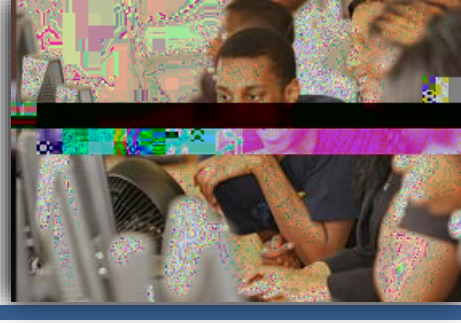
New York State P-12 Science Learning Standards

Phase I:
Raise Awareness - Build Capacity
Spring 2018

Office of Curriculum and Instruction

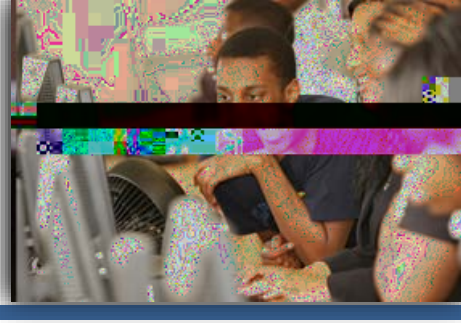
New York State EDUCATION DEPARTMENT

Goals



- Share opportunities for educators/students
- *Standards background and development*
- Share information and materials to support standards implementation
- Discuss 2017-2018 implementation outline

Opportunities



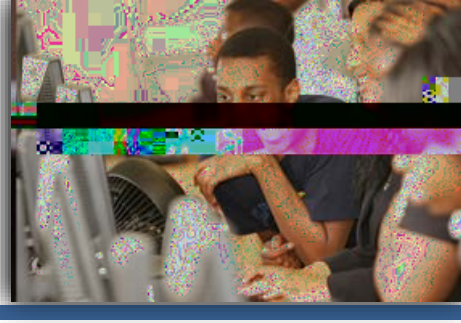
- Presidential Award of Excellence in Math and Science Teaching 2017-2018
  - K-6
  - Nomination/self-initiation

  New York State Presidential Award of Excellent Information

  2016-2017 New York State Finalists Announcement

  https://www.paemst.org/

Opportunities



- Request for Proposals (RFP) for the 2018-2019 Title II, Part B - Mathematics and Science Partnership (MSP) Program.
- RFP #GC18-017 is posted on P-12 Grants Administered by NYSED
- **All proposals must be postmarked by Friday, April 6, 2018.**

- Questions relative to this RFP must be sent to EMSCMSP@nysed.gov no later than close of business on Monday, March 5, 2018
- A questions and answers summary will be posted by Friday March 23, 2018

New York State P-12 Science Learning Standards

In December 2016, the Board of Regents:

- Approved new State science learning standards, with an initial transition beginning with the 2017-2018 school year.

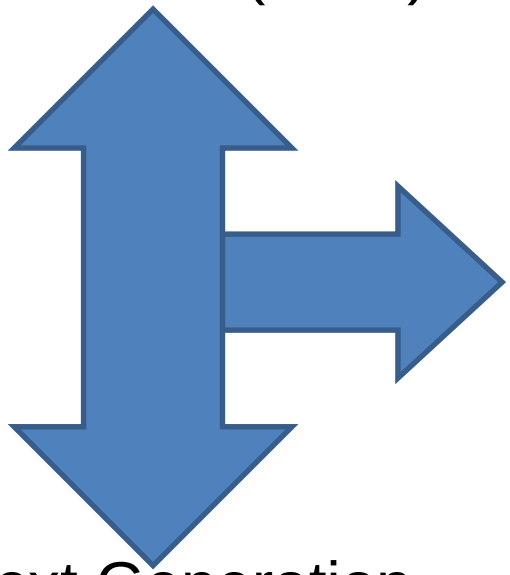
http://www.regents.nysed.gov/common/regents/files/1216p12a1.pdf

http://www.p12.nysed.gov/ciai/mst/sci/documents/p-12-science-learning-standards.pdf

New York State P-12 Science Learning Standards

National Science Education Standards (1996) & Benchmarks for Science Literacy (1993)

A Framework for K-12 Science Education (2012)



Next Generation Science Standards (2013)

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New York State P-12 Science Learning Standards

Architecture of the Science Standards

- **Title Box** – Indicates grade level for PreK-5, grade band (6-8, 9-12) for middle school and high school and Topic Area.
- **Performance Expectations Box** – Includes each Performance Expectation for that Grade level/Topic Area and Clarification Statement and/or Assessment Boundary, as appropriate.
- **Foundations Boxes** – Include pertinent Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts to further define the Performance Expectations.
- **Connections Boxes** - Include connections to other Disciplinary Core Ideas within the same grade level, articulations of Disciplinary Core Ideas across grade levels, and will include updated connections to revised state learning standards in Mathematics and English Language Arts & Literacy when adopted.


