eMPower Content:

A new development approach for college and career readiness standards

December 2017, Revised December 2018

Thoughtful, excellent student assessment instruments aren’t just for statewide testing. Educators and measurement specialists have expanded their expectations of how assessment informs learning, based in part on 21st-century standards, new emphases in ESSA, and the growing awareness of the importance of a balanced assessment system.

At the same time, the issue of testing time has become prominent in professional and public awareness. So we need better, more informative assessments, at the same time as we need to spend less time testing students.

At Measured Progress, as we began to explore the implications of these issues and the widely adopted college and career readiness (CCR) standards in English language arts and mathematics, it was clear that our goal needed to be timely, targeted instructional information at the district and school levels, and effective, meaningful data for decision making at all levels, including statewide. Our goal was to use the least amount of time to provide the most information possible. We needed to create test designs and test items that deliver strong results, fast.

eMPower Assessments

To accomplish these goals, we created eMPower Assessments™, an interim and summative assessment program in reading, language usage, and mathematics developed to CCR standards for grades 3–8. Recognizing that CCR standards and expectations require a better approach to assessment—and to content development in particular—we created new item specifications, based on the information we want to provide to districts, schools, teachers, students, and parents. This evidence-centered design approach is based on extensive research about student learning progressions and grade-level expectations, as well as on careful analysis of the standards.

To make assessment results more valuable for educators, eMPower content provides results at greater depth than other instruments. We base our content development on what we want to report: multiple dimensions for each subject area to indicate students’ strengths and needs at an actionable level.

For each content area, we provide information about the approach and illustrative sample items.

eMPower Content Development

Reading

eMPower reading items assess essential college and career readiness standards. These standards encompass comprehension and critical thinking skills (analysis and interpretation). Many assessments report an overall score of students’ aptitude in these skills; eMPower goes further by reporting one score for comprehension and one score for analysis and interpretation for every student. To accomplish this, items appearing on each eMPower reading assessment are categorized as relating to one of those areas. Items designated as “comprehension,”
such as the one that follows, ask students to effectively demonstrate key content knowledge. Items designated as “analysis and interpretation” evaluate students’ ability to examine, synthesize, and explain key concepts in texts.

eMPower passages and passage pairs are carefully selected to assess a variety of reading skills at a range of cognitive levels. To genuinely assess the standards, eMPower reading assessments are based on:

- Rich and complex authentic texts that are previously published works, similar to what students experience in the classroom
- Literary and informational passages, including scientific or historical texts that are grade-level appropriate paired passages, because students are expected to comprehend and synthesize multiple points of view and sources

The example below is a cognitively rich, evidence-based selected-response item that assesses standard 4.1: Key Ideas and Details. “Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. The items refer to a passage called “The King’s Journey,” by Betsy Sterman. ¹

---

This question has two parts. Be sure to answer both parts of the question.

In Passage 2, what is the main problem the King tries to solve?

A. It takes too long to travel through his lands.
B. The roads are not fit for traveling.
C. His subjects do not amuse him.
D. He knows very few people.

Which detail from the passage best supports the answer to the question above?

A. “This is the swiftest carriage in all the land,’ Sir Highfeather said proudly.”
B. “Ohhh,’ he groaned. ‘What a great reward I would give to anyone who could shorten my journey.’”
C. “The bridges were in ruins, their planks ripped apart and their ropes whipping in the wind.”
D. “A small story it was, but so funny that the king laughed and asked for another.”

STANDARD: RL.04.01
KEYS: A, B

Evidence-based selected-response items include two parts, in which the second part requires students to provide evidence to support their answers to the first part. Here, the students identify a key inference from their reading and then support that inference with details from the text.

eMPower reading items provide important data about students’ progress toward being on target for college and career reading skills.

Language Usage

eMPower language usage assessments assess students’ abilities to recognize good writing and to make good revisions, as well as to demonstrate their command of English language conventions. As in the College Board’s PSAT™, we accomplish this by using embedded-error passages.

The embedded-error approach has several advantages. First, it creates a very natural way for students to experience the passages. Instead of asking rote questions about grammar rules or parts of speech, eMPower language usage tests present text holistically, asking students to respond to written text rather than to address grammar and mechanics out of context. This approach addresses writing skills and language skills together as students experience grade-level appropriate writing. Second, students have experience with the embedded-error approach before they see it in the PSAT or other tests in the SAT® Suite of Assessments. Also, the embedded-error approach requires minimal testing time and provides results more quickly and at lower cost than other methods that assess these skills.

