



**AIMS TO PARCC:
DEMYSTIFYING THE ASSESSMENTS**

Presenters:



- Wendi Anderson, Director for PARCC and Innovative assessment
- Sarah Gardner, ELA/Literacy Educational Specialist
- Jessica Eilertson, Mathematics Educational Specialist

Purpose of Webinar:



To share information about the transition from our current AIMS Assessments to the upcoming PARCC Assessments.

AIMS: Educator Involvement

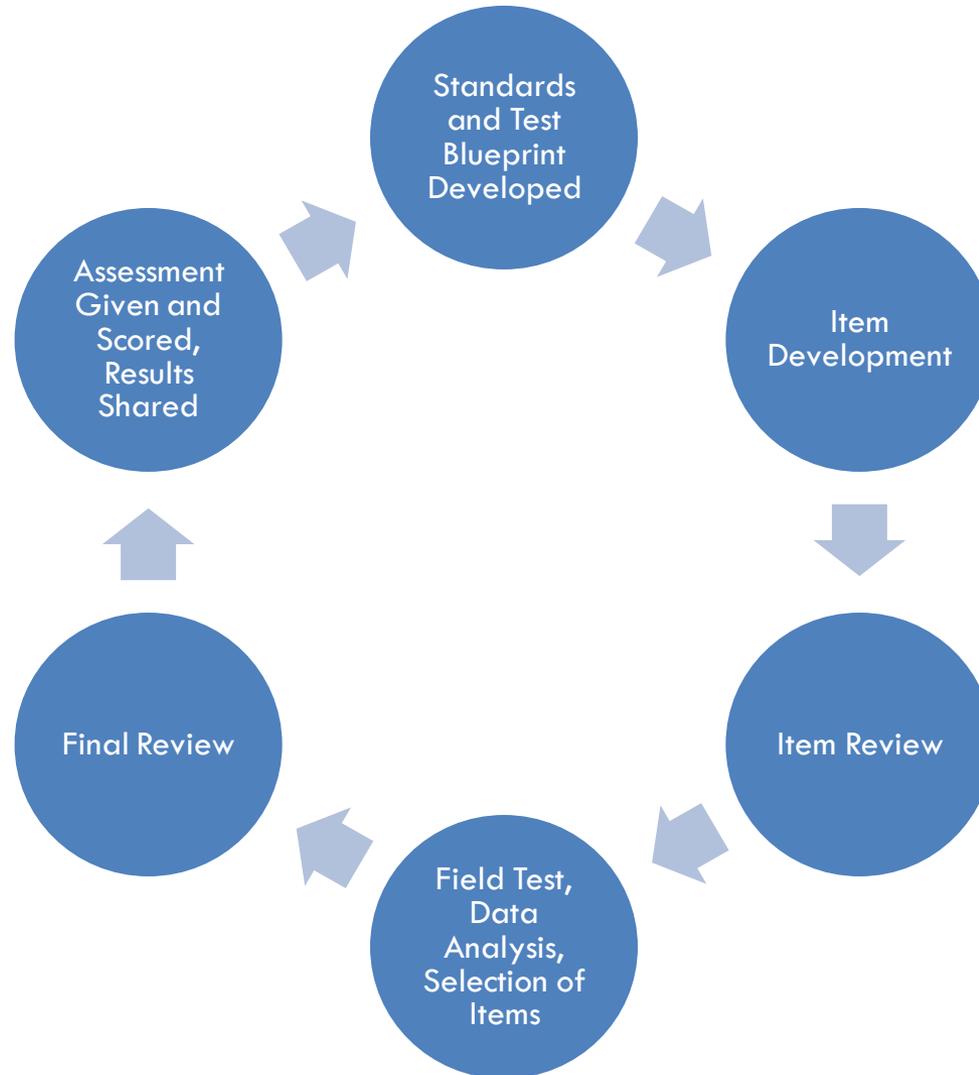


Standards Addressed 2013-2014



- 2003 Reading Standards
- 2004 Writing Standards
- 2004/update 2005 Science Standards
- 2008 Mathematics Standard

AIMS Test Development Cycle



What Do We Do With The Data?



