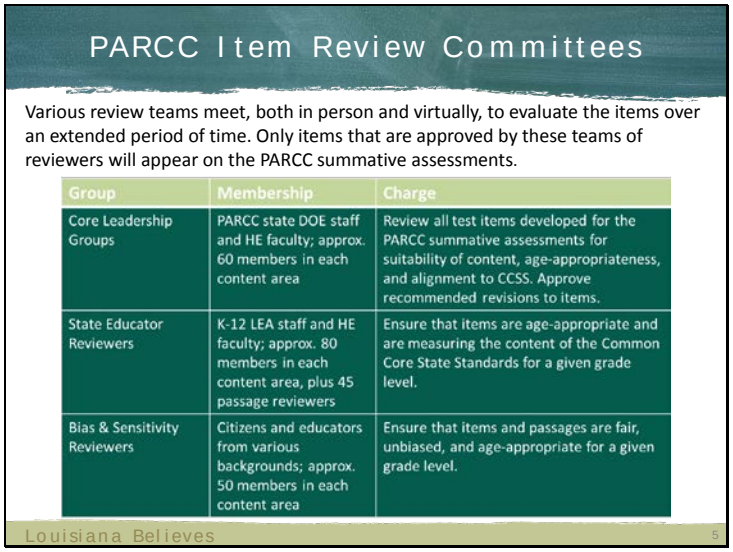


As is with the review of items developed for Louisiana's state assessments, PARCC uses multiple committees to review items that will be included on the PARCC assessments.

Because PARCC is a consortium of states, its committees are composed of educators from PARCC states.

Review the slide to allow participants to view the overall composition of its committees.

Slide 5



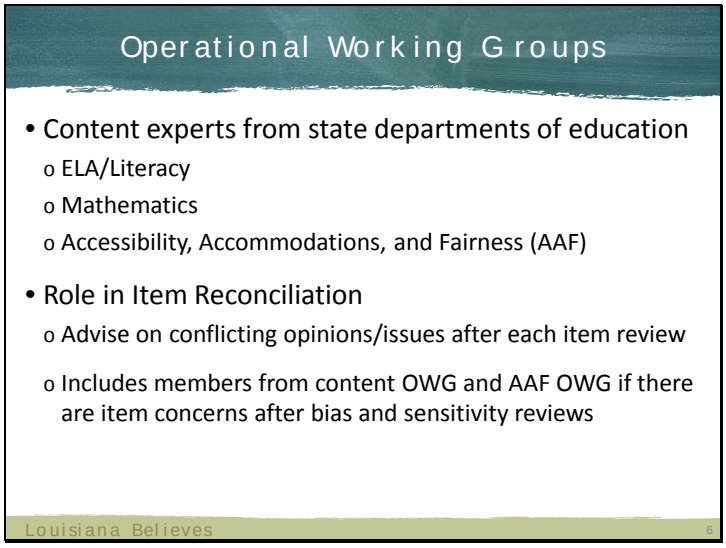
Shown in the chart are the three different item review committees with different makeups (e.g., state/Higher Ed staff vs K-12 district staff). Each committee reviews items at various stages in the item review cycle.

These committees initially meet face-to-face to receive training on the PARCC process for reviewing items and to allow members to ask questions as they review items. Later, committee members go online to review different sets of items individually. Within a day or two after the individual review, small groups of 3-4 members who reviewed the same set of items participate in webinars to discuss the items.

The information in the chart summarizes the membership and work of each group. Allow participants to review the slide or briefly go over the information in the chart.

As we will see in the next slide, Operational Working Content Groups also play a large role in item review cycle.

Slide 6

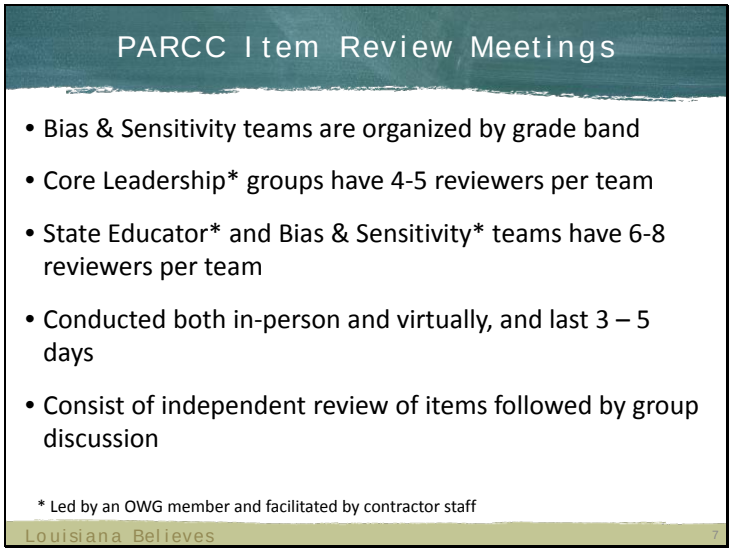


This slide outlines the three content Operational Working Groups. There is one for ELA/Literacy, another for Mathematics, and a third, Accessibility, Accommodations, and Fairness. Each PARCC state is allowed to have a maximum of two representatives on each Operational Work Group. In addition to participating in all phases of item review, the content operational work groups are extremely active in advising PARCC and in doing much of PARCC's work.

Examples of their work include reviewing and editing practice tests, training item reviewers, interpreting Evidence Statements should there be questions, and testing to make sure that technology-enhanced items function as they should.

Because of their content expertise, the Operational Working Groups assist in resolving questions about specific items following each item review (e.g., after the Core Leadership or State Educator reviews).

