Setting Performance Standards on New York State Grades 3-8 Common Core Assessments

Board of Regents
July 22, 2013
A New Baseline

• This year’s Grades 3-8 ELA and math proficiency percentages should not be compared directly with prior year results.
  ○ Unlike prior years, proficiency is now based on the Common Core – a more demanding set of knowledge and skills necessary for 21st century college and careers.

• These results will present a new and transparent baseline from which we can measure student progress and preparedness for college and careers.
New Standards, New Tests, New Scale

New Scale

100 - 425

New performance standards

**Level 4:** Student *excels* in CCLS for this grade level

**Level 3:** Student is *proficient* in CCLS for this grade level

**Level 2:** Student is *not proficient* in CCLS for this grade level (*partial* but insufficient)

**Level 1:** Student is *well below proficient* in standards for this grade level
Notes on Accountability: Institutional

No new districts will be identified as Focus Districts and no new schools will be identified as Priority Schools based on 2012-13 assessment results.
Notes on Accountability: Educators

New York’s growth scores are based on year-to-year comparisons for similar students, all of whom experienced New York’s Common Core assessments for the first time in 2012-13.

The state-provided growth scores are based on year-to-year comparisons on scale scores (100 to 425 in 2012-13) not performance levels (Level 1, 2, 3, or 4).

Therefore, the state-provided growth scores will result in similar proportions of educators earning each rating category* in 2012-13 compared to 2011-12.

*Highly Effective, Effective, Developing, Ineffective
School districts and schools are urged to be thoughtful when using these new Common Core assessment results for local employment decisions, particularly during this first year of the transition.
Notes on Accountability: Students

Students will not be adversely affected by changes to the design of State tests.

Common Core Regents exams will be phased in over several years to ensure all students have the opportunity to meet graduation requirements.

School districts and schools should be thoughtful when preserving legitimate parent and student expectations for access to educational programs, including local promotion and admission policies.
Notes on Accountability: Students

The Department intends to review the requirements for academic intervention services (AIS), including:

• How academic support services should align and reinforce high-quality common core instruction for all students
• How eligibility relates to performance on State tests
• Any necessary transition in eligibility requirements in the 2013-14 school year
Converging Evidence about College Readiness

Whether the measure is national or New York-specific, there is converging evidence about student preparedness for college and careers.
New York's 4-year high school graduation rate is 74% for All Students. However, the percent graduating college and career ready is significantly lower.

### June 2012 Graduation Rate

<table>
<thead>
<tr>
<th>Graduation under Current Requirements</th>
<th>% Graduating</th>
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</thead>
<tbody>
<tr>
<td>All Students</td>
<td>74.0</td>
</tr>
<tr>
<td>American Indian</td>
<td>58.5</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>81.6</td>
</tr>
<tr>
<td>Black</td>
<td>58.1</td>
</tr>
<tr>
<td>Hispanic</td>
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<td>White</td>
<td>85.7</td>
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<tr>
<td>English Language Learners</td>
<td>34.3</td>
</tr>
<tr>
<td>Students with Disabilities</td>
<td>44.7</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Calculated College and Career Ready*</th>
<th>% Graduating</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Students</td>
<td>35.3</td>
</tr>
<tr>
<td>American Indian</td>
<td>18.8</td>
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<tr>
<td>Asian/Pacific Islander</td>
<td>56.5</td>
</tr>
<tr>
<td>Black</td>
<td>12.5</td>
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<tr>
<td>Hispanic</td>
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<tr>
<td>White</td>
<td>48.5</td>
</tr>
<tr>
<td>English Language Learners</td>
<td>7.3</td>
</tr>
<tr>
<td>Students with Disabilities</td>
<td>4.9</td>
</tr>
</tbody>
</table>

*Students graduating with at least a score of 75 on Regents English and 80 on a Math Regents, which correlates with success in first-year college courses.

