Local Assessment Initiatives Yield World-Class Results: The Gwinnett County Story

Kay Elder, Gwinnett County Public Schools
Beneta Brown, Measured Progress
Deborah Farrington, Measured Progress (Moderator)
Gwinnett County Facts and Figures

Demographics
- 168,000 students
- 132 schools
- 22,000 employees
Gwinnett County Facts and Figures

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- 168,000 students
- 132 schools
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Average Teacher
- Master’s degree or higher
- 14 years of experience
Gwinnett County Facts and Figures

Per-student Spending

$7,400
Gwinnett County Facts and Figures

Per-student Spending

$7,400

71% goes to direct cost of instruction
The Partnership

GWINNETT COUNTY PUBLIC SCHOOLS
Expanding Partnership

Student Test Form
Grade 4 Mathematics Testlet – Operations and Algebraic Thinking

1. Carlos and Trevor have stamp collections.
   - Carlos has 420 stamps.
   - Trevor has \( x \) stamps.
   - Carlos has 6 times as many stamps as Trevor.

Which equation can be used to find the number of stamps Trevor has?

\[ \boxed{6 \times x = 420} \]

Scoring Guide
The Paintings of Laueau/Altamira Cave
Multiple-Choice Items

By the permission of the students, these images are not used in order of importance.
Expanding Partnership

- Efforts to foster high achievement
- Value of information from well-crafted assessment items
- How all districts can benefit from Gwinnett’s experience
Gwinnett County Public Schools

Kay Elder, Director of Assessment
Gwinnett County Public Schools

The University of Georgia
Gwinnett County Public Schools

Gwinnett County, Georgia Population Growth
1980 to 2010
Gwinnett County Public Schools

Ferguson Elementary School
Duluth, Gwinnett County, Georgia

Thoughtful Facilities Planning
Gwinnett County Public Schools

Great economic, cultural, and linguistic diversity
Gwinnett County schools have two kinds of employees: those who teach and those who support teaching.

J. Alvin Wilbanks, Superintendent
Gwinnett County Public Schools
Academic Knowledge and Skills Curriculum

AKS
Academic Knowledge and Skills Curriculum

AKS

Common Core State Standards Initiative
PREPARING AMERICA’S STUDENTS FOR COLLEGE & CAREER
Gwinnett Educational Management System

GEMS

- Educators
- District personnel
- Community members
- Parents
Local Assessment System

GCAAS

- Currently all multiple-choice
- Developed by teachers and outside item writers
- Can be administered every nine weeks
Distractor Rationale Project

3. The shaded parts of these models show two different fractions.

Taking a closer look at distractors.

- $\frac{3}{4} > \frac{3}{5}$
- $\frac{3}{4} < \frac{3}{5}$
- $\frac{3}{4} > \frac{3}{8}$
- $\frac{3}{4} < \frac{3}{8}$
3. The shaded parts of these models show two different fractions.

What do these models show is true?

- A $\frac{3}{4} > \frac{3}{5}$
- B $\frac{3}{4} < \frac{3}{5}$
- C $\frac{3}{4} > \frac{3}{8}$
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- Key – correct answer
Distractor Rationale Project

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- Key – correct answer
- Distractors – incorrect answers
3. The shaded parts of these models show two different fractions.

What do these models show is true?

- A: $\frac{3}{4} > \frac{3}{5}$
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- C: $\frac{3}{4} > \frac{3}{8}$
- D: $\frac{3}{4} < \frac{3}{8}$

**Distractor Rationales**

- **A** Identifies the model for $\frac{3}{8}$ incorrectly as $\frac{3}{5}$
- **B** Identifies the model for $\frac{3}{8}$ incorrectly and does not use the models to correctly compare the fractions
- **Key**
- **D** Does not use the correct comparison sign or does not use the models to correctly compare the fractions
Distractor Rationale Project

Goals:

- Distractor plausibility
- Common student misconceptions

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B. $\frac{3}{4} < \frac{3}{5}$

C. $\frac{3}{4} > \frac{3}{8}$

D. $\frac{3}{4} < \frac{3}{8}$
3. The shaded parts of these models show two different fractions.

What do these models show is true?

- \( \frac{3}{4} > \frac{3}{5} \)
- \( \frac{3}{4} < \frac{3}{5} \)
- \( \frac{3}{4} > \frac{3}{8} \)
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Informative results

- Teachers can alter instruction
- Students can recognize misunderstandings
Gwinnett County has demonstrated that an unwavering focus across a school system—by every member of the district and the community—can lead to steady student improvement and achievement. Districts across the country should look to Gwinnett County as an example of what is possible when adults put their interests aside and focus on students.

– Education Secretary Arne Duncan
Beneta Brown, Assistant Director of Content Design and Development
Distractor Rationale Project

Goals:

- Provide teachers with useful information
- Develop strategies to help students learn
Distractor Rationale Project

Scope:

- Review more than 12,000 items in Gwinnett’s item bank
Distractor Rationale Project sorts items into four categories:
1. Items do not require distractor rationales
2. Items already have appropriate rationales
3. Items need distractor rationales written
4. Edits are needed on distractor rationales
What the Responses Tell Us

Student responses can generate a number of questions:

- Does the student demonstrate mastery by correctly responding to the item?
- Does the response indicate an error in the student's thinking or process?
- What is the degree and nature of the student's misconception?

All questions raised can point to next steps for teachers and students.
What is the measure of $\angle ABC$?
- 40° DISTRACTER
- 50° DISTRACTER
- 60° DISTRACTER
- 70° KEY
The kudzu vine crept because of two people: a country boy and a country girl. The boy had never seen a kudzu vine before. He was twelve years old, and lived in the small town of Shiloh, Georgia. The girl was ten years old, and lived in the nearby town of Clayton. They met on a hot summer day in the field behind her house. The kudzu vine crept around them, and they watched in amazement as it grew higher and higher. They talked about it, and decided to try to stop it from growing too fast.

They went back to the town and asked the mayor for help. The mayor told them that kudzu was a plant that grew very fast, and that it could be a problem if allowed to grow unchecked. He gave them some advice on how to control it, and they started working on a plan to stop it.

They began by cutting the vines and tying them up. They then spread some herbicide around the roots to kill the plant. They worked hard, and in a few weeks, they had stopped the kudzu vine from growing too fast. They were proud of themselves, and they knew that they had done something that would benefit the town for years to come. The town was grateful to them, and they were rewarded with a yearly ceremony where they were honored for their hard work.

From that day on, the boy and the girl became best friends. They continued to work together to stop the kudzu vine, and they became known throughout the town as the kudzu hunters. The town was grateful to them, and they were rewarded with a yearly ceremony where they were honored for their hard work.

To this day, the kudzu vine is controlled in Shiloh and Clayton, and the people of the town are proud of themselves for their hard work and dedication. They know that the kudzu vine is a problem, but they are determined to stop it from growing too fast.
CCSS.ELA-Literacy.RL.5.2
Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
Which sentence is the best summary of paragraph 3 in Selection 1?

A. Anchorage had ships and airplanes that could not be used in winter.

B. There was serum in Anchorage but no way to get it to other towns.

C. The children in Anchorage were healthier than the children in Nome.

D. The serum in Anchorage would freeze if it were brought into the cold.
Which sentence is the best summary of paragraph 3 in Selection 1?

A. Anchorage had ships and could not be used.
B. There was serum in Nome, but there was no way to get it to other towns.
C. The children in Anchorage were in more danger than the children in Nome.
D. The serum in Anchorage was sent to Nome, but it was too late by the time it was brought into the city.

**Distractor Rationales**

A. This idea is in paragraph 3, but it is a detail supporting the main idea that the serum was available in Anchorage, but there was no way to get it to Nome.

**Key:** The need for the serum in Nome and the difficulty of transporting it between Anchorage and Nome are the main ideas of the selection.

B. It is clear from the paragraph that the children in Anchorage would have had access to the serum, unlike the children in Nome, but the main idea focuses on the fact that there was no way to get the serum from Anchorage to other towns.

C. According to the information in the paragraph, this is correct; however, it is a detail supporting the main idea, which is the difficulty of transporting the serum.
Which sentence is the best summary of paragraph 3 in Selection 1?

A. Anchorage had ships and planes, but the ships could not be used in winter.

B. There was serum in Anchorage, but there was no way to get it to Nome.

C. The children in Anchorage needed protection from the flu better than the children in Nome.

D. The serum in Anchorage was brought into the city by a plane.

Distractor Rationales

A. This idea is in paragraph 3, but it is a detail supporting the main idea that the serum was available in Anchorage, but there was no way to get it to Nome.

Key: The need for the serum in Nome and the difficulty of transporting it between Anchorage and Nome are the main ideas of the selection.

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Which sentence is the best summary of paragraph 3 in Selection 1?

A. Anchorage had ships and could not be used in winter.
B. There was serum in Anchorage, but there was no way to get it to other towns.
C. The children in Anchorage had more serum than the children in Nome.
D. The serum in Anchorage would have had access to the serum, unlike the children in Nome, but the main idea focuses on the fact that there was no way to get the serum from Anchorage to other towns.

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Which sentence is the best summary of paragraph 3 in Selection 1?

A. Anchorage had ships and could not be used in winter.
B. There was serum in Anchorage, but the children in Nome needed it.
C. The children in Anchorage needed serum more than the children in Nome.
D. The serum in Anchorage would have had access to the serum, unlike the children in Nome, but the main idea focuses on the fact that there was no way to get the serum from Anchorage to other towns.

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Marcus invested $2000 in a bank account earning simple interest. The interest, \( I \), he has after \( t \) years at interest rate \( r \) is given by this equation.

\[
I = 2000rt
\]

After 2 years, the total amount in the account was $2160. What was the annual interest rate?

- \( \text{A} \) 4%
- \( \text{B} \) 8%
- \( \text{C} \) 16%
- \( \text{D} \) 40%

CCSS Math 7.RP.A.3

*Use proportional relationships to solve multistep ratio and percent problems*
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**Distractor Rationales**

- **Key**
  - B: Divides $160 by $2,000
  - C: Divides $160 by $2,000, then multiplies by 2 instead of dividing by 2
  - D: Makes place value error
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**Distractor Rationales**

- **Key**
- [B] Divides $160 by $2,000
- [C] Divides $160 by $2,000, then multiplies by 2 instead of dividing by 2
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In Selection 1, which phrase best describes how the author organizes the information in paragraphs 1 through 5?

- in the order that things happened
- by comparing and contrasting ideas
- by showing how a problem was solved
- from the most to the least important details

**Distractor Rationales**

- **A**: Key: The chronological events of the discovery and its immediate aftermath provide the structure for these paragraphs.
- **B**: Nothing is compared in these paragraphs.
- **C**: Although the passage begins with a problem, the subsequent paragraphs do not explain a solution.
- **D**: The details in the paragraphs are not told in order of importance.

- **Testlets**
- **Benchmarks**
- **Item Bank**

Built specifically to the Common Core State Standards
# COMMON CORE Testlets

## Reading Testlet Blueprint

**Morning Girl/One to a New Day**

<table>
<thead>
<tr>
<th>Purpose of Assessments</th>
<th>To gather evidence of student understanding to inform instruction.</th>
</tr>
</thead>
</table>

### New Specifications

<table>
<thead>
<tr>
<th>Anchor Standards</th>
<th>Target Standards</th>
<th>Testlet Standards</th>
<th>Check at Knowledge (KG)</th>
<th>Item Type (IT)</th>
<th># of Items</th>
<th>Item Position</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Ideas and Details</strong></td>
<td>Core Textual Evidence/Integration of Information across Texts</td>
<td>Summarize or Use Detailed Information to Support Claims</td>
<td>1</td>
<td>Multiple Choice (MC)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interpret Data and Analyze Information</td>
<td>1</td>
<td>Multiple Choice (MC)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analyze the Meaning of Words and Phrases in the Context of a Literary or Historical Text</td>
<td>1</td>
<td>Multiple Choice (MC)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluate the Conclusions, Reasoning, and Evidence in an Argument</td>
<td>1</td>
<td>Multiple Choice (MC)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analyze and Evaluate Texts in Different Formats and Genres</td>
<td>1</td>
<td>Short Response (SR)</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

*MC = Multiple Choice, SR = Short Response*
COMMON CORE Testlets

Reading Informational Texts
Seeing Stars/Astronomy

For each question, choose the correct answer. Then completely fill in the circle for the answer you chose.

1. Based on the constellation "Big Dipper," the distance in which the stars are from the earth is
   (1) one light-year, (2) one century, (3) one millennium, (4) a giga-gram, (5) a giga-ton.

2. Based on the following graph in which the vertex of the parabola is (2, -3) and the y-intercept is 3,
   its equation is
   (1) y = 2x^2 - 3, (2) y = 2x^2 + 3, (3) y = 3x^2 - 2, (4) y = 3x^2 + 2, (5) y = 3x + 2.

Jorge reflects the rectangle over the y-axis. What are the coordinates of the image of point H?
   (1) (5, -1), (2) (-1, 5), (3) (5, -1), (4) (-5, 1)

Which of the following transformations could not be used to map Figure 1 onto Figure 2?
   (1) Translate Figure 1 down 4 units, then 5 units to the left.
   (2) Reflect Figure 1 over the line x = 1, then translate it 4 units down.
   (3) Reflect Figure 1 over the y-axis, then translate it 5 units to the left.
   (4) Translate Figure 1 down 4 units, then reflect it over the line x = 1.
District initiatives:

- Gwinnett Teacher Effectiveness System (teacher evaluation)
- AKS alignment to Common Core State Standards
- eClass (personalized learning)
- Leadership Development
Goal: Promote effective use of classroom formative assessment practices
Gwinnett County Public Schools

Goal: Improved teaching and learning

COMMON CORE Testlets

COMMON CORE Item Bank
What about Your District?

- Smaller populations?
- Different demographics?
- Limited resources?
- Unique challenges?
COMMON CORE Assessment Program

Comprehensive Common Core Assessment System

Key

- **Testlets** support classroom formative assessment practices by assessing a targeted set of standards within Common Core domains and clusters.

- **Benchmarks** cover a broader scope than **Testlets** and allow for in-depth coverage of more than one set of standards used to inform instructional pacing.

- **Interim assessments** are general achievement measures used to evaluate the full scope of Common Core knowledge and skills relative to a whole academic year.¹

  ¹Available Fall 2014.

- **Summative assessments** (such as consortia or state summative assessments) serve as a year-end accountability measure.

- **Item Bank** — can be used to create customized assessments for daily instruction.
Built to the Common Core

built to consortia specifications
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Questions?