To provide students the holistic experience with each passage, we write our embedded-error passages to be good works of writing, not to exemplify problem writing. We write the passages first, and determine what to modify to ask meaningful questions, second. We craft the passages according to the grade-range genres emphasized in college and career readiness standards: narrative and expository for grades 3-5, expository and argument in grades 6-8.

The example that follows assesses students’ ability to include effective conclusions in their writing, based on standard 4.3E: “Provide a conclusion that follows from the narrated experiences or events.” The items refer to a passage called “Great Aunt Lily’s Attic,” by Measured Progress.

---

This question has two parts. Be sure to answer both parts of the question.

Which sentence should be added after sentence 26 to make the best ending for the passage?

A Chair: It’ll be nice to be part of the family again!
B Chair: I wonder if the living room has changed much.
C Chair: I can’t wait to not be covered in dust anymore!
D Chair: It’ll be hard to not miss the peace and quiet a little.

Which detail from the passage best supports the answer above?

A “That got me rocking, and I woke up.”
B “Do you recall when we used to be in the living room?”
C “Album: I wish we were back in the living room with the family.”
D “Sara: Let’s get some cloths to dust everything off.”

STANDARD: W.04.03.e
KEYS: A, C

In the first part of this EBSR, the student analyzes the passage to determine the best conclusion for the narrative. The second part asks the student to select specific evidence from the passage to support that choice. This provides some of the depth of an open-response question, but gets at it efficiently.

---

2 “Great Aunt Lily’s Attic” © 2015 by Measured Progress.
eMPower language usage assessments provide important data to teachers regarding their students’ proficiency with written communication. If a state, district, or school also uses a direct writing prompt, eMPower results supplement and strengthen the evidence from the prompt.

**Mathematics**
From the outset, we wanted to break new ground in mathematics assessment by reflecting the two dimensions of the college and career readiness standards in mathematics: concepts and procedures, and mathematical practices. To accomplish this, our content developers probed the practices to create detailed “focus points” and item specifications for each practice—beyond those for concepts and procedures (C&P). (See “Sample: eMPower Assessments Mathematical Practices Focal Points.”)

Each eMPower mathematics assessment includes items that address a range of focus points within each mathematical practice. The specific mathematical practice focus points, and dual coding to both concepts and procedures and to practices, are unique to Measured Progress and to eMPower.

The grade 3 item on the following page assesses mathematical practice 3 for grades 3–5: “Construct viable arguments and critique the reasoning of others.” To assess this practice, we developed two distinct focus points: Construct arguments (Practice 3A), and evaluate arguments (Practice 3B). The item on the next page assesses the second focus point—evaluating arguments. The primary C&P standard assessed is 03.MD.07.d.
A Students were asked to find the area of this figure. Five children tried to find the area.

<table>
<thead>
<tr>
<th></th>
<th>Kelly</th>
<th>Trina</th>
<th>Sandy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$8 \times 2 = 16$</td>
<td>$8 \times 2 = 16$</td>
<td>$8 \times 8 = 64$</td>
</tr>
<tr>
<td></td>
<td>$8 \times 3 = 24$</td>
<td>$6 \times 3 = 18$</td>
<td>$2 \times 3 = 6$</td>
</tr>
<tr>
<td></td>
<td>$16 + 24 = 40$</td>
<td>$16 + 18 = 34$</td>
<td>$64 - 6 = 58$</td>
</tr>
<tr>
<td></td>
<td>40 square feet</td>
<td>34 square feet</td>
<td>58 square feet</td>
</tr>
</tbody>
</table>

B Which two children’s work and answer are correct?

  - Kelly
  - Trina
  - Sandy
  - Bob
  - Won

Keys: B, D

Distractor Rationales:

- **A** Student multiplies given side measures, and does not decompose rectangles.
- **B** Key
- **C** Student multiplies given side measures, and does not understand how to decompose rectangles.
- **D** Key
- **E** Student multiplies given side measures, and does not decompose rectangles.
- **I**

Depth of Knowledge: 2

Focus/Bullet: 3B/Bullet 3

Primary Content Domain/Cluster: 03.MD.03.07.d

Secondary Content Domain/Cluster: 03.MD.03.07.b

Additional Mathematical Practices: Problem Solving, Focus 1C/Bullet 1

By assessing specific practice focus points as well as concepts and procedures, eMPower mathematics assessments provide a second key dimension of insight to support instructional decisions.