

Maureen Miller

STEM Professional Development: Performance Task Assessments

Background: As per WV State guidelines, the Science Assessment is administered to 5th and 8th grade students every year in late April-May. For 5th grade students the standard set is based upon all the science standards at the elementary level and for 8th grade it is based upon the standard sets from 6th, 7th, and 8th grades. The assessment is a set of comprehensive performance tasks which align directly to the WV NGSS. The test is administered completely online, and students are permitted to use scratch paper along with online tools such as calculators and rulers.

Although completely online testing has been in effect in WV for five years, the performance task assessment has been in effect for only two years. West Virginia is currently in the process of vetting the performance tasks in a roll out basis (a grade level per year) so that by 2020 the test will be complete, standards will be aligned, and itemized feedback will be provided to educators. Putnam County Schools is currently in year two of formally developing professional learning communities both at home schools as well as across the county. The PLCs are required participation by all educators and are data driven with the focus that all students can be successful.

Rationale: The professional development session I am proposing is to support the needs of the elementary educators to understand the WV NGSS, so they can create authentic performance tasks assessments. Because the educators will be able to create these assessments, their students will have a better and deeper understanding of the assessment process and thus be more successful.

Audience: The professional development will be offered to primarily 5th grade teachers from across Putnam County but group may include 3rd and 4th grades teachers as decided upon by board administration. The estimated group size is approximately 25 teachers reaching approximately 625 students.

Learning Goals for Educators: *Learning Goal #1:* For the educators to have a deeper understanding on how to interpret the WV NGSS as it relates to student performance and products. *Learning Goal #2:* For the educators to create a performance task that they will implement with their students in preparation for state testing in May. *Learning Goal #3:* For educators to utilize a collaborative online workspace to share created performance tasks with other educators from across the county.

Timeline: This professional development is scheduled to be offered during the county wide continuing education days. It is tentatively scheduled for Friday, January 11, 2019 with the session possibly repeated for another group of educators on Tuesday, February 26, 2019. The location of the session will be determined by the county office. Session length will be approximately three hours, morning or afternoon, as determined by the county office.

Resources: Teachers will be utilizing computers to research, collaborate, and create a performance task. Using the Teams app on Office 365, teachers will share their performance task ideas and products. Teachers will be exploring the pHET website to utilize computer animations that correlate with the performance tasks. They will also explore the Jet Propulsion Lab site <https://www.jpl.nasa.gov/edu/teach/> as a resource to create STEM lessons as a scaffolding activity prior to a performance task assessment.

Desired outcomes: From this professional development session, I hope that the elementary educators are more confident in creating performance tasks for their students as a type of formative assessment. In addition, by meeting as grade level educators from across the county, I hope that the teachers feel supported and encouraged in their sharing of best practices so that all their students can benefit from the shared knowledge.

Follow-up: Because I will also be participating in the Teams page, I will be able to follow along with the conversations as well as the development and implementation of the professional development. Additional professional development sessions will be determined by county level administration.

Data collection: The group will complete a quick survey prior to beginning the session which will determine level of knowledge and comfort regarding performance task assessments. The group will also complete a post-session evaluation regarding the delivery, usefulness, and implementation of the professional development. Results of both will be shared with county level administration.