- Check content and coding
- Check DOK levels
- Check for standards alignment
- Check Rasch value
- Check P-Value
- Check the PtBis of items
- Check Infit/Outfit Statistics
- Check Bias flags
- Check percent distributions
- Check the percent of omits
- Accept/Reject/Revise the item



Changes in AIMS:



- Many AIMS ELA and Mathematics items are aligned to Arizona's Common Core Standards.
- Passages have been written with greater text complexity and higher Lexile levels.
- Items that were selected have increased DOK levels.
- Public domain/primary source passages and items that address multiple Performance Objectives within a concept will be field tested in 2013.

Future of AIMS



Will the state of Arizona continue to administer the AIMS test past 2014?



Complexity vs. Difficulty

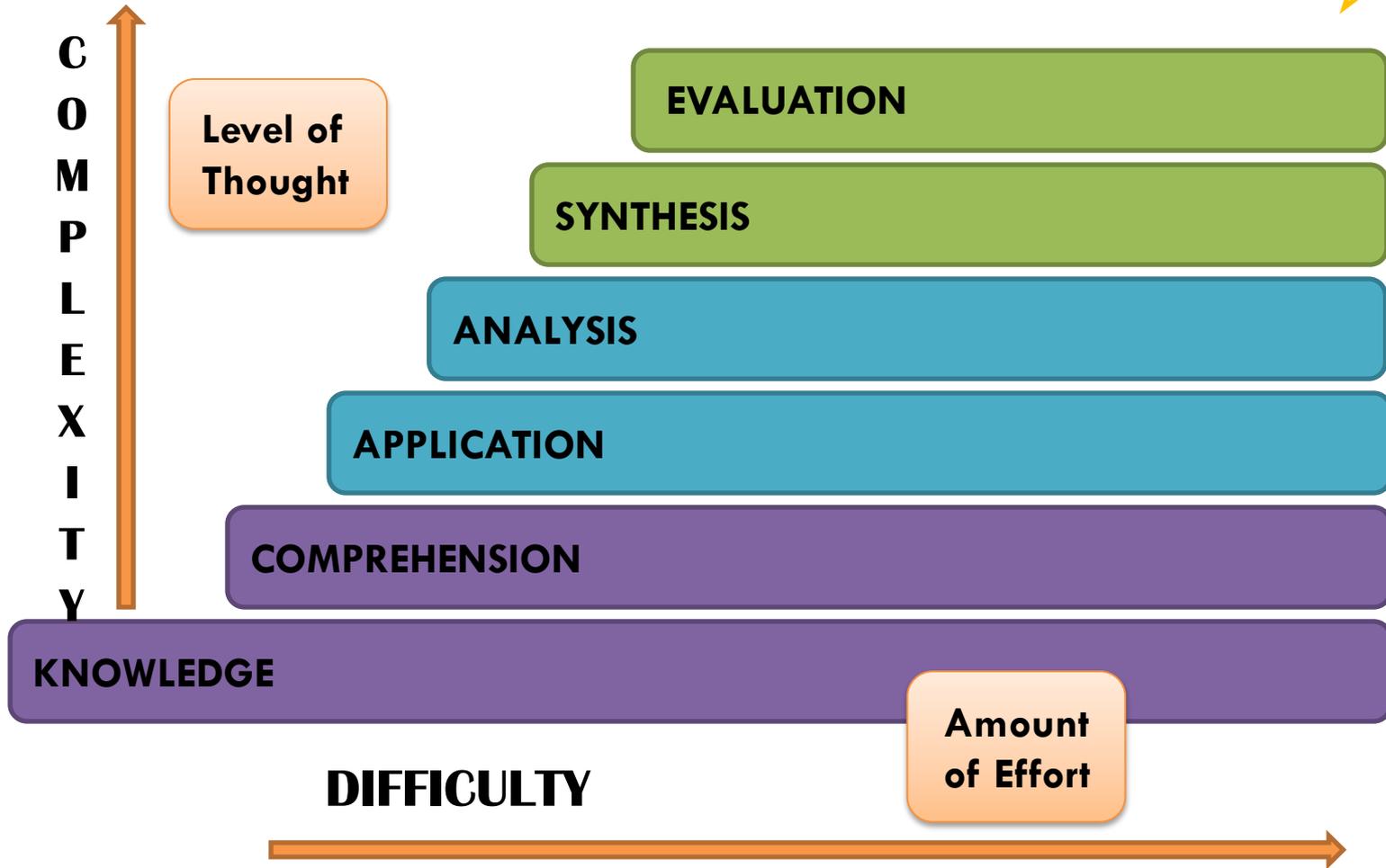


KAREN HESS VIDEO:



