

Turnkey Guidance for Utilizing the New Teacher-Support Features Built into the Next Generation Mathematics Standards

<u>Goal:</u> To provide educators with essential turnkey information they will need to prepare instructors for the transition to the NYS Next Generation Mathematics Learning Standards and how to support all learner populations during the process.

Materials needed:

- <u>Utilizing the New Teacher-Support Features Built into the Next Generation Mathematics</u> Standards PowerPoint
- Next Generation Mathematics Learning Standards Document
- Comparing Common Core to Next Generation standards 2-sided handout
- Treasure Hunt recording sheet
- Treasure Hunt handout for reference

Optional Materials:

- Broome-Tioga BOCES has created an enhanced standards document (digital version) that is available from their math web page: Broome-Tioga BOCES Enhanced Math Standards Document. This document is utilized in stop 4 of the toolkit.
- Standards for Mathematical Practice (found on pages 7-8 in the <u>Next Generation</u> <u>Mathematics Standards</u> document)

Instructions:

- Prior to the presentation, send attendees a copy or link to the Next Generation Mathematics Learning Standards document to download for reference in 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: Why a Revision

- Slides 1-2: Welcome attendees and share objectives of this turnkey session.
- Slide 3: Explain that Bill McCallum, one of the lead authors of the Common Core Mathematics Standards, was thinking about the importance of states revising a common set of standards even before the Common Core was initially adopted, such as well-developed research-based curricula.
- Slide 4: Point out imperfections in the Common Core Standards document, including inconsistent fonts and alignment on the page, highlighting, lack of whitespace, and inconsistent footnotes.
- Slides 5-8: Share that the Common Core Standards were not released as a stand-alone document, but that other materials from PARCC and the Progressions and other

materials add clarity to the meaning of the standards. The Next Generation Mathematics Standards have been structured to avoid many of these challenges.



STOP 2: Comparing the Next Generation Mathematics Standards to the Common Core Standards

Activity: Highlight slide 9-10 for question prompts. Give attendees the comparing Common Core to Next Generation standards 2-sided handout. Attendees will compare with a partner or small group near them. Use guiding questions on slide 9-10 to get attendees talking. Attendees may refer to page 37 in the Next Generation Mathematics Learning Standards document for further reference. Allow time for attendees to share their findings and questions.

STOP 3: Identifying the built-in teacher supports

Highlight slides 11-19. These slides focus on the main **teacher supports** in the Next Generation Mathematics Standards document.

- Slide 11: The 'NY' indicator for the Next Generation Mathematics Standards clearly defines the Next Generation Mathematics Standards from the Common Core Standards but still keeps them connected. This allows a user to search for outside resources and materials. It is important to note that resources and materials that don't have 'NY' with the connecting standard could be Common Core aligned but are still relevant with the Next Generation Mathematics Learning Standards.
- Slide 12: The coherence section shows the immediate foundational standard below as well as the immediate standard of impact above. This is the most direct connection to the standard which allows for differentiation for students working below grade level and students working above grade level.
- Slide 13: Visuals and outside document references are located in the right hand section. These are supporting visuals to support the standard for further reference.
- Slide 14: Examples are noted across from the reference to the standard. These examples can be used to further clarify a strategy or statement in the standard.
- Slides 15-16: Notes have been added at the bottom of the page. These notes give direct references to fluency, manipulatives, within-grade connections, and the Standards for Mathematical Practice.
- Slide 17: The linked navigation at the bottom of each page allows the user to navigate to different sections of the standards document.
- Slide 18: The high school standard indicators are now identified by course and *shared* standards are identified for further clarity of what is taught in each course.
- Activity: Reference slide 20 and have attendees work in small groups. They should select a grade level or grade band and go through the standards document to identify where different **teacher supports** are located. Attendees will record their findings in the treasure hunt recording template handout. Allow time for groups to work and discuss

their findings before handing out the treasure hunt reference sheet. Give groups time to check their recording sheet compared to the reference sheet.

STOP 4: Broome-Tioga BOCES Enhanced Standards Document

Highlight slide 22 and have attendees go to the <u>Broome-Tioga BOCES webpage</u>. Have attendees click on the Next Generation Mathematics Standards image on the right side of the webpage. The image is a direct link to an enhanced version of the standards document created by Broome-Tioga BOCES to further support teachers. Reference page 3 of the document to highlight the following enhancements:

- Links to the crosswalk and snapshot documents on each grade level overview page
- In document links to the grade level standards domain for easier document searching
- Referenced visuals within the document are linked to their original source
- All coherence standards have hover overs for a quick view of the connected standards