Preparing Utah’s Students for College and Career

New standards
New tests
New scores

Utah State Office of Education
Assessment and Accountability
Why new standards? Why now?

• Old standards were not adequate for success after high school.
  – 40% of students in college need remediation in at least one academic subject.
  – US Chamber of Commerce ranks Utah students *low* in post-secondary workforce readiness.

• By 2020, 74% of jobs will require more than a high school diploma.

• Prosperity 20/20 and the governor agree:
  – We must raise the bar for students of all ages.
    • 90% of elementary students must achieve math and reading proficiency by the end of third grade by 2020
    • 66% of Utah residents should achieve post-secondary training by 2020

http://prosperity2020.com/
What I do believe and what I do support is that...we need to have high standards, and that's not in just math and...language arts/reading, it's in all of our curriculum. We need to have high standards. We need to, in fact, raise the bar. I think everybody understands that. And I haven't met anybody yet that doesn't agree with that.
What are Utah’s New Standards?

- Standards are the expectations for what students should know and be able to do.
- They are *not* curriculum.
- State Board of Education approved the Utah Core standards for English language arts and mathematics in 2010.
- Standards meet nationally and internationally competitive benchmarks

For additional information about standards:

Understanding the Utah Core [link](http://www.utahpublicschools.org/Utah-core-links.html)

Governor’s Utah Core Standards page, [link](http://www.utah.gov/governor/standards)
How are the old Utah Standards different from the new Utah Core Standards?

Old = basic proficiency       New = college and career readiness
Utah teachers developed the new standards and assessments

Examples of old vs new standards:

<table>
<thead>
<tr>
<th>New Utah Core Standards</th>
<th>Old Utah Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts</strong></td>
<td></td>
</tr>
<tr>
<td>arguing to discover fact</td>
<td>persuading to influence audiences</td>
</tr>
<tr>
<td>reading; text complexity</td>
<td>understanding genre (fiction/non-fiction), historical</td>
</tr>
<tr>
<td>text-based questioning</td>
<td>questioning, and background knowledge-based</td>
</tr>
<tr>
<td>analyzing and applying information from multiple texts</td>
<td>recognizing and identifying information in single texts</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td>applying mathematical knowledge and skills in multiple</td>
<td>demonstrating mathematical knowledge and skills in a single</td>
</tr>
<tr>
<td>authentic ways</td>
<td>way</td>
</tr>
<tr>
<td>understanding based on application, analysis, synthesis of</td>
<td>understanding based on recall and memorization</td>
</tr>
<tr>
<td>mathematical concepts and practices</td>
<td></td>
</tr>
<tr>
<td>justifying the solution to a problem and provide</td>
<td>producing a stand-alone solution to a problem</td>
</tr>
<tr>
<td>mathematical reasoning behind the solution</td>
<td></td>
</tr>
</tbody>
</table>
Example of an old item measuring an old standard vs a new item measuring new standards

**Old Item example**

Which bar graph correctly shows how students travel to school?

- **A.** How Students Travel to School
- **B.** How Students Travel to School
- **C.** How Students Travel to School
- **D.** How Students Travel to School

**New Item example**

7

A linear function is represented in the table shown.

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>-6</td>
</tr>
<tr>
<td>1</td>
<td>-2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Use the Add Arrow tool to draw a line on the coordinate grid that has a greater y-intercept than the function represented by the table and is perpendicular to the function $y = \frac{1}{2}x - 2$. 
How are we measuring the new standards?

• Using new, next-generation assessments that measure students’ knowledge
  – Computer adaptive
  – Developed by Utah teachers
• Every test question went through the following process:
  
  Prior to assessment
  - Development committee: new item creation
  - Content committee: align to new standards
  - Bias/sensitivity committee: reviews for fairness to all test takers
  - Parent review committee: 15 member legislated committee to see all test items
  - Rubric review: view student responses for correct scoring
  - Range Finding: set criteria for writing scoring
  - Data review: review items statistics for anomalies
  - Standard setting: set proficiency benchmarks

• Spring 2014 marked the first administration of the operational field test of new online adaptive assessments.
What does computer adaptive mean?

• Correct answers lead to more difficult questions; incorrect answers lead to less difficult questions.

To take a training test and see questions similar to those on SAGE, please visit: http://sageportal.org/training-tests/
For additional information about SAGE assessments:
http://schools.utah.gov/SAGE/
http://sageportal.org/
How did Parents review the SAGE Test?

