CCSSO 2013: Transitioning Assessment Systems

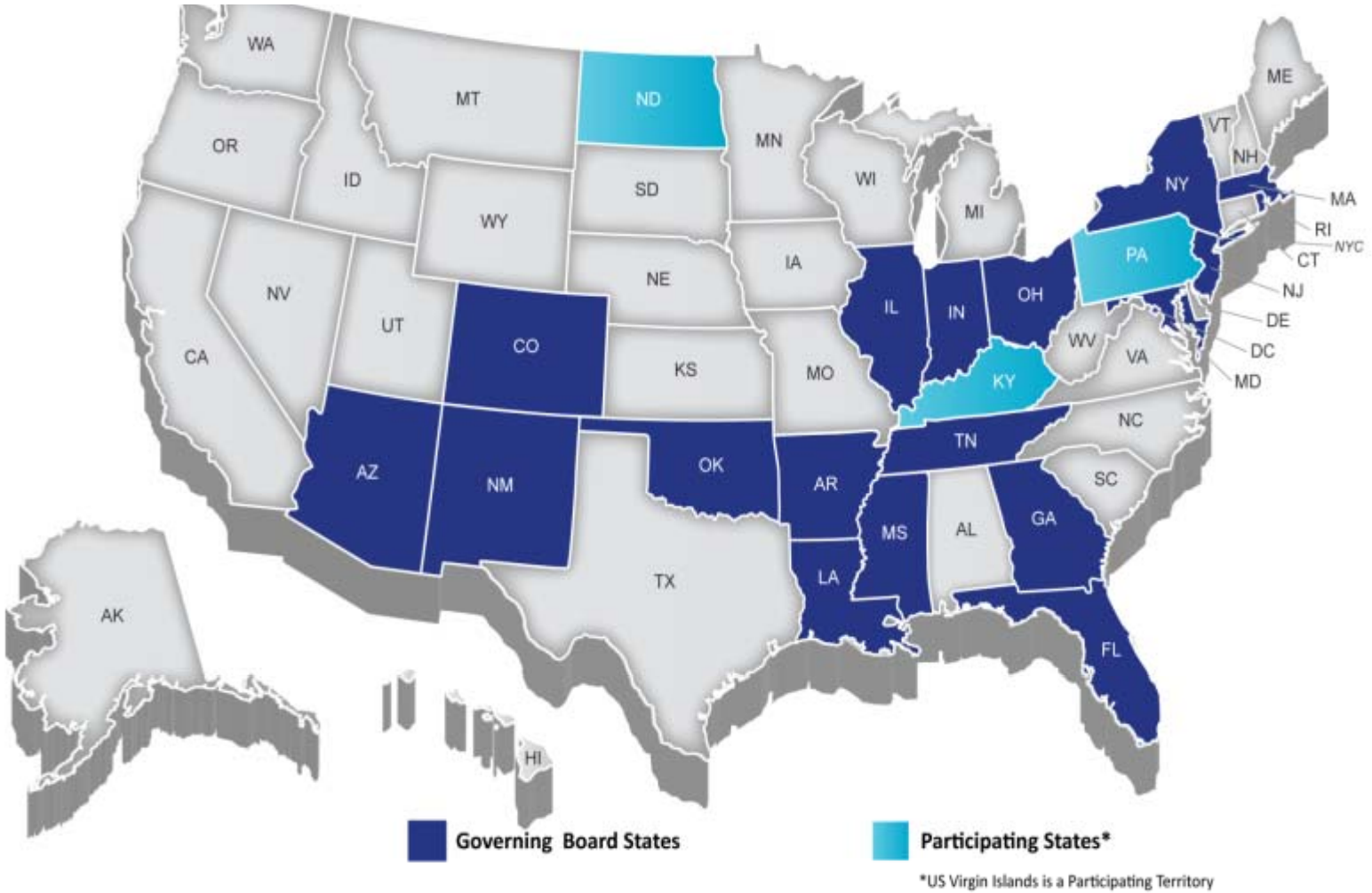
Using Technology to Assess Hard-to-Measure Constructs in the Common Core State Standards and to Expand Accessibility

Kathleen Scalise

The Challenge to Presenters:

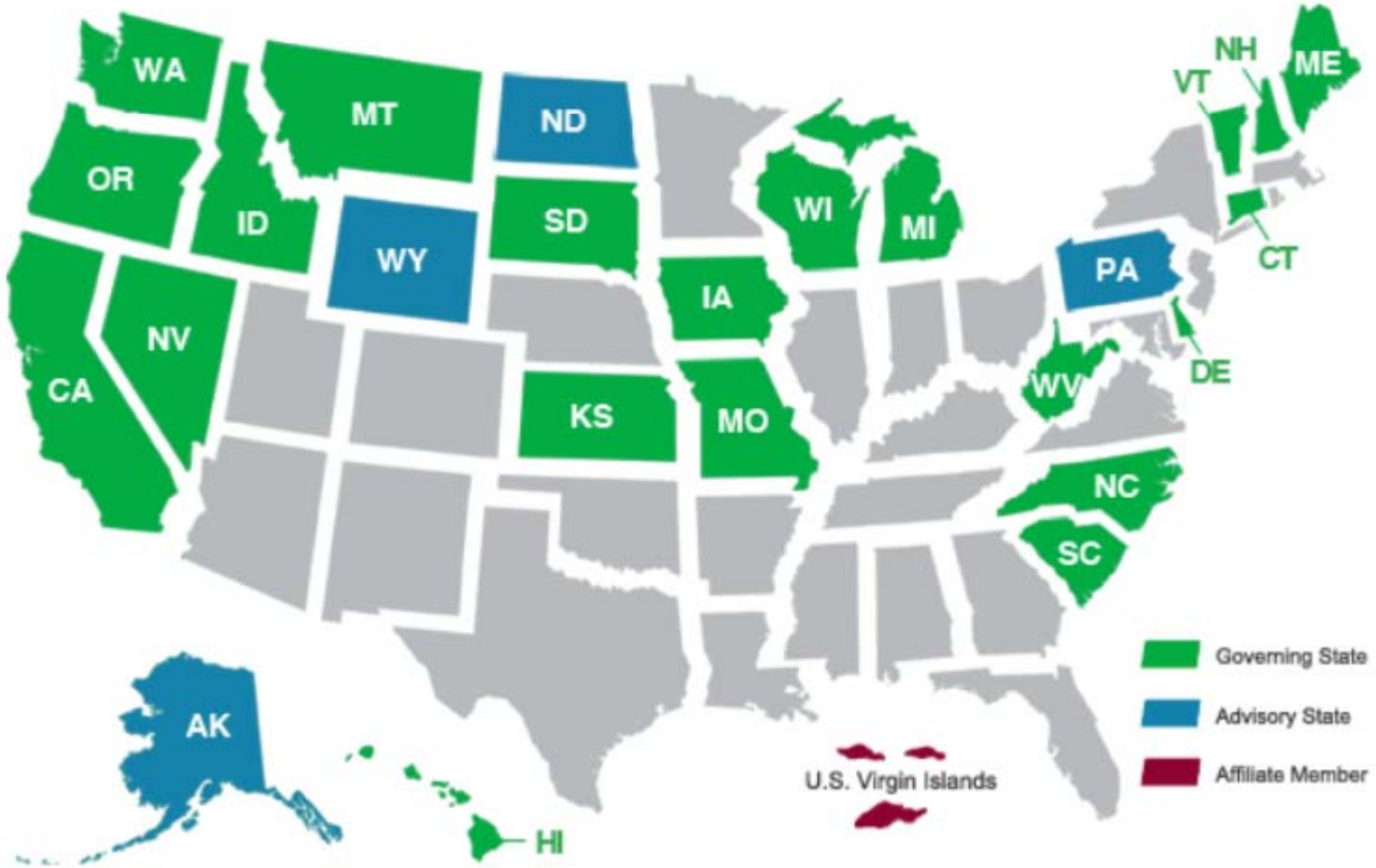
Remember emphasis here is not only on how you are better measuring complex constructs and being broadly accessible in your current assessments, but how you are designing the larger system and assessments to allow for evolution / advances after 2015.

Presentation from PARCC States



Achieve

Presentation from SBAC States



Proportional Punch
Section 3

Question #
2 of 6

Timer

CBAL MATH

Mix | Calc | STOP | Back | Next

Below is a table showing Aliya's
recipes for making cherry punc

	Nur
	Scoops of Mix
Aliya's recipe	3
Malcolm's recipe	3

makes the sweeter punch?

recipe
n's recipe

nswer in terms of number of scoops of
f water.

Source: ETS, TEA Symposium 2012

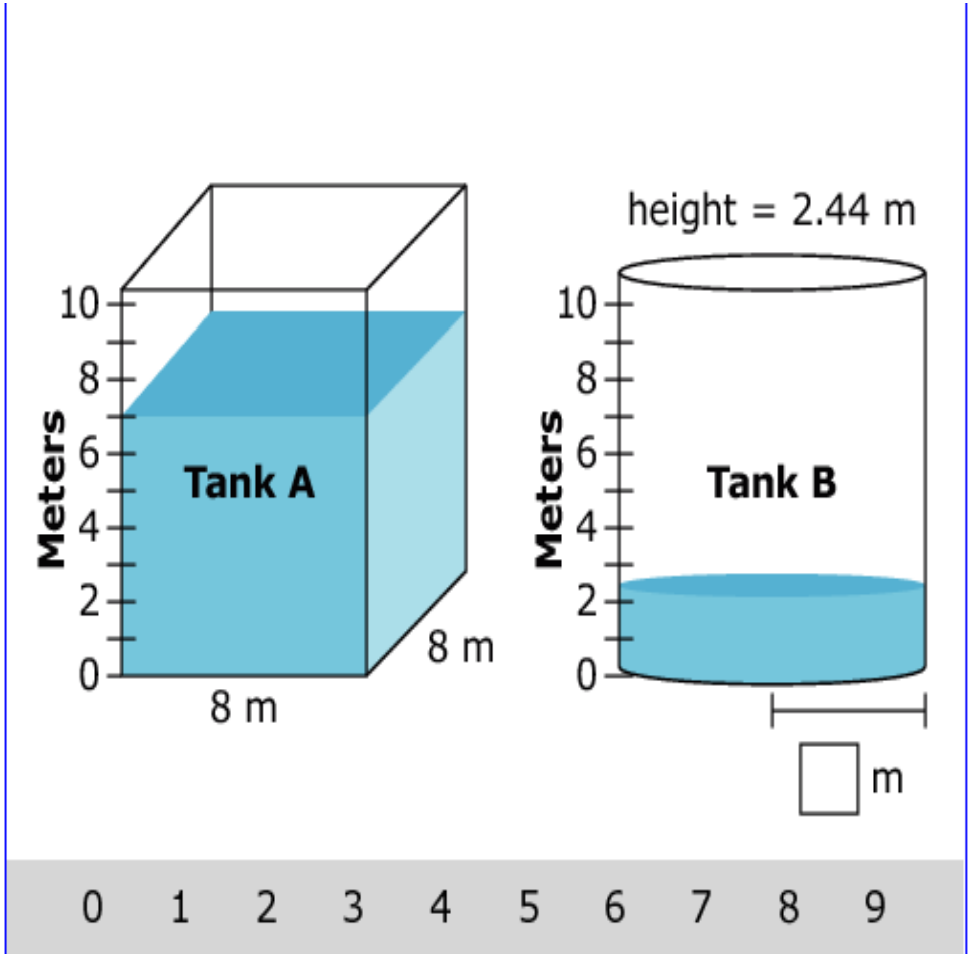
Water Tank Simulation (SBAC)

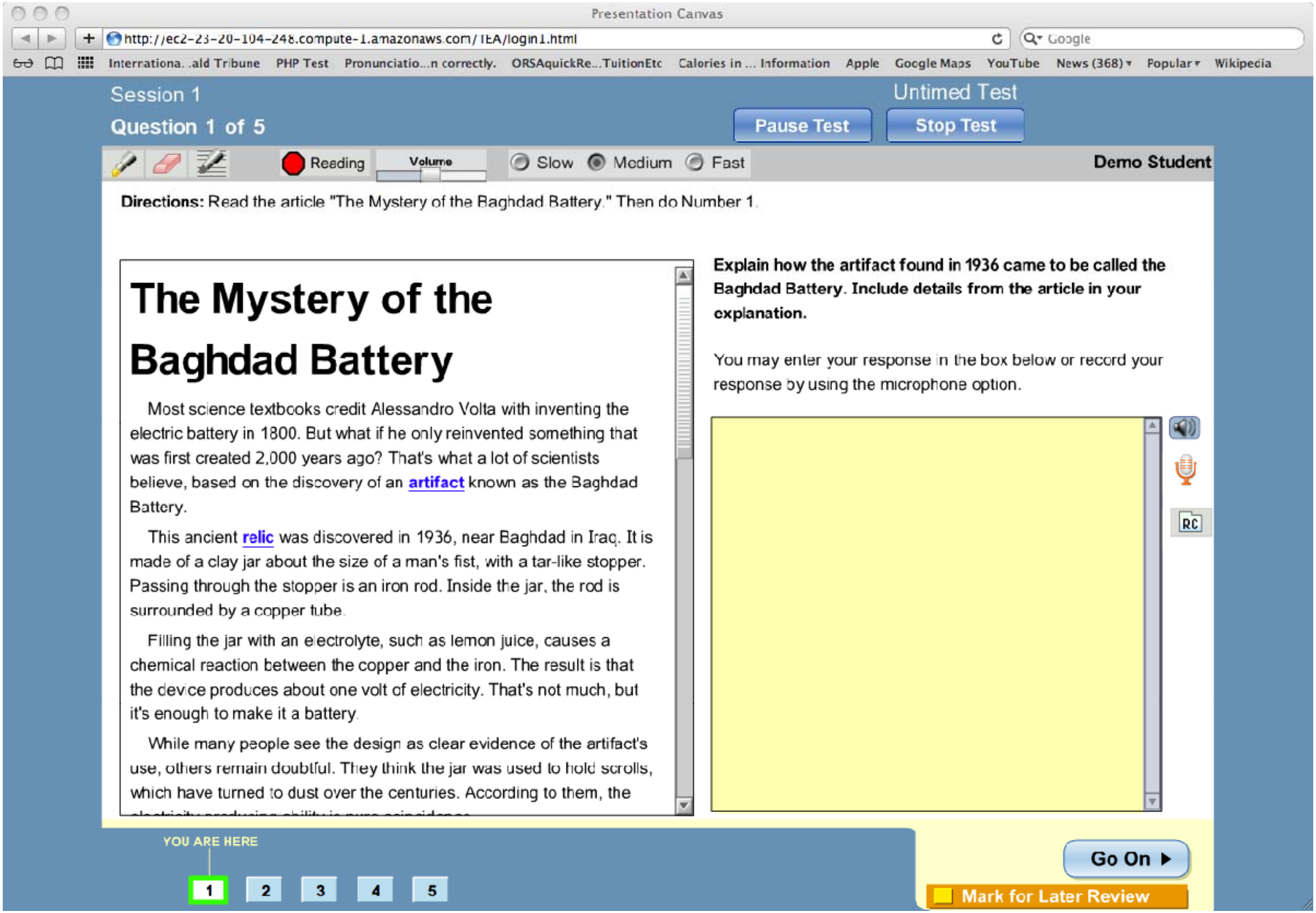
Two water tanks are shown. Tank A is a rectangular prism and Tank B is a cylinder. The tanks are not drawn to scale.

Tank A is filled with water to the 10-meter mark.

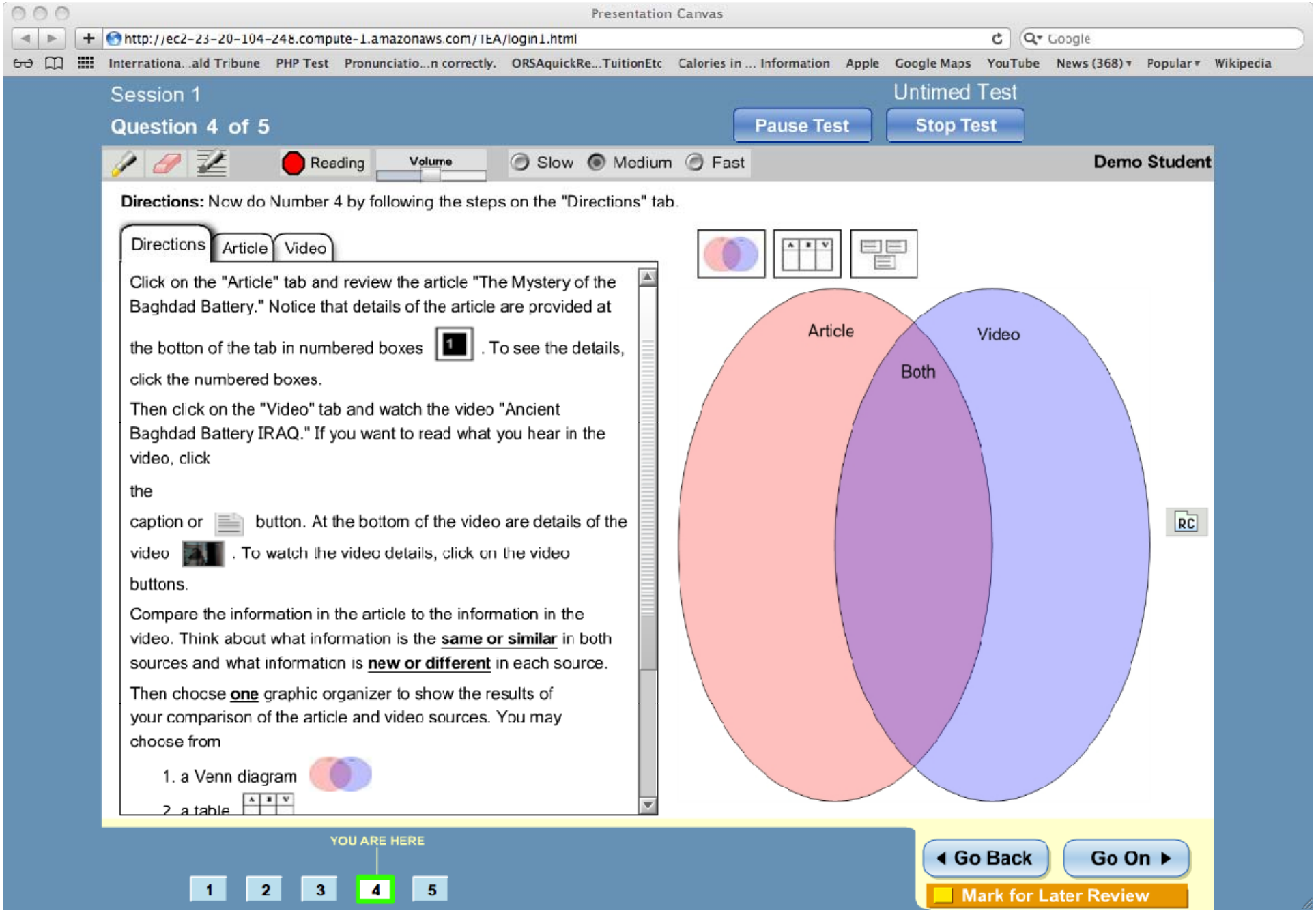
Click Tank A to change the water level. The volume of water that leaves Tank A is transferred to Tank B, and the height of the water in Tank B is shown.

Drag one number into the box to show the approximate radius of the base of Tank B.





Source: CTB, TEA Symposium 2012



Source: CTB, TEA Symposium 2012

ELA / Literacy: Grade 7 Sample (PARCC)

SAMPLE ITEM

Below are three claims that one could make based on the article "Earhart's Final Resting Place Believed Found."

Claims	Earhart and Noonan lived as castaways on Nikumaroro Island.
	Earhart and Noonan's plane crashed into the Pacific Ocean
	People don't really know where Earhart and Noonan died.

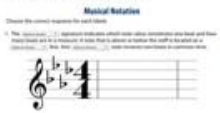
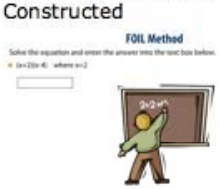
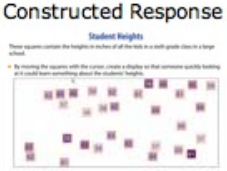
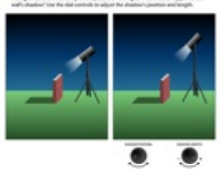
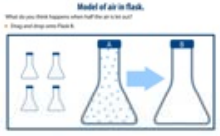
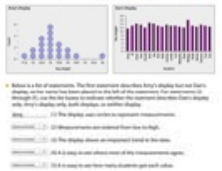
Part A: Highlight the claim that is supported by the most relevant and sufficient facts within "Earhart's Final Resting Place Believed Found."

Part B: Click on two facts within the article that best provide evidence to support the claim selected in Part A.

