Lesson Plan

Career Study

Time Needed

1 class period for introductory work; more days for project completion depending on project

Materials (for each student or group of students):

- *Natural Inquirer* scientist and engineer cards
- Writing utensil
- Colored pencils, crayons, or markers
- Other art supplies

Scientists and engineers are people who collect, evaluate, and test information. Scientists and engineers also propose answers or solutions to questions or problems. People of all different ages, backgrounds, and ethnicities can become scientists. *Natural Inquirer* scientist and engineer cards introduce a diversity of scientists and engineers within the USDA Forest Service. Scientists and engineers share information about their titles, their education, their current research and work, and also the characteristics which they feel enable them to be good scientists and engineers.

In this activity, students read the cards and present the information to their classmates. After learning about a number of different science and engineering careers, students create a character in their chosen field of research and present this character in a variety of creative ways. This activity enables students to learn more about USDA Forest Service scientists and helps students imagine their own potential future as a scientist or engineer.

Methods:

Prep

Order a free set of *Natural Inquirer* Scientist and Engineer cards (http://www.naturalinquirer.org/Scientist-Card-Ordering-Page-v-55.html) or print out a set of cards from the *Natural Inquirer* website.

Day One

Have students look through the scientist cards to get an idea of what specialties are included. Have them choose a particular kind of scientist or engineer they are most interested in.

As they read about several scientists or engineers in that field, have them take notes on things like what tools they use, what questions they investigate, where they work, where they went to school, etc.

You can also include outside research on this particular field - like courses of study at universities, etc.

Now comes the creative part! Students will take what they've learned about their particular field to create a character in that field. What would their character look like? Where would he/she work? What kinds of tools would he/she use? How would he/she dress? What kinds of questions or problems would he/she investigate? Have them brainstorm ideas and discuss their characters in small groups to encourage new ideas. Then students will present their character in one of following ways:

- Create a comic strip featuring your character tackling a problem or investigating a question related to his/her field. Maybe an evil super-villain who keeps releasing invasive beetles to destroy local forests?
- Design a diorama that illustrates your character at work. Include details about the environment he/she would work in, make models of the tools he/she would use, etc.
- Create a paper doll of your character where each new outfit includes the gear he/she would need for different aspects of his/her job. As a bonus, create a scene the paper doll would work in and/or other characters that would be involved.
- Act out a scene as your character to be performed live to the class or filmed. Maybe it's a public service announcement about an issue

he/she is involved in researching. Or maybe multiple scientists can group together to solve a problem. Maybe the character is filming a video to convince other people to join in his/her field.

Or choose another creative project to present your character and their field to your class.