New York State P-12 Science Learning Standards
5. Structure and Properties of Matt
evidence supporting a model could include adding air to expand a basketball, compressing air in a syringe, dissolving sugar in water, and evaporating salt water.]
[Assessment Boundary: Assessment does not include the atomic-scale mechanism of evaporation and condensation or defining the unseen particles.]
or changes could include phase changes, dissolving, and mixing that form new substances. Assume that reactions with any gas
5-PS1-3 Make observations and measurements to identify materials based on their properties
5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances
The performance expectations above were deve

New York State P-12 Science Learning Standards

Initial Transition Curriculum & Instruction

- Coherent professional development opportunities are vital.
- Continued collaboration among science education stakeholders will ensure building awareness and capacity of teachers and leaders of science at the local, regional, and state levels.
- Continued focus of science education stakeholders on the critical components of the Statewide Strategic Plan for Science will enhance opportunities for student achievement of the new NYS P-12 Science Learning Standards.

New York State P-12 Science Learning Standards

New York State Statewide Strategic Plan for Science:

A plan that aligns to the mission, vision and six key components of the *Statewide Strategic Plan for Science across 3 phases;*

New York State P-12 Science Learning Standards

Proposed Phases of Implementation:

- **Three Phases**

  Phase I - Initial Transition

  Raise Awareness and Build Capacity

  Phase II -Transition and Implementation

  Phase III - Implementation and Sustainability-

More information and periodic updates can be found on the Department's website at

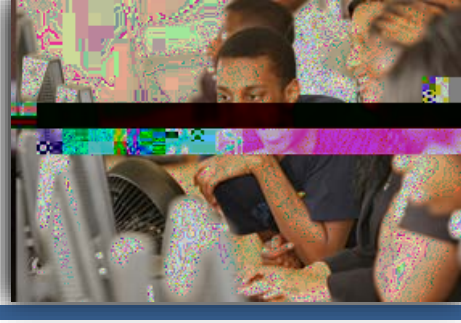
http://www.p12.nysed.gov/ciai/mst/sci/nyssls.html

Standards Introduction

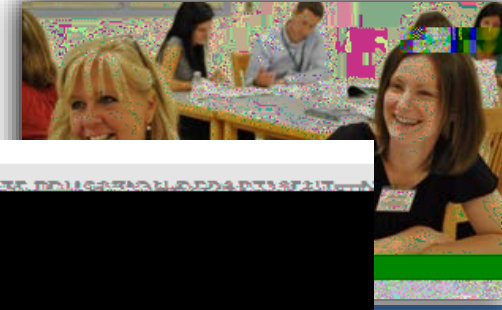
- Context
- Diverse learner populations
  - English Language Learners/Multilanguage Learners
  - Students with Disabilities
- Organization
- Connecting to Performance Expectations

http://www.p12.nysed.gov/ciai/mst/sci/NYS_Science_Intro.pdf

Roadmap



- Guidance document that pinpoints goals, objectives and activities aligned with three phases to address a systematic and systemic transition to new standards based on the Statewide Strategic Plan for Science.



Influencing Factors

- ESSA
  -

New York State P-12 Science Learning Standards

Assessment System Transition

- New local and state-level assessments will need to be developed to measure the learning expectations included in the new standards.
- New local and state-level assessments should focus on evaluating student achievement of three-dimensional learning – Science and Engineering Practices, Crosscutting Concepts, and Disciplinary Core Ideas.
- Proposed State Assessments:
  - Grade 5
  - Grade 8
  -

New York State P-12 Science Learning Standards

Timeframe	Phase I - Initial Transition
2017-2018 School Year	Engage relevant stakeholder groups to help outline a transition strategy for the new NYS P-12 Science Learning Standards in alignment with the Statewide Strategic Plan for Science to the New York State P-12 Science Learning Standards Implementation Roadmap.
	Phase I: Raise Awareness, Build Capacity of new NYS P-12 Science Learning Standards; Collaborate with relevant stakeholder groups to build awareness of the new NYS P-12 Science Learning Standards across the state. Develop and propose assessment frameworks for State assessments in science

EMSCURRIC@nysed.gov