

Professional Learning Workshops from *Phenomenon Science Education*



INTRODUCTION TO PHENOMENA FOR TEKS

In this Texas-focused version of our *Introduction to Phenomena* workshop, we explore the use of phenomena in activities and lessons aligned to the new Texas Essential Knowledge and Skills for Science (TEKS) and discuss challenges Texas teachers face in implementing these standards.

- We set you up as a student scientist to review the structure and intent of the new TEKS.
- We dig deep into phenomena, exploring criteria, characteristics, and pitfalls.
- You will evaluate examples of stand-alone phenomena and phenomena associated with published resources, discussing the alignments and merits of each.
- You will evaluate activities in published resources, focusing on the phenomenon, student use of the three dimensions or TEKS elements, and student-centered learning.
- In the end, you will have a process to help you determine if a curricular resource has a phenomenon or anchor that will work for you and aligns to the new TEKS or can be easily modified to align to the new TEKS.

Introduction to Phenomena for TEKS involves eight contact hours, plus assignments. We offer it in online blocks that you can schedule as you like. Or we can come to you and run it in-person over two days, which allows for more interaction. Finally, we offer a one-day in-person version that covers standards and phenomena but omits discussion of published resources and possible modifications (* below indicate material not covered in the one-day version).

Learning Objectives:

1. I can identify and group elements of the new TEKS for a given grade and topic.
2. I can recognize student-centered, TEKS-aligned teaching and learning.
3. I can recognize student-centered sensemaking in a TEKS-aligned activity or lesson.*
4. I can use given criteria to identify and evaluate phenomena.
5. I can recognize when a curricular resource includes a phenomenon and evaluate whether the resource has students address that phenomenon.*
6. I understand that students can use elements of the TEKS to make sense of phenomena.

Goals:

1. You will be able to recognize phenomenon-based, student-centered learning materials that are aligned to three-dimensional (3D) standards and/or the new TEKS.
 - a. You will be able to identify phenomena and evaluate them to determine if a proposed phenomenon will work for a given grouping of new TEKS.
 - b. You will be able to identify connections among recurring themes and concepts, scientific and engineering practices, and science content.
 - c. You will be able to determine if curricular materials 1) align to the new TEKS or can be easily modified to align to them, 2) use phenomena, and 3) integrate 3D-aligned teaching and learning practices.*

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

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