



Student Academic Achievement
Presentation:

Analysis of Student Artifacts in
English Language Arts (ELA),
Mathematics, and Science

November 17, 2025

Student Work Collected:



**43 artifacts
submitted
for ELA**



**42 artifacts
submitted
for math**



**40 artifacts
submitted
for science**



**ELA
collected
from
grades 1,
3, 7, and 10**



**Math
collected
from
grades K,
4, 6, and
Alg I**



**Science
collected
from
grades 2,
5, 8 and 10
(Biology)**

Content:

- Is the work *aligned to standards*?
- Is the work *on grade level*?

Context:

- How is the student *demonstrating learning*?
 - Test? Real world? Classroom specific? Meaningful writing?

Cognitive Demand:

- What is the *rigor* or Depth of Knowledge (DOK)?

SNAPSHOT OF STUDENT WORK

English
Language Arts
(ELA) collected
from grades
1, 3, 7, & 10



Science
collected from
grades
2, 5, 8, & BIO



Math
collected from
grades
K, 4, 6, & ALG I



43
artifacts
submitted for
ELA



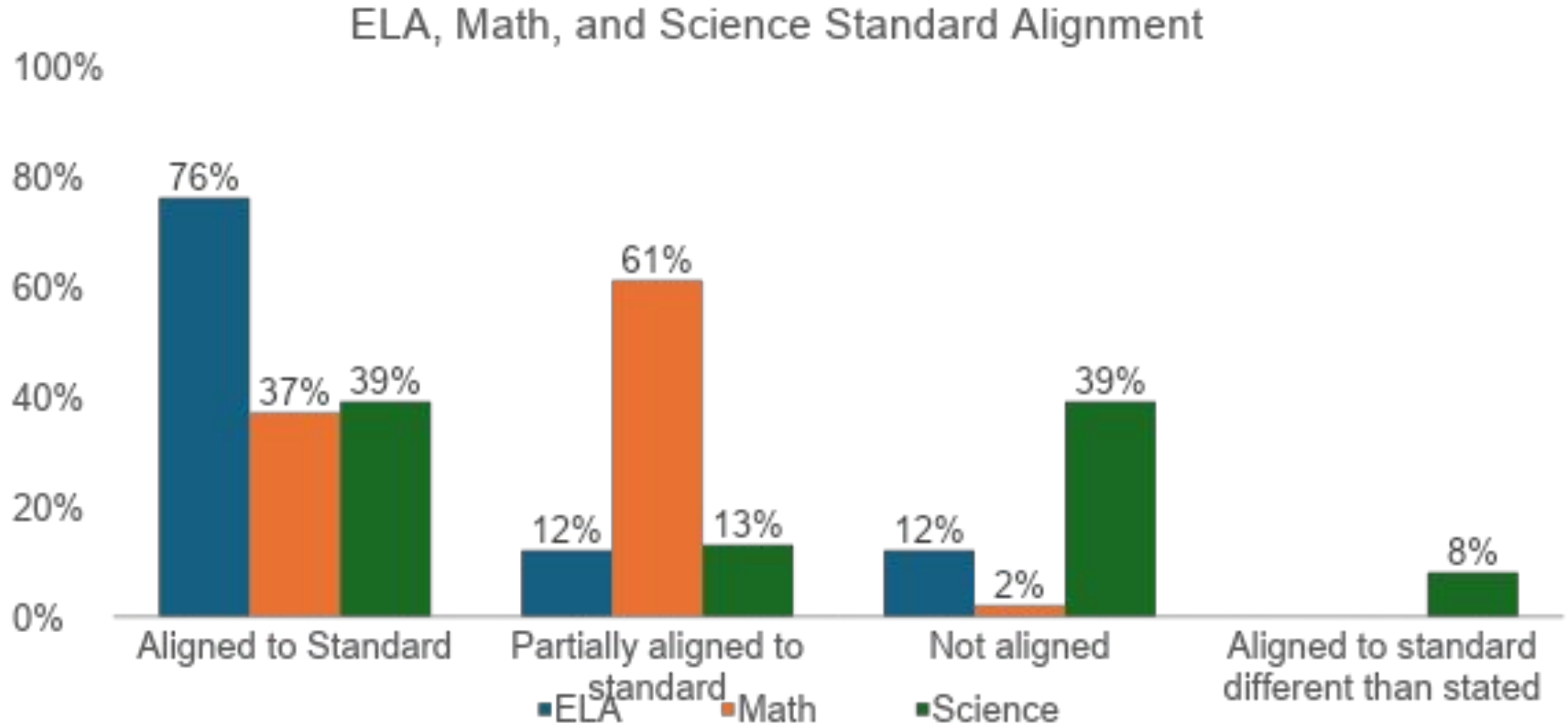
40
artifacts
submitted for
science



42
artifacts
submitted for
math



Percentage of student work aligned to grade level standards:



