TEACHER

GUIDE

Student Presentation Planning Guide

This guide is designed to help you answer key questions in planning to support student presentations. Giving students options for their presentations is fantastic. Not putting parameters and limits on those options is a recipe for disaster. Use the questions below to help frame student options and to plan ahead for their needs:

* What presentation formats are available? (ex. video, poster, PowerPoint, etc.)
* Will the class create one presentation together where they all work on different pieces of it, or do you want student groups to create their own presentations? (also, if you teach multiple classes, will each class make their own presentation, or will they all work on different pieces of one presentation?)
* If there will be multiple presentations, do you want each group to use the same format or can they use different formats?
* What materials will be necessary to create the presentation?
* Who will the audience be for the presentation?
* Do students need to learn additional skills to create the presentation (ex. to make a video or a PowerPoint)
* What is the timeline for students to create their presentation?
* Will students be working on their presentation entirely in class, or will they be expected to work on part of it at home?
* How will you grade student presentations? A generic rubric is below, but it will need to be modified based on different formats and expectations.

Student Name

Pollution in the Chesapeake Bay Presentation Rubric

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project area** | **Beginning** | **Needs Improvement** | **Proficient** | **Advanced** |
| Content | Student’s presentation has significant factual inaccuracies and shows limited understanding of Chesapeake Bay pollution issues and air pollution in general. | Student’s presentation has some factual inaccuracies, and shows some understanding of Chesapeake Bay pollution issues and air pollution in general. | Student’s presentation is factually accurate, and shows strong understanding of Chesapeake Bay pollution issues and air pollution in general. | Student’s presentation is factually accurate, and shows detailed and extensive understanding of Chesapeake Bay pollution issues and air pollution in general. |
| Completeness | Student’s presentation is missing significant required parts. | Student’s presentation addresses most required elements. | Student’s presentation addresses all required elements, although some may not be fully complete. | Student’s presentation addresses all required elements fully. |
| Answering questions (if applicable) | Student cannot answer questions about their presentation or answers incorrectly due to gaps in knowledge. | Student can answer some questions about their presentation, but struggles to answer others correctly because of gaps in their knowledge. | Student is able to answer questions about their presentation by drawing upon knowledge from the module, although they may have some gaps in their knowledge. | Student is able to fully answer questions about their presentation by drawing upon knowledge from the module |
| Craftsmanship | Student’s presentation has numerous grammatical errors, and is not delivered smoothly. | Student’s presentation has some grammatical errors, and may not be delivered smoothly. | Student’s presentation is well-designed, with few grammatical errors. Their presentation may not be delivered smoothly. | Student’s presentation is very well designed, with few or no grammatical errors. Their presentation is delivered smoothly and comfortably. |

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Pollution in the Chesapeake Bay Content Look-Fors

Below are some key ideas to look for in student presentations. This is by no means a comprehensive list, nor should it be considered a checklist for students to complete. Instead, it is a guide of key takeaways from the module that students will likely include in their presentations if they are thorough. It can also serve as a source of questions to students after their presentations to ascertain their understanding. For an excellent example of a short professional presentation that covers many of these topics, check out this video from the Chesapeake Bay Program: <https://www.chesapeakebay.net/discover/videos/bay_101_air_pollution>

* The Chesapeake Bay watershed is the land around the Bay that drains into the Bay.
* The Chesapeake Bay airshed is the area of land that shares a common flow of air.
* The majority of nitrogen pollution to the Chesapeake Bay comes from somewhere in the airshed.
* Algae blooms are caused when there are too many nutrients in the water
* Dead zones/Fish kills are created after an algae bloom when the algae die and decompose. Decomposers use up the dissolved oxygen, leaving not enough for animals like fish and crabs.
* Nutrient pollution to the Bay (nitrogen and phosphorus) comes mainly from agriculture, but also largely from air pollution
* Pollution that is in the watershed gets washed down to the Bay when it rains
* Air pollution to the Bay falls in the form of dry deposition and wet deposition (dissolved in rain)
* Modeling is a way that scientists can organize what they know about something (like an ecosystem) in order to explain how it works (ex. causes and effects)