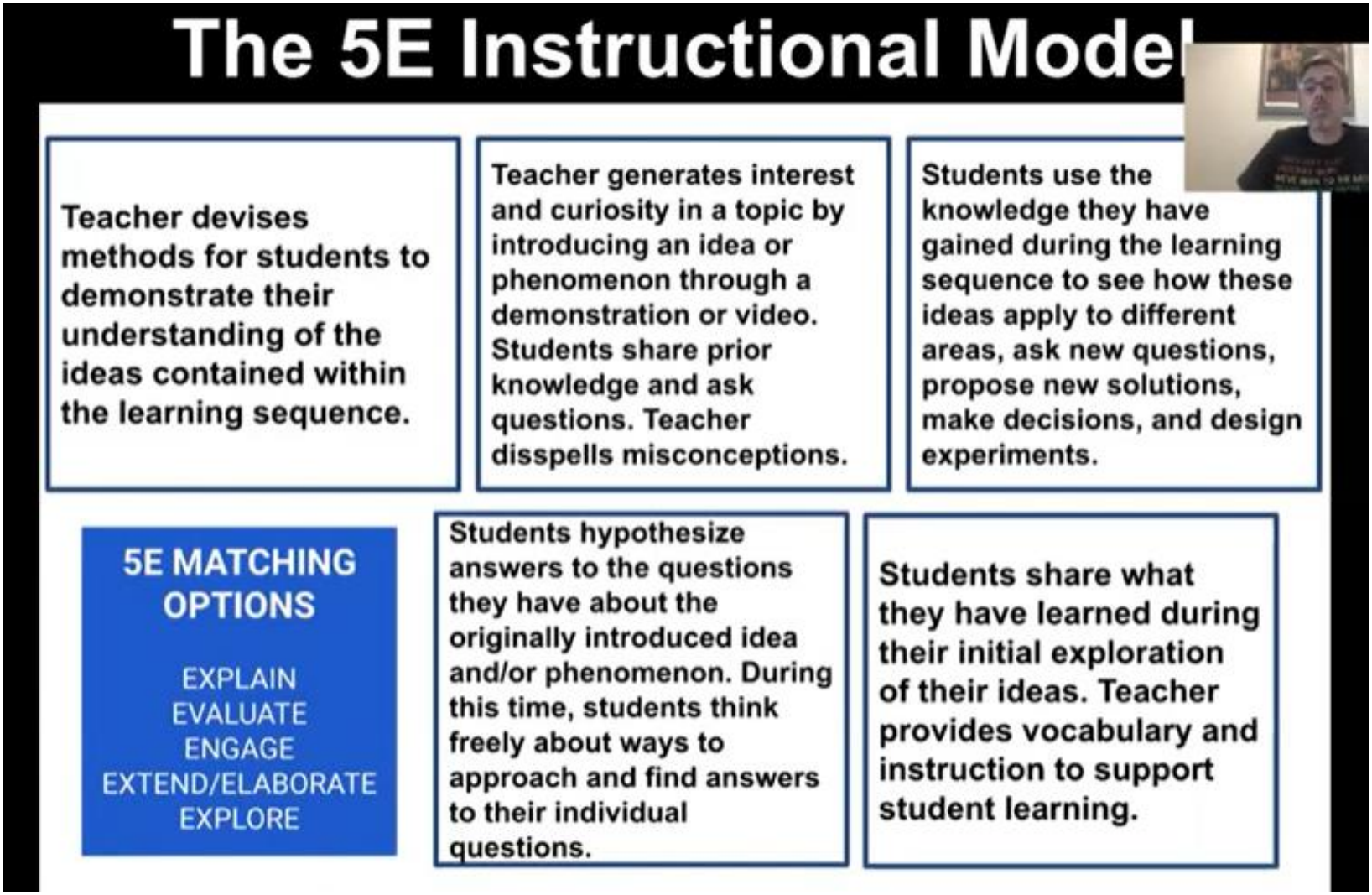
The 5E Instructional Model in Science

The 5E **instructional model** is a process of teaching, learning and doing science. It encompasses specific **phases** which adapt and execute traditional science actions and procedures that promote deep connections and understanding in knowing and doing science. Students collaborate, evaluate, explain, justify and reflect on and provide evidence of their new understanding of scientific concepts, ideas and processes that they are learning. We'll be using this model throughout the year in our teaching and learning of physics.

Activity

The 5E Instructional Model

Directions: Read each description and match them to their correct "E" phase. Then place the phases in logical sequential order according to how you think they should follow for learning and doing science.



The 5E Instructional Model

(1) ENGAGE

Teacher generates interest and curiosity in a topic by introducing an idea or phenomenon through a demonstration or video. Students share prior knowledge and ask questions. Teacher disspells misconceptions.

(2) EXPLORE

Students hypothesize answers to the questions they ENGAGE have about the originally introduced idea and/or phenomenon. During this time, students think freely about ways to approach and find answers to their individual questions.

(3) EXPLAIN

Students share what they have learned during their initial exploration of their ideas. Teacher provides vocabulary and instruction to support student learning.

(4) EXTEND/ ELABORATE

Students use the knowledge they have gained during the learning sequence to see how these ideas apply to different areas, ask new questions, propose new solutions, make decisions, and design experiments.

(5) EVALUATE

Teacher devises methods for students to demonstrate their understanding of the ideas contained within the learning sequence.

5 E's Science Instructional Model for Multiple-day Lessons

Engage

Explore

Explain

Extend

Evaluate