

Lesson Description: Lesson 10

Film, edit and view the “Weather Broadcast”

This lesson will continue and complete the wrap-up of the weather unit. All of the lessons and activities that have been covered thus far will be drawn on for students to complete the final project in the PBL. Students will finish the creation and publication of a “Weather Broadcast” by continuing their look at how meteorologists predict and report on the weather.

Outcomes



Resources



Procedure



Assessments



Grade: 5

Subject: Science

Unit: Predicting the Weather

Driving Questions: *How do we predict the Weather?*



Curriculum Outcomes:

Properties of Air

- 300-14 describe situations demonstrating that air takes up space, has mass, and expands when heated
- 105-2 describe how studies of the depletion of the ozone layer, global warming, and the increase identify and use weather-related folklore to predict weather
- 104-7, 204-8, 205-4, 205-10, 205-7, 300-13 using correct names of weather instruments, construct and use instruments to record temperature, wind speed, wind direction, and precipitation
- 104-4, 206-1 Identify, classify, and compare clouds
- 107-14, 205-8, 302-11 using a variety of sources, gather information to describe the key features of weather systems and identify weather-related technological innovations and products that have been developed by cultures in response to weather conditions

English Language Arts:

- 1.3 Explain and support personal ideas and opinions. Respond personally and with developing critical awareness to a range of print, media, and electronic resources.

- 7.1 Use their background knowledge to question and analyze information presented visually and in print.
- 7.3 Identify instances where language is used to entertain, manipulate, persuade or control them.
- 7.3 Listen critically to others ideas, opinions and points of view.
- 8.3 Make deliberate language choices appropriate to purpose, audience and form.
- 9.1 Create written and media texts collaboratively and independently and in different modes (expressive) and forms.
- 9.3 Invite responses to early drafts of their media productions and use audience reaction to help shape subsequent drafts.
- 10.3 Use technology with increasing proficiency to create, revise, edit and publish.
- 10.5 Select, organize and combine relevant information, from three or more sources to construct and communicate meaning.

Technology Integration:

- BOC 3.2 Use a range of appropriate equipment, computer technology, and software to plan and create multimedia works that contain pictures, words, and sound to tell a story or report the results of their learning.
- BOC 3.4 Locate relevant information by using the appropriate organizational features of and search strategies applicable to books, other print, audio CDs, videos, computer software, multimedia, and the Internet.

Visual Arts:

- 2.1 Work independently and collaboratively to apply learned skills.
- 5.1 Express through their artwork personal ideas and points of view.
- 6.2.1 Examine the role of media and discuss its impact upon their lives.

Mathematics: (Students are encouraged to make these connections but it is not

necessary)

- F2 use pictographs and bar graphs to display and interpret data
- F4 create and interpret line graphs
- F6 recognize and explain the effect of certain changes in data on the mean of that data
- F7 explore relevant issues for which data collection assists in reaching conclusions

G2 determine simple theoretical probabilities and use fractions to describe them

Expected Time: 140 minutes (4 x 35 minute class periods)



Resources:

- Screen cast: "[Using Storyboard That!](#)"
- Chroma-key backgrounds (If needed)
- Video Cameras and tripods
- Laptop computers with video editing software
- iPad tablets
- [Screen cast: Tech Tutorials on Pinnacle 17](#)
- [Assessment Rubric for the Weather Broadcast](#)
- [Student outcomes checklist for key outcomes from the broadcast](#)
- [Study Jams on Weather and Climate](#) from Scholastic

**21st century
skills**

Wacky Weather Broadcast Completion

Lesson 10: Teacher Does (5 Minutes)


Ask the students if they have any questions from last class that need to be discussed. As students begin filming have them refer back to the "Tech Tutorials" for trouble shooting video issues. Make sure they are familiar with what is covered here so they are not asking questions about information that is already covered. These contain important lessons on operating the video equipment, green screen and Pinnacle 17 editor. If the students choose to use iPads and iMovie that is okay as well as long as they are aware that the version of iMovie on the tablets does not support green screen work. (Something used extensively in today's weather broadcasts)

As a work-around students may wish to do the green screen portion on Pinnacle and then plug in their tablets to the computer and transfer the green screen portion to the iPads camera roll for use in their iMovie production.

Another possibility iPad tablet users may want to try a free app from the app store called "Veescape Live" as it does is supposed to do green screen work.

To the students: We will be continue working towards creating a TV style weather report over the next several classes. This should involve pulling all your data together creating charts, graphs (cross curricular connection with the Data Management Unit in Math) As the students get ready to begin the culminating project they should consider all the questions they have asked and answered throughout the unit to this point.

☐ remember,
understand

<p>As students proceed they may want to refresh themselves on weather concepts by accessing Study Jams on Weather and Climate from Scholastic.</p>	
<p>Wacky Weather Broadcast Production Lesson 10: Group work (we do) (90 Minutes)</p> <p>Students should now have completed the planning phase of the activity, scripts and storyboards should be in place and groups beginning to film. They have approximately 1 ½ hours to do this.</p> <p>Anything beyond this they can make arrangements to stay in at lunch or after school. Students are responsible to come prepared with any props or costumes that they intend to use in their weather broadcast.</p> <p>Once they have acquired their footage they should transfer their footage to their laptops “Footage Folder” (Teacher should create a “Footage Folder” on each computers desktop.)</p> <p>Students are encouraged to view the following screencasts accessed through</p>  <p>this link:</p> <p>Tutorial 1 Video Capture and Camera Basics Tutorial 2 Chroma Key Tutorial 3 General editing Tutorial 4 Adding Captions and Text Tutorial 5 Adding Sound Effects Tutorial 6 Adding Background Music Tutorial 7 Adding Voiceovers Tutorial 9 Using YouTube Footage</p> <p>By making a video production it will allow:</p> <ol style="list-style-type: none"> 1. students to watch and reflect on their project 2. students the ability to share their weather report with their family and friends. 	<ul style="list-style-type: none"> <input type="checkbox"/> collaborate, communicate <input type="checkbox"/> analyze, synthesize <input type="checkbox"/> critical thinking <input type="checkbox"/> evaluate, leverage <input type="checkbox"/> create, publish <input type="checkbox"/> citizenship
<p>Wacky Weather Broadcast Publishing and Sharing Lesson 10: Class Share (we share) (35 Minutes)</p> <p>View, present and access weather broadcasts: Invite the other grade 5 classes in to view the weather forecasts or send them the “broadcasts” by publishing them to a private Dropbox or You Tube link</p> <p>Students:</p> <ol style="list-style-type: none"> 1) Have students write a reflection on the unit. <ol style="list-style-type: none"> a) Would you like to be a meteorologist? Why or why not? 	<ul style="list-style-type: none"> <input type="checkbox"/> collaborate, communicate <input type="checkbox"/> evaluate, leverage <input type="checkbox"/> citizenship

<p>b) What have you learned about forecasting weather? c) Why do you think sometimes the meteorologists get it wrong?</p> <p>2) Have students evaluate their culminating project using the “Wacky Weather Rubric”</p> <p>Teacher:</p> <p>1) Keep a checklist of informal observations as students’ progress with their projects. 2) Rubric for the culminating activity.</p>	

Differentiation/Modification/Enrichment:

- The use of special effects in the weather broadcast such as chroma-key etc... are definitely enrichment areas for students.
- Areas of differentiation would be extending timelines, making sure that weaker students are in groups with stronger ones and reduced expectations.



Assessment:

- *Observation and participation in small group and class discussions.*
- [Assessment Rubric for the Weather Broadcast](#)
- [Student outcomes checklist for key outcomes from the broadcast](#)

Teacher Reflection: