



WHAT MATTERS NOW NETWORK: MARYLAND

MARYLAND'S FOCUS: IMPROVING STUDENT PERFORMANCE ON THE SCIENCE STATE ASSESSMENT

The Maryland What Matters Now coalition is building middle school science teacher capacity to plan and deliver coherent and Next Generation Science Standards (NGSS)-aligned learning units to improve student achievement in science. In the two participating WMN districts, Prince Georges County Public Schools and Dorchester County Public Schools, the focus has been on providing consistent access to high-quality curriculum and instructional materials, in combination with transforming professional learning communities (PLCs) to allow for identification of high quality instructional materials and lessons, peer observations and structured feedback in PLCs. The outcomes of this work will include measurement of student performance on the Maryland Integrated Science Assessment (MISA).

The teachers and administrators in the WMN schools, along with district and state leaders, committed to working together to transform their school-embedded professional collaboration time (PLCs) from a focus on shared planning to a renewed focus on examining instructional practice aligned to 3D instruction. The science teachers came together in each of their schools for a 3-part PLC series during which they reflected on their selection of lessons and instructional materials and explored new resources and strategies which could help them to more fully access and teach in alignment with the NGSS.

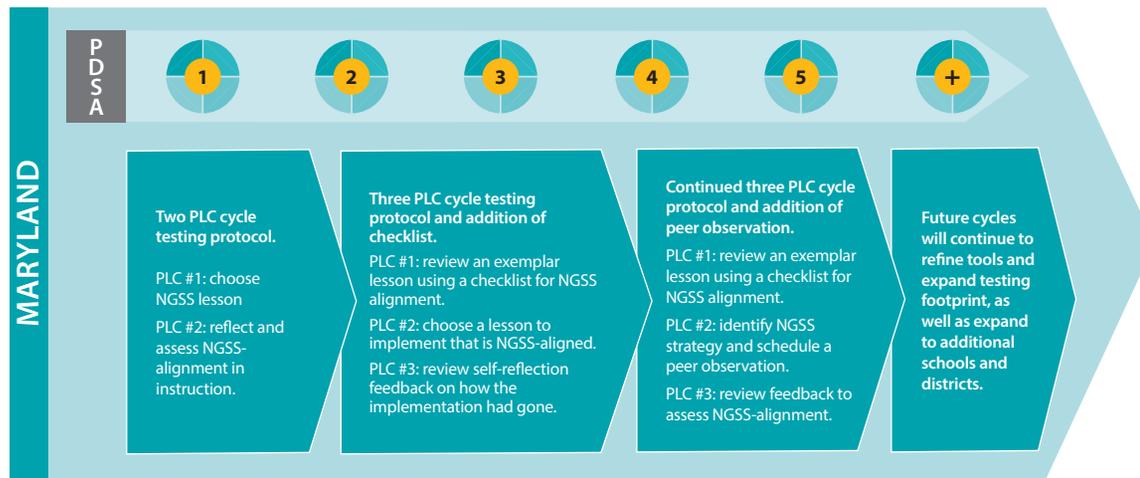




WMN MARYLAND: TOOLS AND SUSTAINABILITY



THE MARYLAND “WHAT MATTERS NOW” COALITION provided the teacher leaders in the four schools with detailed facilitation protocols for their science PLC meetings. In addition, the coalition developed a suite of resources that are designed to help instigate the examination of instructional practice, including: model NGSS learning units; a NGSS Lesson Checklist; a Peer Collaboration tool; and a “Looking at Student Work” protocol.



...teacher teams have gone from a mindset of “we just ‘know’ what to do with our students,” to “we have to ground our work in the data that we see about our students.”

