Next Generation
English Language Arts and Mathematics Learning Standards

Board of Regents
May 2017
English Language Arts and Mathematics Standards Review Committees

Teachers = 94
Administrators = 21
Library Media Specialists = 3
College Professors = 4
Parents = 16

- Long Island = 17
- NYC = 27
- Hudson Valley = 15
- Capital = 15
- North Country = 12
- Central = 13
- Western = 26
- Southern Tier = 13

= English language arts
= Mathematics
The Math and ELA Leadership Teams plan the logistics for the standards review process including developing materials and providing guidance for the Standards Review Committees.

Both Math and ELA Committees are split into grade band subcommittees; and into course subcommittees for high school math.

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<th>Each Grade Band Committees include:</th>
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<td>Facilitator</td>
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The Power of Collaboration

- The Mathematics and English Language Arts Leadership teams include members of Staff/Curriculum Development Network (S/CDN), BOCES, NYSUT, and the NYCDOE.

- The PTA worked closely with the NYSED teams to select the parent representatives.

- The work of the standards review continues to be a collaborative effort.
Governor’s Task Force Recommendations

Establish New High Quality New York Standards

- **Recommendation 1:** Adopt high quality New York education standards with input from local districts, educators, and parents through an open and transparent process.

- **Recommendation 2:** Modify early grade standards so they are age-appropriate.

- **Recommendation 3:** Ensure that standards accommodate flexibility that allows educators to meet the needs of unique student populations, including Students with Disabilities and English Language Learners.

- **Recommendation 4:** Ensure standards do not lead to the narrowing of curriculum or diminish the love of reading and joy of learning.

- **Recommendation 5:** Establish a transparent and open process by which New York standards are periodically reviewed by educators and content area experts.
## Highlights of the Revisions of the Mathematics Standards

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| Clarification of existing standards included changing or adding language, adding notes to more clearly identify grade-level expectations, adding diagrams, and modifying prior examples. | Survey/review committee input reflected a need for clarifications to be made to help improve the focus of instruction; allowing teachers and students time to develop conceptual understanding, while maintaining grade level appropriateness.  

**Example:**  
Standard 8. EE.C.8b that deals with solving systems of two linear equations in two variables now contains language that states that the linear equations in two variables will have integer coefficients. The added note further sets the grade level expectation that there will be at least one equation containing at least one variable whose coefficient is 1.  
The review committees felt that this clarification will improve the focus of the introduction to the solving of systems in grade 8, allowing for the elimination and substitution solution methods to be more grade level appropriate, while providing the foundational skills needed for upcoming work with systems in Algebra I. |
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| New standards were added to improve coherence within and amongst grade levels. | **Examples:**

Standard 6.G.A.5 *Using area and volume models to explain perfect squares and perfect cubes* was added by the review committees to help connect work with other grade-level standards that deal with exponents, as well as strengthen the progression of skills with exponents, irrational numbers, radicals and Algebra I work with completing the square.

Standard 2.G.A.1 *Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. (Sizes are compared directly or visually, not compared by measuring.),* was replaced with *Classify two-dimensional figures as polygons or non-polygons.*

Angles and angle measurement are introduced in Grade 4. The committee’s recommendation to add this standard at Grade 2 now allows for an introductory focus to be on the first way to sub-classify 2-D shapes – polygons or non-polygons, building a more solid continuum of classifying shapes in Grades 3 (sides and vertices) and 4 (angles, parallel and perpendicular lines).
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| Standards were moved to different grade levels to improve focus, coherence and grade-level appropriateness. | **Example:** Based on survey input and review committee recommendation, Algebra I standard S.ID.B.6b was moved to a (+) standard, no longer being an expectation for Algebra I. As a (+) standard, the study of residuals is open to district’s discretion and can be placed where appropriate to support a district’s mathematical program.  

In Algebra II, additional trigonometry standards were added that were originally from Geometry (F-TF.A.1b) and the plus standards (F-TF.A.4) to improve the trigonometry focus of the course. Since radian measure was removed from Geometry, finding either the central angle, arc length radius, or area of a sector of a circle given two others, was now determined to be a better fit for Algebra II since radian measure is being introduced at this level. The focus of the trigonometry studied in Algebra II pertains to defining trigonometric functions by way of the unit circle, so the plus standard that deals with using the unit circle to explain the symmetry and periodicity of trigonometric functions was added for better coherence. Based on students past work with transformations, knowledge and understanding of phase shift was also added (F-TF.B.5). The focus of trigonometry in Geometry, is now solely the trigonometry of the right triangle. |
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<td>Multiple standards were consolidated into one standard to improve focus and alleviate redundancy. Some standards were removed as well to alleviate redundancy issues.</td>
<td><strong>Example:</strong> Algebra II standards S-CP.A.2, 3, 5 and 6 have been incorporated into standard S-CP.A.4 for clarity purposes and to improve the focus of determining independence and conditional probabilities using two-way frequency tables.</td>
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| Added the language “explore” to some standards to alleviate grade-level appropriateness concerns. | Certain standards have been re-written and now use the word “explore”. Based on the recommendation coming from the educator committees, explore requires the student to learn the concept in the standard through a variety of instructional activities. *Repeated experiences* with this concept, with the immersion in the concrete are vital. Explore indicates that the topic is an important concept that builds the foundation for progression toward mastery in later grades. However, *mastery at the current level is not expected*.  

**Example:**  
Kindergarten Standard K.MD.B.4 *Explore coins (pennies, nickels, dimes, and quarters) and begin identifying pennies and dimes*, provides a foundation and progression for work with coins and place value in later grades. |
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| Maintain the rigor of the standards by balancing the need for conceptual understanding, procedural skill and application. | The fluency standards at the high school level are now clearly defined.  
The Geometry standard G.SRT.D.9 *Justify and apply the formula* \( A = \frac{1}{2} ab \sin (C) \) *to find the area of any triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side*, was added to allow students the opportunity to apply their knowledge of right triangle trigonometry (conceptual/procedural) to general triangles (application). |
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<td>Create a Glossary of Verbs associated with the mathematics standards. This glossary contains a list of verbs that appear throughout the revised standards recommendations.</td>
<td>The term “explore” is now utilized in some standards to alleviate grade-level appropriateness concerns. It indicates exposure to the concept within the grade level to provide foundational support for mastery at a later grade level.</td>
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### Highlights of the Revisions of the ELA Standards

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| Revised the English Language Arts standards across all of the grades to reduce repetition of standards and ensure clarity, appropriateness, and vertical alignment. | The educator committees made changes to the language of the standards and examples, and in some cases merged, omitted, or wrote a new grade-level standard.  

**Example:**  
Reading Anchor Standard 9 combines elements of previous Anchor Standard 11 and 9 for a new combined standard: “**Standard 9:** Analyze and evaluate texts using knowledge of literary forms, elements, and devices through a variety of lenses and perspectives.” |
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| **Added Lifelong Practices of Readers and Writers to ensure that students become lifelong learners who can communicate effectively** | The BOCES Staff and Curriculum Development Network created a draft of *Lifelong Practices of Readers in Writers* to add to the ELA Standards. The reason to add these practices is to parallel other standard areas that have practices (Social Studies, Science, and Mathematics) and to exemplify reading and writing practices/habits that should begin in the early years and be fostered throughout life.  

**Example:**  
Reading Practice: “Read for multiple purposes, including for learning and for pleasure.”  
Writing Practices: “Enrich personal language, background knowledge, and vocabulary through writing and communicating with others.” |
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<td>Merged the Reading for Information and Reading for Literature Standards to reduce repetition and assist with classroom curriculum and instruction</td>
<td>The 2016 educator committee recommended merging the grade-level Reading for Information and Reading for Literature Standards to reduce repetitive standards and make it easier for classroom instruction and curriculum development. <strong>There is still the expectation that students read a balance of informational and literary texts across all of the grades.</strong></td>
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**Example:**

The new 2nd grade Reading Standard 6 has been created by merging two separate reading standards: “Identify examples of how illustrations and details support the point of view or purpose of the text. (RI&RL)”

Previous standards:

2011 **Grade 2 Reading Standard 6** (Literature): “Acknowledge differences in the points of view of characters, including by speaking in a difference voice for each character when reading dialogue aloud.”

2011 **Grade 2 Reading Standard 6** (Informational): “Identify the main purpose of a text, including what the author wants to answer, explain, or describe.”
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| Reduced the overall number of Anchor Standards to respond to educator concern that there are too many standards and that some previous standards are repetitive. | Anchor Standards definition: Anchor Standards represent broad statements about the expectations for students as they prepare for high school graduation, positioning them for potential success in either college or careers, or both.  

