



# NGSS Summer Institute

## LIVE ONLINE

### July 19 – 29, 2021



We are excited to offer our NGSS Summer Institute LIVE ONLINE starting Monday July 19. Join us as we explore how to best support students as they make sense of the world around them using the tools provided by the NGSS. The Institute is designed to support you as you create NGSS-aligned investigations for your classroom whether in person or remotely. We will model what in-school and remote science instruction may look like and how electronic tools can be used to support students' science learning.

The Institute consists of eight 2-hour sessions over two weeks according to the following schedule:

Monday July 19	Tuesday July 20	Wednesday July 21	Thursday July 22
Identifying, selecting, and fine-tuning phenomena and connecting them to NSSS core ideas		Turning NGSS practices into 3D performance tasks and investigating physical science phenomena	
Monday July 26	Tuesday July 27	Wednesday July 28	Thursday July 29
Making NGSS crosscutting concepts explicit and investigating life science phenomena		Using explanation and argument as assessment for learning and investigating earth science phenomena	

Each session takes place from 9 – 11 AM and includes interactive presentations, virtual breakout room discussions, practice, and planning by grade level; investigations are done off-line at home. The Summer Institute will be led by Dr. Wil van der Veen, [author](#) and a nationally recognized expert on the NGSS, and supported by NGSS Teacher Leaders.

#### This is what teachers have said about our online Summer Institute in the past:

*"The way the presentation, chat interactions, breakout rooms, online and offline tasks were setup were wonderful. I will definitely be incorporating these logistics into my own "classroom". Thank you so much for your guidance and all of the resources. These NGSS PDs with you has made the biggest impact on my teaching career; they've helped my confidence as a science educator to grow immensely."*

*"This was definitely an invaluable experience for me. The tools I received in this workshop has given me a clearer path of where I need to focus my energies where my curriculum is concerned. I have a clearer path of how to get my students engaged in content moving forward."*

*"I looked forward to attending each day and I feel like I learned so much through the discussions, given examples and the performance tasks I did myself!"*

#### Teachers can choose from two options to participate:

**Option 1 (\*Recommended\*; All eight sessions; two weeks): July 19-22, 26-29; Fee \$200 (24 pdu's)**  
**The first 30 participants who register for Option 1 will receive a complimentary copy of the book "Engaging Students in Science Investigation Using GRC" by Brett Moulding, Kenneth Huff, and Wil van der Veen (\$35 value).**

**Option 2 (First week only): July 19-22; Fee \$125 (12 pdu's)**

**To register online click here or visit our website at [www.raritanval.edu/ngss](http://www.raritanval.edu/ngss). For more information contact Tina Gandarillas at [tina.gandarillas@raritanval.edu](mailto:tina.gandarillas@raritanval.edu) or 908-526-1200 Ext 8942.**

***This Summer Institute is supported by a grant from the New Jersey Space Grant Consortium.***



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**This is what teachers have said about our online summer institute in the past:**

*"I really enjoyed how we carry the investigations on our own at home because it really gave me the experience from a student point of view who will also be in school online."*

*"I really appreciated the small group break-out sessions. It was awesome getting to ask questions, share ideas, apply what we were learning, and get immediate feedback. I love how we had whole group sessions where we reviewed not only HOW to use the NGSS Planning Guide but also WHY we should be explicit about integrating CCCs and SEPs into each step of the learning investigation as well as using phenomena throughout."*

*"Great job transitioning to a remote version. It was hard to tell that this was not the usual way this would be done."*

*"For an online class with many different components, it was super easy to navigate."*

*"I felt that this course was very professional, offered incredible value, and I could feel the passion of the main presenters."*

**Professional development provided by RVCC's Science Education Institute follows the recommendations from "Teaching K-12 Science and Engineering During a Crisis", National Academy Press, pages 2-1 ([www.nap.edu/25909](http://www.nap.edu/25909))**

1. Maintain a focus on the *Framework's* vision for high quality science and engineering education:
  - a. Learning science and engineering is essential for all students at all grade levels,
  - b. Instruction focuses on student engagement with real-world phenomena and problems, and
  - c. The three dimensions (practices, crosscutting concepts, and disciplinary core ideas) need to be integrated during learning and instruction.
2. Prioritize relationships, equity and the most vulnerable students.
3. Families and communities are critical assets for science and engineering learning
4. Adjusting to changing learning environments and recovering from disrupted learning as an ongoing process that takes time.

**Professional development provided by RVCC's Science Education Institute follows the recommendations from "Science and Engineering for Grades 6-12: Investigation and Design at the Center", National Academy Press, pages 275-278 ([www.nap.edu/25216](http://www.nap.edu/25216))**

1. Science investigation and engineering design should be the central approach for teaching and learning science and engineering.
2. Instruction should provide multiple embedded opportunities for students to engage in three-dimensional science and engineering performances.
3. High-quality, sustained, professional learning opportunities are needed to engage teachers as professionals with effective evidence-based instructional practices and models for instruction in science and engineering. Administrators should identify and encourage participation in sustained and meaningful professional learning opportunities for teachers to learn and develop successful approaches to effective science and engineering teaching and learning.