<http://vimeo.com/20998609>

Complexity vs. Difficulty



Webb's DOK Levels



Level 1

- RECALL OF INFORMATION

Level 2

- BASIC REASONING

Level 3

- COMPLEX REASONING

Level 4

- EXTENDED REASONING

Hess Cognitive Rigor Matrix



Webb's DOK Bloom's Taxonomy	DOK LEVEL 1 Recall & Reproduction	DOK LEVEL 2 Basic Skills & Concepts	DOK LEVEL 3 Strategic Thinking & Reasoning	DOK Level 4 Extended Thinking
Remember	-recall, locate basic facts, definitions, details, events			
Understand	-Select appropriate words for use when intended meaning is clearly evident.	-Specify, explain relationships -Summarize -Identify central ideas	-Explain, generalize, or connect ideas using supporting evidence	-Explain how concepts or ideas specifically relate to other content domains or content
Apply	-Use language structure or word relationships to determine meaning	-Use context to identify word meanings -Obtain/interpret information using text features	-Use concepts to solve non-routine problems	-Devise an approach among many alternatives to research a novel problem
Analyze	-Identify the kind of information contained in a graphic, table, visual, etc.	-Compare literary elements, facts, terms, events -Analyze organization & text structures	-Analyze or interpret author's craft to critique a text	-Analyze multiple sources or texts -Analyze complex/abstract themes
Evaluate			-Cite evidence and develop a logical argument for conjectures based on one text or problem	-Evaluate relevancy, accuracy & completeness of information across texts/sources
Create	-Brainstorm ideas, concepts, etc. related to a topic or concept	-Generate hypotheses based on observations or prior knowledge	-Develop a complex model for a situation -Develop an alternative solution	-Synthesize information across multiple sources or texts; articulate new voice or perspective

Common Core Key Shifts— ELA/Literacy



- 1. Building knowledge through content-rich nonfiction.**
- 2. Reading, writing and speaking grounded in evidence from text, both literary and informational.**
- 3. Regular practice with complex text and its academic language.**

AIMS to PARCC Grade 3 ELA/literacy Standards



Standards Assessed by AIMS

- 3S1C6.PO4

Answer clarifying questions in order to comprehend text.

Standards Assessed by PARCC

- 3.RI.1 Ask and answer questions to demonstrate understanding of a text, **referring explicitly to the text** as the basis for the answers.
- 3.RI.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.
- 3.RI.10 (Read and comprehend informational texts...)

ELA/Literacy—3rd Grade

Reading Items



AIMS

Which of these is **not** a way to buy the Zoomster Deluxe?

- A. Go to the store
- B. Call the toll-free number
- C. Go on-line
- D. Mail order with payment

PARCC

Read all parts of the question before responding.

Part A: What is one main idea of “How Animals Live?”

- a. There are many types of animals on the planet.
- b. Animals need water to live.
- c. There are many ways to sort different animals.
- d. Animals begin their life cycles in different forms.

Part B: Which detail from the article best supports your answer to Part A?

- a. “Animals get oxygen from air or water.”
- b. “Animals can be grouped by their traits.”
- c. “Worms are invertebrates.”
- d. “All animals grow and change over time.”
- e. “Almost all animals need water, food, oxygen, and shelter to live.”

AIMS to PARCC

Grade 3 ELA/literacy Standards



Standards Assessed by AIMS

- 3S3C2.PO4

Interpret information in functional documents (e.g., maps, schedules, pamphlets) for a specific purpose.

Standards Assessed by PARCC

- 3.RI.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- 3.RI.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
- 3.RI.10 Read and comprehend informational texts...

