



Cultivating Wonder Throughout the School with John Mays

Lecture I: Apprehending the Wonder of the Moment

Outline:

In this lesson, John Mays models how teachers can cultivate wonder by engaging students in a reflection on light, its mystery, scientific marvel, and profound biblical significance. He introduces a model physics lesson on light not as a technical lecture, but as a contemplative moment that awakens awe and reverence, drawing from scripture, music, and science to present light as a metaphor for God, Christ, and salvation.

*“If the landscape reveals one certainty, it is that the extravagant gesture is the very stuff of creation.” – Annie Dillard, *Pilgrim at Tinker Creek**

Cultivating a Wondering Mind

- The goal is to help students “develop a wondered mind”—to see reality like Annie Dillard sees it, ablaze with beauty and mystery.
- Wonder should be accessible to all teachers and students, not just those in the sciences.

Model Lesson: Introducing Light

- Begins a ninth-grade physics lesson not by diving into textbooks but by posing the question: “Do we know what we’re talking about when we talk about light?”
- Offers quotes from Morris Kline and Richard Feynman to illustrate that even experts confess ignorance about light’s nature.
- Plays a choral piece about light and invites reflection, enhancing contemplation.

Light in Scripture and Theology

- Scriptures describe God as light (1 John 1:5; 1 Tim. 6:16).
- Jesus is described as the “light of the world” and the Logos through whom all things were made (John 1:3, 1:9; Col. 1:16-17).
- Light is linked with salvation and truth (Psalm 27:1; 43:3; Acts 26:18).



- The Nicene Creed reinforces the identity of Christ as “Light from Light.”

Connecting Light, Creation, and Mystery

- Light serves as a nexus for theology, physics, metaphor, and salvation.
- Teachers are encouraged to acknowledge the mystery and not reduce wonder with routine textbook delivery.
- The point: “When you are standing face to face with mystery, do something different.”

Wonder as a Pedagogical Posture

- The teacher’s role is to either reveal or create wonder.
- The lesson on light revealed wonder by interweaving music, scripture, theology, and scientific limitations.
- Wonder is available across all disciplines, not just science.

Examples of Wonder in Science

- Homeostasis: The self-regulating, harmonious complexity of the body’s 37 trillion cells.
- Fine-Tuning of the Universe: Numerous physical constants appear perfectly “dialed in” to sustain life.
- Biological Marvels: DNA replication and cell behavior are staggering in complexity and suggest more than mere mechanical origins.
- Astronomical Awe: The expansion of the universe and the beginning of time point to divine orchestration.

Other Curricular Opportunities for Wonder

- Literature: Beowulf, Shakespeare, and more will be explored in later sessions.
- Even water’s properties (e.g., ice floating) are worth pausing to contemplate.
- Teachers should seize these wonder moments or create them intentionally.