

Teaching Artist: 杰意 Jiéyì

Stop Motion Animation: Character and Environment

Art, Math, and Technology

2nd, 3rd, or 4th grade

About:

In this class we will work together to create stop motion animation stories using both traditional and digital media. This class is meant to take place over 5 sessions with 45-60 minutes for each session.

Materials:

- 1 ipad per 2-4 students
- Watercolor paints and brushes
- Pencils and black markers
- copy paper and cardstock
- Scissors
- Hole punchers and brads
- Blocks or other objects for a practice movie

Day 1 (45 minutes)

- Community Agreements: Be Safe. Have Fun. We're in this together.
- Introduction to OSnap! Stop motion animation app.
 - *Rules: 5-10 seconds max! As slow as 5 frames per second and no faster than 15 frames per second.*
- Collaborate with your whole table to use tetris blocks and polygon blocks to make a 10 second long animation at 10 frames per second. $10 \times 10 = 100$ pictures!
 - *Did you know that professionals frequently shoot at least 30 or 60 or even 90 frames per second? How many pictures would you need to take to make a 1 hour long movie?*

Day 2 (45 minutes)

- Draw a character...*a fire tail t-rex*
- Make another drawing of your character in a setting... *on a sailboat in the middle of the ocean.*
- What might the story here be? *Maybe the fire tail on the monster burns the sailboat.*
- And then what? *The monster is in the ocean with a broken sailboat and its fire goes out.*
- Draw a 3-5 segment storyboard
- Talk with other people at your table. How can you compromise and combine stories? What role will each person take (camera operator, parts-mover, handwriter)? Will you take turns with your roles?

Day 3 (45 minutes)

- Work with people at your table to paint your character(s), setting pieces, and background. Who is doing what? How can you help each other?

- Begin cutting out parts if you're ready.
- If you have lots of extra time, try making your character into a moving-limb puppet.

Day 4 (45 minutes)

- Finish cutting out parts
- If you're making character puppet(s), hole punch and assemble character parts
- If you're ready, begin filming a title sequence

Day 5 (45 minutes)

- Finish filming story
- If you have extra time, also film a cool end sequence
- Help other groups finish in time
- Make sure you render & save your projects and send them to me so that we can all watch your video later

Learning Goals:

- Brainstorming, sketching, and planning to generate ideas
 - **Activity:** drawing our character, character in a setting, and storyboard before beginning on our big projects.
 - **Assessment:** Visual check of brainstorming pages. Does the student have drawings of a character without-context and in-context? Does the student have a storyboard before beginning to paint and film? Does the group follow through on the plans they made?
- Collaborating with others to create projects. Practice turn-taking and role-taking.
 - **Activity:** work together on the first day in groups of 3-4 to use blocks to create a 10 second long animation. Take turns holding the iPad and moving the blocks.
 - **Activity:** talk with others to come up with stories, decide who is doing what (camera operator, storyboarder, painter, parts mover...), work on projects together, and help other groups finish in time.
 - **Assessment:** Teacher check-in with each team. Are students able to consider each other's ideas? Are students able to compromise and come to consensus? Are students taking turns with the technology? Do group members each have a role? Do students try out multiple roles? Does every student feel engaged with the project and part of a team?
- Students are able to identify elements of a story and can create a sequence of events
 - **Activity:** Explore character and environments by drawing storyboards, paper characters, objects, and backgrounds and using those parts to film a stop motion animation project.
 - **Assessment:** Can students separate out the elements of their projects (character, background, object...) and use the elements together to create an animation? Is there a beginning, middle, and end to their story? Does their storyboard match their final animation?

- Take a multimedia approach by incorporating both traditional and digital methods
 - **Activity:** Paint characters and setting pieces using watercolor, then cut out parts and use the OSnap app for iPad to create Stop Motion Animation videos.
 - **Assessment:** Do students create line drawings before adding color? Do students practice care with the art tools? Do students use paint brushes, scissors, hole punchers, and brads with control? Are students able to use small movements to create smooth video? Can students use multiple techniques within a video (zooming in/out, panning across a scene, character limbs that move when walking, handwriting letter-by-letter...)? Can students keep characters and background in frame while filming video? Can students select and delete frames that don't work (e.g. fingers over camera)? Can students follow directions to render and share their projects? Can students safely use various tools to create and finish their projects?
- Art across the curriculum: math (multiplication, quantity, speed, duration, word problems)
 - **Activity:** Create stop motion animation projects that work towards a goal of $10 \times 10 = 100$ (10 seconds at 10 fps = 100 pictures). Try increasing and decreasing the speed (5-15 fps). How does that influence how fast a movie feels and how long movie is? As a class, can we figure out how many pictures we would have to take to make an hour long movie at 40 fps?
 - **Assessment:** How long are student videos and how many pictures did they take? Students will be able to adjust the length and speed of their movie by adjusting how many pictures they take and the number of frames per second. As a group, can students answer through their projects: "If you increase or decrease the speed, how many pictures do you need to take to have a 10 second long video?"