– Participating Teacher

MD PDSA #4 PROTOCOL FOR PLC TEAMS	To serve as a guide for the three Professional Learning Community sequence and the steps teachers need to take in between.
MD NGSS LESSON CHECKLIST FULL VERSION FOR MIDDLE SCHOOL SCIENCE TEACHERS	To assess the quality and NGSS-alignment of a lesson or multi-day lesson sequence.
MD NGSS LESSON CHECKLIST AT A GLANCE VERSION FOR MIDDLE SCHOOL SCIENCE TEACHERS	To assess the quality and NGSS-alignment of a lesson or multi-day lesson sequence.
MD PEER COLLAB TOOL_V4 PDF VERSION FOR MIDDLE SCHOOL SCIENCE TEACHERS	To guide to support peer-to-peer classroom visitations. Includes a pre- visit, day of visit, and post-visit planning and reflection template. Design is focused on the implementation of Next Generation Science Standards, but could used for any content area.
MD PEER COLLAB TOOL_V4 WORD VERSION FOR MIDDLE SCHOOL SCIENCE TEACHERS	Word version.
MD PLC #3 DISCUSSION NOTETAKER FOR PLC TEAMS	To capture reflections during PLC #3 around lesson implementation and peer collaboration
MD SELF-REFLECTION FOR MIDDLE SCHOOL SCIENCE TEACHERS	To gather data from individual teachers re perceptions of changes in practice and changes in student outcomes.



WMN MARYLAND: RESULTS



The coalition collected process data on how the teachers in the four schools experienced the PLC meetings and what they learned from these shared processes and resources. Teachers reported:

- 88%** 88% of WMN teachers strongly agreed or agreed that the PLC processes and tools increased their confidence in delivering NGSS-aligned instruction.
- 88%** 88% of WMN teachers strongly agreed or agreed that the PLC processes and tools helped them to better understand what instructional resources are needed to design and/or implement an NGSS-aligned lesson.

- And, WMN teachers reported that they grew their capacity in using NGSS-aligned curricular resources that resulted in increased student ability to:
 - elicit direct, observable evidence of 3D learning, and
 - increase engagement in both SEPs and CCCS.

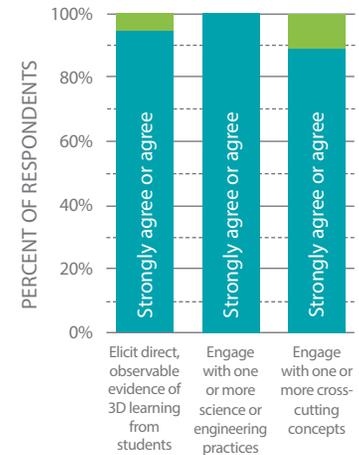
The work in the four schools has spanned eighteen months and three semesters. Summative MISA data was anticipated in spring 2020; however, schools were closed because of the COVID19 pandemic. At this time, we are assessing how to collect summative data going forward.

In addition to quantitative data, WMN Maryland saw local and state level policy changes across the Maryland WMN Network. For example, as a result of WMN, Dorchester County has allocated funding in the coming year to pilot a high-quality science curriculum. At one middle school in Prince Georges County, the administration reconfigured the school's master schedule to ensure protected time for the science team to meet in PLCs. And at the state level, the Maryland State Department of Education approved CEU credit for educators participating in the WMN continuous learning cycles.

PROCESS IMPROVEMENT Post PDSA5 Survey Responses



NGSS IMPLEMENTATION Post PDSA5 Survey Responses



FOCUS ON IMPROVING NGSS IMPLEMENTATION THROUGH PLC PROCESSES HAS BUILT CAPACITY TO USE NGSS-ALIGNED CURRICULAR RESOURCES TO ADVANCE STUDENT LEARNING.



WMN MARYLAND: GOALS MOVING FORWARD

LOOKING FORWARD

The What Matters Now Network is seeking funding to grow its footprint within current participating states and nationally. The participating members are committed to pursuing a structure that continues the core focus of the work and the operating structure of the network and look forward to scaling the work through additional collaboration within each state.



For more information about the What Matters Now Network, visit:
<https://learningforward.org/networks/what-matters-now-network/>.

