Inventions and the Wright Brothers

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Standards

 > Organize and integrate information from a variety of sources (e.g., books, interviews, library reference materials, websites, CD/ROMs).
> Identify key historical figures (e.g., scientists, mathematicians, inventors, business leaders) and events associated with areas where the target language is spoken and explain their influence.
IRA.14.1 ...apply research for improved literacy
IRA.14.3 ...promote and facilitate teacher- and classroom-based research

Resources

Library of Congress Website

Overview and Rationale

Using a K-W-L chart, the students will learn about the Wright Brothers and their importance on the American aviation field. The students will document their knowledge of the Wright Brothers and then explore the Library of Congress website to develop a better understanding of these highly-famed American inventors. After reviewing the website and discussing what they learned, the class will then discuss what they still have yet to learn. Understanding the importance of these American inventors will allow them have a better knowledge on the history of aviation and relate the changes by inventors to their daily lives and society. The students will also gain insight on how to accurately research topics that interest them.

Objectives

Upon completion of the lesson plan, the students will be able to list the discoveries and accomplishments of the Wright Brothers and explain how their inventions affected our society and daily lives. Students should also gain the capability to use a combination of books and other sources to accurately research a given topic. Students will learn this ability by properly navigating through the Library of Congress website and reporting learned

information back to the class. Students will be assessed via completion of their personal KWL chart, demonstrating completion of research and understanding of the material.

Materials

-Computer Lab -Internet (Library of Congress Website) -KWL Chart Handout -White Board -Dry Erase Marker -"First Flight" By George Shea and Don Bolognese

Procedure

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- Introduce the topic of the Wright Brothers and discuss how they were important people in the aviation field
- Pass out the KWL Chart Handout to each student
- Have students fill out the "K" portion of the handout by having them fill out what they already know about the topic using previous knowledge and experiences
- As a class, discuss what students wrote in the "K" portion of the handout
- Teacher will document this discussion on the whiteboard in a whole class KWL Chart
- The class will go to the computer lab and use the Library of Congress website to research the Wright Brothers
- While in the lab, students will pass around 'First Flight" and take turns using the book for research
- Students will document what they have learned about the Wright Brothers in the their "W" portion on their handouts
- Return to the classroom and discuss as the class what students have learned about the Wright Brothers
- Teacher will document this discussion on the whiteboard in the whole class KWL Chart
- Students will then complete what they still would like to know about the Wright Brothers in the "L" portion of the handout
- As a class, discuss these remaining questions and try to have students answer the questions presented by other students
- The teacher will encourage further independent research in the topic if anyone still has questions
- Collect the KWL Chart Handouts for assessment

Accommodations

- Provide any students with visual impairments a computer with enlarged fonts
- Provide the links to specific Wright Brothers articles on the Library of Congress website for faster viewing

Crucial Points

- They were doubted in their inventions
- Created first powered, sustained flight in 1901
- Ran without an engine
- Much different from planes of today
- Flew their first plane at Kitty Hawk
- Were from Ohio
- Wings were made from fabric
- Flight is documented in photographs and film
- They were originally bicycle mechanics

Assessment

Students will turn in their KWL Charts after researching in the computer lab and completing class discussion. The teacher will review all of these charts and check for the following:

- Students will demonstrate their understanding of the Wright Brothers through their completion of the "W" portion of the handout
- Students will demonstrate their ability to use resources through teacher's observation in the lab and completion of the "W" and "L" portion of the handout
- The teacher will assign grades based on the completion of these portions

The teacher can also assign points for the classroom discussion by taking note on who is active in the discussion. The teacher can also check for an urge to complete further research by reviewing the "L" column of all students.

Reflection