Source: NYSED Office of Information and Reporting Services
New York

Percent at or above Proficient: 3-8 ELA & Math

<table>
<thead>
<tr>
<th>Grade</th>
<th>ELA</th>
<th>Math</th>
<th>ELA</th>
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<th>ELA</th>
<th>Math</th>
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<td>7</td>
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<td>69</td>
<td>80</td>
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<table>
<thead>
<tr>
<th>Grade</th>
<th>Reading</th>
<th>Math</th>
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<td>32</td>
<td>30</td>
<td>33</td>
<td>34</td>
<td>35</td>
<td>30</td>
</tr>
</tbody>
</table>


Most recent year available for Reading and Mathematics is 2011.
New York 2011 NAEP Reading

Grades 4 and 8

Total Public

Grade 4

- Level 1: 32.0%
- Level 2: 33.0%
- Level 3: 26.0%
- Level 4: 9.0%

Grade 8

- Level 1: 24.0%
- Level 2: 41.0%
- Level 3: 31.0%
- Level 4: 4.0%

Legend:
- Level 1
- Level 2
- Level 3
- Level 4
New York 2011 NAEP Math
Grades 4 and 8
Total Public

<table>
<thead>
<tr>
<th></th>
<th>Grade 4</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>20.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Level 2</td>
<td>44.0%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Level 3</td>
<td>31.0%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Level 4</td>
<td>5.0%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

Legend:
- Level 1
- Level 2
- Level 3
- Level 4
SAT and P/N Benchmarks for New York Students

• College Board and NAEP study determined scores on SAT and PSAT/NMSQT that correspond with college readiness for the nation.
• Criteria were adapted slightly to accommodate NY students’ course-taking patterns.
• The results for all NY students who graduated in 2010 and who took the SAT and PSAT/NMSQT are on the following slide.
SAT and PSAT/NMSQT CCR Benchmark Data: ELA

Percent of Students at or above ELA External Benchmarks

- SAT-CR: National 30%, NYS 25%
- SAT-W: National 35%, NYS 31%
- PSAT-CR: National 27%, NYS 26%
- PSAT-W: National 35%, NYS 31%
- NAEP Grade 8: National 32%, NYS 35%
- NAEP Grade 4: National 32%, NYS 35%
SAT and PSAT/NMSQT CCR Benchmark Data: Math

Percent of Students at or above Math External Benchmarks

- SAT-M: National 40%, NYS 36%
- PSAT-M: National 41%, NYS 41%
- NAEP Grade 8: National 34%, NYS 30%
- NAEP Grade 4: National 40%, NYS 36%
SETTING PERFORMANCE STANDARDS

Common Core Standards / CCR

Research-based Methodology

NY Educator Judgment

Cut Scores

Standard Setting Determination
SETTING PERFORMANCE STANDARDS

• Required by USDE and Standards for Educational and Psychological Measurement to use research-based methodology

• National experts in standard setting monitored planning, materials and process
Just as NY Educators are Essential to Test Development…

NYS Educators are represented on the following panels:

- New York State Content Advisory Panels
  - Spans early childhood and P12 through CUNY, SUNY and clcu faculty
- Item Development, Item Review, Final Form Review

These panels are informing:

- College and Career Ready Determinations
- Test specifications, policies, and items
- NYS policy-level and grade-level performance level descriptors
- Standard setting
...NY Educators are Essential to Setting Standards

- 95 NY Educators for four full days of work
- 34 stayed for a fifth day
- Variety of educators represented:
  - K12 ELA and Math Teachers
  - BOCES
  - ELL and SWD specialists
  - Higher Education
  - K12 Administration
Selection of Panelists

Letters sent to key NY educator organizations, BOCES and Big 5 seeking nominations of educators who:

- have a deep knowledge of the Common Core standards
- have experience teaching different student populations
- represent the diversity of New York State
- include urban/rural/suburban schools
- include various geographic areas of the state

Resumes were reviewed carefully to ensure rich representation for each ELA and Math grade band.
Standard Setting Panelists

Days 1 – 4
• A total of 95 panelists
• Panelists divided into four groups:
  o ELA Grades 3 – 5
  o ELA Grades 6 – 8
  o Math Grades 3 – 5
  o Math Grades 6 – 8

For Day 5
• 34 of the 95 remained for Day 5
  o Panelists divided into two groups: ELA and Math
ELA Panelists by Position

SS Panelists (Days 1-4)
- Teacher: 68%
- Administrator: 16%
- BOCES: 14%
- Higher Ed: 2%