Slide 7



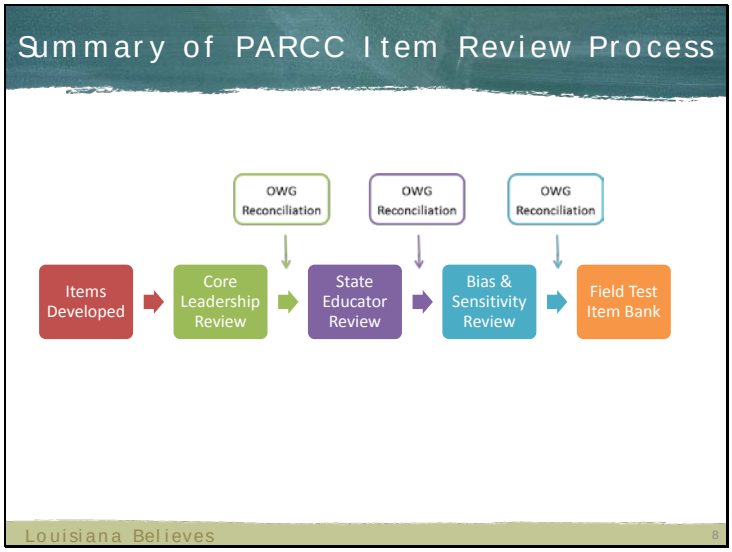
Because of the large number of items created, item review committees are divided into smaller teams to review a subset of the items created. The size of the smaller teams depends on the committee (i.e., Core Leadership, State Educator, Bias & Sensitivity). Each small team has an Operational Group Member and a contractor's staff member whose responsibilities are to ensure that edits requested by the committee are correctly recorded and to answer questions as needed.

Item review meetings whether face-to-face or virtual last 3-5 days. However, in both types of meetings, items are reviewed independently first and then discussed by a small team of reviewers.

As you can see, serving as an item reviewer requires a considerable time commitment.

The next slide shows the progressions of reviews and the way that OWGs interact with each review

Slide 8



This is the life cycle of an item. At a minimum, each item is reviewed three times once it is developed and before it can become part of the field testing item bank. At any point in the cycle, an item can be rejected and not used.

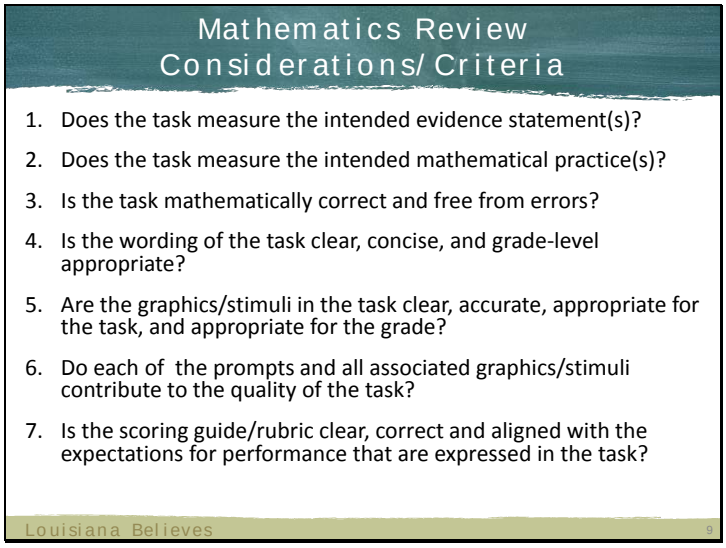
Once items are developed, they are first reviewed by the Core Leadership for suitability of content, age appropriateness, and alignment to the CCSS.

Should there be conflicting opinions about items from the Core Leadership, the Operational Work Group reads and discusses the information provided by the Core Leadership committee and resolves the issue.

The same process continues with the State Educator Committee whose members give items a second look. If edits were requested by the CLG committee, those items are made prior to the State Educator review. Items then go to a review by the Bias and Sensitivity committee.

Not shown is the step in which items undergo review and testing of their embedded technology before being field tested, work that is generally done by the Operational Work Groups for that content area.

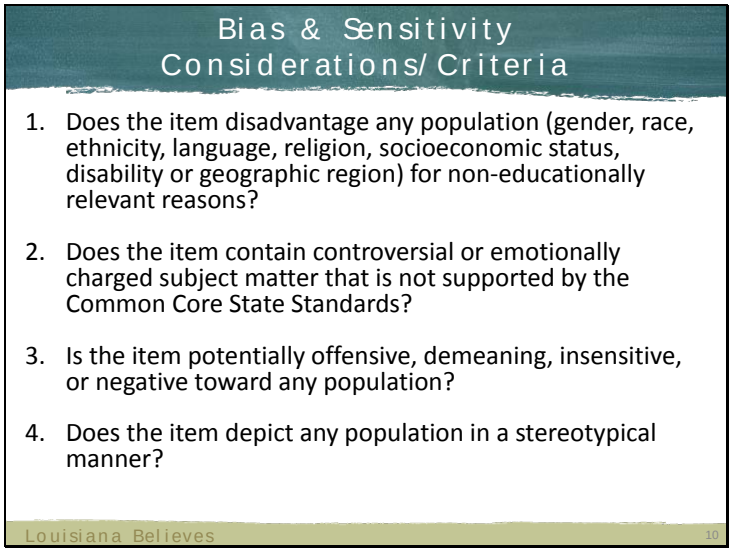
Slide 9



This slide notes the general review criteria for math items used by the Core Leadership and State Educator Review Committees.

