



Maker Lesson Summary

Lesson Title	Virus and Bacteria Multimodal Book
Name of creator	Maisha Rumman
Name of collaborator/s	Shelly Rodriguez, Kasey Weilnau, Kira Lowery
Subject and grade level	9 th grade Biology
Time required	6 - 7 hours (one week)
Link to lesson plan and materials	https://makermaisha.wordpress.com/

Lesson Description:

Multimodal books are books and stories that others can interact with. Whether that means they can touch it, hear sounds, or feel textures—these books engage the readers' senses. Students made a book designed for fifth graders about viruses or bacteria. Each book tackled a different virus or bacteria, what they are, if it was harmful or beneficial, and how it spreads. Students developed a story board, chose multimodal elements, and added words and drawings to their story.

Lesson Development (*How was this lesson developed? What resources/collaborators were involved in planning?*):

This lesson was developed in collaboration with Shelly who shared a video with me about the Better Book Project. After watching the video and thinking about what to focus on, I realized I was trying to incorporate too much into the project. I followed Shelly's advise on trying to be as simple as possible and providing students with simple materials in order to make their books multimodal. The first thing I created was the document where students would write down their research and storyboard. As I started implementation, I also made story creation cards and a rubric. Before starting the lesson, I prepared by researching multimodal books as well as children's books. During the maker cohort meeting, I brainstormed with Kira on what topic to pick and why. Kira helped me realize it would be interesting to have students do different viruses and bacteria and include how they reproduce in different ways.

Lesson Implementation (*Describe the lesson implementation*):



Day 1 Introduction: On the first day of the lesson, I had students read various children's books about viruses and bacteria and discuss why reading was important. Then, I had students pick a virus or bacteria.

Day 2 & 3 Research: On the second and third day, students start researching the virus or bacteria of their choice. They look up what it is, what it looks like, how they reproduce and spread, etc.

Day 4 & 5 Story Board: Next, students brainstormed with partners and classmates on how to formulate a story. Since students were struggling with how to start, I provided story cards that prompted students to add an event to the story such as introducing a new character.

Day 5 & 6 Book Making: Lastly, students got paper and drew out their story. They were given materials such as cotton balls, pipe cleaners, paper circuit materials, and pom poms to add multimodal elements to their book.

Day 7 Presentation: Some classes got to video conference with fifth graders about the books that were sent over. The fifth graders asked questions such as where you would normally find the virus/bacteria and how you got it, etc.

Connection to important concepts and skills within the discipline and/or across subject areas:

A variety of cross disciplinary skills were needed in this project including communication skills to address fifth graders and introduce themselves. In creating the book, students needed to use art, creativity, and English to come up with a creative and catchy story line. Not to mention, they also had to use critical thinking in order to research and then pick the appropriate multimodal elements for their book.



REFLECTION

What Went Well:

Because of this project, I was able to see a side to my students that I hadn't been able to previously because of how structured the nature of my usual assignments are. Through the book, I was able to see how creative and analytical some of my quieter students were. They were able to convey the story in a way that made you smile or wove together storylines to connect two characters together. I was impressed by the empathy that was needed for my students to be able to communicate and speak in such a way that is understandable for fifth graders. Not to mention, students who usually zone out in class were heavily involved and excited to see their finished products.

Thoughts for the Next Iteration:

On the next iteration, I want to pre-teach viruses and bacteria more. Although I liked just having the students explore, it would have been nice to at least explain the basic difference between the two and what types exist. Additionally, I would have spent more time having students identify a virus or bacteria that was personal and relevant to them. Although the results of this project were great, students could have done more to add personal elements about themselves.