

Lesson 7: Community Presentations + Engagement

Overview

Students create multimedia presentation(s) about vectors such as mosquitoes and/or their mosquito habitat research—or another vector-related project—and it's importance for reducing the threat of disease. In this way, students strengthen their understanding and skills, and magnify their positive impact on the community. This can be both in terms of increased awareness of their scientific investigation, as well as enhanced education of the public about how to reduce the spread of vectors-borne illness. There is also the opportunity to help the community gain better understanding of some of the local impacts of global climate change at this critical moment in history. Creating videos and/or poster presentations are additional options.

Subjects: Speaking & Listening, Science, Reading, Writing, and Art

Grades: Adaptable for 2–12

Time: Will vary

Vocabulary

 Rubric (if you have not used one with the students yet this year)

Lesson Goals

- Allow students the opportunity to share the results of their research and gain experience writing, presenting, and listening to their peers
- Increase public understanding of how mosquitoes breed, ways to control their spread, and how to stay safe from them

Objectives

- Students will create effective multimedia presentations which educate the community about vectors, vector-borne disease, and/or the results of their research.
- Students will present their work to peers and the broader community with the assistance of a rubric to help them enhance their skills and exceed standards.



A student presents about her research project.

Image courtesy U.S. Dept. of Agriculture

Standards		Middle School (Grades 6-8)	
Next Generation Science Standards (NGSS)	Crosscutting Concepts	Cause and EffectStability and Change	
	Science & Engineering Practices	 Analyzing and Interpreting Data Constructing Explanations and Designing Solutions Obtaining, Evaluating, and Communicating Information Engaging in Argument from Evidence 	
	Disciplinary Core Ideas	LS2: Ecosystems: Interactions, Energy, and Dynamics LS4: Biological Evolution: Unity and Diversity	
Common Core State Standards ELA	Speaking & Listening	1, 2, 4, 6	
	Language Standards	1, 2, 3, 6	
	Writing Standards Science & Technical Subjects	4, 7, 10	

Materials + Preparation

- Computer access and software such as PowerPoint, Prezi, and/or iMovie to create multimedia presentations and/or videos
- Display screen
- Schedule an event well in advance and, if desired, work with partners to invite community members such as parents, administrators, and other members of the school and broader community, including elected officials.
- Encourage students to dress appropriately when it is time to present to the public.
- Encourage students to incorporate props and/or different types of visuals into their presentations, if possible, such as research tools and/or live magnified mosquito larvae which which can help engage the audience and help convey their points.
- Send invitations to local newspapers and other media outlets.
- Optional: Tables for students or partner organizations such as Clackamas County Vector Control or health officials to display information

Suggested Procedure

- 1. Talk to students about ideas for the format of the community presentations. This will give them the opportunity to incorporate their ideas for the event(s) and have more "buy-in" and enthusiasm for them. For example, what groups do they think should be invited? When should the event be held?
- 2. Explain to students how they will be working. For example, if you would like them to present with their small groups from their research project, creating a 5-10 minute oral presentation or video about their project (if applicable), etc.. Tell them if engaging multimedia content should be incorporated using software such as PowerPoint, Keynote, or Prezi, and/or if videos can be created using software such as iMovie. Encourage students to conduct additional research to enhance their presentations/videos and bolster their arguments.
- 3. Pass out copies of the Presentation Rubric found at the end of the lesson to guide student learning and let them know how they will be assessed. Tell students that they will complete the "Self-Score" portion of the rubric and turn it in to you before they present.
- 4. Discuss what content you would like students to include and/or provide them with a sample outline they can use to help them structure their presentations. For example, instruct students to include details such as:
 - All the elements of their mosquito habitat investigations (if applicable), including visuals,
 - What they learned about mosquitoes and other vectors during the unit, and/or
 - How their field work enhanced what they learned in the classroom.
- 5. Discussing best practices for multimedia presentations with students while showing them a good example, such as those listed on the Clackamas County Vector Control District's education page: fightthebites.com/education. For example, they should not include too many words on slides, font sizes need to be large enough to be read from the back of a large room, there should be enough contrast between colors, even for those in the audience who may be color blind, etc.
- 6. If desired, work with partner organizations such as Clackamas County Vector Control or county/state health officials to develop an agenda for the community presentations. Other organizations can also be invited to attend who can staff tables and provide information before the presentations begin and after they are complete.
- 7. On the day of the event, sit back and watch the students shine!



A student points out an element of his service project.

Courtesy SOLVE

Adaptations / Extensions

- Identify students who have photography and/or filming experience and ask them to use a camera(s) and/or video camera(s) to document the community presentations. Students can then share their presentations with Clackamas County Vector Control, via YouTube, the school website, social media, etc., as allowed by school and district policy.
- Collaborate with grade level English/Language Arts teachers to support standards that have been taught in the students' LA classes. Students could do a joint project in which they work on science and literacy together in both their LA and science classes.
- **Students can present to younger students** to teach them about their work.
- Students can work in pairs or small groups to create short videos or poster presentations as an alternative to, or in addition to, oral presentations.
- One or more awards could be presented to outstanding class members, either individuals or groups. Awards could be for exceptional additional volunteer efforts to reduce mosquito breeding areas, leadership in the field and/or classroom, exceptional education of the public, etc.

More Resources / References

- Professionals can be invited to serve as keynote speakers for community presentation events from organizations such as those listed above.
- More resources from Clackamas County Vector Control District: fightthebites.com/education.
- More information about the Next Generation Science Standards: <u>nextgenscience.org</u>
- More information about the Common Core State Standards: corestandards.org

Name(s):	Date:

Presentation Rubric

Title:

Presentation Component	Maximum Points Possible	Self-Score (fill out before presentation)	Teacher Score			
Part 1: Content						
Subject and purpose of presentation clearly introduced	10					
Key concepts identified and clearly explained in well- organized way	10					
Ideas supported by examples, data, graphs, etc.; All information accurate and from reliable sources	10					
Conclusion summarizes key points in persuasive way; Questions answered thoroughly and accurately	10					
Part 2: Delivery / Audience Engagement						
Speech delivered clearly at appropriate volume and speed (not too fast, slow, loud, or soft)	10					
Speed, volume, and voice inflection are varied to engage audience and emphasize key points	10					
Speaker connects with audience through eye contact and does not spend too much time looking at notes or screen	10					
Speaker demonstrates enthusiasm for topic throughout presentation; audience is persuaded by speaker	10					
Part 3: Visuals						
Visuals help to clearly explain concepts	10					
Part 4: Writing Conventions						
Grammatical and spelling conventions followed	10					
TOTALS:	100					

Comments: