

SCIENCE REPORTER FOR WHERE IN THE WORLD IS SCIENCE? PROJECT

Performance Standard 13B.C

Students will play the role of a science reporter to explore direct connections to science and technology in various real-world applications accordingly:

- *Knowledge*: Correlate science knowledge, skills and processes to applications beyond the science textbook.
- *Application*: Interview various people to explore the possible science connections they apply in jobs, careers, avocations, or at home and put it in a form that can be used for a written article.
- *Communication*: Write the article to explain how data were collected and presented by the students; include data in the article.

Procedures

1. ***In order to know and apply the concepts that describe the interaction between science, technology and society (13B)***, students should experience sufficient learning opportunities to develop the following:
 - Determine questions for interviews for “Where in the World is Science?” project
 - Apply language arts writing procedures for interviews
 - Write a narrative paragraph to document the interview’s questions,
 - Create and explaining pictures or drawings that illustrate applicable data.
 - Present the science connections interview to the classroom.

Note to teacher: This activity may be incorporated into many science curricular units in order to emphasize or reinforce the real-world applications for science concepts. Information about the Career Interest Areas is provided for teacher use and access to resources.
2. Have students review and discuss the assessment task and how the rubric will be used to evaluate their work.
3. Explain to the students that they will play the role of a science reporter who is gathering data for a newspaper article, ‘Where in the World is Science?’. Students will need to create a ‘question’ sheet so that they can ask an adult (parent, other relative, child care attendant, etc.). The questions should focus on the concept of finding where science is used in the person’s job or hobby or at home. Encourage student-generated questions as much as possible; prepare some sampler questions if necessary, such as ‘How do you use science in your job?’, ‘Does your hobby have any science connections?’, ‘Where is science at home?’. Students can practice their interviewing skills with their classmates.
4. Provide each student a copy of the “Science Reporter’s Journal” task sheet. Ask students to complete the items on the task sheet to gather information for use in an article about the science project. They can add pictures or drawings to add to their report.
5. Ask each student to write a one-page article on the science project using their interview information.
6. Evaluate each student’s work using the Science Rubric as follows and add the scores to determine the performance level:
 - *Knowledge*: The information gathered from the interview was complete and accurate.
 - *Application*: The personalized information was written in a form that was thorough and useful
 - *Communication*: The article reporting the science connections was well-focused, well-detailed and well-organized.

Examples of Student Work not available

Time Requirements

- One to two class periods

Resources

- Copies of the ‘Science Reporter’s Journal’ task sheet
- Science Rubric

Teacher Resource Page provided to explain Career Interest Areas (as described in 13 B performance descriptions at stage C) and to offer information about available classroom resources.

NAME _____ DATE _____

SCIENCE REPORTER'S JOURNAL

Acting as a science reporter for our local newspaper, you are to find out about connections of science: Where in the World is Science? Write down the questions you will ask in your interview. Write 'reminder' notes from the interview for your final newspaper article.

Question #1: _____

Question #2: _____

Question #3: _____

CAREER INTEREST AREAS

Career interest areas (CIA) are large groupings of occupations that have like industry backgrounds and functions. The career areas of interest help educators to make students aware of the wide spectrum of occupations in the labor market through experiential, interdisciplinary activities that reinforce the fundamental learning areas. It is expected that by the beginning of the 11th grade, all students will be able to select a career area to further investigate. The six career interest areas are:

- Agriculture and Natural Resources
- Arts and Communications
- Business and Administrative Services
- Health Care
- Human and Family Services
- Industrial and Engineering Technology

Elementary educators have used the career interest areas, at a minimum, in the following ways:

- Assigning a Career Interest Area by grade level; i.e. 1st grade - Family and Consumer Services, 2nd grade – Arts and Communications, etc.
- Assigning a Career Interest Area by subject matter area; i.e. Science – Agriculture and Natural Resources, Mathematics – Engineering and Industrial Technology.
- Using the Career Interest Areas to organize field trips and resource speakers so students are exposed to a variety of careers.
- Use the Career Interest Areas to help organize educator visits to business and industry.
- Use the Career Interest Areas to organize the occupations represented at a career day or fair.
- Organize Parents' Speakers "bureau" by Career Interest Area.

As a resource for elementary teachers, the following explanations for each of the CIAs and resource access information is provided.

AGRICULTURE AND NATURAL RESOURCES

Agribusiness, agriscience and natural resources have always been and will continue to be very important industries. The industries include such things as farms, dairies, greenhouses, fruit orchards, vineyards and nurseries focused on the production of crops, plants, trees and livestock. Agribusiness involves research, service, supply and production as well as processing, marketing and advertising, and employs a substantial workforce nationwide.

ARTS AND COMMUNICATION

Arts and communications are essential parts of our modern society. The arts include careers in film, theater, television, radio, dance, music and visual arts. The communications area includes telegraph, telephone, printing, publishing and

broadcasting media. Communications media are in a sense, the nervous system of our society. People in these fields facilitate communications between people and over long distances.

BUSINESS AND ADMINISTRATIVE SERVICES

Almost one-third of the workforce in the United States is employed in administration, business, and office work. Each sector of the economy, from mining and agriculture to wholesale and retail trade, requires office workers and business and financial experts. The field of marketing and distribution comprises all the steps that bring countless products and services to consumers. The jobs and work settings are as varied as the thousands of products and services that are bought and sold everyday.

HEALTH CARE

Health care, with its perpetual technological changes and high degree of specialization, offers many individual challenges. The health services industry has responded to market forces and the demands for low cost medical care with changes in its delivery system, making this an exciting field. Health care encompasses a wide variety of positions in an assortment of settings with an expanding and challenging future.

HUMAN AND FAMILY SERVICES

People in these occupations work in the hospitality and recreation field, public and community services, or family/consumer and personal service areas. Occupations in the hospitality field are diverse and are related to foodservice, lodging, recreation and travel. The occupations in public and community services are necessary to keep the nation and state and community running smoothly and efficiently. Public service employees work in occupations where they help school children learn, see that taxes get collected, and that heat, electricity, light and water are available in homes, schools and workplaces. These employees also see that waste is removed and disposed of properly and that people are safe on the streets and at home. People with jobs in the personal services area help consumers feel and look better. Social service workers support people of all ages who need assistance.

ENGINEERING AND INDUSTRIAL TECHNOLOGY.

Scientists, engineers, technologists and technicians all contribute to the wondrous development of technology. The manufacturing industry with its factories and suppliers helps keep America running. Construction, with all its related fields, is an enormous industry but one that is tied closely to the economy and is one of the first fields hit by recession and economic change. Jobs in construction will go to those who have obtained training and have up-to-date skills. The transportation industry includes occupations moving both people and products via buses, railroads, trucks, airplanes and ships.

Note to Teacher: Resources are available to aid in the integration of career interest areas with science learning standards on the ISBE/etc homepage at www.isbe.il.us/etc, click “partnership resources and click “teacher’s corner.”

The **Curriculum Publications Clearinghouse** is operated by Western Illinois University, through a funding agreement with the Illinois State Board of Education, for the purpose of providing state-developed materials on a cost-recovery basis. For more information and/or a catalog of resources, contact:

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