



FACT SHEET: Revised NYS P-12 English Language Arts and Mathematics Learning Standards Examples

May 2017

The revision of the *English Language Arts and Mathematics Learning Standards* has been a two-year collaborative process involving numerous educators, parents, specialists, and the public.

Committees comprised of more than 130 New York State educators and parents recommended revisions to the standards across all grades, Prekindergarten to Grade 12. Revisions included omitting a standard, adding a standard, merging standards, and providing examples. The Department worked with the BOCES Staff and Curriculum Development Network, the NYC Department of Education, and New York State United Teachers to plan and implement the standards revision process. The Department worked with the statewide Parent Teacher Association to ensure parent representation and input in the standards process.

The Department provided two public surveys (in fall 2015 and fall 2016) to gather input on the standards and recommended revisions. Committees reviewed this input and made any necessary modifications to the draft standards documents.

The Standards Review Committees met in person for five days in July 2016 in Albany to provide input and recommended revisions to the previous New York State *P-12 English Language Arts and Mathematics Common Core Learning Standards*. This group included classroom teachers, curriculum specialists, parents, college professors, and school administrators. As part of the revision process, experts in development, literacy, English Language Arts, Special Education, English Language Learners and Mathematics provided input on the draft standards to guide the development and revisions. Throughout every step of the process, educators who work with students with disabilities and English Language Learners were part of the educator committees to ensure that the needs of all students are met.

The revision of the learning standards was New York State-centered and guided by New York State educators: No external groups or testing companies were involved in the standards revision sessions.

The Department created an Early Learning Standards Task Force to provide guidance on necessary supporting materials and guidance to support the needs of the “whole child.” This Task Force, made up of over 30 educators and parents, gave feedback on the standards and is currently working on a set of recommendations for early learning resources to help guide learning in the earliest grades.

Below are specific examples of changes made to the learning standards.

New York State English Language Arts Learning Standards Changes

Revisions to the ELA Standards	Example
<p>Revised the English Language Arts standards across all grades to reduce repetition of standards and ensure clarity, appropriateness, and vertical alignment.</p> <p>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.</p>	<p>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.”</p>
<p>Add Practices to Foster Lifelong Readers and Writers to ensure students become lifelong learners who can effectively communicate. The BOCES Staff and Curriculum Development Network drafted these practices to help students exemplify and foster strong reading and writing habits from the early years through adulthood.</p> <p>These practices 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.</p>	<p>One example of a Reading Practice: “Read for multiple purposes, including for learning and for pleasure.”</p> <p>Another example from the Writing Practices: “Enrich personal language, background knowledge, and vocabulary through writing and communicating with others.”</p>
<p>Merge the Reading for Information and Reading for Literature Standards to reduce repetitive standards, streamline classroom instruction and curriculum development, and ensure a healthy balance of both types of reading across all grades. The standards also encourage the use a of variety of texts to balance literary and informational reading with clear guidance for teachers and to ensure students read both full-length texts and shorter pieces, as well as to encourage reading for pleasure. Specific reading selections remain local decisions to be chosen by local educators.</p>	<p>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:</p> <p>2011 Grade 2 Reading Standard 6 (Literature): “Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.”</p> <p>2011 Grade 2 Reading Standard 6 (Informational): “Identify the main purpose of a text, including what the author wants to answer, explain, or describe.”</p>

<p>Convene 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. Grade-specific changes and additions were made to provide a strong emphasis on the whole child. The Task Force reviewed and provided feedback on the standards. The Task Force continues to meet and now is working on recommendations to develop resources and guidance to implement the new standards for educators and parents including resources on professional development for teachers, P-12 school supports, child development and instructional practice, including play as an instructional strategy.</p>	<p>The Early Learning Standards Task Force recommended the following areas for additional guidance or resources to be developed:</p> <ul style="list-style-type: none"> • 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
<p>Revise Every Grade’s Reading Expectations for Text Complexity to clarify expectations over multiple grades. A text complexity section is also added to the introduction to underscore the importance of reading different types of texts with varying levels of difficulty. The expectations have been relocated to a “Range, Quality, and Complexity of Student Reading” section for each grade level. The text complexity language has been revised to ensure that the reading expectations are grade-level and clear for educators.</p>	<p>The previous 3rd 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.”</p> <p>The new 3rd 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.”</p>
<p>Revise the Writing Standards so they are easier 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</p>	<p>The Writing Anchor Standards now include seven standards grouped under two strands: Text Types and Purposes, and Research to Build and Present Knowledge.</p> <p>For example, Anchor Standard 5: Conduct research based on focused questions to demonstrate understanding of the subject under investigation, was omitted.</p> <p>Additionally, the ELA committee added the <i>Lifelong Practices of Readers and Writers</i> to exemplify writing practices/habits that should begin in the early years and be fostered throughout life.</p>