The previous set of ELA Standards (2011) had 34 Anchor Standards; the 2017 revised version has 28 Anchor Standards.  

**Example:**  
Six Anchor Standards in Reading and Writing were omitted, moved to the Lifelong Practices, or merged with other standards. |
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| Revised the grade level text-complexity reading expectations to ensure clarity for educators and families. | Grade-level text complexity expectations remain in the 2017 set of standards; however, the expectations have been relocated to a “Range, Quality, and Complexity of Student Reading” section for each grade level. This will help to clarify text complexity and reading expectations at each grade level. The text complexity language has been revised to ensure that the reading expectations are grade-level and clear for educators.  

**Example:**  
The previous 3<sup>rd</sup> grade Range of Reading and Level of Text Complexity Standard 10 read: “By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2-3 text complexity band independently and proficiently.”  

The new 3<sup>rd</sup> grade Text Complexity expectation: “By the end of the school year, read and comprehend literary and informational texts that are appropriately complex at or above grade level.” |
Text Complexity

- Three aspects must be considered to help teachers select appropriate texts for their students to read and comprehend:
  - Quantitative analyses accurately place a text within a grade band
  - Qualitative analyses measure other important dimensions of text, such as complexity of text’s structure, language conventionality and clarity, levels of meaning and knowledge demands
  - Reader and task helps considers the student’s motivation, background knowledge, and task variables
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| Created a New York State-specific introduction to provide specific guidance and background on how to use the standards and how to inform local curriculum and instruction decisions. | New York State has a long history of educational expectations and guidance, going back to the 1800s. This new set of *English Language Arts Learning Standards* has a New York State introduction that includes key information necessary for educators and parents to understand about the new revised standards.  

**Examples:**  
- How to use the new *Lifelong Practices for Readers and Writers*.  
- How the standards are organized and how to use them in the classroom.  
- How the standards apply to students with disabilities and English Language Learners.  
- How to use the standards to inform local school district curriculum and instruction decisions. |
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<td>Created a separate <em>Grades 6-12 Literacy in Social Studies, Science, and Technical Subjects Standards</em> document that connects with the other content areas.</td>
<td>The educator committee recommended separating the <em>Grades 6-12 Literacy in Social Studies, Science, and Technical Subjects Standards</em> document from the English Language Arts Standards to ensure educators will see how those standards connect directly with the applicable standard areas. This document will have its own introduction and link to the related learning standards (for example, Social Studies and Science).</td>
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<td>Revise the Writing Standards so they are more user-friendly for educators to use for curriculum and instruction. In addition to omitting some of the standards, there are grade-specific changes across the grades to clarify language and ensure writing expectations are clear.</td>
<td>The Writing Anchor Standards now include seven standards grouped under two strands: Text Types and Purposes, and Research to Build and Present Knowledge. For example, Anchor Standard 5: Conduct research based on focused questions to demonstrate understanding of the subject under investigation, was omitted. Additionally, the ELA committee added the Lifelong Practices of Readers and Writers to exemplify writing practices/habits that should begin in the early years and be fostered throughout life.</td>
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Highlights of the Revisions of the ELA Standards

The Department convened the New York State Early Learning Task Force to discuss concerns around the P-2 grades, including standards, program decisions, social emotional needs, and how the content areas/domains work together in the early grades. The Task Force has emphasized the importance of focusing on the whole child in the early grades.

The Task Force, which includes classroom teachers, parents, school administrators, and professors, met in February and April. They reviewed and provided feedback on the standards as well as made additional recommendations to support early learning.

The Task Force continues to meet and now is working on recommendations to develop resources and guidance to implement the new standards including resources on professional development for teachers, P-12 school supports, child development and instructional practice.
Highlights of the Revisions of the ELA Standards

The Early Learning Standards Task Force recommended the following areas for additional guidance or resources to be developed over the coming months:

- Standards, Curriculum, and Assessment
- Instructional Practice (including Developmentally Appropriate Practice)
- Systems and P-12 School Support
- Parent Resources
- Professional Development and Teacher Training
- Child Development
Next Steps

- Resources/training/professional development
- Supporting resources for guidance. For example, a glossary of terms for ELA and grade by grade crosswalks of what is different in the revised standards.
- Guidance for students with disabilities and English language learners.
- Ongoing discussions with Staff/Curriculum Development Network (S/CDN), Teacher Centers, and ELA and Mathematics Professional Development groups to provide resources and guidance to ensure successful implementation.
Questions?