Content Calibration

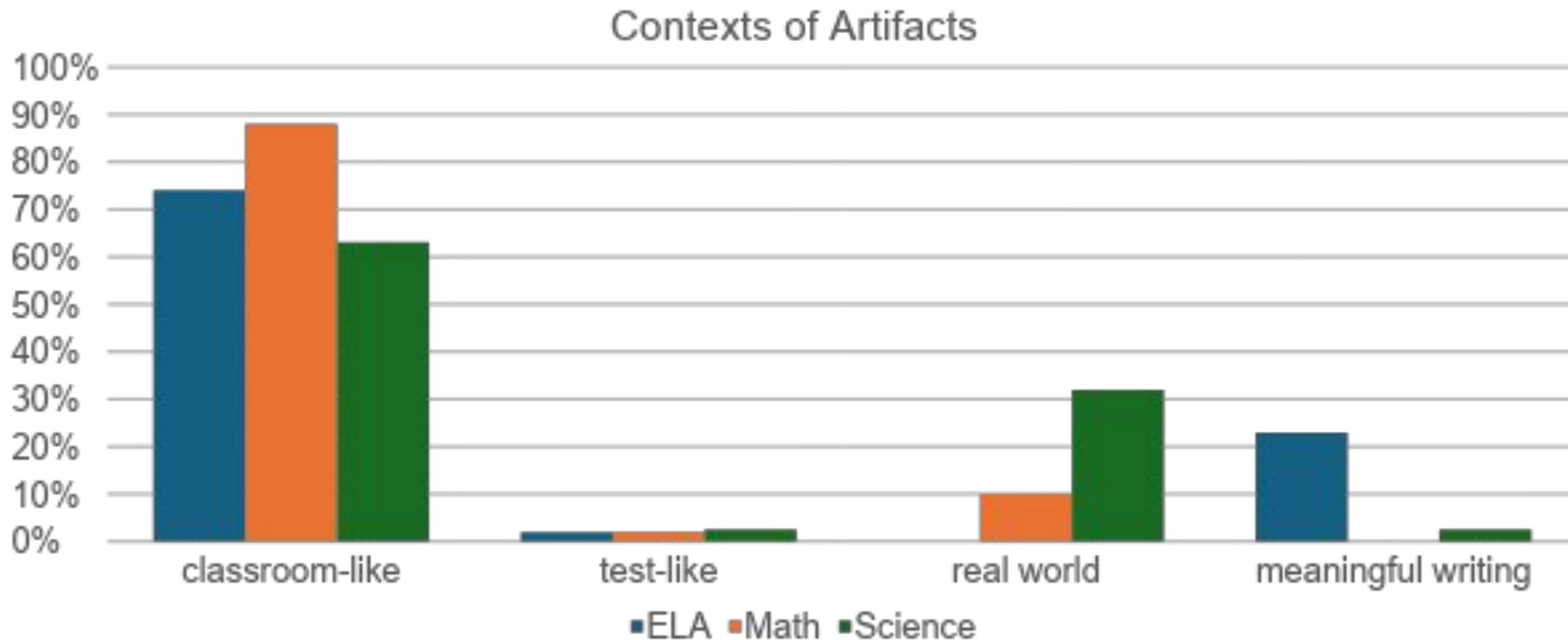
Celebrations

- Math (61%) were at least partially aligned to grade level standards.
- Student work in ELA & Math is technically on-level.

Opportunities for Growth

- Science had the highest percentage not aligned, mostly due to the context required by the standard.
- Student work is not at the depth, complexity, & authenticity needed.
- ELA samples showed inconsistency in definitions of mastery across all grades, but greatest at middle school.

Contexts of Student Work:



Context of Artifacts



Science had the greatest number of artifacts (32%) reflecting real-world, authentic contexts.



Mathematics had few (10%) samples of student work that represented authentic scenarios based on students' real-life experiences, and no samples that required meaningful writing.

