Developing Assessments of Deeper Learning: The Costs & Benefits of Tests that Help Students Learn
High-Quality Assessments Are Needed to Evaluate the Skills Required by Today’s Society
The Changing Demand for Job Skills

“Deeper learning”

Source: Murnane & Levy (1996)
Higher Order Skills Are Needed

Bloom’s Taxonomy

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

Higher Order Skills
But U.S. Tests Focus on Lower-Level Skills

• Since NCLB, tests have become mostly multiple-choice. States phased out performance assessments.

• New RAND study of 17 states’ tests: Only 2% of math items and 21% of ELA items assess higher-order skills.
Other Nations are Transforming Curriculum and Assessments

Finland, Singapore, New Zealand, Hong Kong, the UK, Australia, and others assess deeper learning through:

-- Tests that use open-ended essays and problems to be solved and explained

-- Performance tasks that require students to design and conduct investigations, collect data, analyze and present findings in writing, orally, and with technology
Research finds that these assessments:

• Can be scored reliably by teachers with moderation and auditing systems
• Enable teachers to learn about the standards, curriculum, and teaching
• Support more rigorous instruction and more intensive learning
Change Is on the Horizon

• Common Core State Standards: More attention to deeper learning
• SBAC and PARCC: States coming together to develop next generation assessments
• Some states are re-introducing performance assessments
New Assessments Tap Deeper Learning

SBAC Sixth-Grade Task: Planning a Field Trip

**Classroom Activity:** The teacher introduces the topic and activates students’ prior knowledge of planning field trips by:

1) Leading students in a whole-class discussion about where they have previously been on field trips or other outings with their school, youth group, or family.

2) Creating a chart showing the class’s preferences by having students first list and then vote on the places they would most like to go on a field trip, followed by whole-class discussion about the top choices.

**Student Task:** Individual students:

1) Recommend where the class should go on a field trip based on their analysis of the class vote.

2) Determine the per-student cost of going on a field trip to three different locations, based on a chart showing the distance and entrance fees for each option, plus a formula for bus charges.

3) Use information from the cost chart to evaluate a hypothetical recommendation about going to the zoo.

4) Write a note to their teacher recommending and justifying which field trip the class should take based on an analysis of all available information.

Sample Task from Smarter Balanced Assessment Consortia (SBAC)
Can High-Quality Assessments Become Feasible and Affordable?
Evaluating Costs and Benefits

• Because of NCLB requirements for “every child, every year” testing, states have looked for inexpensive tests.
• On average states spend $25 per pupil for NCLB-required ELA and math tests [< ½ of 1% of education spending]
• However, the range is from about $10 to over $100 per pupil.
There Are also hidden costs

• Other state and local costs add to the total:
  o Interim & benchmark tests
  o Data systems
  o Test preparation materials
  o Scoring, analysis, and teacher development costs

• With state test costs, these total > $50 per pupil on average

• But because they are focused on the same low-level tests, these costs don’t support deeper learning
And there Are costs to instruction

“I have seen more students who can pass the [state test] but cannot apply those skills to anything if it’s not in the test format. I have students who can do the test but can’t look up words in a dictionary and understand the different meanings.... As for higher quality teaching, I’m not sure I would call it that. Because of the pressure for passing scores, more and more time is spent practicing the test and putting everything in [the test] format.”

-- A Texas Teacher
What are the Benefits of Alternatives?

• Open-ended assessments -- essay examinations and performance tasks -- are more expensive to score, but they can support more diagnostic teaching and more ambitious learning,

• Involving teachers reaps additional benefits for implementing new standards and improving classroom practice
We Could Gain the Benefits of Higher-Quality Assessments and Spend Less Than We Are Spending Today ...
...If We Focus on How to Create a Higher-Quality System

Cost-saving approaches include:

• Multi-state consortia,
• Online delivery of assessments,
• Computer scoring of some open-ended items,
• Engagement of teachers in scoring and analyzing performance tasks,
• An integrated approach to creating a system of curriculum, assessment, instruction, and teacher development.
It is Time to Change the Question:

“Can we Afford High-Quality Assessments?”
It is time to change the question:

“Can we afford not to have high-quality assessments?”