Teaching Science

Reasons Why Teaching Science Is Important

- Science cultivates wonder, and a posture of wonder is a very Christ-like posture.
- Nature declares God's glory, and science class is a chance to explore those declarations.
- God has commanded us to care for the earth and to love and serve our neighbors. Learning about the earth is part of caring for it well. On the other hand, ignorance about the way the physical world works can be harmful.

General Advice and Teaching Tips

- Do not expect to inspire wonder in your students if you do not first engage in the preparation it requires to thrill yourself in what you're teaching.
- Beware of giving explanations too quickly. Instead, ask students "Why?" and let them puzzle over the answers before you explain things in detail.
- Don't shy away from doing experiments—students learn so much more when they see actual things being done rather than just reading it in the book (though reading it in the book is important, too). Make experiments easier for yourself by planning ahead. Before school starts, get a bin and collect everything that you will need to do the experiments, or at least look a few days ahead and get the supplies that will be needed.
- Science sketchbooks are a wonderful teaching tool. Give each student a blank sketchbook with no lines. As you are going over the lesson, encourage students to draw (using colored pencils) and label the main points of what you are studying that day. Tell your students what to draw and model it for them on the board.
- Go on nature walks. You can use this time to find examples of what you have been studying in science.
- Consider assigning text reading as homework. This allows you to maximize class time for exploration and demonstrations.
- It's okay to admit when the full understanding of something is beyond your grasp—in fact, knowledge limits highlight God's expansiveness. You can tell students, "I know it works, here's what I grasp."

Recommended Resources

Below you will find some general, multi-use application resources. However, the Dock contains hundreds of science resources shared by teachers, such as worksheets, study guides, tests, and more. Go to https://thedockforlearning.org/ and search for your specific theme or science curriculum—you may find that another teacher has shared something that can be useful to you.

- An overview of the history of science and the modern scientific method: The Method of Science - The Dock for Learning

- How to use experiments to draw students to wonder and worship: Wonder through Science - The Dock for Learning
- Suggested resources for teaching science in first and second grade: Suggested Resources for Teaching Science in Grades 1 and 2 - The Dock for Learning
- Chemistry lab safety guidelines: Chemistry Lab Safety Guidelines - The Dock for Learning
- Advice on foraging and edible plants: Tasting the Seasons - The Dock for Learning

Sources

- Top Five Practices for Science Class by Deana Swanson Top Five Practices for Science Class - The Dock for Learning
- Wonder through Science by Steven Brubaker Wonder through Science - The Dock for Learning
- Science by the Textbook by Jesse Hurst Science by the Textbook - The Dock for Learning
- Why Teach Science? by James Goering Why Teach Science? - The Dock for Learning