

## NGSS Professional Development Workshop Series

### Constructing Explanations Supported by Arguments

**Grades 6-12: Tuesday February 5, 2019, 9:00 AM – 3:30 PM**

**Grades K-5: Wednesday February 6, 2019, 9:00 AM – 3:30 PM**

**Fee: \$125 Credits: 5.5 PDU Hours**

In 2018-2019, the Science Education Institute at Raritan Valley Community College will offer a series of four one-day workshops designed to support teachers and supervisors with the implementation of the Next Generation Science Standards (NGSS).

The vision behind the NGSS is to provide students with the knowledge and skills so that later in life they can make sense of the natural world and construct explanations for natural phenomena (observable events) on their own. To make this vision a reality, the NGSS requires that students engage in Science Practices to explore how and why natural phenomena occur. As they construct explanations for these natural events they apply their understanding of Core Ideas in science and use Crosscutting Concepts to guide their thinking.



This workshop will focus on Constructing Explanations, Engaging in Argument from Evidence, and Cause and Effect. Participants will engage in NGSS-aligned investigations in a variety of science content areas to deepen their understanding of these Practices and this Crosscutting Concept, and how they mutually support each other. They will take away strategies to help students construct and write explanations and support them with arguments for how the evidence supports the explanation. They will learn how to set norms and use strategies to ensure productive classroom discussions and respectful arguments and how to help students support claims with evidence and/or reasons. Participants will experience and reflect on how Practices, Crosscutting Concepts, and Core Ideas are meaningfully integrated in instruction and assessments using Performance Tasks. There will be time for reflection and to plan NGSS-aligned lessons.

The workshop will be held at Raritan Valley Community College in North Branch (NJ) and will begin promptly at 9 am and end by 3:30 pm. Light breakfast and lunch will be provided.

The workshop leader, Dr. Wil van der Veen, is a nationally recognized expert in science education and is a member of the New Jersey State Leadership Team for the NGSS. Participants will work in small groups that are facilitated by experienced classroom teachers from our NGSS Teacher Leader Program.

**For more information and to register online go to our website at [www.raritanval.edu/ngss](http://www.raritanval.edu/ngss).**

**We recommend sending leadership teams of 3-7 teachers to at least three one-day workshops or the Summer Institute to develop a solid foundation for the NGSS.**