New York State Next Generation English Language Arts and Mathematics Learning Standards

New York State Next Generation Learning Standards Now Available

The Board of Regents adopted the newly revised English Language Arts and Mathematics Learning Standards on September 11, 2017. The new standards have been the result of over two years of collaborative work to ensure New York State has the best learning standards for our students. Over 130 educators and parents worked together to make recommendations and revise the standards, resulting in a new set of revised English Language Arts and Mathematics Learning Standards. Additional information about the timeline for implementation in schools is available from Standards and Assessment Implementation Timeline.
Next Generation Learning Standards Roadmap and Implementation Timeline

The Next Generation English Language Arts (ELA) and Mathematics Implementation Roadmap is a document prepared by the State Education Department to assist educators' transition to fully implement the new Next Generation Standards. The Roadmap’s goals and activities were designed by the State Education Department in collaboration with various local school districts and stakeholders to ensure that all New York State schools would be equipped to implement the Next Generation Standards. The overall timeline for the implementation of the Next Generation ELA and Mathematics is as follows:

- **September 2017**: Adoption of NYS Next Generation Learning Standards.
- **Phase I: Raise Awareness (Winter 2018-Winter/Spring 2019)**: Professional development on NYS Next Generation Learning Standards; two-day assessments measuring the 2011 P-12 Learning Standards.
- **Phase II: Build Capacity (Spring 2019-Summer 2020)**: Professional development continuing on NYS Next Generation Learning Standards; two-day assessments measuring the 2011 P-12 Learning Standards.
- **Phase III Full Implementation (September 2020 – ongoing)**: Full implementation of the NYS Next Generation Learning Standards.
- **Spring 2021**: New grade 3-8 tests measuring the NYS Next Generation Learning Standards. The timeline regarding the full-implementation/assessment alignment at the high-school level has not yet been determined and will be forthcoming; however, full-implementation/assessment alignment will not be before the school year 2020-2021.
### Phase I: Raise Awareness

Starting in Winter 2018 through Winter/Spring 2019, we want to ensure all education stakeholders are aware of the revised standards and the timeline for implementation and highlight areas of impact with respect to current standards, instruction, and assessment. This collaborative phase will help identify the necessary professional development that will occur in Phase II.

Please note: In Spring 2021, the NYS 3-8 assessments will align to the NYS Next Generation Learning Standards. The timeline regarding assessment alignment at the high school level has not been determined and will be forthcoming.

|----------------------|-------------------------------------------|

<table>
<thead>
<tr>
<th>Goal(s)</th>
<th>Key Implementation Activities</th>
<th>S/CDIN &amp; BOCES</th>
<th>Local School Districts</th>
<th>Other Stakeholder Groups</th>
<th>Action Steps Taken (To be completed by local districts)</th>
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<tbody>
<tr>
<td><strong>Goal 2: Understand and clearly communicate the changes between the 2011 P-12 Learning Standards and the NYS Next Generation Learning Standards.</strong></td>
<td>Review the Introduction to the New York State Next Generation Early Learning Standards, the Pre-K to the 11-12 ELA and Mathematics Standards, and the Next Generation Learning Standards. Introductions for both ELA and Mathematics, identifying potential needs for future professional development in Phase II.</td>
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<td>Review and discuss Dr. Levan’s literacy tools that offer deep explanation of concepts shared in the standards. Provide guidance to district that serve linguistically diverse learning populations. Additional resources: Blueprint for Improving Results for Students with Disabilities and Blueprint for English Language Learner Success.</td>
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<td>Review the new Lifelong Practices of Readers and Mathematicians. Identifying potential needs for future professional development in Phase II.</td>
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<td>Create and release crosswalks that show the differences between the 2011 P-12 Learning Standards and 2017 NYS Next Generation ELA and Mathematics Standards.</td>
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* NYSED, S/CDIN, BOCES, Local Schools, professional organizations, NYSUT, NYS Teacher Centers, IHEs, PTA, and others

### Phase II: Capacity Building

Starting in Spring 2019 through Summer 2020, we will provide guidance and support for districts with regards to the professional development needs identified in Phase I, with a focus on the integration of the Next Generation ELA and Mathematics Learning Standards into curriculum, instruction, and assessment design.

### Phase III: Implementation

In September 2020 and on, local school districts will fully implement the NYS Next Generation Mathematics and ELA Learning Standards in classrooms for Prekindergarten-Grade 12.

*Please note: In Spring 2021, the NYS 3-8 assessments will align to the NYS Next Generation Learning Standards. The timeline regarding assessment alignment at the high school level has not been determined and will be forthcoming.*
## Phase I: Raise Awareness

Make all education stakeholders aware of the revised standards and the timeline for implementation; highlight areas of impact with respect to current standards, instruction, and assessment. This collaborative phase will help identify the necessary professional development that will occur in Phase II. Please note: In Spring 2021, the NYS 3-8 assessments will align to the NYS Next Generation Learning Standards. The timeline regarding assessment alignment at the high school level has not been determined and will be forthcoming.

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<td><strong>Goal 2: Understand and clearly communicate the changes between the 2011 P-12 Learning Standards and the NYS Next Generation Learning Standards.</strong></td>
<td>Build, support, and enhance knowledge of the NYS Next Generation ELA and Mathematics Learning Standards in the public sector (other stakeholders, higher education, parents, and the community) to promote effective implementation.</td>
<td>NYSED: ☒, S/CDN &amp; BOCES: ☒, Local School Districts: ☒, Other Stakeholder Groups: ☒</td>
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<td><strong>Goal 3: Develop a P-12 district/building/grade level plan to be utilized in Phase II for curriculum development and professional development aligned to the NYS Next Generation ELA and Mathematics Learning Standards.</strong></td>
<td>Identify district-level policies, initiatives, funding, and schedules that will support implementation.</td>
<td>NYSED: ☒, S/CDN &amp; BOCES: ☒, Local School Districts: ☒, Other Stakeholder Groups: ☒</td>
<td>☒ ☒ ☒ ☒</td>
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<td><strong>Goal 4: Support the development of summative assessments at the state level aligned to NYS Next Generation ELA and Mathematics Learning Standards.</strong></td>
<td>Work collaboratively with the Office of State Assessment to analyze the standard changes and implications to the test development cycle/guidance documents. Note: New York State Education Department State Assessment teacher participation opportunities are available on the OSA website.</td>
<td>NYSED: ☒, S/CDN &amp; BOCES: ☒, Local School Districts: ☒</td>
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**Action Steps Taken** (To be completed by local districts): ☒ ☒ ☒
New York State Next Generation Mathematics Learning Standards

2017
The Introduction: Why Start Here?

Why is there a need for change?

What is the relationship between standards, curriculum, instruction and assessment with regards to student learning?

How do we make the standards accessible to our diverse learner populations?

What is the importance of connecting the Content Standards to the Standards for Mathematical Practice, and what does this look like?
In 2015, New York State (NYS) began a process of review and revision of its current mathematics standards adopted in January of 2011. Through numerous phases of public comment, virtual and face-to-face meetings with committees consisting of NYS educators (Special Education, Bilingual Education and English as a New Language teachers), parents, curriculum specialists, school administrators, college professors, and experts in cognitive research, the New York State Next Generation Mathematics Learning Standards (2017) were developed. **These revised standards reflect the collaborative efforts and expertise of all constituents involved.**
2015 Legislative Requirement:
Standards re-evaluated with stakeholder input

NYSED conducted a survey (AIMHighNY) of teachers, parents and other stakeholders about the current standards. More than 10,500 people responded to the survey and provided over 750,000 pieces of feedback.
2015 Legislative Requirement:
Standards re-evaluated with stakeholder input

NYSED formed the Mathematics Learning Standards Review committee comprised of more than 68 educators and key stakeholders across the state that met for a week in Albany during July

Fall 2015

April 2016
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.
2015 Legislative Requirement:
Standards re-evaluated with stakeholder input

NYSED released the new draft learning standards for public comment and received more than 4,100 comments
2015 Legislative Requirement:
Standards re-evaluated with stakeholder input

The Mathematics Content Advisory Panel and other committees reviewed every learning standard, making any necessary modifications based on professional expertise as well as input gathered from public comment and child development experts.
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2015 Legislative Requirement:
Standards re-evaluated with stakeholder input

