Clay Animation

This activity will deepen your student's understanding of both spatial reasoning and computational thinking. The process of creating a stop motion animation will challenge children to break down a larger task into small steps. It also teaches how to plan, create, and implement a sequence of events in a manner that is very similar to coding a computer program.

Stop-motion animation requires students to create a clay figure and take a series of digital photographs. For each photograph, students will make a very small change in the placement of the clay. When the photos are put together and shown in a rapid sequence, it will look like the figure is moving (animated). To create the animation, the photos can be dropped into a PowerPoint presentation and played as a slide show at a rapid pace. There are also many animation apps and programs designed specifically for stop-motion animation.

What You Need

- Modeling clay
- Camera, phone, tablet or other device for taking digital photos
- Computer/device with PowerPoint or animation app

What You Do

1. Ask your student what they already know about stop motion animation. Discuss examples they have seen and their prior knowledge about how stop motion animations are made.
2. If possible, show an example of stop motion animation using clay, such as "How Claymation Movies Are Made."
3. Explain that to make their own stop-motion animation, they will make a clay figure and then take a series of digital photos. For each photograph, students will make a very small change in the placement of the clay. When the photos are put together and shown in a rapid sequence, it will look like the figure is moving (animated).
4. Invite your student to create a clay figure using modeling clay. Encourage them to keep the figure's structure fairly simple in order to easily make changes and movements.

Ann Gadzikowski is an author and educator with a passion for challenging children to think creatively and critically. Her recent book Robotics for Young Children won the 2018 Midwest Book Award for best educational book. Ann developed her expertise in robotics, computer science, and engineering through her work as early childhood coordinator for Northwestern University's Center for Talent Development. She has over 25 years of experience as a teacher and director of early childhood programs, and currently serves as the Executive Director of Preschool of the Arts, a Reggio-Emilia inspired school in Madison, Wisconsin.

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