Claymation Movies

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GOALS & OBJECTIVES

The students will acquire knowledge about earth and life on a space station through conducting research.

Students will use computer technology and the internet as research tools

The students will synthesize information about living in space through writing storyboarding, and creating Claymation movies.

Students will learn how to use the digital camera and upload pictures to the computer.

Students will learn edit frames using computer software as they practice sequencing skills to tell a story.

SUNSHINE STATE STANDARDS:

Science:
1. The students understand the interaction and organization in the Solar System and the universe and how it affects life on earth. (SC.E.1.2)

2. The students recognize the vastness of the universe and Earth’s place in it (SE.2.2).

Visual Art:
1. The student understands and applies media, techniques and processes. (VA.A.1.2)

2. The student creates and communicates a range of subject matter, symbols and ideas using knowledge of structure and function of visual art. (VA.B.1.2)

3. The students make connections between visual art, other disciplines and the real world (VA.E.1.2).
MATERIALS

The project can be done very quickly and inexpensively using play dough or children’s modeling clay.

| pipe cleaners          | Heavy Drawing Paper          |
| non drying clay        | Markers                     |
| combo bending and cutting pliers | Crayons             |
| glue gun and glue sticks(1 pack) |                        |
| digital camera         |                            |
| tripod                 |                            |
| Computer/laptops       |                            |
| Power Point, iMovie or Media Blender software |                     |

OVERVIEW

The program consisted of involving students in the study of space and living on the International Space Station (ISS) and designing a Claymation movie to demonstrate living on the ISS. Students worked with computers to research, gather and present information as it relates to living in space. The art teacher and the gifted resource teacher collaborated to engage students in this project.

Under the direction of the gifted resource teacher, the students studied and discussed various aspects of space travel. They investigated what astronauts do on the ISS. They considered factors, such as gravity, air purity, and types of soil and daily activities. Students worked in groups to develop their ideas and then created a storyboard.

The art teacher assisted with designing the background scene and guided students in creating their models. Both teachers instructed and supervised students as they developed their scene sculpted and posed their figures and took photographs. Students edited their projects, added sound and presented to their peers.

Students worked in teams to develop their story and then design their story boards and backdrops. The students then collaborated to construct characters using wire and clay. The characters were then positioned in front of backdrops while students took photographs that were uploaded to the computer to create movies on animation software.

COURSE OUTLINE

Week 1: Research space travel

Week 2&3: Write scripts and prepare storyboards
**Week 4&5:** Create props & backdrops for scenes

**Week 6&7&8:** Create clay characters

**Week 9&10&11:** Film animation, edit on computer using power Power Point or Video Blender software.

**Week 12:** Share with peers

*Creating the characters is very engaging for students. Don’t get stuck in a time warp! Be sure to allot adequate time at the end of the project for filming and editing movies*
PLANNING YOUR PROJECT

THE STORYBOARD

The storyboard is the place where thoughts and action come together. Similar to a comic strip, the storyboard consists of words or the script which the characters speak and drawings which represent the flow of the action or plot which unfolds on the stage. The drawings are called thumbnail sketches (because they are small) and do not need to be finished works of art. Stick figures are sufficient, although you may spend as much time finishing your story board as you would like.

Like a rough draft, the story board allows you to work out the flow of your story. It also forces you to commit your idea to paper and gives you, your peers, and teacher a chance to critique and suggest improvements.

Each frame contains one scene in the action sequence you will be filming. Following the storyboard makes taking the camera shots very easy. Stick to your plan and you will succeed with ease.

