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Spread the Word! A Look at the Development of Communication Technology

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Spread the Word! A Look at the Development of Communication Technology

Lesson Overview

This lesson investigates and examines the different forms of communication technology used during the Civil War. The lesson introduces primary sources (photographs) to examine and determine how Americans received news of the War and how the military gathered and disseminated information. Students will use these photographs to understand communication technology and compare past and present technologies.

Objective

Students will be renewing and adding skills related to inquiry:

- View visual images and list details.
- Make deductions and interpretations from the list of details.
- Formulate questions for further investigation.
- Present deductions, conclusions, and questions to other groups.

Goal

 Students will be able to link past and present technologies and investigate future trends in communication technology.

Investigative Question

How do people gather information and disseminate it? How has that changed over the years?

Time Required

3 40-minute class periods (40 min)

Recommended Grade Range

4-5

Subject/Sub-Subject

Technology, History

Standards

CCSS.ELA-Literacy. RI4.3	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
CCSS.ELA-Literacy.W.4.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.
CCSS.ELA-Literacy.W.4.8	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
CCSS.ILA-Literacy.L.4.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, endangered when discussing animal preservation).
CCSS.ELA.L.4.3a	Choose words and phrases to convey ideas precisely.

NETS-S

1. Creativity and Innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
   a. Apply existing knowledge to generate new ideas, products, or processes.

2. Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance to support individual learning and contribute to the learning of others
   a. Interact, collaborate, and publish with peers, experts, or others employing a variety of environments and media.
4. Critical Thinking, Problem Solving, and Decision Making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
   c. Collect and analyze data to identify solutions and or make informed decisions.

Preparation

Review various forms of communication technology in use today. Define types of communication technology, letters, spoken word, written word.

Determine means of gaining information and disseminating it.

Resources

Teacher's Guide: [Analyzing Photographs and Prints](#)

Pictures from Library of Congress Civil War Collection:

Title: Inflation of the balloon Intrepid to reconnoiter the Battle of Fair Oaks
Author/Creator: Brady, Mathew B.
Date Created: June 1, 1862 (Printed between 1880-1889)
URL: http://hdl.loc.gov/loc.pnp/ppmsca.34751

Title: Professor Lowe in his balloon
Author/Creator: The War Photograph & Exhibition Co.
Date: May 31, 1862
URL: http://hdl.loc.gov/loc.pnp/stereo.1s02744

Title: Fair Oaks, Virginia. Prof. Thaddeus S. Lowe replenishing balloon INTREPID from balloon CONSTITUTION
Author/Creator: Unknown
Date: May 1862
URL: http://hdl.loc.gov/loc.pnp/cwpb.01563

Title: Fair Oaks, Va. Prof. Thaddeus S. Lowe observing the battle from his balloon "Intrepid"
Author/Creator: Unknown
Date: May 31, 1862
URL: http://hdl.loc.gov/loc.pnp/cwpb.01560

Title: Signal tower on the line before Petersburg, Va., 1864
Author/Creator: The War Photograph & Exhibition Co., Hartford, Conn.
Date: 1864
URL: http://hdl.loc.gov/loc.pnp/stereo.1s02750

Title: Signal station on Elk Mountain, Md., overlooking battlefield of Antietam, October 1862
Author/Creator: O'Sullivan, Timothy H.
Date: 1862 (Printed between 1862 and 1889)
URL: http://hdl.loc.gov/loc.pnp/ppmsca.33160

 Title: Newsboy in camp (A Welcome Visitor)
Author/Creator: Gardner, Alexander
Date: November 1863
URL: http://hdl.loc.gov/loc.pnp/ppmsca.33163

Title: Headquarters of New York Herald in the field (1863)
Author/Creator: Russell, Andrew J.
Date: 1863
URL: http://hdl.loc.gov/loc.pnp/ppmsca.33169

Title: Petersburg, Va. Signal tower at 14th New York Heavy Artillery headquarters between 1860 and 1865
Author/Creator: Unknown
Date: Between 1860-1865
URL: http://hdl.loc.gov/loc.pnp/cwpb.01567