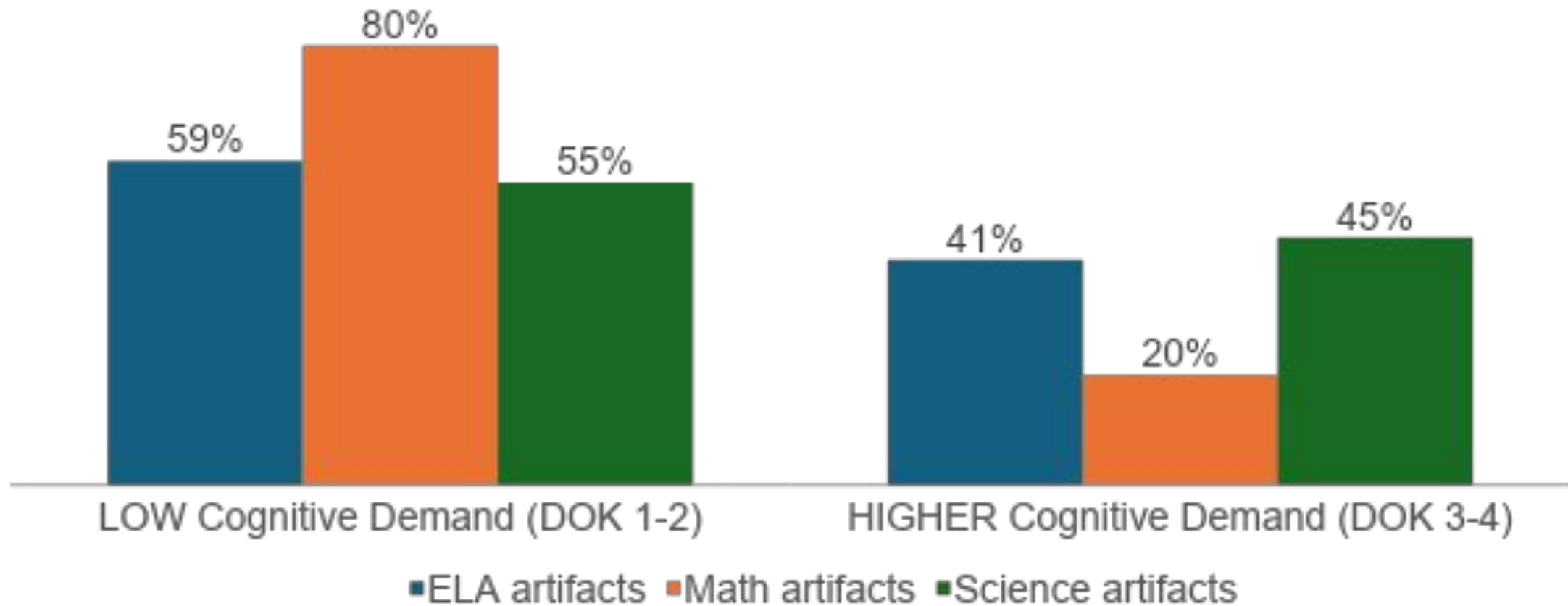


ELA had the highest number of artifacts requiring meaningful writing (23%), but no samples of work that would be considered authentic and real-world.

Webb's Depth of Knowledge (DOK) Levels

Level One Activities	Level Two Activities	Level Three Activities	Level Four Activities
<p>Recall elements and details of story structure, such as sequence of events, character, plot and setting.</p> <p>Conduct basic mathematical calculations.</p> <p>Label locations on a map.</p> <p>Represent in words or diagrams a scientific concept or relationship.</p> <p>Perform routine procedures like measuring length or using punctuation marks correctly.</p> <p>Describe the features of a place or people.</p>	<p>Identify and summarize the major events in a narrative.</p> <p>Use context cues to identify the meaning of unfamiliar words.</p> <p>Solve routine multiple-step problems.</p> <p>Describe the cause/effect of a particular event.</p> <p>Identify patterns in events or behavior.</p> <p>Formulate a routine problem given data and conditions.</p> <p>Organize, represent and interpret data.</p>	<p>Support ideas with details and examples.</p> <p>Use voice appropriate to the purpose and audience.</p> <p>Identify research questions and design investigations for a scientific problem.</p> <p>Develop a scientific model for a complex situation.</p> <p>Determine the author's purpose and describe how it affects the interpretation of a reading selection.</p> <p>Apply a concept in other contexts.</p>	<p>Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/solutions.</p> <p>Apply mathematical model to illuminate a problem or situation.</p> <p>Analyze and synthesize information from multiple sources.</p> <p>Describe and illustrate how common themes are found across texts from different cultures.</p> <p>Design a mathematical model to inform and solve a practical or abstract situation.</p>

Cognitive Demand of Student Work:



Cognitive Demand of Artifacts

The cognitive demand of student work improved over last year, but was still lowest in mathematics.

The cognitive demand of ELA was higher in secondary, proportionally, than at elementary.

The science samples had higher cognitive demand, as well, but were higher in elementary than in secondary.

Continuous Improvement:

Exemplar Lessons and Student Work for Each Essential Standard in the Curriculum

Six Schools ½ day training to Analyze Work Samples and Work with Teacher Teams for Better Alignment

Purchased new ELA, Math & Science curriculum for middle and high schools in the last two years.

Continuous Monitoring and Feedback. Spring 2026