Articulation Panelists (Day 5)
- Teacher: 33%
- Administrator: 45%
- Higher Ed: 22%
ELA Panelists by Geographic Region

SS Panelists (Days 1-4)
- Long Island: 10%
- NYC: 23%
- Western: 25%
- Central: 8%
- North Country: 10%
- Southern Tier: 4%
- Hudson Valley: 8%

Articulation Panelists (Day 5)
- Long Island: 11%
- Western: 22%
- Capital District: 17%
- NYC: 22%
- Hudson Valley: 17%
- Southern Tier: 6%
- North Country: 5%
- Central: 11%
Math Panelists by Position

SS Panelists (Days 1-4)
- Teacher: 70%
- Higher Ed: 11%
- Administrator: 17%
- BOCES: 2%

Articulation Panelists (Day 5)
- Teacher: 37%
- Higher Ed: 16%
- Administrator: 47%
Math Panelists by Geographic Representation

SS Panelists (Days 1-4)
- Long Island: 17%
- Western: 24%
- NYC: 20%
- Capital District: 9%
- Hudson Valley: 15%
- Southern Tier: 6%
- North Country: 2%
- Central: 7%

Articulation Panelists (Day 5)
- Long Island: 11%
- Western: 21%
- NYC: 32%
- Capital District: 5%
- Hudson Valley: 10%
- Southern Tier: 5%
- Central: 16%
First Task: Defining Expectations

For each grade, panelists:

1. Review detailed descriptions of the range of knowledge and skills that describe students who are proficient with grade-level standards (Level 3)

2. Discuss and come to consensus on the specific knowledge and skills that characterize a student who is “just barely” proficient. This is the **threshold** student.

3. Repeat process for Level 2 (partial but insufficient) and Level 4 (excel).

Focus is on what students **should** be able to do at each grade according to demand of the standards.
## Performance Level Descriptions

This is the PLD for one cluster. There are five clusters that comprise the Major content of the grade. PLDs are available for all five.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Performance Level 4</th>
<th>Performance Level 3</th>
<th>Performance Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students understand the place value system. (5.NBT.1-4)</td>
<td>In any multi-digit number, determine that a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole number exponents to denote powers of 10. Use symbols (&gt;,&lt;, =) to compare two powers of 10 expressed exponentially (compare $10^2$ to $10^5$). Read, write, and compare decimals to any place using numerals, number names, expanded form, and inequality symbols (&gt;, &lt;, =), and choose the appropriate context given a rounded number.</td>
<td>In any multi-digit number, determine that a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10. Use whole number exponents to denote powers of 10. Read, write, and compare decimals to the tenths using numerals, number names, expanded form, and inequality symbols (&gt;, &lt;, =). Round decimals to thousandths.</td>
<td>In any multi-digit number, determine that a digit in one place represents 10 times as much as it represents in the place to its right or 1/10 of what it represents in the place to its left by using visual models.</td>
</tr>
</tbody>
</table>
Steps in the Standard Setting Process (cont.)

Define the threshold student for each level

Threshold Students

NYS Level 1 → NYS Level 2 → NYS Level 3 → NYS Level 4

Low Achievement → Recommended Standards → High Achievement
Second Task: Review Test and Benchmarks

For each grade, panelists:
1. Take a “mini test” comprised of a subset of the same items administered in 2013
2. Review the remainder of the test
3. Have opportunity to discuss any questions with the test developers
4. Review benchmark data from NAEP, SAT and PSAT/NMSQT
Third Task: Educators Provide First Judgment

Panelists are asked to provide their response to the following question:

For proficiency level (NYS Level 3) only, given the rigor of the Common Core State Standards, I will be surprised if:

- Fewer than _____ percent of students reach proficiency
- More than ______ percent of students reach proficiency

At this point in process, panelists have yet to review how students performed on the test.
Fourth Task: Training on Ordered Item Booklet (OIB) Method

- Most common methodology in state testing
- Extensive research base for validity of process to capture educator judgment
- Items from test are ordered from easiest to hardest
- It is the tool by which cut score recommendations are made
Fourth Task: Training on Ordered Item Booklet (OIB) Method (cont.)