Revised learning standards presented to the Board of Regents

- Fall 2015
- April 2016
- Sept. 2016
- Dec. 2016 – April 2017
- May 2017
2015 Legislative Requirement:
Standards re-evaluated with stakeholder input

Next Generation Mathematics Learning Standards approved by the Board of Regents

- Fall 2015
- April 2016
- Sept. 2016
- Dec. 2016 - April 2017
- May 2017
- Sept. 2017
The New York State Next Generation Mathematics Learning Standards (2017) reflect revisions, additions, vertical movement, and clarifications to the current mathematics standards. The Standards are defined as the knowledge, skills and understanding that individuals can and do habitually demonstrate over time because of instruction and learning experiences.
These mathematics standards, collectively, are focused and cohesive—designed to support student access to the knowledge and understanding of the mathematical concepts that are necessary to function in a world very dependent upon the application of mathematics, while providing educators the opportunity to devise innovative programs to support this endeavor.
As with any set of standards, they need to be rigorous; they need to demand a balance of conceptual understanding, procedural fluency and application and represent a significant level of achievement in mathematics that will enable students to successfully transition to post-secondary education and the workforce.
How do these four components work together to support student learning?
Introduction

Context for Revision of the NYS Next Generation Mathematics Learning Standards (2017)

- Changing expectations for mathematics achievement
- Increasingly Diverse Learner Populations
- Students with Disabilities and the Standards

Understanding the NYS Next Generation Mathematics Learning Standards (2017)
Round Robin

• Each team of 4 will be provided a set of task cards to read

• While reading your assigned task card, answer the following:
  • What is the most important takeaway?
  • How do you relate your takeaway to standards, curriculum, instruction, and/or assessment?
What types of learning experiences support these changing expectations?
Describe how the shapes are growing.

Case 1

Case 2

Case 3
Continuous Round Table

- Pass your paper clockwise
- Read your teammates description
- Write at least 1 comment reflecting on their description
- Repeat process until you receive your paper back
That’s Me!

• Which method do you identify with?

• We’ll share some common strategies. If you hear one of yours, stand up and say, “That’s me!”
Raindrop Method
Bowling Alley Method
Wayne’s World
Red Sea Method
Square Method
Team Collaboration

• What would the 6th case look like? How many total blocks would it have? How do you know?

• How many blocks would there be in the n-th case? How do you know?
How Do The NYS Next Generation Mathematics Learning Standards Support These Changing Expectations?

Connecting Content to Practice

Standards for Mathematical Content

NY-3.OA.9
NY-4.OA.5
NY-5.OA.3
NY-6.EE.1
NY-6.EE.2
NY-6.G.5
AI-F.BF.1a
How Do The NYS Next Generation Mathematics Learning Standards Support These Changing Expectations?

Connecting Content to Practice

What are the Standards for Mathematical Practice?
Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning
Table Talk

• Each table has been assigned a number
• At your table fill in the following sentence frame:

  SMP ________ Looked like __________ and
  Sounded like ______________ during this activity.
Work as an impactful and motivated data scientist developing technical solutions to complex problems. Analyze data to identify trends and support the development of mission-related analyses, using techniques such as econometrics regression analysis, cluster analysis, Bayesian analysis, discriminant analysis, sentiment analysis, support vector machines, survival analysis, and other modes of machine learning. Contribute to the development of new concepts and experiments, translate these ideas into executable action plans, and communicate these plans to a diverse client base. Create mathematical models and programs used to test solutions to complex systems. Work within cross-functional teams to engage the client, comprehend the client's problems, develop strategic analytical products, support requirements analysis, including process and systems analyses, support the development of business and system architectures, and define actionable system requirements.
What do the Standards for Mathematical Practice Look and Sound Like in Kindergarten?

https://www.teachingchannel.org/videos/pre-k-math-lesson
Boards of Cooperative Educational Services (BOCES)
Staff and Curriculum Development Network (S/CDN)

Whose mission is to strengthen the capacity of school districts to promote successful attainment of the New York State Standards by all students.
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.

**Grade Band Committees**

- **Facilitator**: Content Advisory Member
- **Teachers**: P-12, ENL, Special Education
- **Administrators**: Building level, District level, Instructional Coaches
- **College Professors**: SUNY, CUNY, Community Colleges
- **Parents**: Urban, Suburban, rural, ENL, SWD