ELA/Literacy—3rd Grade

Reading Items



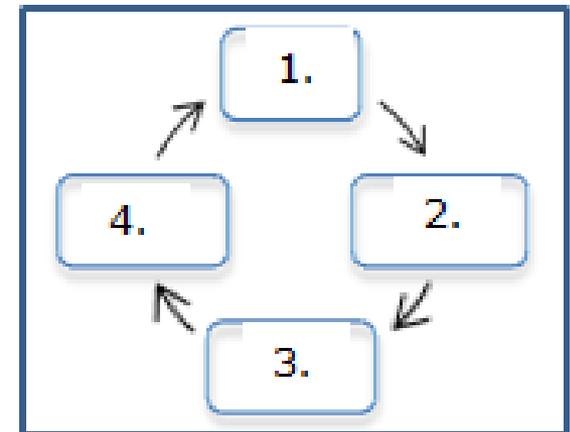
AIMS

According to the passage, which of the following is true about the Zoomster 2000?

- A. It is slower than the Zoomster Deluxe.
- B. It is a new toy.
- C. It saves time and money.
- D. It works on rough ground.

PARCC

Drag the words from the word box into the correct locations on the graphic to show the life cycle of a butterfly as described in “How Animals Live.”



AIMS to PARCC

Grade 5-6 ELA/literacy Standards



Standards Assessed by AIMS

5S3C1.PO1 (Strands 1 and 2 are also assessed)

Write a narrative based on imagined or real events, observations, or memories that includes:

- a. Characters
- b. Setting
- c. Plot
- d. Sensory details
- e. Clear language
- f. Logical sequence of events

Standards Assessed by PARCC

- 6.RL.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- 6.W.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequence.
- 6.L.1-3 Command of conventions

ELA/Literacy—Writing



AIMS

5th grade Writing Prompt:

Imagine one morning you wake up and look in the mirror to see a different reflection. You realize you have turned into the principal of your school.

Write a story in which you describe what happens when you go to school that day.

PARCC

6th grade Prose Constructed Response:

In the passage, the author developed a strong character named Miyax. Think about Miyax and the details the author used to create that character. The passage ends with Miyax waiting for the black wolf to look at her.

Write an original story to continue where the passage ended. In your story, be sure to use what you have learned about the character Miyax as you tell what happens to her next.

Key Shifts—Mathematics



- 1. Focus** strongly where the Standards focus
- 2. Coherence: Think** across grades, and **link** to major topics within grades
- 3. Rigor:** In major topics pursue **conceptual understanding**, procedural skill and **fluency**, and **application** with equal intensity.

AIMS to PARCC: Grade 3 Mathematics Standards



Standard Assessed by AIMS

- **3S1C1.5**

Express benchmark fractions as fair sharing, parts of a whole, or parts of a set.

Standard(s) Assessed by PARCC

- For Mathematical Content:
3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- For Mathematical Practice:
MP.2 (reason abstractly and quantitatively) and **MP.7** (Look for and make use of structure)

Mathematics—3rd Grade Items



AIMS

Gloria and her 3 friends will share a pizza equally. Which fraction shows the portion of the pizza each person will receive?

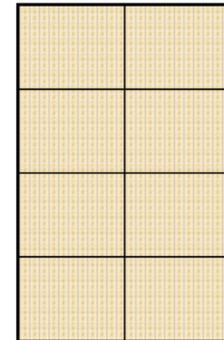
- A. $1/4$
- B. $1/3$
- C. $3/8$
- D. $3/4$

PARCC

Part A

A farmer plants $3/4$ of the field with soybeans. Drag the soybean to the field as many times as needed to show the fraction of the field that is planted with soybeans.

Farmer's Fields

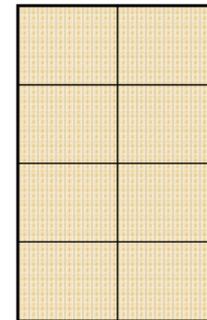


Part B

Type a fraction different than $3/4$ in the boxes that also represents the fractional part of the farmer's field that is planted with soybeans.

$$\frac{\boxed{3}}{\boxed{4}} = \frac{\boxed{}}{\boxed{}}$$

Farmer's Fields



[Reset](#)

Explain why the two fractions above are equal.

