

Stop Motion Action! Creating Clay Animated Movies

2006 Georgia Educational Technology Conference

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Clay Animation Made Easy
<http://education.wichita.edu/claymotion>



Presentation Notes:
<http://essdack.org/gaetc2006>

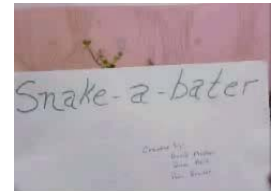
GaETC 2006

Stop Motion Animation

The illusion of movement is called Persistence Of Vision and is based on the eye's ability to retain a picture for a fraction of a second after it is removed

If a new picture is shown while the viewing eye can still perceive the first, then the mind is tricked, and the object viewed appears to move on its own

- Take a series of still photos
- Play the photos back at a frame rate to simulate motion



Provides Opportunities for Students

Collaborate and work as a team



Provides Opportunities for Students

Use humor to solve visual problems



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Provides Opportunities for Students

- Develop creative characteristics
 - Fluency
 - Originality
 - Re-definition
 - Adaptation
 - Elaboration



Brainstorming and Storyboarding

- Brainstorm and think of a story idea
 - Characters
 - Setting
 - Plot
- Create a storyboard or an outline of the action



Creating Clay Figures

- Armature – pipe cleaners or wire, foil, Styrofoam
- Thin skin of oil-based non-hardening clay (Van Aken, or Claytoons)
- Stability – big feet, magnets
- Details
 - Wiggly eyes or beads
 - Garlic pressed clay hair
 - Pockets, buttons, etc.
 - Facial features: lips, ears, eyebrows



Creating Clay Puppets



Mueller Elementary Wichita, KS, Beth Adamson, 4/5 Grade Classroom

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Creating Sets

- File folders, shoeboxes, tri-fold boards
- Scale, proportion
- 3-Dimensions – remember the foreground
- Color – contrast characters and other objects with background
- Paper, fabric, glue, little toys, anything can be used



Creating Sets



Robinson Middle School, Wichita, KS- Gail Boddy, 7/8 Grade Classroom

Lighting

- Constant source of lighting
- Indirect – bounced
- Clip on shop lamps
- Beware of shadows – these cause flickering strobe-like effects! People walking by, people leaning over, clouds going by-- all change the lighting.



Digital Cameras

- Webcams – cheap, immediate feedback, small files, no cards, or tapes
 - Logitech QuickCam Pro 5000
 - Apple iSight



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Capture Software

SMA – Stop Motion Animator for Windows
FREE Download:

http://www.clayanimator.com/english/stop_motion_animator.html



Capture Software

- iStopmotion - for Mac
<http://istopmotion.com>
Download a demo, education pricing



Video Editing

- Import video
- Titles
- Credits
- Effects
- Music
- Narration
- Remove frames with hands
- Software: iMovie for Mac or Windows Movie Maker



Materials

- Clay – oil-based, non-hardening (Van Aken, Claytoons)
- Armatures – wire, pipe cleaners, foil, Styrofoam
- Art Supplies – paint, markers, crayons, glue, scissors, construction paper, etc.
- Sets – cardboard, folders, shoeboxes
- Sculpting tools – garlic press, pasta maker, popsicle sticks, plastic knives, rolling pin, baby oil
- Misc. Supplies – baby wipes, cookie sheets, wax paper, Ziploc bags, magnets, fishing line

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Books and Videos

- How to Make Clay Characters by Maureen Carlson
- Secrets of Clay Animation Revealed! by Marc Spess and Lynda Lotman
- A Beginners Guide to Animation: Sculpting Characters With Clay by Mark Sawiciki
- Stop Motion: Craft Skills for Model Animation by Susannah Shaw

Resources

- http://www97.intel.com/education/odyssey/day_223/day_223.htm
- <http://teachnet-lab.org/santab/claymotion.htm>
- <http://education.wichita.edu/claymotion/videos7.html>
- http://www.tech4learning.com/pdfs/claykit/personification_poetry.pdf
- <http://tech4learning.com/claykit/standards.html>
- <http://freeplaymusic.com>
- <http://www.animateclay.com/>
- <http://ali.apple.com/events/sfsu/>
- <http://home.neb.rr.com/monarchrose/animation.htm>
- <http://www.thedeathlydeaths.com/blog/>
- <http://www.hthdeneps.sa.edu.au/clay/>

Process or Production?

- What is your primary learning objective?
 - Research and study a topic
 - Experience visual language
 - Group collaboration and extension of a topic
 - Practice a step-by-step process
 - Create a final product for parents, administrators, showcases...?

Your primary objective will determine the scope of your production.

Classroom Management

- Teachers collaborate (Language Arts, Math, Computer Studies, Social Studies, Science...)
- One computer and one camera for the entire class OR one computer and camera per group.
- Process deadlines
 - Organize, brainstorm, and storyboard
 - Create puppets and sets
 - Capture stop-motion
 - Edit and export

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Tips

- Start SMALL and don't count on a production piece the first time
- Storage – shoebox, Ziploc bags, place to keep everything safe
- Keep surfaces and hands clean
- File management – where are they going to save their files?
- File sizes – Storage room goes fast
- End product – CD, DVD, Web ?
- Procedures – this can be messy and time consuming

Curriculum Connections

- Cross Curricular – processing and synthesizing information and creating a visual representation
- Language – writing, reading, details, outlining
- Mathematical – logic, sequencing, problem solving, and spatial skills
- Collaboration
- Creativity
- Appeals to multiple intelligences

Curriculum Connections

- Animate a scientific process
- Communicate research or information
- Retell a historical event
- Retell a novel or story
- Animate a poem or song
- Standards and Learning Goals

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