# Success Story: Math Performance Tasks

November 6, 2021

In the spring of 2021, the Pacific Education Institute (PEI) piloted four brand new Math Performance Tasks with educators across Washington State. By the fall of 2021, the tasks were published and ready to be implemented in K-12 classrooms!
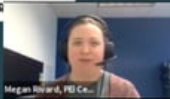
In a three-hour Zoom workshop one Saturday in November, twenty-two K-12 educators joined PEI FieldSTEM Coordinator Megan Rivard (Central Washington) and performance tasks writer Sam Fulton to learn the how and why of Math Performance Tasks. Participants started by exploring the locally relevant phenomena of the invasive brown marmorated stink bug, an insect that can damage food crops. After experiencing the phenomena as a learner, teachers discussed the use of phenomena in mathematics instruction to connect the learning of mathematical concepts to math in the real world. "I have done notice-and-wonder activities in my class, but usually with random pictures. I like the idea of using real data and real-time data!"

# Success Story Cont'd:

Participants were sorted into groups named after animal species of concern in Washington State and spent time defining the who, what, where, when and why for "3-Act Tasks" in mathematics. "Everybody should use performance tasks. They help engage students in the concepts and content being taught and relate it to math in the real world." This discussion was made richer by, and the collaboration was facilitated with, the use of PearDeck and Google Slides. Because field-based learning is so important to PEI, participants also spent time outdoors collecting data for a biodiversity index exercise.
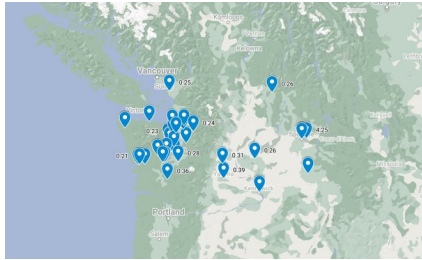


Because field-based learning is so important to PEI, participants also spent time outdoors collecting data for a biodiversity index exercise. Using only a paper and pencil for tools, educators stepped outside to identify and count as many different species as possible. After counting and calculating the biodiversity index of their site, participants input their data into a spreadsheet. The data were used as a jumping off point for discussion and exploration of how real-world data can be displayed in different ways to help students visualize and interpret trends, explore patterns, and more. A collaborative map was constructed with the data to see the biodiversity index for different locations across the state.

The small-group collaboration and discussion time allowed participants to dig deeper into the tasks and brainstorm ways in which they might integrate the tasks into their curriculum. Many participants began asking for more. "When will we see more Math Performance Tasks on your website?" PEI is planning for  new tasks by spring of 2022.