

# Year One Workshops

Workshop 1.1 (2-day) | November 15-16, 2018

## Learn Science by Doing Science

This two-day workshop provides an immersive experience where teachers learn science by doing science. Conduct science investigations utilizing the VAEI Instructional Model for Inquiry-Based Science, which integrates a process of scientific inquiry, a rich learning environment, and scientific habits of mind. Learn 4 changes you can make right away to increase student engagement with inquiry-based instruction. Evaluate the role of a growth mindset in transforming science instruction and leave with a ready-to-implement inquiry-based lesson as well as practical strategies to begin transforming your classroom.

### Learning Objectives/Benefits

- Experience a complete investigation sequence that models inquiry-based science (messing about, structured, open, and engineering design).
- Understand how the VAEI instructional model can be used to support teaching and learning with a process of scientific inquiry, a rich learning environment, and scientific habits of mind.
- Learn time-saving connections for integrating science across the curriculum (K-5).
- Learn time-saving strategies for facilitating inquiry-based science (6-12).
- Discover 4 instructional habits that can increase engagement and kick-start inquiry-based instruction.
- Utilize strategies for cultivating a growth mindset in your classroom.
- Select and prepare a lesson where students learn science by doing science.
- Receive customized assistance with implementation plans and lesson feedback.

*1-day option available, but excludes the complete investigation sequence, the customized assistance and feedback, and time for application.*

### Focus Areas

Learning Environment	Scientific Inquiry	Habits of Mind
Experiential introduction to the instructional model for inquiry-based science and specific strategies to begin inquiry-based instruction		

Workshop 1.2 | December 11, 2018; January 22, 2019

## Questions Drive Inquiry

In this one-day workshop, discuss the role journaling plays in helping students construct meaning, and learn ways to incorporate journaling throughout an investigation. Refine your understanding of investigation questions with practical guidance on the creation and evaluation of questions that drive science investigations. Discover strategies to nurture curiosity and student engagement. Share your experiences in implementing inquiry-based lessons and strategies with colleagues and leave with additional lessons and strategies to implement.

### Learning Objectives/Benefits

- Experience an investigation that models inquiry-based science.
- Understand the role of journaling and practical strategies to incorporate journaling.
- Become proficient in evaluating and creating investigation questions that effectively drive inquiry-based investigations.
- Develop strategies that nurture curiosity and increase student engagement.
- Select and prepare a lesson where students learn science by doing science.

### Focus Areas

Learning Environment	Scientific Inquiry	Habits of Mind
Student Engagement	Question	Curiosity



Workshop 1.3 | February 19, 2019; March 12, 2019

## Turning Data into Evidence

In this one-day workshop, explore the role of Data Analysis in the inquiry process, and learn how to help students turn data into evidence with a 4-part process. Discover practical strategies for developing student creativity and critical thinking. Learn how to teach students the importance of integrity in investigations. Use oral and written discourse strategies that put students in the driver's seat of their own learning. Foster an environment that promotes students' use of rich language. Share your experiences in implementing inquiry-based lessons and strategies with colleagues and leave with additional lessons and strategies to implement inquiry-based science.

### Learning Objectives/Benefits

- Experience an investigation that models inquiry-based science.
- Understand the role of Data Analysis and a 4-part process for helping students turn data into evidence.
- Discover engaging strategies to boost student creative and critical thinking skills.
- Learn how to promote student integrity during investigations.
- Use oral and written discourse strategies to increase student ownership of their learning and promote the use of rich language
- Select and prepare a lesson where students learn science by doing science.

### Focus Areas

Learning Environment	Scientific Inquiry	Habits of Mind
Oral and Written Discourse	Data Analysis	Creative Thinking
Rich Language		Critical Thinking
		Integrity

Workshop 1.4 | April 16, 2019; May 14, 2019

## C-E-R in the Collaborative Classroom

In this one-day workshop, learn how to guide students in creating first-rate investigation explanations. Utilize an explanation framework to help students write a claim that is explicitly supported by evidence and reasoning. Help students develop an openness to new ideas, and discover classroom culture strategies that encourage collaboration. Explore a variety of ways that students and teachers can construct meaning together in a rich learning environment. Share your experiences in implementing inquiry-based lessons and strategies with colleagues and leave with additional lessons and strategies to implement inquiry-based science.

### Learning Objectives/Benefits

- Experience an investigation that models inquiry-based science.
- Understand the elements that make up a sound explanation (claim, evidence, and reasoning).
- Utilize a framework to help students write claims that are explicitly supported by evidence and reasoning.
- Learn how to develop a classroom culture where students are open to new ideas.
- Discover strategies that encourage collaboration and the construction of meaning in a rich learning environment.
- Select and prepare a lesson where students learn science by doing science.

### Focus Areas

Learning Environment	Scientific Inquiry	Habits of Mind
Collaboration	Explanation (Claim, Evidence, Reasoning)	Openness to New Ideas
Construction of Meaning		