- Panelists are trained on how to use the OIB to make judgments about where the cut scores should be to distinguish:
  - Level 2 from Level 1
  - Level 3 from Level 2
  - Level 4 from Level 3

- After training, each panelist fills out a survey indicating his or her level of understanding. If any panelist is not confident in their understanding, more training is provided to all.
Fifth Task: Make Round 1 Judgments about Cut Scores

- Panelists make judgments individually
- Individual judgments are handed to facilitators
- Facilitators aggregate data and share with panelists
- Panelists discuss their rationales for their judgments
  - Rationales must be based on threshold descriptions and expectations of the Common Core standards
- Panelists review impact data
  - Impact data are the percentage of students who would be in each category if Round 1 cut scores were implemented
Four Rounds for Each Grade

• The process described above is repeated four times for each grade to ensure panelists have ample time to discuss rationales for their judgments and change their judgments should their fellow panelists offer compelling rationales to do so.

• Panelists were not required to come to consensus as individual judgment is valued.

• The process takes four full days for three grades.

• All panelists were present from beginning to end each and every day. No multi-tasking was permitted.
Panelist Evaluation of Process

Over 90% of panelists at end of Day 4 said they would defend the recommended cut scores. Of those in the minority, none strongly disagreed with the recommended standards (they only moderately disagreed).

“The standards are being set by a group that consists of teachers, k-12, college professors and administrators. It makes sense and it's transparent.”

“The collective experience and knowledge evidenced in discussions and the outcomes of the tasks resulted in fair and unbiased standards. Participants followed directions carefully and judiciously.”
Day 5

• The purpose of Day 5 was to review the results across all six grade levels to ensure that the results made sense from a broader perspective.

• Panelists were allowed to make small adjustments only.
  o Adjustments had to be within +/- 4 raw score points.
  o Adjustments were required to be grounded in rationale of threshold definitions and the expectations of the Common Core standards.

• Commissioner was presented with both sets of recommendations – those from Day 4 and from Day 5.

• The results of Day 4 and Day 5 differed minimally.
# Changes in Cut Score Points from Day 4 to Day 5

<table>
<thead>
<tr>
<th></th>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
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<tbody>
<tr>
<td>ELA</td>
<td></td>
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</tr>
<tr>
<td>NYS Level 2</td>
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<td>-2</td>
<td>-3</td>
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<td>-2</td>
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</table>
“In observing the training for the NY State Grades 3-8 ELA and Math Common Core Tests Standard Setting on June 29, 2013, we were comfortable that the facilitators were following best practices in implementing research-based procedures. After observing a full standard-setting session, we are confident that the recommended cut scores were derived using a well-implemented process that followed the plan presented to the NY technical advisory committee (TAC).”

Marianne Perie and Michael Rodriguez
New York State TAC
The Commissioner accepted recommendations from Day 5 with no changes.
# ELA: Final Recommended Cut Scores

<table>
<thead>
<tr>
<th>Grade</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
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<tbody>
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<td>291-319</td>
<td>320-357</td>
<td>358-423</td>
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<tr>
<td>4</td>
<td>139-286</td>
<td>287-319</td>
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<td>5</td>
<td>116-288</td>
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<td>112-282</td>
<td>283-319</td>
<td>320-337</td>
<td>338-412</td>
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<tr>
<td>7</td>
<td>103-286</td>
<td>287-317</td>
<td>318-346</td>
<td>347-413</td>
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<tr>
<td>8</td>
<td>100-283</td>
<td>284-315</td>
<td>316-342</td>
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### Math: Final Recommended Cut Scores

<table>
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<th>Level 4</th>
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<tbody>
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<td>314-339</td>
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</tr>
<tr>
<td>4</td>
<td>126-282</td>
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<td>8</td>
<td>119-286</td>
<td>287-321</td>
<td>322-348</td>
<td>349-403</td>
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</table>
Using Test Scores to Inform Classroom Instruction
Resources Available Now on EngageNY.org

1. Test Guides

2. Assessment Design Information

3. Sample Questions

Test guides include full blueprint (test specifications). Assessment design documentation includes specific criteria for writing test questions.
To Come: Materials to Support Score Interpretation and Use

Available on EngageNY.org upon release of scores
Also…

• Key background information for principals and teachers to share when talking with families and the community about the results

• Recommendations for parents on key background information to emphasize with students when discussing the results