

Modeled Science – Using Flip Video Clips to Build Understanding

Objective: Students will create an active model or demonstration that teaches a science process or science concept and capture it with a pocket camcorder.

Project Description and Procedures for Teachers:

Topic Selection

Students explore and select a science topic that can be modeled or demonstrated. Topics should lend themselves to hands-on or active presentations. Before student work begins on the project, students need to think through and write up a story board for the model they choose to create. The teacher needs to check the idea for content and safety issues and make recommendations for improving their plans.

Model Building

After the teacher approves the project, the student gathers materials and creates the model or demonstration. Several trials and model rebuilding attempts may be needed to work out the bugs before the best educational model is ready to film.

Once the model is fine-tuned to be predictable and effective, students will submit a written script along with story board revisions for approval by the teacher.

The narration of the model or demonstration is crucial, so students must be well practiced with how they communicate during the modeling. Eliminating background noise is very important.

Presenting Models and Filming

Students then present their model to the class while someone films the process with a digital pocket camera with a USB flip connection. (Camera brands include as Flip Video and Small Wonder.) Filming can also be done beforehand in quiet locations and played back for classroom presentations.

Prior to filming, classmates will need to be instructed about the importance of reducing unwanted, background sounds that could interfere with filming. Consider doing practice videos – one with silent viewers and one with talking by classmates. Play both videos back to students to show how talking can distract or make a film presentation ineffective.

Viewing the Video Clips

The pocket camera clips can be downloaded directly to files on a computer through the USB port. Of course, students will enjoy watching the clips immediately after presentations. Consider viewing them as a review weeks later to reinforce the concepts covered in the lessons.

Teacher Instructional Resource:

To review an abstract of a book on teaching science using analogies, explore the following:

Teaching Science With Analogies: A Resource for Teachers and Textbook Authors

CO-AUTHOR: Shawn M. Glynn

CO-AUTHOR: Michael Law

CO-AUTHOR: Nicole M. Gibson

CO-AUTHOR: Charles H. Hawkins

INSTITUTION: *University of Georgia*

An abstract of the information is available at

http://curry.edschool.virginia.edu/go/clic/nrrc/scin_ir7.html