Most Constrained → **Least Constrained**

Fully Selected — *Intermediate Constraint Item Types* — *Fully Constructed*

Less Complex ↓ **More Complex**

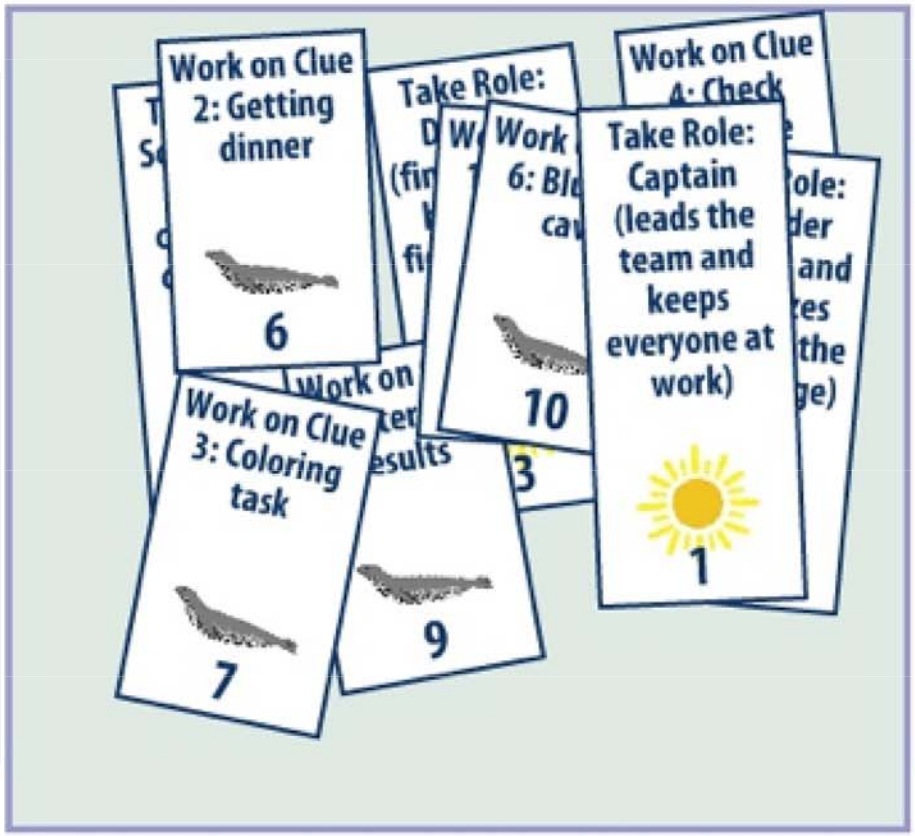
1. Multiple Choice	2. Selection/ Identification	3. Reordering/ Rearrangement	4. Substitution/ Correction	5. Completion	6. Construction	7. Presentation
1A. True/False 	2A. Multiple True/False 	3A. Matching 	4A. Interlinear 	5A. Single Numerical Constructed 	6A. Open-Ended Multiple Choice 	7A. Project
1B. Alternate Choice 	2B. Yes/No with Explanation 	3B. Categorizing 	4B. Sore-Finger 	5B. Short-Answer and Sentence Completion 	6B. Figural Constructed Response 	7B. Demonstration, Experiment, Performance
1C. Conventional Multiple Choice 	2C. Multiple Answer 	3C. Ranking and Sequencing 	4C. Limited Figural Drawing 	5C. Cloze-Procedure 	6C. Concept Map 	7C. Discussion, Interview
1D. Multiple Choice with New Media Distractors 	2D. Complex Multiple Choice 	3D. Assembling Proof 	4D. Bug/Fault Correction 	5D. Matrix Completion 	6D. Essay and Automated Editing 	7D. Diagnosis, Teaching

Source: K. Scalise, avaliable at: http://pages.uoregon.edu/kscalise/taxonomy/taxonomy.html

