

New York State EDUCATION DEPARTMENT

Knowledge > Skill > Opportunity

Turnkey Guidance for Let Me Introduce Myself: The Next Generation Mathematics Learning Standards Introduction

<u>Goal:</u> To provide educators with essential questions and discussion points that will guide upcoming work with regards to transitioning to the NYS Next Generation Mathematics Learning Standards and how to support all learner populations during the process.

Materials needed:

- Let Me Introduce Myself PowerPoint
- Let Me Introduce Myself Task Cards
- Let Me Introduce Myself Squares Upon Squares Worksheet
- <u>Next Generation Mathematics Standards Introduction</u> (found on page 3 in the beginning of the standards document)

Optional Materials:

- <u>A Series of Topic Briefs Produced for the New York State Education Department</u> by Nonie K. Lesaux, PhD and Emily Phillips Galloway, EdD.
- Blueprint for English Language Learner Success
- Blueprint for Improved Results for Students with Disabilities

Instructions:

- Prior to the presentation, send attendees copies of the Learning Standards Introduction and any optional materials that you will be using. Encourage all participants to read the materials in advance and bring print/digital copies to the session.
- Included below are notes for each of the steps along the way, as well as links to resources that delve further into each topic.

STOP 1: THE TIMELINE

Highlight slide 4, showing the timeline of where we started with respect to the adoption of the NYS Next Generation Learning Standards this past September, and when full-implementation of these standards will take place. Full implementation will begin with the 2020-2021 school year for grades PK-8, meaning that state assessments for grades 3-8 will be aligned to the NYS Next Generation Learning Standards. Information regarding full-implementation/state assessment alignment at the high school level with be forthcoming, however this will not take place prior to the school year 2020-2021.

As your participants will see, the transition period to full-implementation has been broken down into three phases: raising awareness, building capacity and full-implementation. The focus of this presentation will be on raising awareness and how the information found in the introduction to the standards document supports upcoming planning by providing guiding thoughts as to what needs to be considered as districts move forward with transition work in regards to curriculum and instruction.



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STOP 2: INTRODUCTION TO THE STANDARDS, WHY STOP HERE?

Highlight slide 8. The introductory material is essential as it provides key understandings about the new standards as well as the context for the revision. The focus of the conversations that will take place today include:

- What is the relationship between standards, curriculum, instruction and assessment with regards to student learning?
- Why is there a need for change?
- How do we make the standards accessible to our diverse learner populations?
- How do we connect content to practice?

We will be walking through these pieces together.

STOP 3: DEFINING STANDARDS, CURRICULUM, INSTRUCTION AND ASSESSMENT

Highlight slides 17-20: These slides focus on the second paragraph of the Introduction, which contains working "definitions" of the four terms: Standards, Curriculum, Instruction, and Assessment. The overriding task is to discuss the following:

- How do standards, curriculum, instructions and assessment relate?
- How are they different?
- How do they collectively support student learning?

<u>Activity</u>: Working in groups of 4, using one piece of blank paper, have each group develop a visual that represents the relationship between standards, curriculum, instruction, and assessment AND THE IMPACT ON STUDENT LEARNING. Have groups volunteer to share and explain their visual.

STOP 4: DIVERSE LEARNER POPULATIONS

Highlight slide 21: Pages 3-5 of the introduction focus on what drives the need for reviewing and modifying the standards, so they best reflect the educational demands of our ever-changing world.

<u>Activity</u>: Highlight slide 22. To deepen the understanding of the first 4 sections of the Introduction, engage in a round robin jigsaw task.

Teams of 4 will be provided a set of task cards. Everyone in the group will get one of the task cards which contains text from the introduction on the following:

#1 Changing expectations for mathematics achievement

#2 Increasingly Diverse Learner Populations

#3 Students with Disabilities and the Standards

#4 Understanding the NYS Next Generation Mathematics Learning Standards



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Participants will be asked to individually read their task card, and consider what the biggest take away is, and how they envision the main message impacting future planning of standards, curriculum, instruction, and assessment. Once all group members have had time to read and reflect, each participant will share their takeaways with the rest of the group (round-robin discussion).

Depending on time, a large group discussion could take place, with groups sharing their takeaways.

The <u>Blueprint for English Language Learner Success</u> and the <u>Blueprint for Improved Results</u> for <u>Students with Disabilities</u> are mentioned in task cards #3 and 4. Task card #1 touches upon the need for advanced literacies; the skills and competencies that enable communication, spoken and written, in increasingly diverse ways and with increasingly diverse audiences that make way for participation in academic, civic, and professional communities, where knowledge is shared and generated (<u>Topic Brief One: Advanced Literacies for Academic Success</u>). Depending on the length of the professional development session, these supporting documents could be pulled in for discussion and the generating of take-aways that could be utilized in upcoming planning.

STOP 5: STANDARDS FOR MATHEMATICAL PRACTICE

Highlight slide 7: While the content standards with the 11 domains for grades Pk-8 and 6 conceptual categories at the high school level set a core foundation of mathematical skill and are coherently built upon by grade level, their strength lies in the opportunities embedded that allow for our students to engage in the 8 standards for mathematical practice, those 8 habits of mind become part of our students' natural mathematical routine within and outside of the mathematics classroom.

<u>Activity</u>: Have participants read the last two sections of the introduction: <u>Standards for</u> <u>Mathematical Practice</u> and Connecting the Standards for Mathematical Practice to the Standards for Mathematical Content, located on pages 7-9.

Individually, group members should reflect on the following questions:

- What do you observe about the practices?
- How do/should they connect to the content? Why is this important?
- Which practices do you regularly see at school? What are the pieces of evidence?

Once all group members have had time to read and reflect, each participant will share their thoughts the rest of the group (round-robin discussion).

Highlight slide 23: It is important to have learning experiences that connect content with practice, allowing content to be accessible to ALL STUDENTS.

<u>Activity</u>: Have participants engage in the low floor high ceiling task (Squares upon Squares) that comes from Jo Boaler and YouCubed.org., which is covered on slides 24 – 32.



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<u>Activity</u>: After completing the Squares upon Squares task, highlight slides 34-36. Assign each group a SMP (slide 35) and have each group fill out the sentence frame given on slide 36 (SMP ______ Looked like ______ and Sounded like ______ during this activity. Have each group share their sentence frames.

STOP 6: SUMMING IT UP and Other Considerations

Highlight slide 37 and give the group a moment to read the job description. Discuss what potential employers are looking for and how employer expectations tie directly to what was discussed in the session today.

Other possible talking points could include the following:

- What does our district currently do to support advanced literacies and culturally responsive education in the classroom? What role does "unstructured" problem solving in the mathematics classroom have in this process? What further work needs to be done and how should this guide our implementation planning?
- What should the areas of focus be for phase two of implementation, building capacity?
- From our work with parents, what aspects of this session should be shared with them and highlighted as we move forward with our transition to the Next Generation Mathematics Learning Standards as a district?