PolarTREC
Learning Resources

Completion Time: N/A

Permission: Download and Share

Technology Enhances KWL (Know, Want to Know, Learned)

Overview
I, Elizabeth Eubanks PolarTREC teacher 2008 – Arctic Tundra Dynamics created this lesson to introduce my students to utilizing technology to document and share what they know, want to know and have learned about polar studies and environments.

Objectives
The objective of this lesson is for students to utilize recording devices (audio with or without video) and podcasts while learning about the polar regions. After students have written a baseline for what they want to record and have developed questions for their podcast they will interview other students and create at least 3 podcasts under the umbrella of What I Know, What I Want to Know and What I learned about Polar Regions. Students will then burn a CD to share and/ or upload their project to iTunes. This lesson plan can also be used with an entire school during a thematic year.

Lesson Preparation
Teachers should have some basic knowledge of Audio/Video recording devices and computer programs to utilize. Teachers should have a themed lesson plan(s) to implement the KWL (Know, Want to Know, Learned project). Teachers should also research iTunes or other websites with podcasts.

Since this is a lesson on podcasting, with application to polar lessons and polar science, content previously studied is not needed. However, students should have knowledge of what podcasts are and how to find them on iTunes or the Internet.

Procedure
1. Teaser for students: Present the PolarTREC podcasts to students from iTunes. Go to iTunes Store and search podcast PolarTREC, they are free to upload or listen to/

Materials

- Voice Recorder or camera with video capabilities
- Computer with iMovie, Movie Maker or comparable computer program to manipulate audio recordings
- Computer with Internet and iTunes to listen to/view Polar-TREC Podcasts
- Students to interview
- Various polar lessons to learn

view. Select a podcast to listen to/ view with students.

2. Explain the objective of the lesson – to learn how to make a podcast while learning about a given topic, specifically anything to do with the with the Arctic or Antarctic.

3. Teacher introduces – or reintroduces students to audio/audio visual equipment and teaches them how to use it.

4. Teacher teachers how to make a baseline for podcast creation. Utilizing podcasts students observe different styles.

5. Students create a written intro and extro for their podcast. Students outline what they want in the body of the podcast.

Intro- should include their name, what school they are from and what the project is about.

Extro- should restate the author(s) name, sum up what the project was about and let the audience know that this is the end.

6. In the case of this project KWL. Students should let their audience know that they are creating a three part podcast with the first being what students already know about the Arctic or Antarctic.

7. Students develop an interview and cast, and then begin recording the intro, interviews and extro.

8. Students should upload their work to a computer with a program capable of manipulating audio/audio visual. They utilize the program to create a quality production and burn to a disc or upload to a sharing program.

9. Repeat steps 5-8 however changing interview focus from what interviewees know, to what they want to know. This step can be completed soon after the first podcast.

10. Repeat steps 5-8 after polar lessons have been taught – one week to one school year. Change focus of interview to what interviewees have learned.

11. Collect podcasts, evaluate and share.

Extension
N/A

Assessment
Teacher would listen to/view podcasts and create a rubric based on specific targets that teacher designs for students to include .
ie. intro with authors name and purpose of podcast
extro with summary, authors name and statement of end
interview: consistent questioning and minimum of 7 interviewees
audio is clear
visuals
creativity
time of podcast fitting minimum of 3 minutes

Resources
Podcasts on iTunes (specifically PolarTREC podcasts), www.polartrec.com

Credits
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National Science Education Standards (NSES)

Content Standards, Grades K-4

Content Standard E: Science and Technology
a.   Abilities of technological design
b.   Understandings about science and technology

Content Standards, Grades 5-8

Content Standard E: Science and Technology
a.   Abilities of technological design
b.   Understandings about science and technology

Content Standards, Grades 9-12

Content Standard E: Science and Technology
a.   Abilities of technological design
b.   Understandings about science and technology

Other Standards

N/A