

Teacher Guide for using *Career Currents*

BACKGROUND

Teachers and members of the energy industry recognize a need for comprehensive energy career information aimed at middle school and high school students. Each issue of *Career Currents* will focus on careers in a specific segment of the energy industry.

GOALS

- To present students with a broad spectrum of energy careers and corresponding occupations so that students are informed about employment options they have for their future.
- To profile occupations with a wide range of educational requirements and salaries.
- To help students realize that the careers they want to pursue several years from now will be affected by their current skills and attitudes about science and math.
- To show the application of energy knowledge in “non-traditional” career paths (e.g. accounting, mathematics, law).

NATIONAL SCIENCE STANDARDS

Content Standard G: History and Nature of Science, Science as a Human Endeavor

- Many people choose science as a career and devote their entire lives to studying it. Many people derive great pleasure from doing science. (K-4)
- Women and men of various social and ethnic backgrounds - and with diverse interests, talents, qualities, and motivations - engage in the activities of science, engineering, and related fields such as the health profession. Some scientists work in teams, and some work alone, but all communicate extensively with others. (5-8)
- Individuals and teams have contributed and will continue to contribute to the scientific enterprise. Doing science or engineering can be as simple as an individual conducting field studies or as complex as hundreds of people working on a major scientific question or technological problem. Pursuing science as a career or as a hobby can be both fascinating and intellectually rewarding. (9-12)

EXTENSION IDEAS

- Survey students at the beginning and end of the school year, ranking the following questions. Compare rankings to analyze how students’ attitudes and perceptions change over the year.
 1. What are your top three career choices?
 2. How important is your knowledge of science to your career choices?
 3. How important is getting an education to your career choices?
 4. When do you think you should begin preparing for your future career?
- Have students brainstorm a list of energy careers at the beginning and end of the year. Compare the variety/quantity of answers.
- Using the interview model, divide students into teams of two. Each team chooses an energy career to research, and presents the results of its research with a mock interview between the two team members. As the energy professional being interviewed, the student might want to use props related to his/her career. Use these questions as a guide.
 1. What is your energy career? Describe your typical work day.
 2. What kind of education do you need in this job? Do you have any special degrees or certifications?
 3. What are your working conditions like? Do you work in an office or out in the field?
 4. Where are most people in this career employed?
 5. What is the average salary for this career?
- Have small groups choose a career, research it, and write a skit/play about a day in the life of a person in that career. Gather costumes and props, and perform for younger grades.
- Challenge students to identify people with energy careers in your community; invite them to speak to your class.
- Practice job interviewing skills. To model the actual interview process, invite industry professionals to “interview” students for potential employment with their companies.