<p>Streamline the Anchor Standards based upon comments from educators that the standards were too numerous and at times repetitive. Standards are merged, and included in the practices to foster lifelong readers and writers.</p> <p>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.</p>	<p>Six Anchor Standards in Reading and Writing were omitted, moved to the Lifelong Practices, or merged with other standards.</p>
<p>Create NY-Specific Introduction on How to Use the Standards to help inform local curriculum and instruction. While all curriculum decisions are locally made, a set of learning standards cannot be properly used without the necessary guidance.</p>	<p>The introduction provides information on</p> <ul style="list-style-type: none"> • How to use the new <i>Lifelong Practices for Readers and Writers</i>. • 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.
<p>Ensure Literacy is Included in the Content Areas. In addition, guidance will be developed to show connections to literacy in other content areas.</p>	<p>For example, the committee recommended creating a new document for the Grades 6-12 Literacy in Social Studies, Science and Technical Subjects Standards. The committees separated the literacy standards for these distinct content areas to better connect the standards directly with these content areas.</p> <p>This document will have its own introduction and link to the related learning standards (for example, Social Studies and Science).</p>

New York State Mathematics Learning Standards Changes

Revisions to the Math Standards	Rationale/Example
<p>Move Standards to Different Grade Levels to improve the focus of major content and skills for each grade-level and course; providing more time for students to develop deep levels of understanding of grade-level appropriate content. Based on public and expert comments, major grade movements occurred in statistics and probability at the middle level and in Algebra at the high school level.</p>	<p>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.</p> <p>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 is 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.</p>
<p>Provide for Students to Explore Standards to ensure standards are grade-level appropriate. Exploring a standard allows students to be introduced to and learn a concept without the expectation of mastering the concept at that grade level. Exploring the topic recognizes the importance of building a foundation toward mastering the concept in subsequent grades.</p>	<p>Kindergarten Standard K.MD.B.4 <i>Explore coins (pennies, nickels, dimes, and quarters) and begin identifying pennies and dimes,</i> provides a foundation and progression for work with coins and place value in later grades.</p> <p>The Algebra II Standard F-BF.B.7 now states <i>Explore the derivation of the formulas for finite arithmetic and finite geometric series. Use the formulas to solve problems.</i> Students were originally expected to derive the formula for the sum of a geometric series. Now instructionally, students should still be exposed to the derivation and its connection to other mathematical concepts studied, but the focus is on the application.</p>

<p>Clarification of Standards involving the changing or adding of language, the adding of notes and diagrams, as well as modifying prior examples so that educators, students and parents can more clearly understand the grade-level expectation, without limiting instructional flexibility.</p>	<p>Standard 8. EE.C.8b that deals with solving systems of two linear equations in two variables now contains language that states that the <i>linear equations</i> in two variables will have <i>integer coefficients</i>. The added note further sets the grade level expectation that there will be <i>at least one equation containing at least one variable whose coefficient is 1</i>.</p> <p>The review committees felt that this clarification improves 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.</p> <p>Modifications were also made to better define the progression of skills and the transition of some of the 18 shared standards between Algebra I and Algebra II. For example, A-SSE.A.2 has a new factoring limitation for trinomials in Algebra I, where the lead coefficient will be a 1 (after possibly factoring out an GCF). In Algebra II, quadratic expressions will include leading coefficients other than 1.</p>
<p>Add and Consolidate Standards to improve coherence, focus and reduce redundancy among grade levels.</p>	<p>Kindergarten standard K.OA.B.6 was added to help solidify pattern recognition and creation from Pre-K to Grade 2. In addition, standards regarding time and money (K.MD.B.4, 1. MD.3a, b and c, 2.MD.C.7 and 8) were added/modified to smooth the transition of building these skills at the PreK-Grade 4 level.</p> <p>Standard 6.G.A.5 <i>Using area and volume models to explain perfect squares and perfect cubes</i> 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.</p> <p>Standard 2.G.A.1 <i>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</i></p>

	<p><i>by measuring.</i>), was replaced with <i>Classify two-dimensional figures as polygons or non-polygons</i>. 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).</p> <p>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.</p>
<p>Maintain the Rigor of the Standards by balancing the need for conceptual understanding, procedural skill and application.</p>	<p>The fluency standards at the high school level are now clearly defined.</p> <p>The Geometry standard G.SRT.D.9 <i>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</i>, was added to allow students the opportunity to apply their knowledge of right triangle trigonometry (conceptual/procedural) to general triangles (application).</p>
<p>Create a Glossary of Verbs associated with the mathematics standards. This glossary contains a list of verbs that appear throughout the revised standards recommendations.</p>	<p>The term “explore” is now utilized in some standards to alleviate grade-level appropriateness concerns.</p>

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