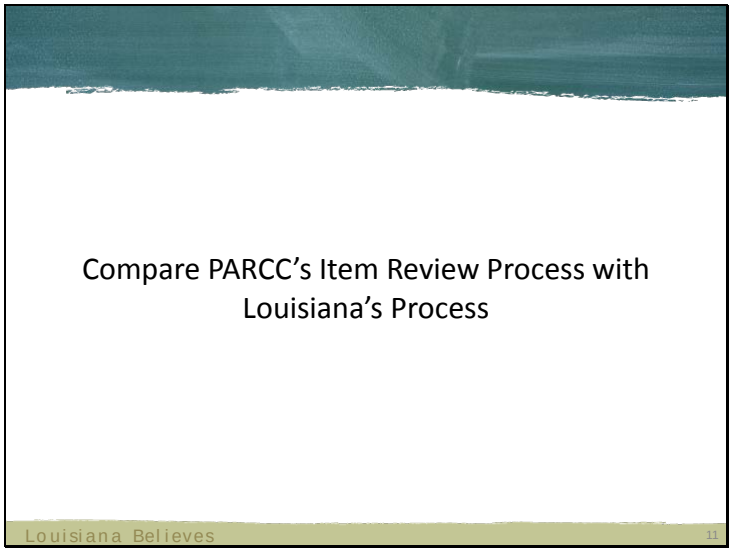
Indicate to the audience that they will be using these criteria in an activity to better understand the review process. Additionally, the criteria can also be used to determine the alignment of a task to PARCC assessments.

Slide 10



General review criteria for bias and sensitivity reviews

Slide 11



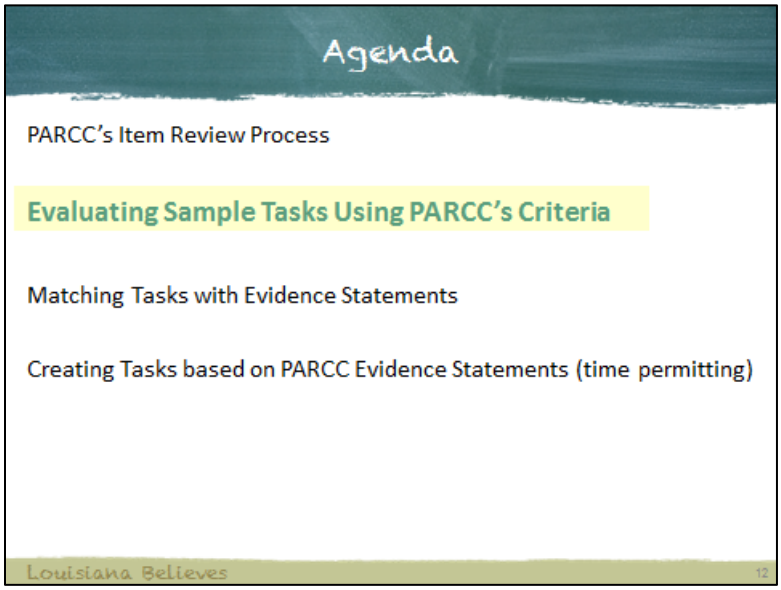
Take a few minutes to ask audience members if they have ever served on an item review for the LA Department of Education. For those who have and are willing to share, ask how the PARCC process compares to the state process.

The purpose of this discussion is to allow participants to see that the PARCC process is generally more extensive than the state because of the fact that at least three committees review each item. The state generally has one content review and one bias and sensitivity review for each assessment. The process is similar in that educators appropriate for the grade band review all items and can make suggestions for edits.

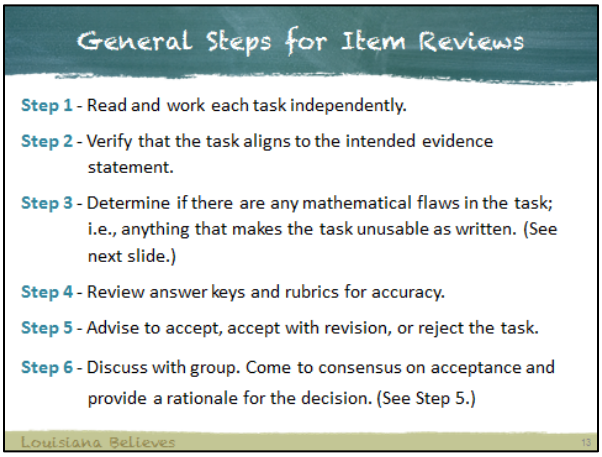
State assessments are informed by state educators who teach and/or work with students who will take the assessments. As with the state process, the PARCC process is a collaborative process among educators from states whose students will take the PARCC assessments. Louisiana has had over 25 educators at the state, district, and school level who have worked on item review and test forms construction in either ELA or mathematics.

Once field testing is over, committees of educators, content experts, and LDOE staff conduct a data review to determine which field test items will be used on the operational state tests. A similar process will be used by PARCC in determining which items will be used for the tests in 2015 and beyond.

Slide 12


Agenda
PARCC's Item Review Process
Evaluating Sample Tasks Using PARCC's Criteria
Matching Tasks with Evidence Statements
Creating Tasks based on PARCC Evidence Statements (time permitting)
Louisiana Believes
12

Slide 13



In Evidence Statements – Part I, participants were introduced to Evidence Statements. We will now use the PARCC criteria to evaluate some sample tasks that PARCC developed for training purposes. The primary purpose of this activity is to provide an opportunity for participants to practice using an Evidence Statement to evaluate any task as well as to understand how PARCC assessment items are evaluated.