Title: Bermuda Hundred, Va. Photographer at Butler's signal tower
Author/Creator: Unknown
Date: 1864
URL: http://hdl.loc.gov/loc.pnp/cwpb.01829

Title: Bermuda Hundred, Virginia. Lookout tower on left of Bermuda Hundred line
Author/Creator: Unknown
Date: 1865
URL: http://hdl.loc.gov/loc.pnp/cwpb.00491

Title: Prospect Hill, Virginia. Signal station at camp of 13th New York Cavalry
Author/Creator: Gardner, Alexander
Date: July 1865
URL: http://hdl.loc.gov/loc.pnp/cwpb.04181

Title: Falmouth, Virginia. Mail wagon for headquarters, Army of the Potomac
Author/Creator: Unknown
Date: 1863
URL: http://hdl.loc.gov/loc.pnp/cwpb.00098

Title: Civil War newspaper maps from the New York times and the New York herald
Author/Creator: New York times : New York herald
Date: 1861-1862
URL: http://hdl.loc.gov/loc.gmd/g3701sm.gcw1035000

Title: Letter from Thomas Screven to the father of R. Cecil Johnson
Author/Creator: Screven, Thomas
Date: 1863
URL: http://hdl.loc.gov/loc.pnp/ppmsca.31270

Procedure

- Define technology, communication. Brainstorm how people communicate information using various forms of technology. Look for examples/pictures from everyday life
- Show photographs to all students and explain where and when photographs were taken.
- Divide students into pairs and pass out two related photographs per group. Pass out Analyzing Primary Sources worksheet. Explain to students that they will be completing the first column with observations only. Model with photograph. Allow 10-15 minutes to fill in observations. (Express)

- Explain "Reflect" and model. Ask questions: What types of technology do you see? What kind of communication would that technology represent? How does it aid in communication? Is it similar to today's technology? How did it developed over time? (Wonder) (Investigate) Allow 10-15 minutes to reflect and write.
- Question: What would you like to know more about? How might these technologies develop further? (Express, Reflect)
- Question: How do these technologies compare to present day technologies. (Investigate) What connection can you make to today's communication technology? (Connect, Construct)
- Student will create a timeline of one form of communication technology as seen in the Civil War photograph from pre-Civil war to present. (Express)

Further investigation

Take one technology from the Civil War and trace its development to present day. What improvements do you find? How have the improvements changed communication?

Evaluation

Students will be share their observations and findings with classmates.

They will be assessed on their understanding of the progression of communication through their timelines

Lesson Plan Reflection

This lesson was presented to a 5th grade class. I had the students pair up and gave each pair 2 related pictures. After going over the questions on the Photograph Analysis Sheets I gave the students about 15 minutes to look at their pictures. They also had small magnifying glasses to look more closely. I think that they enjoyed having that opportunity to look more carefully at the photographs. Many students wanted further clarification on what they were supposed to be looking for to answer the questions. I worked with each group to clarify the questions and how to write their observations and reflections. They then were able to come up with some great connections and regarding their particular photographs and observations.

I noticed that it was difficult at first for the students to merely observe without inferring or interpreting. I think this type of activity develops those observations skills in students and develops their ability to infer or interpret using their own observations. I think that being too specific in the questions for analyzing inhibits their natural observation skills. They look for answers to the questions rather than just noting their observations. On the other hand, it seemed that they needed guidance to know what to be looking for

The students seemed to enjoy looking at the photographs and were able to appreciate the age of the photographs as far as being "old," and something that had happened "a long time ago." With guidance they were able to observe more closely, e.g., the clothes looked old, the clothes "looked like uniforms," and then the students could suggest who might be wearing uniforms. I thought this was a good way for them to explore their visual and reasoning skills and connect.

Having the students work in pair helped them by giving them a different perspective, based on their partner's background knowledge. Having related photographs also helped them make connections to the topic, the development of communication technology. The time frame seemed appropriate, with the opportunity to investigate further and draw more conclusions during a second class period.

Overall, the students were engaged in the activity, were able to make connections to the topic through their observations of the photographs and encouraged further exploration and inference-making. This lesson gave the students the opportunity to examine real examples from the past and make connections to the present.