The following pages are select samples from

Issues and Science **, Teacher Resources**

The following resource on Academically Gifted Students is from the Diverse Learners chapter of the full-year curriculum from SEPUP, *Issues and Science*. It can also be used to support classroom instruction with any material, particularly Lab-Aids kits available on this site.

The results of 20 years of research on the SEPUP program indicates positive effects on student learning in the following areas: content knowledge, problem-solving, decision-making, investigation skills, increased interest in science, and increased perception of the relevance of science to students' lives.

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STRATEGIES FOR ACADEMICALLY GIFTED STUDENTS

Although the definition of "gifted and talented" varies from state to state, many state education departments define gifted and talented students as those students who display high academic achievement and intellectual capability in general, or exceptional talent and performance in specific areas.

Many descriptions also include such additional indicators as creativity, the ability to see alternatives, motivation to learn, and the ability to reflect on and own their expanding knowledge. Programs for gifted and talented students assume that these students need challenges and opportunities beyond those provided in typical instruction if the students are to fully develop their potential. SEPUP's instructional model encourages gifted and talented students to extend their thinking through inquiry- and issue-oriented approaches to science and evidence-based decision making. In exploring current and relevant personal and societal issues, these students begin applying analytic, evidence-based perspectives when making trade-off type decisions.

When modifying and adapting instruction and assessment to meet the needs of academically gifted and talented students, the following additional strategies can be effective:

- Encourage students to analyze and revise procedures or activities to address limitations in models and labs.
- Find ways for students to extend explorations that could answer new questions, such as conducting additional lab investigations or Internet and library research.
- Increase the depth of background information presented.
- Ask students to present more than one viewpoint and to find evidence to support other points of view.
- Ask students to set their own goals for a Level-4 response, and have them demonstrate those goals in their assessment pieces.