The steps for reviewing items by committees are outlined on the slide. Note that while there are many things to consider, the first major consideration during the independent review is to ensure that the task aligns to the intended Evidence Statement.

Review the slide for the remaining steps.

Indicate that the process for the next few slides will be that

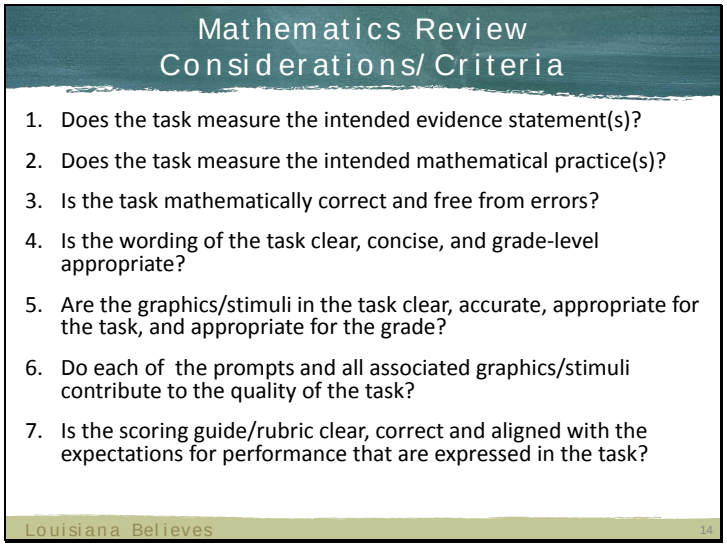
- A sample task will be presented on a slide.
- Information on the Evidence Statement and rubric, if applicable, will be presented on the next one or two slides.
- Participants will review the task on their own first and have time to complete review steps 1, 2, and 3.
- A short group discussion will follow the review of each item.

Ask participants to honor this individual time before having discussion with neighbors.

Presenter Note: Proceed to the next slide which has the first sample task. It is recommended that for all tasks, the presenter show the problem while the participants look at the Evidence Statement information on the following slide. Give participants 2-3 minutes to work the task and evaluate it using steps 2, 3, and 4. When the item is discussed by the whole group, call on different people to provide input. In an actual item review, reviewers independently work through 4-5 items at a time before discussion; however, those groups range in size from 5 to 8. The temptation to discuss when given 4-5

tasks to review is often impossible to resist. Therefore, it is best to evaluate each item as described above.

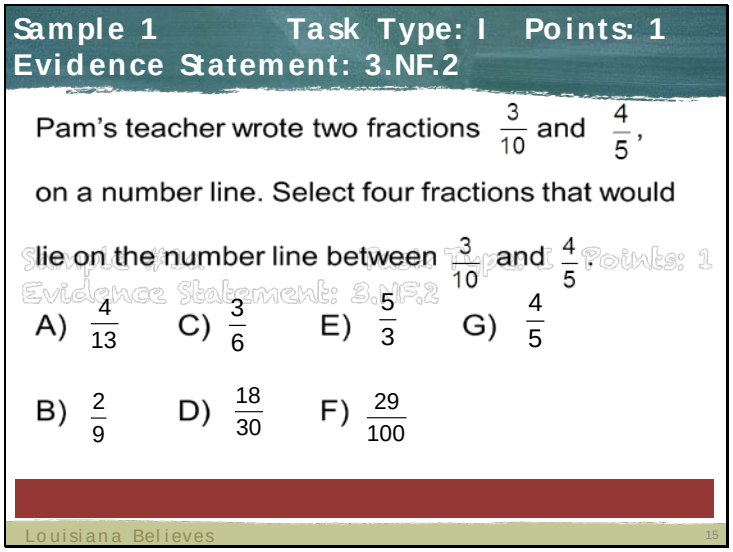
Slide 14



This slide notes the general review criteria for math items used by the Core Leadership and State Educator Review Committees.

Indicate to the audience that while steps for completing a review were listed on the previous slide, this slide shows all the things that should be checked to determine if a task is a PARCC-like task.

Slide 15



Show participants this slide.

Note the disclaimer in the red bar on the slide. If the presentation is used with other audiences, PARCC has asked that this notation remain when using slides developed for training purposes.

Before allowing participants to proceed, review the information in the title of the slide by asking participants what they can determine about the task. This will help those individuals who might not have participated in Part I training. Possible responses include:

- Type I assesses Major, Additional, or Supporting Content and might be tied to a fluency standard
- Will be computer scored.
- Task will be worth 1 point.
- Evidence Statement will have the same wording as the standard 3.NF.2

Advance to the slide 16 so that participants can see the evidence statement. Tell participants that they should remain on slide 16. Back up to slide 15 and display the task so that they can see both at the same time.

Remind them that they are to complete the review independently (without discussion). Ask participants to look up when they are finished. Call time in 3 minutes or when it appears that most participants have completed the steps. Ask individuals to provide input about what they found.

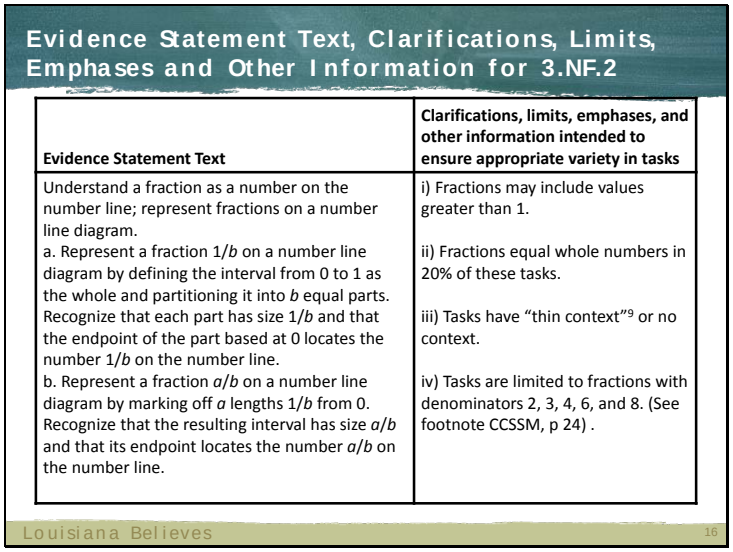
The following is information about the item that participants should point out during this discussion:

This task does not meet the evidence statement as clarification (iii) indicates that denominators of fractions are limited to 2, 3, 4, 5, and 8. The fractions 3/10, 4/13, 3/6, 2/9, 18/30, and 29/100 exceed that limitation.

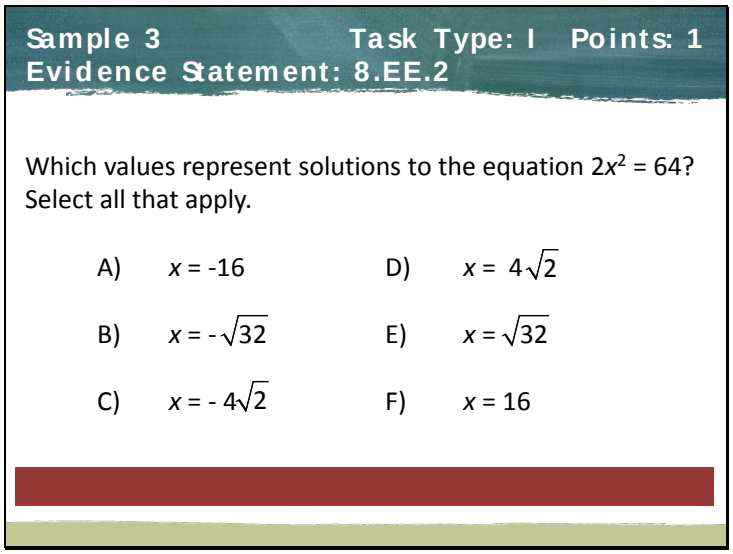
This is a problem with thin context because the situation is not presented in a real-world application which would necessitate a number line; however, the information provided does give the task more meaning.

Proceed to the next task on slide 17 and repeat the same process until all tasks have been reviewed.

Slide 16



Slide 17



Information about this task

Without reading the clarifications closely, someone may think that the equation $2x^2=64$ does not fit the ES; however, in clarification (ii), the use of "leading to" implies that the coefficient of 2 is OK. This is also supported by the fact that students in grade 7 solve equations of the form px + q =r and should know how to divide both sides of an equation by 2.

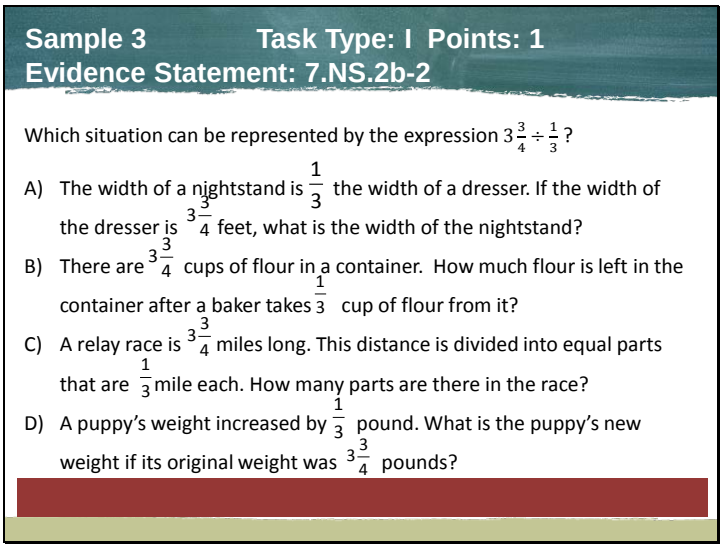
The primary issue with this item is that students are expected to simplify the square root of 32 in this sample task, but clarifications indicate this is beyond Grade 8. (See clarification iv.)

Slide 18

Evidence Statement Text, Clarifications, Limits, Emphases and Other Information for 8.EE.2

Evidence Statement Text	Clarifications, limits, emphases, and other information intended to ensure appropriate variety in tasks
Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.	i) Pool should contain tasks with and without contexts. ii) Tasks might for example take the form of algebraic word problems leading to equations $x^2 = p$ or $x^3 = p$, or geometric problems such as finding the edge length of a cubical object with a given volume. iii) In problems where $\sqrt{p}$ and $-\sqrt{p}$ are both relevant as solutions to $x^2 = p$, both of these solutions should be given. Note that $\sqrt{p}$ is nonnegative by definition. iii) Solutions to equations $x^2 = p$ or $x^3 = p$ are represented as $\sqrt{p}$ or $\sqrt[3]{p}$, respectively. iv) Manipulations such as $\sqrt{8} = 2\sqrt{2}$ are beyond the scope of grade 8. Students need not simplify a solution such as $\sqrt{8}$. But students should ultimately express the following cases in the form of whole numbers: (a) the square roots of 1, 4, 9, 16, 25, 36, 49, 64, 81 and 100; (b) the cube roots of 1, 8, 27, and 64.

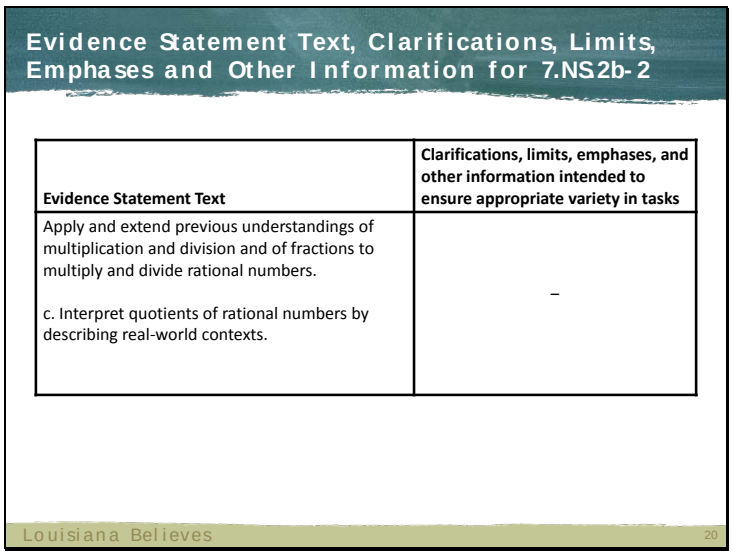
Slide 19



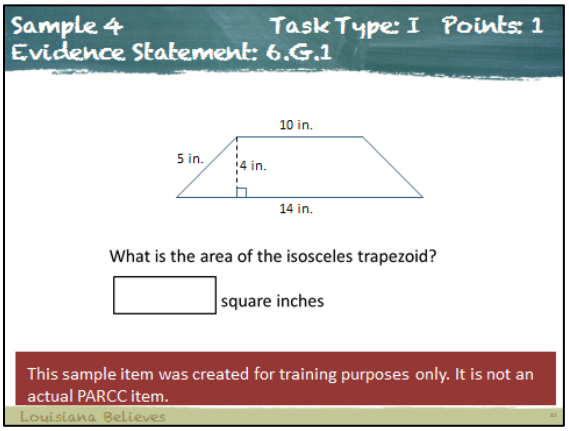
Information on this task

- Internal clueing (the correct answer uses the words "divided" and "equal parts" and none of the others do).
- Item wording is not concise.

Slide 20



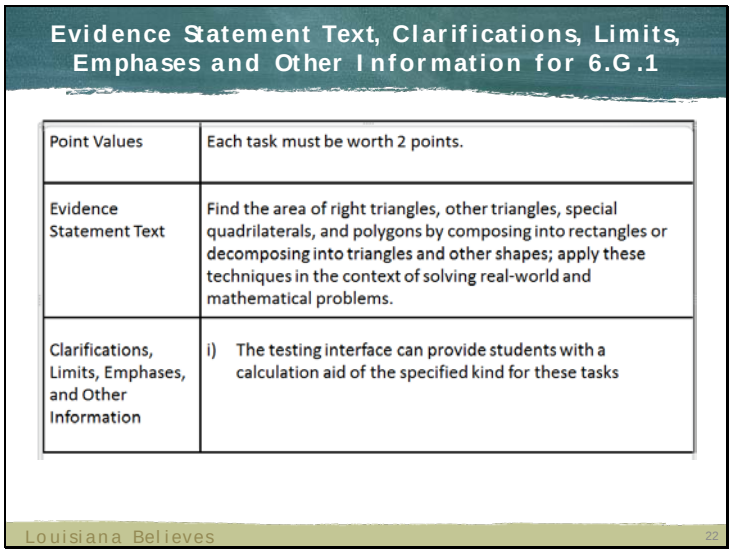
Slide 21



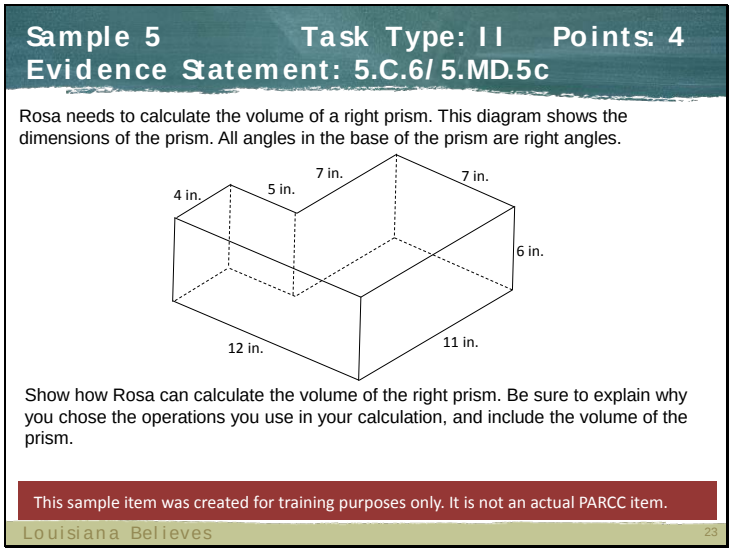
Information on this task

The shape is not mathematically possible as the missing leg of the right triangles created by the height is 3 inches. The bottom base needs to be updated to 16 inches. If that was the only issue, the task could be edited and moved forward. The fatal flaw comes from the fact that the task is worth 1 point, but the blueprint only allows for 2-point tasks for this evidence statement.

Slide 22



Slide 23



Inform participants that this task includes a rubric on slide 25. It may be necessary to give 4 minutes for this review to allow time to read the rubric.

Information on this task

The rubric only accepts one strategy. A student could fill in the missing corner and approach the item in a subtractive way, OR indicate that he could fill the base with 1-cubic-centimeter cubes and multiply by the number of layers (the height).

The rubric needs to be revised to indicate that strategies other than adding two volumes are acceptable.

Some may not want to accept the use of subtraction (total volume – volume of missing prism) as a strategy based on the wording of the standard. However, this is a higher order thinking and visualization skill and students who use such as strategy show understanding of the relationship between addition and subtraction.

Slide 24

Evidence Statement Text, Clarifications, Limits, Emphases, Other Information for 5.C.6 and 5.MD.5c

Evidence Statement Key	Evidence Statement Text	Clarifications, Limits, Emphases, and Other Information
5.C.6	Base explanations/reasoning on concrete referents such as diagrams (whether provided in the prompt or constructed by the student in her response). Content Scope: Knowledge and skills articulated in 5.MD.C	–
5.MD.5c	Relate the operations of multiplication and addition and solve real world and mathematical problems involving volume. c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.	i) Tasks require students to solve a contextual problem by applying the indicated concepts and skills.

Slide 25

Scoring Rubric for Sample # 5

Scoring Rubric

The task is worth 4 points; 1 point for computation and 3 points for reasoning.

Computation component: 582 cubic inches

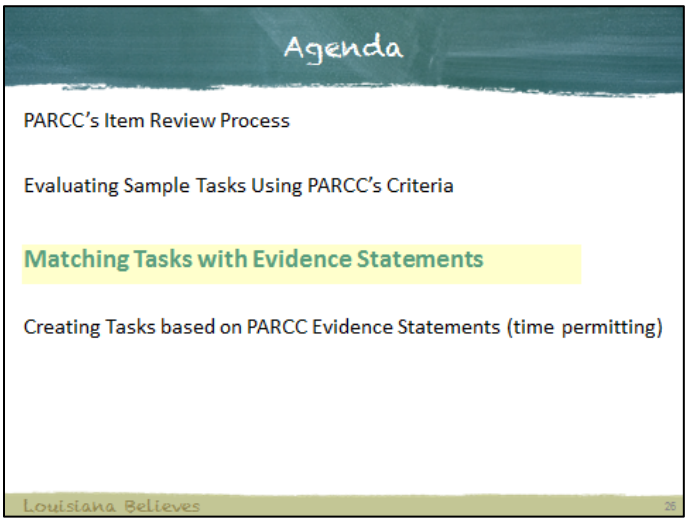
Reasoning component:

1 point is awarded for a correct process in which the student shows or explains how to divide the prism into two (or more) right rectangular prisms

1 point is awarded for showing or explaining the correct calculations for determining the volume of each rectangular prism

1 point is awarded for showing or explaining that the volumes need to be added together to determine the volume of the entire prism.

Slide 26



Tell participants that they are going to be provided a set of tasks for either Grade 4 or Grade 7 and will work in groups of four. Groups will try to match each task in the set to the Evidence Statement to which the item was written.

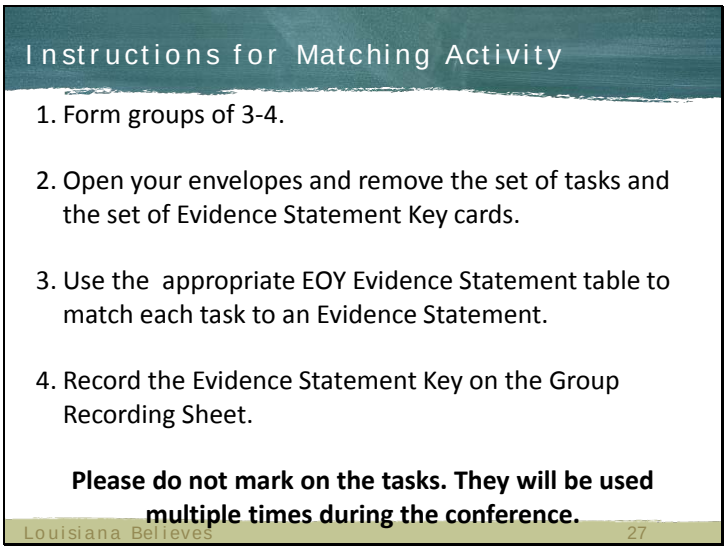
Indicate to participants that they should access the EOY Evidence Statements for the grade that they receive.

Allow participants time to form groups and then distribute the packets. Each packet should contain

- 5 sheets containing 10 tasks (2 tasks on each sheet)
- 10 cards showing the Evidence Statement Keys for the tasks (cut apart and mixed up)
- A recording sheet for each group.

Instructions are on the next slide.

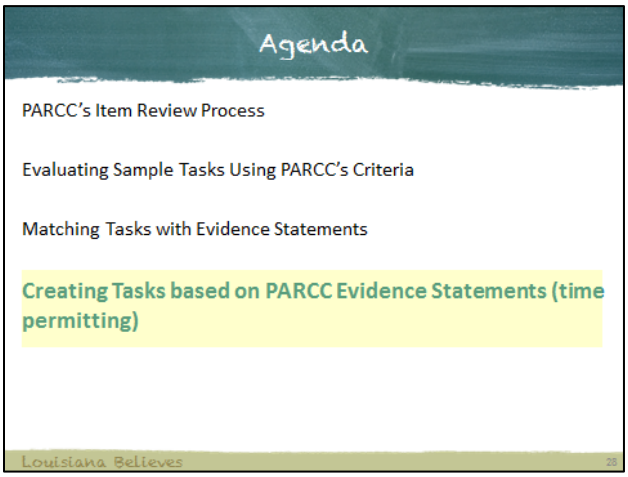
Slide 27



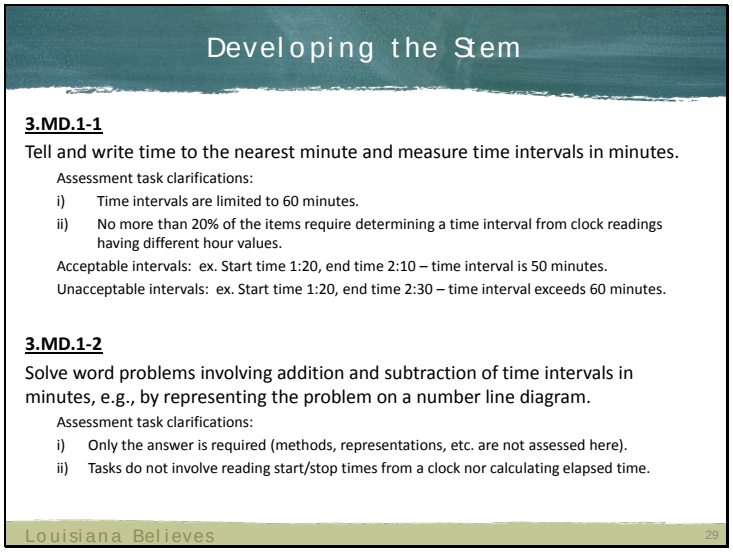
NOTE: After the Teacher Leader Summit, this activity was adjusted to make it easier. There are now 10 Evidence Statement Key cards. Participants will need to read the Evidence Statement text for a given Evidence Statement Key and then determine which task matches the description. Having to determine the CCSS domain and then read all the Evidence Statements in the domain to determine which code to record was very challenging for some participants at the TL meeting. If working with teachers knowledgeable about the CCSS for a particular grade, facilitators may want to present the activity as originally designed (i.e., distribute the tasks, recording sheet, and have the participants use only the Evidence Statement Table to find the correct key).

Facilitators can create the same activity for other grades by making screen shots of items found in the PARCC EOY practice tests at http://practice.parcc.testnav.com/#.

Slide 28



Slide 29



Here are two evidence statements from Grade 3. They both were derived from 3.MD.1. The content clarifications are listed for each.

Is there a logical way of presenting this content during instruction? Some sort of progression? Should these two evidence statements be explored in the same instructional lesson?

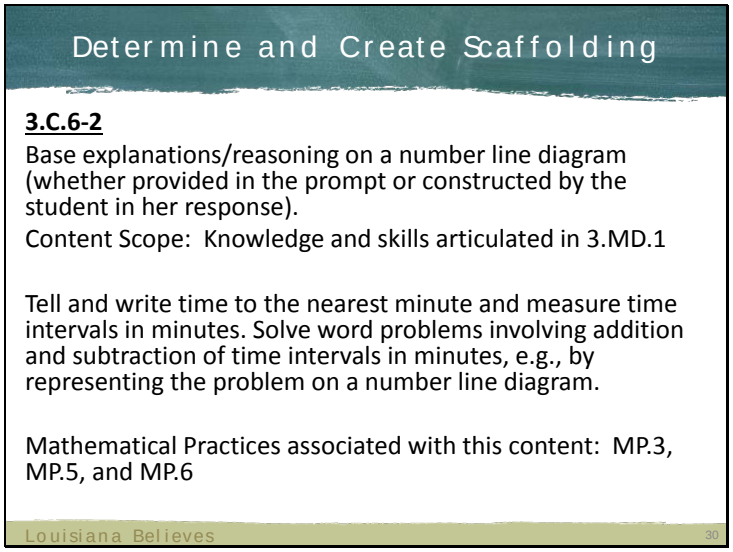
Should one design an instructional task that elicits evidence for both evidence statements? Why? Why Not?
Should one pay attention to the clarifications section when designing an instruction task? Why? Why Not?

Keep in mind: One should only develop instructional tasks worth students time to complete.

Split room into 2 sections:
Section 1: Develop the beginning of an instructional task for 3.MD.1-1.
Section 2: Develop the beginning of an instructional task for 3.MD.1-2.

Give time for discussion and reflection.
Ask each section how they approached the design of its instructional task.
Does your instructional task reflect mastery of the evidence statement assigned?

Slide 30



Here is another evidence statement from Grade 3.

Look at the content scope. You are already familiar with the two Type 1 evidence statements that align to this standard. What type of assessment task would be developed to elicit evidence from the students on the PARCC Assessment (What does the "C" stand for?)

Let's think about how we could design a scaffolded instructional task to elicit evidence for this evidence statement within this content scope. Discuss that a scaffolded task in one in which the problem is broken into parts requiring students to provide intermediate answers.

With your same partner, design a scaffolded instructional task aligned to the given evidence statement.

Reminder: Develop a task worth teaching to.

Give time for discussion and reflection.
Knowing how you approached your design previously, what did you do different in the way you approached the design of this instructional task?
Does your instructional task reflect mastery of the evidence statement and/or standard?
How might this type of scaffolded instructional task alter one's instruction in the classroom?

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Key Takeaways

- The PARCC evidence statement tables are valuable tools that can and should be used in the classroom to inform instruction.
- The PARCC sample items act as great instructional tasks to embedded in instruction.
- Creating one's own instructional tasks or lessons aligned to the PARCC evidence statement tables with not only prepare students for the PARCC Assessment, but, will prepare students to be College and Career Ready, as intended through the CCSS.

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Partnership for Assessment of Readiness for College and Careers

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