



Curriculum Overview



What is *PhD Science*® *TEKS Edition*?

In 2020, the Texas Education Agency chose Great Minds® to develop high-quality science instructional materials for Levels K–5 through its Texas Home Learning initiative. *PhD Science TEKS Edition* is now available as an open educational resource for all schools in the state through the 2024–2025 school year.

PhD Science TEKS Edition is a phenomenon-based K–5 curriculum in which students' natural curiosity drives the learning as they build enduring knowledge about the real world and its everyday wonders. Classrooms transform into a place of exploration as students learn to think and act like real scientist. Students build their understanding of science concepts by engaging in the TEKS Scientific Investigation and Reasoning standards as they explore authentic phenomena. Students move from just reading about science to *doing* science.

AT THE CORE OF *PhD SCIENCE TEKS EDITION*

AUTHENTIC PHENOMENA

Students explore rich, authentic phenomena through observation, questioning, modeling, investigation, and evidence-based argumentation.

STUDENT-DRIVEN LEARNING

Teachers act as facilitators, allowing students to drive the learning as they wonder and ask questions about phenomena, analyze and synthesize information, and apply new knowledge to solve real-world problems.

COHERENT STORYLINE

Each module weaves a storyline through which students make sense of compelling phenomena, as each lesson builds on previous lessons.

PhD Science in Sync™ *TEKS Edition*

PhD Science in Sync TEKS Edition is a continuous learning program that complements the in-class curriculum and is designed to help students and teachers continue rich science education from anywhere. Now teachers and students can toggle seamlessly from classroom instruction to distance learning.



Hands-On Investigations

Carefully crafted hands-on activities allow students to practice collaboration and problem solving as they build enduring knowledge.



Fine Art

Students engage with art in every module, allowing them to make observations, ask questions, and interact with scientific phenomena in a new, accessible context.



Core Texts

Each module integrates authentic, content-rich trade texts that support or explain the science while giving students an opportunity to practice and strengthen literacy skills.

**GREAT
MINDS**

every child
is capable of
greatness

Program Components

Every component of *PhD Science TEKS Edition* serves a specific purpose in helping teachers facilitate student-driven learning in and out of the classroom.

Print, PDFs, and Manipulatives

- Teacher Edition PDFs
- Science Logbook
- Hands-On Materials Kit
- Core Texts
- Knowledge Deck™

Digital Tools and Materials

- *PhD Science in Sync TEKS Edition*
- Science Journal
- Daily Videos
- PhD Projected
- Learn Anywhere Plans

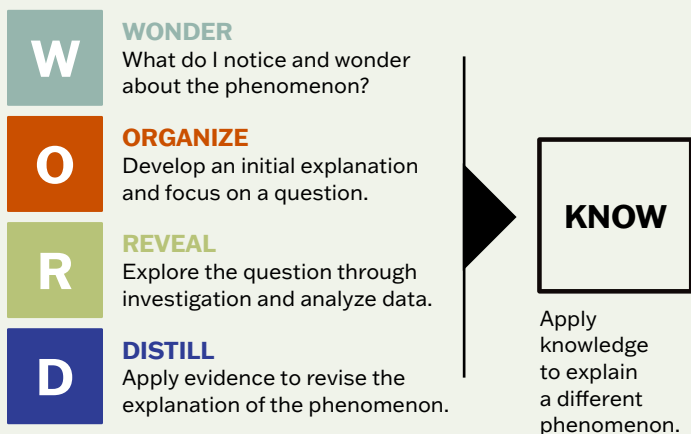


Professional Learning

Professional development and coaching sessions are designed to help teachers and leaders deeply understand the curriculum and prepare for implementation. Delivered virtually or in person, sessions are led by a team of current and former educators who have experience implementing *PhD Science*® in the classroom.

Learning Cycle

During each concept sequence in a module, students engage in the following learning stages.



Pacing

Each of the three modules in a level focuses on a specific anchor phenomenon and includes spotlight lessons on a different science topic. Students seek to answer each module's Essential Question about that phenomenon.

25–35 lessons per module (35–45 minutes per lesson)

- **Launch:** the lesson opening, which engages students as they begin thinking about the lesson phenomenon
- **Learn:** the heart of the lesson, during which students develop new knowledge and apply prior knowledge to explore phenomena
- **Land:** the lesson closing, in which students reflect on what they have learned

Assessments

PhD Science TEKS Edition assessments help teachers affirm student understanding and assess students' ability to apply the conceptual knowledge and skills they've acquired to decipher new phenomena.

Formative Assessments

- **Checks for Understanding**
- **Conceptual Checkpoints**

Summative Assessments

- **Engineering or Science Challenges**
- **End-of-Module Assessments**

“With PhD Science, students were excited by experiments and truly engaged by finding out answers. I now hear students in the hallway talking about what they were doing in class. That wasn't happening before.”

—Mary Morris, 4th Grade Teacher,
E.J. Moss Intermediate School, TX