Kansas Effective Practices
Instructional Toolkit

Implementing Research and Resources Into Action
Research Lesson 1: Daily Challenges

Ascending Intellectual Demand
Strength Area: Science/Social Studies

Level III - Intensive/Individualized	Internships Model programs IB Programming EPGY Honors Physics Historical research project SEO-college courses/distance learning
Level II - Targeted	Legislative Day AP science and social studies High school/elementary mentor Testing out of course to receive credit Advanced sections of science/social studies Contemporary Perspective (Greenhaven Press) BSCS (Biological Sciences Curriculum Study) FAST (Foundational Approaches to Science Teaching) Online advanced course e.g. APEX Learning
Level I - Core	FOSS (Full Option Science System) Complex products and real-world products Insights: A Hands-on Elementary Science Curriculum Great Exploration in Math and Science, Voyage of the Mimi Assessment alternatives that include options in student's strength areas or talents Science and social studies extended enrichment programs, e.g. River Watch, Knowledge Bowl

Frequently Asked Questions

According to Gallagher, social studies is one of the least understood topics. How can gifted children be introduced to this topic effectively?

Students can be introduced to the topic by beginning with the social studies standards and building a continuum of activities using higher order thinking skills, complexity, and pacing. To keep abreast of our changing world, use the internet, the websites on the Resources list, as well as speakers, experts, newspapers, and magazines for up-to-date resources and use the textbook as a reference. Use problem-based learning with instructional differentiation of content, process, product, and environment with broad based issues and themes to extend the study. Have the opportunity for students to complete an independent study of choice and share it with an authentic audience.

How do we structure a program for gifted students whose area of strength is science?

Begin with the science standards and develop parallel activities for gifted students that include inquiry, higher order thinking skills, creative problem solving, research skills, and experimenting, as well as guest speakers and experts, problem-based learning and real-world issues in science. By grouping the high ability students in science, there is opportunity for students to interact with others with similar interests and to talk with students at the advanced level of understanding about science concepts, ideas, or discovery.

Resources

Abby's Resource Page for Social Studies Teachers: www.alltel.net/abbtsresources

AIMS Education Foundation, Fresno, CA: www.aimsedu.org

American Memory: Historical Collections for the National Digital Library: www.memory.loc.gov

Edmund Scientific Sells Kits for Beginning Experimenters. Edmund Scientific, 101 E. Gloucester Pike, Barrington, NJ.

education@nationalgeographic.com

www.nationalgeographic.com

Education Program for Gifted Youth (EPGY). Stanford University: www.epgy.stanford.edu

Gardner, R. Science Project Ideas Series. Berkeley Heights, NJ: Enslow Publishers, Inc.: www.enslow.com

Hot Pro/Con Issues Series. Berkeley Heights, NJ: Enslow Publishers, Inc.: www.enslow.com

Invent America! United States Patent Model Foundation; 703-684-1836.

John-Steiner, V. (1985). *Notebooks of the Mind: Explorations of Thinking*. New York: Harper and Row.

Kinetic City: www.kineticcity.com

Mad Scientist Network: www.madsci.org

National Science Olympiad (NSO): www.soinc.org

NewsCurrents Online: www.newscurrents.com

Opposing Viewpoints Series. Chicago, IL: Greenhaven Press: www.galegroup.com/greenhaven

Problem-Based Science Learning for K-8 Curriculum Units. Dubuque, IA: Kendall/Hunt Publishing Company: www.sandlotsscience.com

Social Studies School Service, Culver City, CA: www.socialstudies.com

SpaceKids: Space Science for Kids: www.spacekids.com

Virtual School for the Gifted: www.vsg.edu.au