Character Sketch:

Like the storyboard, the character sketch makes you accountable for your idea. It could literally take forever, if students do not commit to their characters and keep starting over. A lot of waste takes place if students don't know which character they are creating. What color are the character’s eyes, hair and skin? What kind of clothes do they wear? Work the details out on paper. This will save time and supplies.
Project Storyboard

A storyboard is a combination of outlines and visual sketches that map out the contents and direction of a project. A storyboard is your blueprint for project design. Use this storyboard to show what will happen in each scene of your animation.
SKETCH YOUR CHARACTER

Guidelines:

1) Your character must fit inside this box
   (Your character can be smaller, but not larger than this space)

   You may turn paper to either *Horizontal format or *Vertical format

   **Horizontal format** – standing the long way
   (example: a dog or horse)

   **Vertical format** means standing the tall way
   (example: a person)

2) Your character must:
   Be *free standing
   (Stand up by itself with out your help)
**The Armature**  
By Nancy Mastronardi

Materials:

14 gauge aluminum wire  
26 Gauge (fine) craft wire or pipe cleaners  

Adaptations  
Pipe cleaners or telephone wire can be substituted for 16 gauge aluminum armature wire but characters tend to be floppy and unable to support the weight of the clay. (Pipe cleaners are easiest to bend but create the least sturdy product.) Phone wire is very durable, but the most difficult to bend.

Wire cutters  
Pliers  
Hot Glue gun  
Hot glue refill sticks

The armature is the skeleton which will support your clay character. The armature can be created with pipe cleaners, aluminum wire, or other pliable wire such as telephone wire. It is the wire inside which gives the character its ability to bend.
Claymation Armature

Use approximately 40 inches of wire to create the armature.

Cut wire into 2 12 inch pieces (the head and torso, and the arms) and one 16 inch piece (for the legs and feet).

Use a wire cutter or a pliers with a built in wire cutter to cut your wire. The back of the jaws on this wire cutter near the handle can be used for cutting wire. Aluminum wire is so soft, you could cut it with a scissors, but you will dull the scissor blades and eventually ruin them.

Head and Torso
Using one 12 inch piece of wire, form a small loop at one end to form the head.
Twist the rest of the wire all the way down to the ends for strength.

**Hands and Arms**
Using the second 12 inch piece of wire, fold the two ends in towards each other so they touch in the center.

Fold wire in half so two ends touch in middle

Twist the outside ends of the wire to create a loop at each end. This will hold a ball of clay for the hands.

Twist the rest of the wire all the way towards the center for strength.
Legs and Feet

Using the 16 inch piece of wire, fold the two ends in towards each other so they touch in the center.

1. Fold wire in half so two ends touch in middle.
2. Twist the outside ends of the wire to create a large loop at each end. The loops will hold a ball of clay for the feet.

3. Twist the rest of the wire all the way towards the center for strength.

4. Twist the outside ends of the wire to create a large loop at each end. The loops will hold a ball of clay for the feet.

5. Bend the wire in half and bend the feet so they stand on the floor. Remember, your character must be able to stand up by itself. Exaggerate! The feet must be large enough to keep your character from falling over.

6. Twist the rest of the wire all the way towards the center for strength.
Attach the legs to the torso. Wrap the end of the head and torso wire around the leg wires.

Twist the remainder of the wire up around the torso for strength.

In order to support the torso so the legs don’t spin around, wrap the pelvic joint with fine wire or a pipe cleaner.

Wrap the arms once around the torso and secure by wrapping with fine wire or a pipe cleaner.

Secure with hot glue for added strength.
Small pieces of dowel can be used to make the armature stronger so that it doesn't bend in the wrong place under the weight of the clay. 1/16 inch dowel works fine. I like to use wooden skewers from the grocery store. They break easily with a pliers.

Wrap each piece of dowel to the wire armature with fine wire.
Cover wire armature with clay.

Be sure to make the feet and base thicker and sturdier than real life. Remember, your character must be free standing (stand on its own).
RESOURCES

http://www.tech4learning.com/
http://www.gumbyworld.com/
http://www.wallaceandgromit.com/
http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/By_Type_Classroom_Activities_landingpage.html

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Sweeney, Joan. “Me and My Place in Space”
Pasachoff, J.M. & Menzel, Donald H. “Stars and Planets”
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