



Tools of the Trade II: Inspiring young minds to be SET* ready for life! ©



*Science, Engineering & Technology

CYTTAP Pilot Project

Direct Provider Workshops and Descriptions

Inspiring Young Minds – The Scientist in All of Us

Science is everywhere! Kids are curious and love to learn about the world around them. Afterschool staff can play an important role in facilitating youth's learning about science, engineering and technology (SET). This session provides an introduction to the Afterschool SET Ready for Life Checklist and elements for high quality SET programming in afterschools.

Explore It! (Science) Design It! (Engineering) Use It! (Technology)

What does it mean to be scientifically literate? The American Association for the Advancement of Science describes a scientifically literate person as, "one who is aware that science, engineering and technology are human enterprises and applies scientific content and abilities in meaningful ways." Understand the relevance of science, engineering, and technology and the language of math in afterschool settings and how these complement each other.

SET Abilities for the 21st Century

Hearing a lot about science, engineering, and technology (SET) these days? In a fun and hands-on way, learn which SET Abilities 21st century kids need for success and how to support the development of these skills and abilities in fun and interactive ways. Special emphasis is given to fostering observation skills, one of the most critical SET abilities.

Hands On! Minds On!...Inquiry and Experiential Learning

Inquiry and experiential learning are natural ways to learn. This session introduces youth workers to the concepts of experiential learning and science inquiry. Understanding these concepts helps youth workers capitalize on kid's interests, assure better learning outcomes and provide exciting learning opportunities for acquisition of science, engineering, and technology knowledge and skills.

How Kids Learn Science and What It Means to Afterschool

Thanks to science research and technologies, we know more about how kids learn and how educators can facilitate enhanced learning. This session will focus on three fundamental principles for learning as identified by the National Academics of Science: 1) attention to prior knowledge; 2) foundation of factual knowledge and understanding; and 3) learner self-regulation. This session builds on Session 4 which introduces inquiry and experiential learning as important strategies for effective learning.

Extension programs and employment are available to all without discrimination.

Evidence of noncompliance may be reported through your local Extension office. This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, and the U.S. Department of Defense under Award No. 2009-48667-05833. Developed in partnership with University of Nebraska-Lincoln Extension and Pennsylvania State University Extension. Any opinions, findings, conclusions, or recommendations expressed herein are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

Creating SET-Rich Environments

Science is everywhere! Learn to develop SET learning opportunities, increasing youth's natural interest, promoting learner-centered science and integrating science throughout the afterschool hours. This session uses a carousel of group-directed, mini-centers that feature ways to create SET-rich environments.

SET Everyday...Using Centers in Afterschool

Learn knowledge-centered, learner-driven activities that can be easily delivered through centers in your afterschool program. Eleven elements of effective SET (science, engineering, and technology) learning centers are discussed. Tips for facilitating and managing centers are also covered.

