GENIUSES WANTED: THE SCIENTIST RESUME PROJECT

Written by Jeremy Peacock and Amy Rowley

Annotation

In this project, students will explore the history of science through the creation of a scientist resume. Students will examine the life of a scientist, including education, achievements and failures, and personal endeavors.

Primary Learning Outcomes:

Students will explore the history and nature of science and scientific discovery.

Students will be able to use available information sources (e.g. internet search, library research, online databases books, periodicals) to research an assigned topic.

Students will be able to organize, synthesize, and evaluate information in the preparation of a written report and oral presentation.

Students will be able to communicate effectively orally and in writing.

Assessed GPS:

Characteristics of Science

SCSh1. Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

SCSh6. Students will communicate scientific investigations and information clearly.

SCSh8. Students will understand important features of the process of scientific inquiry.

SCSh9. Students will enhance reading in all curriculum areas.

Duration:

Introduction: 15 minutes
Student Assignment: Adaptable to class schedule
Conclusion: Adaptable to class schedule
Total Class Time: Adaptable to class schedule

Technology Connection:

Students may use all available information resources (*e.g.* internet search, library research, online databases books, periodicals) to complete the assignment.

Procedures:

Introduction:

Provide students with the *Genuises Wanted: The Scientist Resume Project* student handout. Review with students the expectations and evaluation procedures.

Estimated Time:
15 minutes

Student Assignment:

Students should follow directions set forth in the student handout.

Estimated Time:
Adaptable to class schedule

Conclusion:

Have students present to the class, during a 5-10 minute oral presentation, their scientist resumes. In addition, students should turn in a one-page student reflection. Upon completion of all presentations, conclude with a class discussion of the general findings concerning the lives of scientists and their relation to those of today's student.

Estimated Time:
Adaptable to class schedule

Assessment:

Project assessment should be based on the following…

Scientist Resume (60 points)

- Full Name
- Date and Place of Birth – 5 points
- Family – 5 points
- Education/Training – 10 points
- Experience/Employment History – 10 points
- Scientific Discoveries – 10 points
- Awards/Honors – 5 points
- Hobbies or Personal Interests – 5 points
- Disabilities/Illnesses – 5 points
- Date, Place, and Cause of Death – 5 points

Presentation (20 points)

Reflection Paper (20 points)

- Quality of Written Communication – 10 points
- Thoughtfulness, Clarity, and Originality of Ideas – 10 points

GENUISES WANTED: THE SCIENTIST RESUME PROJECT *Student Handout*

Introduction:

Marie Curie. Robert Boyle. Linus Pauling. Isaac Newton. Albert Einstein. What do these individuals have in common? Yes, all of these individuals are famous scientists. However, upon examination of their lives, you'll most likely find these individuals to be more like yourself than you might have imagined.

Contrary to popular belief, scientists are not wizards, superheroes, freaks, or geeks. Rather, scientists are normal people who dedicate their lives to discovery, curiosity, and creativity. There are no rules and regulations for becoming a scientist. Anyone, male or female, young or old, rich or poor, can become a scientist.

Your Task:

In this activity, you will go beyond your textbook to learn about the lives behind the science that we study daily. You will explore the life history of a particular scientist and identify commonalities found within your own life.

Select a scientist for study, and research the complete history of his/her life. A minimum of five resources is required. No more than two internet resources may be used. The following is a list of possible internet resources:

- Chemical Achievers: The Human Face of the Chemical Sciences – http://www.chemheritage.org/EducationalServices/chemach/home.html
- Faces in Polymers – http://www.chemheritage.org/EducationalServices/FACES/poly/home.htm
- Faces in the Environment – http://www.chemheritage.org/EducationalServices/FACES/env/env.htm
- Pharmaceutical Achievers – http://www.chemheritage.org/EducationalServices/pharm/pa/home.htm
- Historical Entries – http://cse.edc.org/products/historyscience/bios.asp

Upon completion of your research, construct a resume for your scientist. The following information should be included:

- Full Name
- Date and Place of Birth
- Family (spouse, children, etc.)
- Education/Training (schools attended, degrees earned, memberships in honor societies, etc.)
- Experience/Employment History (a list of important job titles and descriptions)
- Scientific Discoveries
- Awards/Honors
- Hobbies or Personal Interests
- Disabilities/Illnesses
- Date, Place, and Cause of Death

NOTE: Additional information regarding your scientist may be added at your discretion.

Upon completion, you will present your scientist resume to the class during a 5-10 minute oral presentation. In addition to the scientist resume, you must prepare a one-page reflection paper. The paper should detail the commonalities, or differences, found within the lives of you and your scientist, as well as your general thoughts and views of scientists, their lives, and their discoveries.

Evaluation:

Your project will be graded based on the following rubric.

Scientist Resume (60 points)

- Full Name
- Date and Place of Birth – 5 points
- Family – 5 points
- Education/Training – 10 points
- Experience/Employment History – 10 points
- Scientific Discoveries – 10 points
- Awards/Honors – 5 points
- Hobbies or Personal Interests – 5 points
- Disabilities/Illnesses – 5 points
- Date, Place, and Cause of Death – 5 points

Presentation (20 points)

Reflection Paper (20 points)

- Quality of Written Communication – 10 points
- Thoughtfulness, Clarity, and Originality of Ideas – 10 points