Elizabeth Harrigan

ILS 7477

Dr. Klimczak

February 19, 2012

Technology Integration Learning Plan

Overview

This learning plan will address the various viruses and bacteria that can affect people. The students will work in collaborative-groups to create a presentation describing various bacteria and viruses. The viruses and bacteria include: HIV/AIDS, Chicken Pox, Influenza, Leukemia, Mumps, Measles, Hepatitis, SARS, helpful bacteria, Escherichia Coli, Salmonella, Streptococcus, Staphylococcus Aureus. They will use a variety of internet resources to create presentations that will inform the other students in the class about the common viruses and bacteria that exist and how they affect humans. They will also present way in which a person can contract the viruses and bacteria and ways in which to avoid them. Those groups describing helpful bacteria, need to inform the class how different bacteria are helpful, and how life would be different without the bacteria. The students will use Glogster™, Empressr™, or ZOHO™ to assist with their presentations.

The reason behind this activity is because it is a required standard in the state of Missouri. Beyond just the basic knowledge of bacteria and viruses, my goal is that my students understand the great deal of risks they can take in their life, and how the risks they take may affect their lives in the future. My goal is that my students recognize the affects viruses have on a person's body and means in which they can use to avoid infection.

Analysis

Needs Assessment

Students will take a pre-assessment that will determine the information they will already know about viruses and bacteria. The students have learned some information about both viruses and bacteria, and have been taught the key difference between the two. The assessment will include the following questions:

- Are bacteria are prokaryotic or eukaryotic?
- Viruses are alive (true/false)

- Viruses have can reproduce (true/false)
- Bacteria are made of cells (true/false)
- Can viruses be cured?
- Can bacteria be cured?

Instructional Purpose

The purpose of this activity is help students understand the difference between viruses and bacteria as well as recognize the dangers of various bacteria and viruses. Skills taught include finding reliable resources, using online resources to create a presentation, and increase collaboration.

Scope

This TILP will take approximately four, 80 minute blocks per class (8 days total).

Topic Covered

Viruses and Bacteria will be taught including examples of various bacteria and viruses.

Desired Learning Outcomes/Objectives: The students will be able to:

- Determine the difference between a bacteria and virus
- Identify various viruses and their impact on the human body
- Identify various bacteria and how they affect humans and the world
- Collaborate with peers to discuss bacteria and viruses
- Determine reliable resources that provide information
- Use online presentation tools to create an interactive presentation about viruses and bacteria
- Present orally to the class information about each virus or bacteria and answer any questions
- Self-reflect on learning

Resources/Media

- Computers – one for every student
- Various virus and bacteria websites
- Empressr™ website (http://www.empressr.com)
- Glogster™ website (http://www.glogster.com)

- ZOHO Show™ website (https://show.zoho.com)
- Classroom projector

Structure/Sequencing of Learning Activity

Prior to the students begin to research and create their presentations, the students will be reviewing their prior knowledge of bacteria and viruses. We will do a brief review of the classroom readings and the allow students to select their partners for the project. The students will do a final presentation of information in the form of speed presentations. Therefore partners are required so that everyone can present quickly and everyone can gain the information they need. Once topics are selected the students will use guided research model to find the pertinent information for the project.

The use of technology in this project is mainly through web-research and web-based presentations. It will allow students to compile information quickly and easily. The students can collaboratively find information through the use of Google™ docs and finally compile their final information in a web-base presentation. The presentation will be easily accessible on any computer and will allow for text, video, music, and images to create an interactive presentation.

Steps for TILP:

1) Needs assessment – informal pre-assessment to determine student's current knowledge
2) Basic review of viruses and bacteria
3) Review of reliable research
4) Review Google Docs™, Glogster™, Zoho™, and Empressr™
5) Selecting partners
6) Selecting Topics
7) Steps 1-6 should take approximately 30 minutes
8) Research – 1.5 days
9) Presentations –(2 days) this will be done speed presentation model – presenters sit in a circle, one student from each partner will present, while the other will switch around to each group (4 minutes per presentation) and learn the information. Once the partner is back with his/her partner, the students will

switch and the second student will become the presenter and the other partner will learn all the information.

10) Post-Assessment

11) Self-Reflection of what the students have learned – included in post-assessment

Assessment

Students will be assessed on their project using a rubric as well as a unit formal assessment. The project rubric will assess content, resources, visual appeal, accuracy of information and presentation. The students will then be assessed formally using a traditional assessment to determine comprehension of material. The students will also assess their partners on collaboration and the amount of work each person contributed. Their presentations will be separately assessed because each will be presenting the same information on separate days.

Implementation

The implementation of this activity could change due to a variety of reasons. The reservation of computer labs is often difficult to do in my building, and although I have reserved the labs for a total of 8 days, this does not mean that I could not get bumped due to some unforeseen need. In addition, the use of the internet may be difficult if the server becomes slow. One other concern I have is what I will do with the students who have been blocked from using the computer due to inappropriate computer usage in our building. I have created an alternative assignment for those students. They will be asked to create a poster and I will provide them with reliable and unreliable resources and they will have to determine on their own which resources to use. Unfortunately, I have a few students who have made poor choices and I have to provide them with the same knowledge as their peers despite not being able to use the same materials.

In the event that a student does not contribute enough to the group project, the students will complete self-evaluations as well as partner evaluations to allow for appropriate grading of each student.

In the event that the technology is not working in my building, I can always provide every student with the alternative assignment. Although the project may not allow for interaction with technology the same skills can be learned.

Evaluation

Evaluation Criteria

I will evaluate my learning plan by answering the following questions about the activity.

- Did the students achieve all of the learning objectives? How was I able to determine that they did/did not learn everything expected?
- Did they learn anything beyond what I was expecting and would that be an additional expectation for the next time I plan to do this assignment?
- Did my students work collaboratively?
    - If not, what could I do next time to ensure greater collaboration?
- What could I change from the next time I do this activity?
- Did the students successfully determine reliable and unreliable resources?
    - If not what could I do to ensure that in the future?
- Did the students successfully make their presentations?
    - Did they have difficulty and if so how could I make it easier?
- Was the presentation an effective way to present the material?
- What would you change if you were to do this lesson again in the futre?