Source: K. Scalise, ATC21S Project, www.atc21s.org

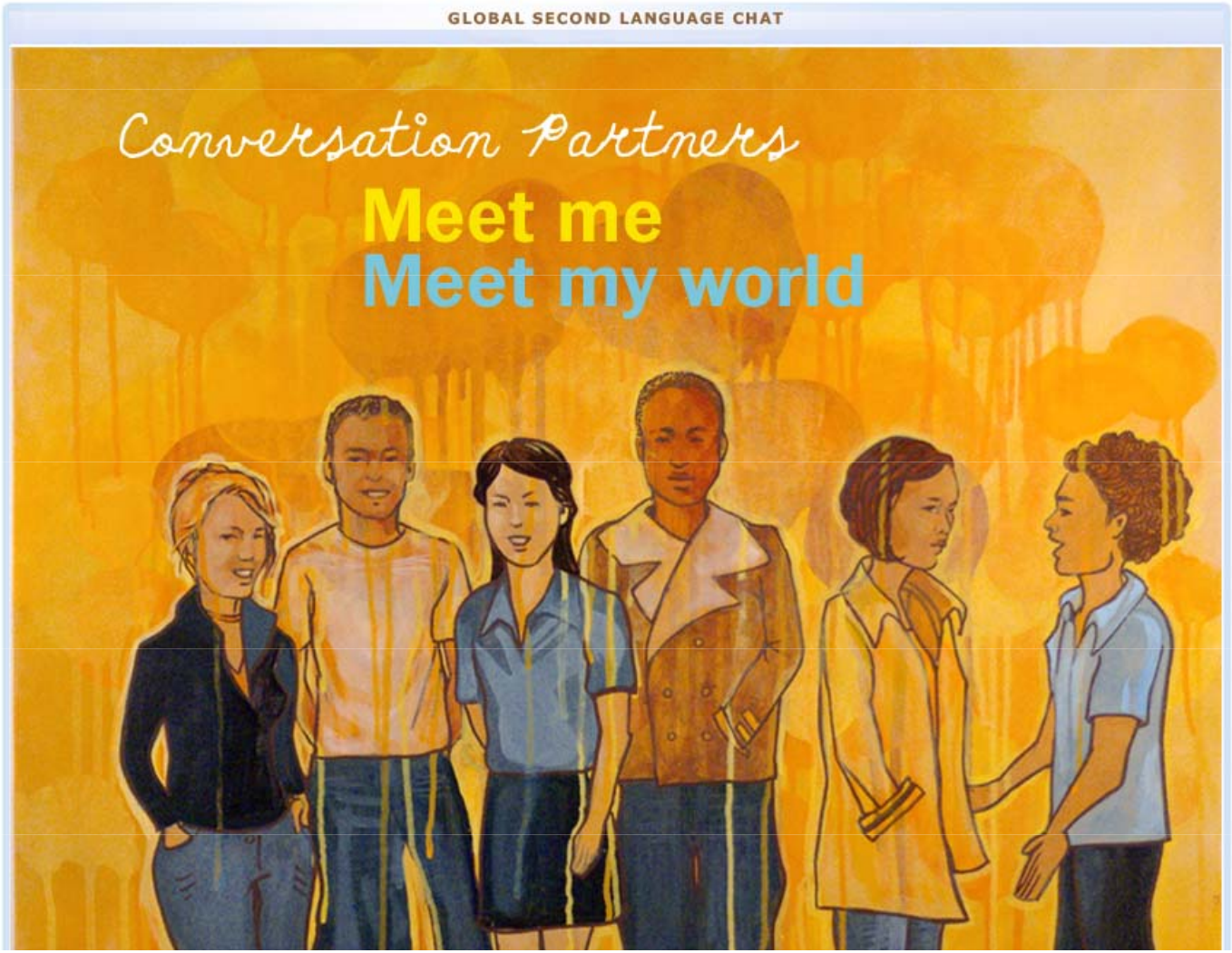
Work with your team to decide who will do what:

Person 1	Person 2	Person 3	Person 4

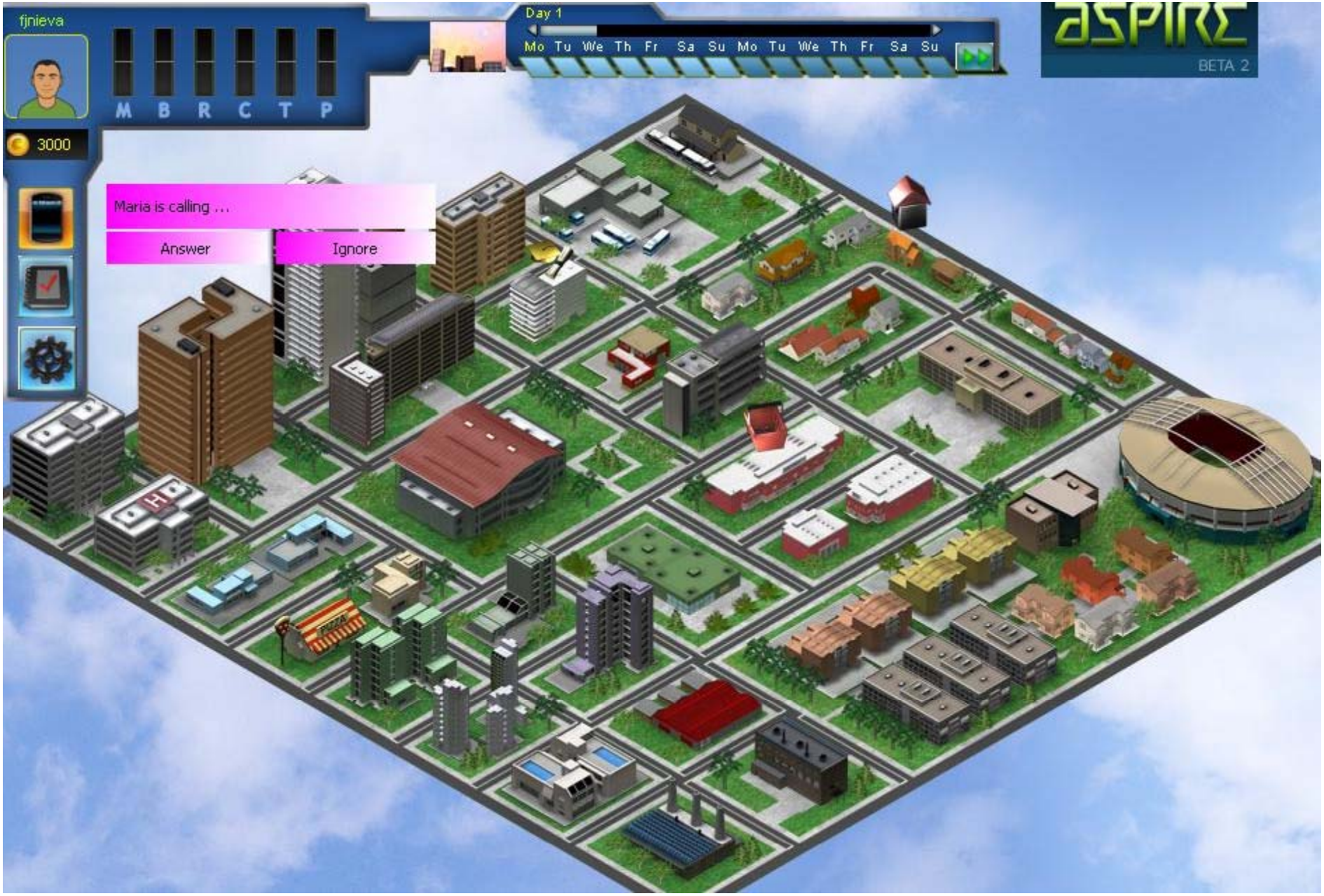


Source: K. Scalise, ATC21S Project, www.atc21s.org

ATC21S
ASSESSMENT & TEACHING OF 21ST CENTURY SKILLS



Source: K. Scalise, ATC21S Project, www.atc21s.org



Source: Kristen DiCerbo, Senior Research Scientist, Center for Digital Experience And Analytics, Pearson Educational Measurement, 2012 Colloquium on Large-scale Assessments Learning from Advanced Assessments, Denver, Colorado.

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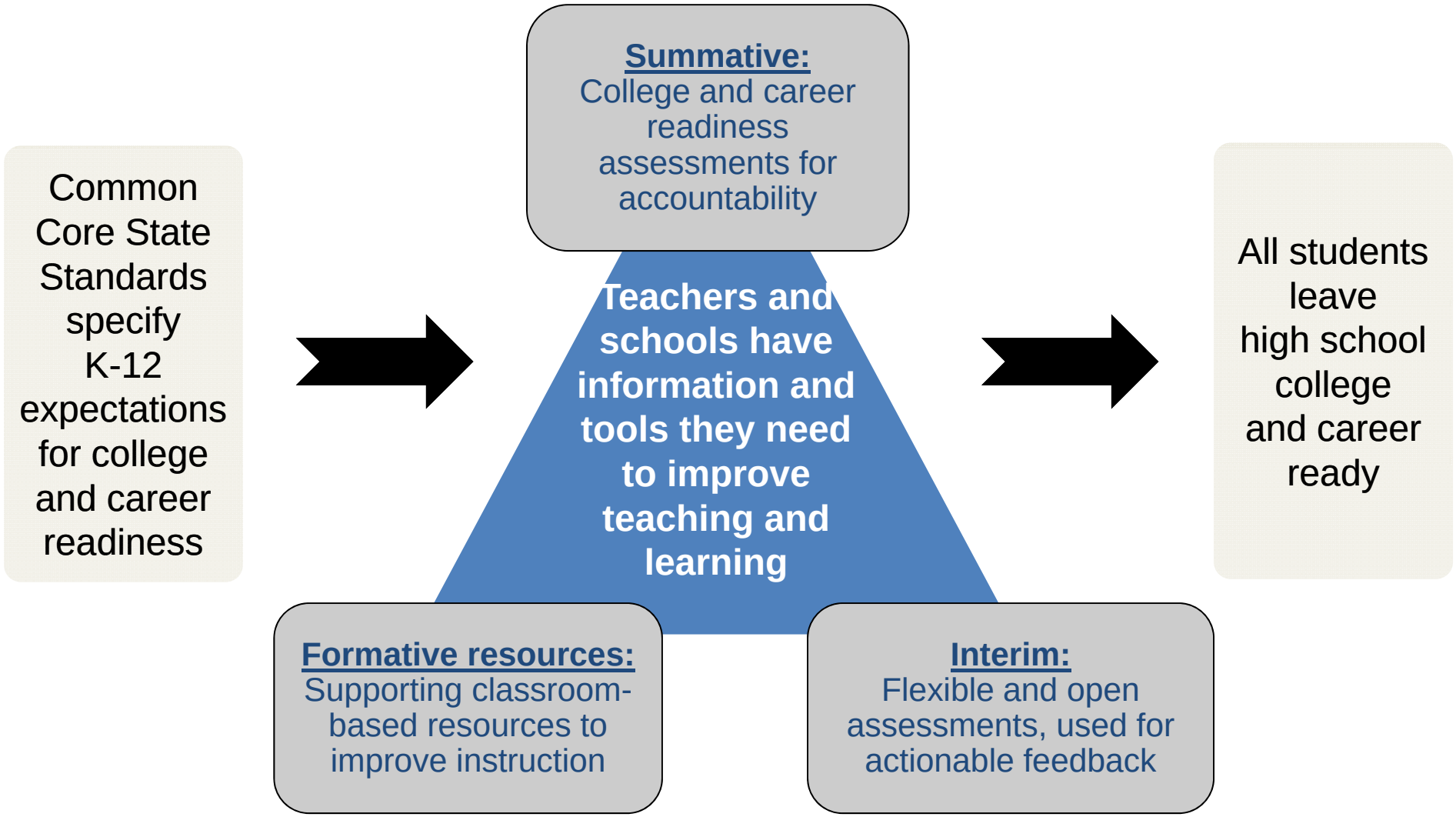
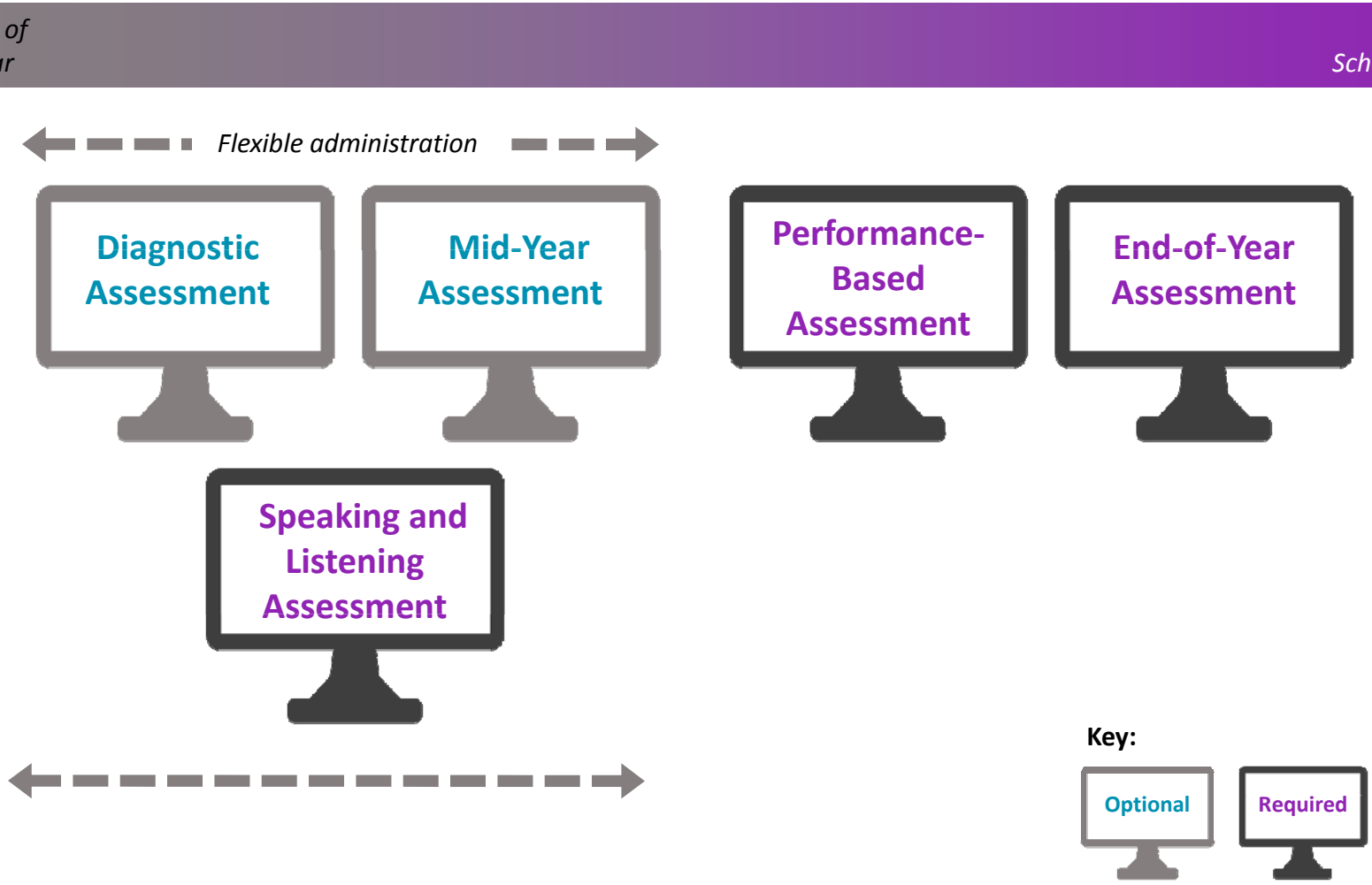
“Meet the Future”: SBAC Example



A Similar Example Could Be Composed from PARCC Elements



SBAC Example

'Core package' bundle that all members receive as base

- Summative assessments, including item bank, administration platform and further item development
- Rules, standards and procedures to certify comparability across states and ensure reliability and scoring consistency
- Reporting and analytics, research and validity studies and peer review documentation
- Membership services and communications
- Additional technical support for state accountability systems

SBAC Example

- Consortium gets items from a combination of vendor and state procurement
- Opportunities for states to participate in item development and review
- About a third of the sustaining budget is expected to be devoted to item and content development, including development of new item types
- Smarter will establish rules, standards and procedures to certify item development bodies
- Will develop procedures for “incubating” new item types

TEA Recommendations: (Source: K. Scalise TEA paper)

1. States should press for adoptions that provide utility while meeting U.S. standards of reliability, validity, acceptability, fairness, and access for every student.
2. Even a small influx of state innovation (working through the consortia sustainability pathways and mechanisms such as in the SBAC example) will make a huge difference in achieving the potential of the future for our students.
3. While high quality evidence is important, seeking avenues for the instructional relevance of evidence, e.g. *USE* of evidence, will support learning outcomes.
4. DON'T lock down around any particular era of technology.
5. Look to Next Gen science assessment upcoming as well, e.g. next slide better understanding cognition.

Science. **Learning Progressions**

"Assessment should help determine where a student can be placed along a sequence of progressively more "scientific" understandings of a given core idea that by definition includes successively more sophisticated applications of practices and cross-cutting concepts. This is an unfamiliar idea in the realm of science assessments, which have more often been viewed as simply measuring whether students know particular grade-level content." – Jim Pellegrino, 2013, "Proficiency in Science: Assessment Challenges and Opportunities"