

AFT Materials That Support Science Education

IF YOU'RE LOOKING to promote scientific inquiry, interest families in STEM-related activities, connect with educators in professional learning communities, and engage students in project-based learning, four new free publications from the AFT's educational issues department can help.

Questions to Promote Scientific Inquiry and Engineering Design

<http://go.aft.org/AE317tft1>

This brochure encourages educators to reflect on the questions they pose to students. Purposeful questions can bolster scientific thinking and deepen understanding of scientific topics by spurring students to:

1. Ask questions and define problems.
2. Develop and use models.
3. Plan and carry out investigations.
4. Analyze and interpret data.
5. Use mathematics and computational thinking.
6. Construct explanations and design solutions.

7. Engage in argument from evidence.
8. Obtain, evaluate, and communicate information.

Planning Family Science Nights

<http://go.aft.org/AE317tft2>

With the release of the Next Generation Science Standards and a shift toward taking a more integrated approach to teaching science, technology, engineering, and math (STEM), the time is ripe for amplifying STEM education. This guide will help you think through how to plan a family science or STEM night at your school.

Creating a Professional Learning Community

<http://go.aft.org/AE317tft3>

A professional learning community, or PLC, is a group of educators who analyze student performance together and learn from one another to improve teaching and learning. PLCs can be organized in various ways, such as by grade level or subject area. This brochure details how to set up a PLC

focused on science, and includes topics such as developing essential questions to lead PLC discussions, monitoring student performance, and using tools for analyzing student data.

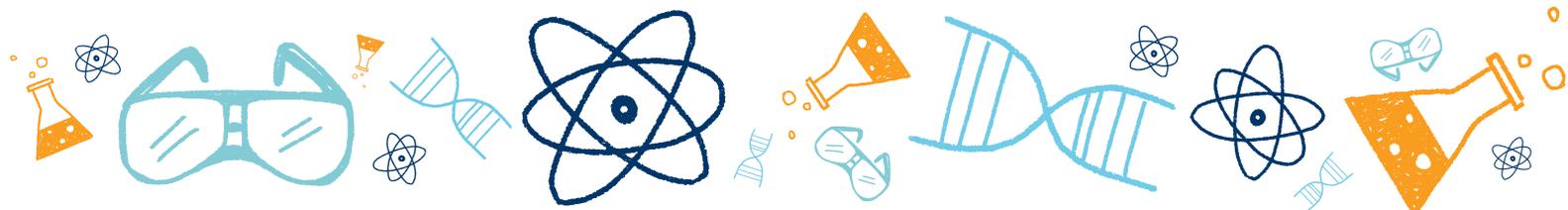
Teaching with Project-Based Learning

<http://go.aft.org/AE317tft4>

Project-based learning allows students to gain knowledge and skills by working for an extended period of time to investigate a complex question, problem, phenomenon, or challenge. Since STEM education naturally lends itself to project-based learning, this brochure describes its benefits, ways to approach it, and resources for incorporating it into STEM courses.

To see more publications from the educational issues department, go to www.aft.org/education/publications.

—AFT EDUCATIONAL ISSUES DEPARTMENT



INTENTIONALLY LEFT BLANK