This lesson incorporates art, academic curriculum, developmental skills, and multi-media technology, and is appropriate for all grade levels. Students become involved in all aspects of this lesson and will understand and appreciate the complexities of clay animation when viewing movies and videos that employ this process. A brief description of the animation process is provided, along with samples and examples to show how the completed work will appear. Step-by-step instructions are included, along with a glossary of terms, lesson goals and objectives, background and preparation information, supply and equipment list, alternative suggestions, and additional ideas. (EH)
Clay Animation:
An Interdisciplinary Lesson.
Amaco Lesson #8.

Harriet Gamble
David Gamble
Clay animation combines the high tech equipment kids love to use with their ageless, timeless love for the tactile qualities of clay. It encourages teamwork and gives students the opportunity to learn through the hands on process of creating. This engaging clay animation lesson incorporates art, academic curriculum, developmental skills, and multi-media technology and is appropriate for all grade levels. Students become involved in all aspects of this exciting lesson, and they will never again see a clay animation movie or video without understanding and appreciating the complexities of the process.
Lesson goals and objectives:

1. Students will work together to create a clay animation video using Permoplast® and Plast-i-Clay® Modeling Clay.
2. The lesson will incorporate art history, aesthetics, and criticism with a hands-on activity.
3. The lesson will focus on interdisciplinary, multidisciplinary concepts, encourage critical thinking, and emphasize cooperation and collaboration.

Notes:

Background and Preparation:

1. This project has been designed for all grade levels from primary through high school. The level of sophistication in creating the video will depend on the age of the students and the time allotted.
2. Talk with classroom teachers and the administration. Request their recommendations for topics and their help with research. This is an interdisciplinary project and should involve different aspects of the curriculum.
3. The art teacher should introduce an overview of animation and clay animation, helping students to understand how complex the process is. Show examples of professional clay animation videos and commercials. Explain that a professional clay animation video is approximately 30 frames per second. A one-minute clay animation video seen on television requires 1800 individual stop-action frames. Using simple equipment — a camcorder, TV/VCR, and audio tape player — it takes 40 frames for 10 seconds of video; 240 frames for a one-minute video; and 14,400 frames for an hour video. A one-minute student-created video will require that the characters and scenes be moved and shot by students 240 times in sequence.
4. Talk to students about the teamwork and cooperation. Explain that each student must be and will be involved in all aspects of the project and that each must do his or her share. Remind students that clay animation is a process that can only be accomplished if it is done step-by-step.
5. Demonstrate the process for the students. Show them how a story line, characters and background sets are created and how video taping is done.

Notes:

Glossary:

Animation — a motion picture or video made by photographing successive positions or poses of drawings or puppets or other immobile objects so that the projection of the film produces a picture in which the objects seem to move in a lifelike and realistic manner.

Armature — a rigid framework, usually of metal, made by a sculptor as a foundation or "skeleton" over which clay is applied.

Collaboration — cooperation, teamwork; the act of working together to create a finished product.

Dub — to add sound to a video or film.

Frame — one picture in a series of many pictures that are part of a video or film.

Narration — the story.

Relief — carving, molding, modeling, or stamping in which the design projects from the background surface.

Sculpture — a work of art that is meant to be viewed from more than one side; a work of art that is three-dimensional.

Stop Action — a process in video taping; characters and objects are moved and then photographed one frame at a time.

Storyboard — a panel or a series of panels with small rough drawings to depict in order the important changes of scenes and actions in a planned film or video.
Story Line — the plot of a story, play, or movie

Taping — to record (video) on magnetic tape

Three-dimensional — a work of art that is meant to be viewed from all sides; having the dimension of depth as well as width and height

Two-dimensional — a work of art that is flat and viewed from the front, like a painting; having the dimension of width and height only

Video — a recording on magnetic tape of a production to be shown on a television

Optional Supplies:

Masonite for base and back
Various multi-media supplies (colored construction paper, found objects, etc. for background sets

Video Equipment

Camcorder capable
TV/VCR
Audio Tape Player

Optional Video Equipment, if available

Editing deck
Power Macintosh AV Computer
New Tek Video Toaster

Instructions:

1. After a theme has been determined, students should choose a title and discuss the theme. If research is involved, ask classroom or subject teachers to help provide resources and assistance.

2. Using their imaginations, students should create a story line about the theme. Remind them to keep the story simple and to limit the number of scenes.

3. Determine the number of scenes. Create a storyboard from the story line and calculate the single frame movements necessary.

4. Divide the class into the same number of groups as there will be scenes. Each group will work on all aspects within the scene, creating characters and background sets and video taping.

5. Scenes can be three-dimensional (vertical) like a stage or horizontal (flat, like a relief) where the characters and objects lay flat on the background. If the class is doing a number of scenes, have some be vertical and some horizontal.

6. The vertical background can be created from curved masonite. A curved, rather than right angle, seam gives an illusion of depth.

7. Explain that creating the background and sets is like creating a relief and that creating the characters and objects is like creating sculptures.

8. Backgrounds (sky, clouds, trees, sun, stars, etc.) are constructed by pressing small chunks of modeling clay on to the masonite board.

9. Use solid core copper wire as armature for the clay people and objects. The wire provides stability and ease of movement.

10. To make figures, show students how to mix and blend colors for flesh tones and other colors. For control and handling, form head and face over eraser of pencil.

11. Once backgrounds, objects, and characters are finished, students should decide where the people and objects should go in the scenes.

12. The story is recorded onto video tape by moving the characters short distances and taking single frame pictures of the scene. This process is repeated over and over until each scene is completed.

13. Students should write a script that includes dialogue, narration, and background music. When the script is recorded, it is then dubbed onto the completed video tape.
Follow Up Ideas:

1. Some successful ideas for clay animation videos include "How an Apple Grows," the study of the life cycle by second grade students "Travels through Electricity," the study of how coal is processed and generated into electricity by fifth grade students "Fun at the Amusement Park," a creative writing language arts lesson by fifth grade students "Journey to Outer Space," the study of planets by fourth grade students "Building a Rainbow," a lesson in positive values and self esteem by elementary students "Afrocentricity on the Move," a story about graduating from high school, overcoming obstacles, and succeeding in life by high school art students.

2. Show complete videos to student body and to parents and visitors at open houses and other school events.

This clay animation lesson is based on workshops presented by Susan Tennant throughout the state of Indiana. Examples of clay animation characters, objects, and scenes were created by students at VanBuren Elementary School, Plainfield, Indiana; Susan Robbins, Art Teacher.

This is one lesson in a series of art plans for elementary and secondary programs using American Art Clay Co., Inc. products. Successful lessons will be considered for future publication. Send your ideas and slides to David Gamble, National Marketing Director, American Art Clay Co, Inc.
I. DOCUMENT IDENTIFICATION:

Title: AMACO LESSON #8 CLAY ANIMATION

Author(s): HARRIET GAMBLE AND DAVID GAMBLE

Corporate Source: AMERICAN ART CLAY COMPANY, INC.

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electroneoptical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following options and sign the release below.

[ ] Sample sticker to be affixed to document

Check here or here

PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

 Level 2

Sign Here, Please

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIE microfiche or electroneoptical media by persons other than ERIE employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: DAVID L. GAMBLE
Printed Name: DAVID L. GAMBLE
Address: 4717 W. 16TH ST
          INDIANAPOLIS, IN 46222
           Position: NATIONAL MARKETING DIRECTOR
          Organization: AMERICAN ART CLAY COMPANY, INC.
          Telephone Number: (800) 374-1600
          Date: OCTOBER 17, 1995

OVER