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Interactive Presentations

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Abstract

Meaningful learning happens when students are engaged in the lessons. One way to get students engaged can be through multimedia presentations. The Jet Propulsion Laboratory has several multimedia interactive presentations that are reviewed and evaluated as to how they can enhance learning in the classroom.

Interactive Multimedia Presentations

The types of tasks that students complete in and out of the classroom help drive the quality of learning that happens (Jonassen, D., Marra, R.M., Howland, J., & Crismond, D., 2008). Students should be engaged in active, constructive, intentional, authentic, and cooperative tasks (Jonassen et al., 2008). One way to accomplish this with students is to have them use multimedia interactive presentations. These types of presentations cover various topics and can be used in the classroom by individual students, in groups, or cooperatively. Many of these presentations are Web based and students may be able to access them from a non-school setting as well.

The Jet Propulsion Laboratory creates new technology for space exploration. The laboratory sponsors web-based interactive sites that anyone with access to the Internet can use. The laboratory’s focus is on space exploration and the tools used to explore space. The website has several interactive multimedia presentations. Three of them were examined and evaluated. The three presentations that were looked at were the wide-field infrared survey explorer (WISE), Climate Time Machine, and Cassini (Espioza L., Greicius, T., Orr, K., & Perez, M., 2010).

The WISE presentation has visual and audio of a scientist that explains what WISE is. After the presentation, viewers can click on various tabs that explain what infrared is. The visuals are stunning and the photographs of space before and after using infrared light are dramatic. It helps a viewer understand how infrared light can help scientists really see what is out in the universe.

This site could spark an interest in astronomy and science in some students solely based on the presentation of the photographs. It could cause a student to want to find out more information on their own. It could be used as a discovery activity in a classroom.

The Climate Time Machine is an interactive site that tracks the changes in global climate over a period of time. Viewers can see the changes in sea level, sea ice, carbon emissions, and average temperature on a global scale by clicking on one of the buttons on a menu. Once in a particular section, viewers see the changes by sliding up and down on a timeline. I liked how this presentation visually shows the changes throughout the years and also shows that the changes do not go in just one direction. Viewers can see the changes in various countries as well. The music that is played on the main menu can be annoying but stops as soon as a button is clicked.

Finally, the Cassini presentation focuses on the exploration of the Saturn System and the spacecraft that explores and takes pictures of it. This presentation allows viewers to download video of the Saturn System and allows a detailed view of the Cassini spacecraft. Viewers can click on various parts of the spacecraft to get specific information about each part. This presentation also has 3-demensional views of the planet and moons and allows viewers to rotate them to see all sides. This presentation allows virtual tours that use audio combined with visual. Viewers can click on different subtopics that they are most interested in.

All of these presentations could be used to enhance learning. They can be constructivist, allowing students to explore the topic on their own and focusing on areas of interest. They can also be used in a collaborative or cooperative way, in which individual students or groups of students focus on a particular part of the presentation and work together to synthesize the information.

Creating a similar presentation for the content of language arts could be done but it would look very different. Presentations could focus on different categories like nonfiction text, grammar, writing, fiction, and poetry. Viewers would click on button for the topic they are interested in. Students would be able to play games to learn their topics and test their skills or knowledge in a topic area.

Overall, the Jet Propulsion Laboratory’s interactive presentations are very engaging. Some of the presentations were very technical but were explained well. The visual, audio, and manipulation aspects of the presentations made the understanding of the different topics easier.

References

Espioza, L., Greicius, T., Orr, K., & Perez, M. (2010). *Jet propulsion laboratory : California*

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