AIMS to PARCC: Grade 3 Mathematics Standards



Standard Assessed by AIMS

- **3S1C1.6**

Compare and order benchmark fractions

Standard(s) Assessed by PARCC

- For Mathematical Content:
3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.
- For Mathematical Practice:
MP.7 (Look for and make use of structure) and **MP.5** (Use appropriate tools strategically)

Mathematics—3rd Grade Items



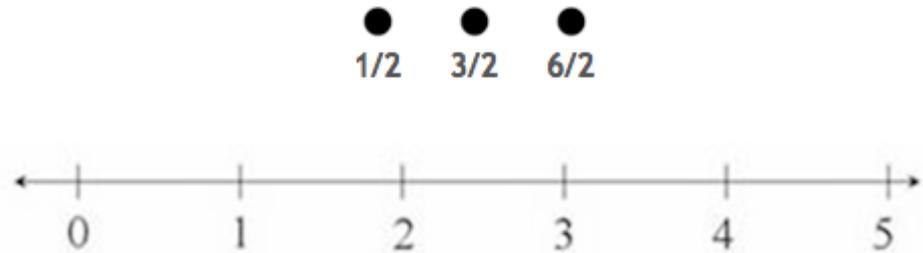
AIMS

Which fraction is greater than $1/2$?

- A. $1/6$
- B. $2/6$
- C. $3/6$
- D. $4/6$

PARCC

Drag each fraction to the correct location on the number line.



PARCC Goals



1. Create **high-quality** assessments
2. Build a pathway to college and career readiness for **all** students
3. Support **educators** in the classroom
4. Develop 21st century, **technology-based** assessments

Evidence Based Assessment



What is college and career ready?

CLAIMS DRIVING DESIGN: MATHEMATICS



Master Claim: On-Track for college and career readiness.

Students solve grade-level/course-level problems in mathematics as set forth in the Standards for Mathematical Content **with connections to the Standards for Mathematical Practice.**

Sub-Claim A:

Students **solve problems involving the major content** for their grade level **with connections to practices**

Sub-Claim B:

Students **solve problems involving the additional and supporting content** for their grade level **with connections to practices**

Sub-Claim C:

Students **express mathematical reasoning** by constructing mathematical arguments and critiques

Sub-Claim D:

Students solve real world problems engaging particularly in the **modeling practice**

Sub-Claim E:

Students **demonstrate fluency** in areas set forth in the Standards for Content in grades 3-6

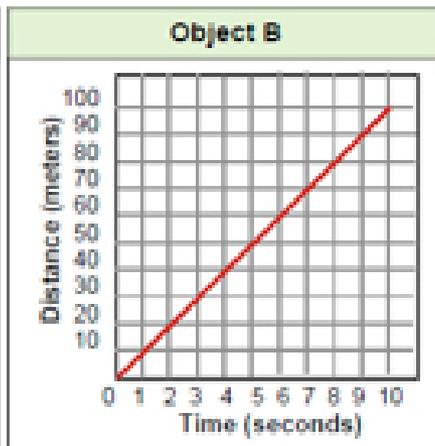
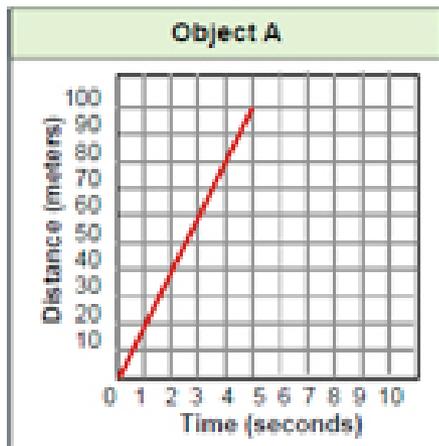
Overview of Mathematics Task Types



PARCC mathematics assessments will include three types of tasks:

Task Type	Description of Task Type
I. Tasks assessing concepts, skills and procedures	<ul style="list-style-type: none">• Balance of conceptual understanding, fluency, and application• Can involve any or all mathematical practice standards• Machine scorable including innovative, computer-based formats• Will appear on the End of Year and Performance Based Assessment components
II. Tasks assessing expressing mathematical reasoning	<ul style="list-style-type: none">• Each task calls for written arguments / justifications, critique of reasoning, or precision in mathematical statements (MP.3, 6).• Can involve other mathematical practice standards• May include a mix of machine scored and hand scored responses• Included on the Performance Based Assessment component
III. Tasks assessing modeling / applications	<ul style="list-style-type: none">• Each task calls for modeling/application in a real-world context or scenario (MP.4)• Can involve other mathematical practice standards.• May include a mix of machine scored and hand scored responses• Included on the Performance Based Assessment component

PARCC Math Assessment Prototypes: Grade 7



Object C

Time (seconds)	Distance (meters)
0	0
3	10
6	20
9	30

Object C moves at constant speed.

Object D

Time (seconds)	Distance (meters)
0	0
1.5	10
3	20
4.5	30

Object D moves at constant speed.

The speed of an object is defined as the change in distance divided by the change in time.

Information about objects A, B, C and D are shown. Objects C and D both have constant speed.

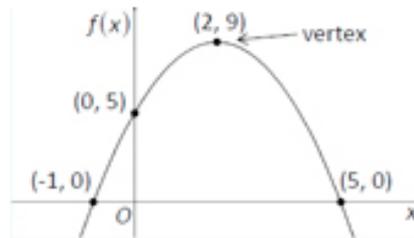
Based on the information given, drag and drop the object names in order from greatest speed to least speed in the table provided.

Object A	Greatest Speed  Least Speed	
Object B		
Object C		
Object D		

PARCC Math Assessment Prototypes: Grade 10



A portion of the graph of a quadratic function $f(x)$ is shown in the xy -plane. Selected values of a linear function $g(x)$ are shown in the table.



x	$g(x)$
-4	7
-1	1
2	-5
5	-11

For each comparison below, use the drop-down menu to select a symbol that correctly indicates the relationship between the first and the second quantity.

First Quantity	Comparison	Second Quantity
The y-coordinate of the y-intercept $f(x)$	<input type="text"/>	The y-coordinate of the y-intercept $g(x)$
$f(3)$	<input type="text"/>	$g(3)$
Maximum value of $f(x)$ on the interval $-5 \leq x \leq 5$	<input type="text"/>	Maximum value of $g(x)$ on the interval $-5 \leq x \leq 5$
$\frac{f(5) - f(2)}{5 - 2}$	<input type="text"/>	$\frac{g(5) - g(2)}{5 - 2}$

Claims Driving Design: ELA/literacy



Students are on-track or ready for college and careers

Students read and comprehend
a range of sufficiently
complex texts independently

Reading
Literature

Reading
Informational
Text

Vocabulary
Interpretation
and use

Students write
effectively when
using and/or
analyzing sources.

Written
Expression

Convention
and
Knowledge of
Language

Students build
and present
knowledge
through
research and
the
integration,
comparison,
and synthesis
of ideas.

PARCC Summative Assessment with EBSR, TECR, and PCR Items (ELA/Literacy)



Performance-Based Assessment

Literary Analysis Task

The Literature Task plays an important role in honing students' ability to read complex text closely, a skill that research reveals as the most significant factor differentiating college-ready from non-college-ready readers. This task will ask students to carefully consider literature worthy of close study and compose an analytic essay.

Narrative Task

The Narrative Task broadens the way in which students may use this type of writing. Narrative writing can be used to convey experiences or events, real or imaginary. In this task, students may be asked to write a story, detail a scientific process, write a historical account of important figures, or to describe an account of events, scenes or objects, for example.

Research Simulation Task

The Research Simulation Task is an assessment component worthy of student preparation because it asks students to exercise the career- and college- readiness skills of observation, deduction, and proper use and evaluation of evidence across text types.

In this task, students will analyze an informational topic presented through several articles or multimedia stimuli, the first text being an anchor text that introduces the topic. Students will engage with the texts by answering a series of questions and synthesizing information from multiple sources in order to write two analytic essays.

End-Of-Year Assessment

On the end-of-year assessment, students have the opportunity to demonstrate their ability to read and comprehend complex informational and literary texts. Questions will be sequenced in a way that they will draw students into deeper encounters with the texts and will result in more thorough comprehension of the concepts.

PARCC ELA Assessment Prototypes: Grade 7



Prose Constructed Response to Research Simulation Task (Analytical Essay)



Click image or use this link: <http://www.parcconline.org/samples/english-language-artsliteracy/grade-7-prose-constructed-response-research-simulation-task-0>

PARCC ELA Assessment Prototypes: Grade 10



Prose Constructed Response – Literary Analysis Task



Arizona Involvement in PARCC



Support and Resources



- List of websites
- Contact information:
 - wendi.anderson@azed.gov
 - sarah.gardner@azed.gov
 - jessica.eilertson@azed.gov