- 15 member parent panel
  - Chosen by Speaker of the House, Senate President and State Board of Education Chair

- At least two parents reviewed every question, (11,773) and some parents viewed all questions.
How will SAGE be reported?

- **Scaled score** and **proficiency level** for each test taken by a student.

- The **scaled score** shows the student’s performance on a test, converted to a common scale (number, 100-900).

- SAGE has vertical scales in mathematics and English language arts. These scales link the subject-based assessments from grade to grade to provide data on student growth over time.  
  - Example: 3rd grade ELA to 4th grade ELA

- SAGE science assessments do not include a vertical scale because proficiency in one grade or course does not necessarily rely on content from the previous grade or course.  
  - Example: chemistry to physics
How will SAGE be reported?

Proficiency levels indicate the student’s progress towards College and Career Readiness (CCR)

Scale Scores vs. Proficiency Levels

- Scale scores indicate the individual level of what a student knows and is able to do.
- Proficiency levels interpret the scale score into categories: Highly Proficient, Proficient, Approaching Proficient, and Below Proficient.

On Track for CCR
(proficient)

- Level 4 Highly Proficient
- Level 3 Proficient

Not on Track for CCR
(not proficient)

- Level 2 Approaching Proficient
- Level 1 Below Proficient
<table>
<thead>
<tr>
<th>SAGE English Language Arts</th>
<th>% Proficient and above</th>
<th>SAGE Mathematics</th>
<th>% Proficient and above</th>
<th>SAGE Science</th>
<th>% Proficient and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELA Grade 3</td>
<td>44%</td>
<td>Math Grade 3</td>
<td>44%</td>
<td>Science Grade 4</td>
<td>42%</td>
</tr>
<tr>
<td>ELA Grade 4</td>
<td>41%</td>
<td>Math Grade 4</td>
<td>47%</td>
<td>Science Grade 5</td>
<td>44%</td>
</tr>
<tr>
<td>ELA Grade 5</td>
<td>43%</td>
<td>Math Grade 5</td>
<td>44%</td>
<td>Science Grade 6</td>
<td>45%</td>
</tr>
<tr>
<td>ELA Grade 6</td>
<td>41%</td>
<td>Math Grade 6</td>
<td>35%</td>
<td>Science Grade 7</td>
<td>41%</td>
</tr>
<tr>
<td>ELA Grade 7</td>
<td>41%</td>
<td>Math Grade 7</td>
<td>43%</td>
<td>Science Grade 8</td>
<td>45%</td>
</tr>
<tr>
<td>ELA Grade 8</td>
<td>40%</td>
<td>Math Grade 8</td>
<td>37%</td>
<td>Biology</td>
<td>37%</td>
</tr>
<tr>
<td>ELA Grade 9</td>
<td>42%</td>
<td>Secondary Math I</td>
<td>32%</td>
<td>Earth Science</td>
<td>43%</td>
</tr>
<tr>
<td>ELA Grade 10</td>
<td>42%</td>
<td>Secondary Math II</td>
<td>29%</td>
<td>Chemistry</td>
<td>45%</td>
</tr>
<tr>
<td>ELA Grade 11</td>
<td>38%</td>
<td>Secondary Math III</td>
<td>33%</td>
<td>Physics</td>
<td>44%</td>
</tr>
</tbody>
</table>
How was a *proficient* score determined?

200 educators and other experts determined proficiencies in a week long Standard Setting workshop last August:

- Educators took tests
- Viewed preliminary results
- Considered national data
- Participated in “bookmarking”
- Determined preliminary proficiency levels
What performance data did educators use to inform the proficiency levels in SAGE?

- Looked at all items from least to most difficult
- Used expert experience and judgment to determine proficiency levels

The participants of a large stakeholder group that included state school board members, superintendents, community advocates, parents, and the Governor’s Office reviewed the results and affirmed the recommendations from standard setting.
- Utah State Board of Education approved the cut (proficiency) scores on Sept. 5 2014.
What performance data did educators use to inform the proficiency levels in SAGE?

- Educators took into account Utah’s expectations along with nationally recognized and accepted assessments to move toward the broader goal of preparing students for success in college and the workplace.

- Educators considered information from national indicators:
  - ACT (American College Test)
  - NAEP (National Assessment of Educational Progress) data

For more information about these assessments, please visit:

http://nces.ed.gov/nationsreportcard/
http://www.act.org
How does SAGE compare to the Old CRT’s

- Comparisons are not typically valid.
- Both tests measure academic knowledge and skills, but use different methods for doing so.
- Year-to-year trend data for SAGE will be available in the coming years.

Comparing Different Performances: Don’t!
- **Proficiency levels have changed.** What was good enough in the past no longer is.

Imagine a test that evaluates a student’s running speed. In the past, where we may have told a student her running was fast enough, we now have a higher expectation and a more rigorous test. The same student’s running must improve, and in addition she must jump hurdles before we can say she is fast enough. And in the academic world, “fast enough” means ready for college and career.
What do the new scores look like?

- As expected, fewer students are proficient.
- Students do not suddenly know less. Teachers are not teaching less.
- The bar measuring expectations on the learning continuum moved. Teachers and students will need time to make the adjustment.
- Of course, this is NOT an indication of decrease in student achievement, rather it reflects an increase in expectations.
Typically, scores shift downward after new standards and assessments. Look at Kentucky and New York:

<table>
<thead>
<tr>
<th>Pass Rate of Summative Testing</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York 3-5 Reading</td>
<td>76%</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td>3-5 Math</td>
<td>73%</td>
<td>40%</td>
<td>44%</td>
</tr>
<tr>
<td>6-8 Reading</td>
<td>70%</td>
<td>47%</td>
<td>51%</td>
</tr>
<tr>
<td>6-8 Math</td>
<td>65%</td>
<td>41%</td>
<td>41%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pass Rate of Summative Testing</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kentucky 3-8 ELA</td>
<td>55%</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td>3-8 Math</td>
<td>65%</td>
<td>31%</td>
<td>36%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pass Rate of Summative Testing</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah 3-8 ELA</td>
<td>83%</td>
<td>42%</td>
</tr>
<tr>
<td>3-8 Math</td>
<td>79%</td>
<td>42%</td>
</tr>
</tbody>
</table>
How will teachers and schools see their test data from last spring?

- October 13 (tentative): Teachers and principals will be able to view student, class, and school level data.
- October 13-19: Data is embargoed.
- October 20: SAGE results will be distributed to students and parents; aggregates will be available to the public.
- Mid-December: Accountability results will be available.
What can teachers do with the new results?

• Continue to focus on the standards. This is the best strategy for raising scores.

• Attend to prerequisite knowledge to build capacity for new learning.

• Use differentiated strategies for English learners, students with disabilities, and other populations with lower scores.

• Make sure students are familiar with the technology of the assessments so the scores are a reflection of their abilities.

• Utilize training tests to provide students with opportunities to be familiar with question types and technology.

• Past CRT Longitudinal data tells us that scores will increase over time.
What can Utah Schools do with their data?

- Aggregate data can provide academic information about students: classes, schools, districts, and statewide.

- Use data to inform annual continual school improvement processes.

- Use individual SAGE results as a snapshot to inform instructional decisions in the school and classroom.

- Benchmark student progress on a broader scale, comparing results with states and districts across the country.

- Keep perspective: SAGE is only one data point of many performance indicators for students.
How will families see their data and be able to respond?

- Families will receive their individual school report from their teacher and local school on or after October 20th. Teachers will be available to explain the new reports and interpretive guides will be provided.

- Families and Utah educators can work together using this data to improve each student’s post high school success. If your student is not yet proficient on one or more of the SAGE assessments, talk to his or her teacher to understand the plan to get there.

- Tips to Student Success in School:
  - Let your child know you think education is important.
  - Make sure your child gets a good night’s rest and eats a good breakfast.
  - Set a daily study time.
  - Discuss homework with your child. Stress responsibility for doing the work and check to see that assignments are completed.
  - Keep track of your child’s progress throughout the year. Praise success. Talk with your child’s teacher about any areas of concern.
  - Encourage your child to ask questions at home or in class.
  - Encourage your child to read and write independently.
  - Look for ways to make learning a part of everyday activities.
Teachers speak about the new test

SAGE Communication Resources

- SAGE Communication Powerpoint  Oct 3, 2014
- SAGE Results Companion Document  Oct 3, 2014
- SAGE Parent Interpretive Guide  Oct 3, 2014
- SAGE Parent Letter  Oct 3, 2014