Unit 2: Who invented it?

Content Area: Gifted and Talented Course(s): Gifted and Talented

Time Period: Week 11
Length: 13 Weeks
Status: Published

Unit Overview

After students have taken the time to look at how different inventions impact their lives and the purpose of different inventions, its time for them to look at the inventors. Within this unit, students will choose an invention and research the person who invented to investigate the person's history, other inventions he/she created, and to think about the overall impact of the invention.

Standards

SOC.K-4.6.1.4.B.9	Relate advances in science and technology to environmental concerns, and to actions taken to address them.
SOC.K-4.6.1.4.C.16	Explain how creativity and innovation resulted in scientific achievement and inventions in many cultures during different historical periods.
SOC.K-4.6.1.4.C.17	Determine the role of science and technology in the transition from an agricultural society to an industrial society, and then to the information age.
TEC.3-4.8.2.4.A.1	Investigate factors that influence the development and function of technology products and systems.
TEC.3-4.8.2.4.A.2	Using a digital format, compare and contrast how a technology product has changed over time due to economic, political, and/or cultural influences.
TEC.3-4.8.2.4.B.3	Explain the positive and negative effect of products and systems on humans, other species and the environment.
CCSS.ELA-Literacy.RI.2.2	Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
CCSS.ELA-Literacy.RI.2.3	Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
CCSS.ELA-Literacy.RI.2.4	Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
CCSS.ELA-Literacy.RI.2.5	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
CCSS.ELA-Literacy.SL.2.3	Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
CCSS.ELA-Literacy.SL.2.4	Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.

Essential Questions

• Why do people become inventors?

Application of Knowledge and Skills	
Students will know that	

many inventors become interested in their topics due to personal experiences

• How do personal experiences impact career and life decisions?

- most inventors are not successful on their first attempts
- · while most inventors are known for one invention, they often have invented numerous other items

Students will be able to...

- ask appropriate questions about a person's life and experiences
- correlate inventions with life experiences
- impersonate an inventor
- investigate the lives and accomplishments of inventors throughout history

Assessments

- Inventor Press Conference Summative: Oral Report Using their research, students prepare presentations about their inventor in a press conference format where other students in the class ask them questions and they impersonate their inventor.
- Research an Inventor Formative: Personal Project Using books or Internet resources, research an inventor to better understand his/her life and motivation for the inventions.
- What do you want to know? Diagnostic: Self Assessment When thinking about an inventor, what do students want to know? Work on generating a list of questions and share with the class to create a master list.

Activities

• Brainstorm a list of different inventions that students find interesting to determine which inventors they will be studying.

- Generate a list of questions that students want answered about their inventor.
- Find age-appropriate research resources, incorporating a trip to the media center, to locate appropriate information.
- Inventor press conference: As a form of presentation, students dress up and act as their inventor. Other students will be responsible for asking the student questions about who he/she is and about his/her life.

Activities to Differentiate Instruction

- Students will choose their research topic based upon their interests to increase investment in the material.
- Provide assistance generating questions if students seem to be having difficulty. Encourage students to share ideas in small groups or as a class.
- Students' research materials should be based on personal ability.
- Create a graphic organizer to help students with research.
- Provide alternative means of presentation if necessary

Integrated/Cross-Disciplinary Instruction

- Coordinate with the media specialist to assist students with finding books and other age-appropriate resources about their inventors
- Seek assistance from the technology teacher to help students create a presentation about their inventors

Resources

- Library resources to help students find books about different inventors:
 - http://library.gbtps.org/quest/servlet/presentquestform.do?site=101
- Internet resources on different inventors:

 | http://cybersleuth-kids.com/sleuth/Science/Inventors/index.htm|
- Help students find books about inventors: