# Professional Learning Workshops from *Phenomenon Science Education*

## *TEKS AND PHENOMENA I: EVALUATING CLASSROOM ACTIVITIES*

In this professional learning workshop, you will evaluate phenomenon-based activities aligned to the new Texas Essential Knowledge and Skills for Science (TEKS).

- We discuss how the new TEKS change the concept of student proficiency and explore proficiency in terms of the Nature of Science, the Scientific and Engineering Practices, the Recurring Themes and Concepts, and Science Content.
- We review the progressions and student-centered intent of the new TEKS.
- We introduce student proficiency goals as a tool for understanding what students need to do to address the recurring themes and concepts, scientific and engineering practices, and content standards.
- We review phenomenon characteristics and criteria.
- You will learn to map a phenomenon to the new TEKS and then use this method to select workable phenomena for your lessons.
- You will evaluate curricular resources, looking for standards-aligned, phenomenon-based, student-centered activities.
- You will explore modifying lessons to ensure alignment to the new TEKS, and agreement among the TEKS, the phenomenon, and the student tasks.
- You will choose a lesson, evaluate it, modify it if necessary, and then map it to a common learning model (e.g., 5E).
- In the end, you will have a process for evaluating and adjusting lessons so that they will work for you. In addition, you will take home an adjusted lesson that lets your students address a real-world example using science practices and ways of thinking.

*TEKS and Phenomena I* involves sixteen contact hours, plus time spent on assignments. We offer it over two **in-person** days or via **online** blocks that you can schedule as you like. We also offer a three-day in-person version that allows you to dig deeper into both student proficiency and your final project. We customize the content based on enrollment.

This workshop works best if it follows *Introduction to Phenomena for TEKS* or if participants are well versed in the new TEKS and the use of phenomena in a student-centered classroom.

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**Learning Objectives:**

1. I can align a phenomenon to a Recurring Theme and Concept, a Scientific and Engineering Practice, and the Nature of Science to use with a content standard.
2. I can implement proficiency goals for the specific standards students use to address a phenomenon.
3. I can modify activities so that they align to a group of TEKS where students learn core ideas using the dimensions to appropriately address a workable phenomenon.
4. I can recognize the difference between a phenomenon and an engineering design problem.
5. I can identify if more than one phenomenon is necessary to fully address the science content included in a standard.
6. I can map classroom activities to a common learning model.

**Goals:**

1. You will be able to implement phenomenon-based, student-centered, and 3D-aligned learning in your classroom.
    a. You will be able to identify and develop workable phenomena.
    b. You will be able to appropriately interpret and bundle TEKS.
    c. You will be able to modify activities to make them work better in your classroom.
    d. You will be able to implement student-centered learning experiences.

https://www.phenomenon.science/standards-and-phenomena-courses-texas

Contact us to schedule a session: josh@phenomenon.science