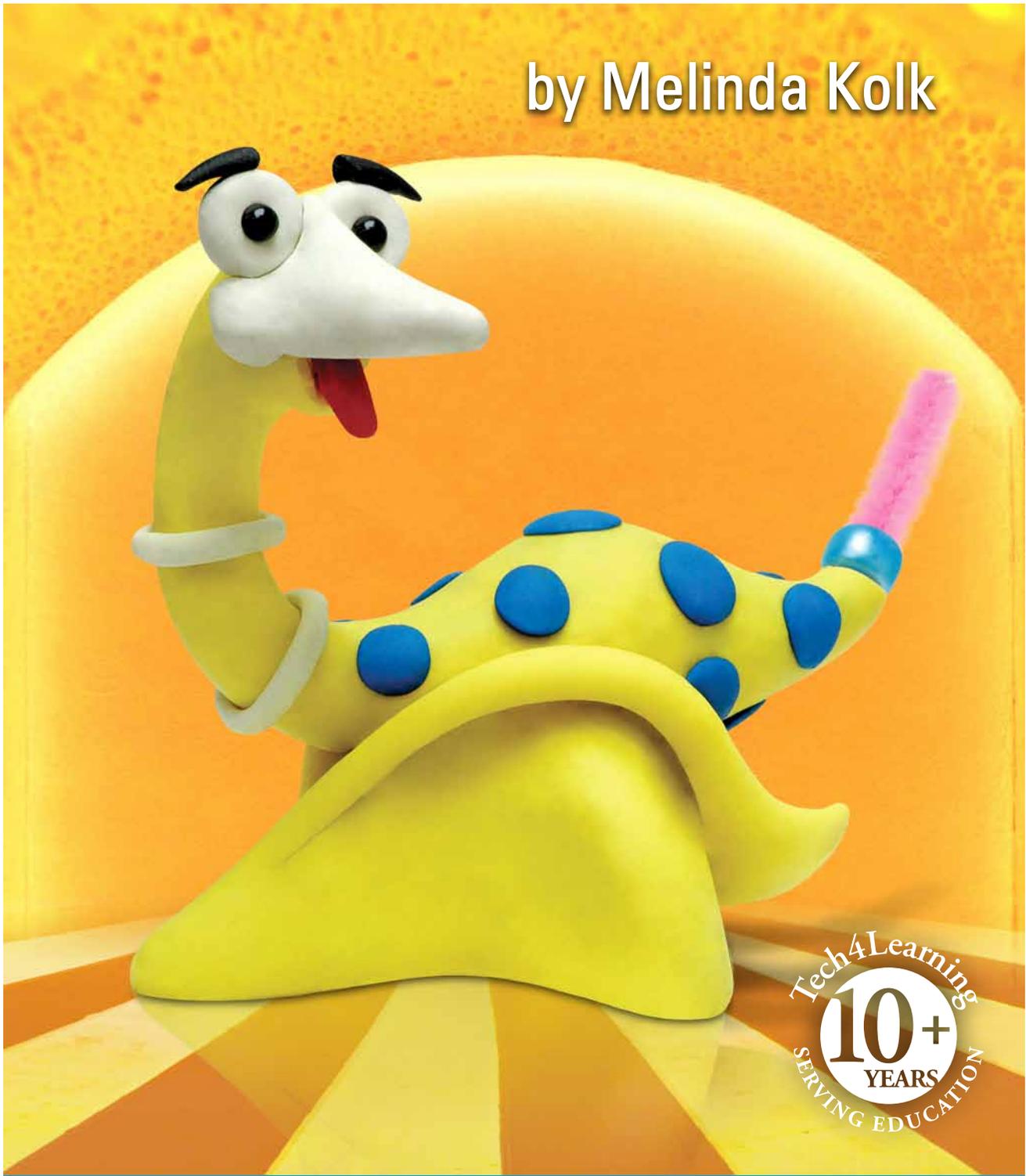


Making Claymation in the Classroom

by Melinda Kolk



Tech4Learning
10+
YEARS
SERVING EDUCATION



Making Claymation in the Classroom

Introduction



Claymation is second to none for engaging students in the curriculum and bringing creativity and exploration to the classroom. It is easily modified to meet the needs of a variety of curriculum topics, and is perfect for hands-on learners and new technology users. The claymation process helps students build essential thinking and communication skills and provides a fun and relevant way for students to demonstrate their knowledge and abilities.

Melinda Kolk

Melinda Kolk, Tech4Learning
Director of Professional Development





What is claymation and why use it?	4
Jumping into Claymation	8
Claymation in the Classroom	10
The Claymation Process	13
Introducing the project.....	14
Planning the project.....	15
Building the characters.....	17
Designing the set	20
Taking pictures.....	21
Building the animation.....	23
Presenting the claymations	24
Claymation Project Ideas	25
Language Arts.....	26
Math.....	27
Science	28
Social Studies	29
World Languages	30
Additional Ideas: Physical Education, Art, Music.....	31
Conclusion	32
Sample Rubric	33
Storyboard Worksheet	34



What is claymation and why use it?

Claymation is any animation done using a character, or characters, created out of clay. Traditionally, claymation has been associated with the time-consuming techniques of stop-motion video, but with the advent of affordable computers, digital cameras, and easy-to-use software like Frames claymation is accessible to almost every classroom.





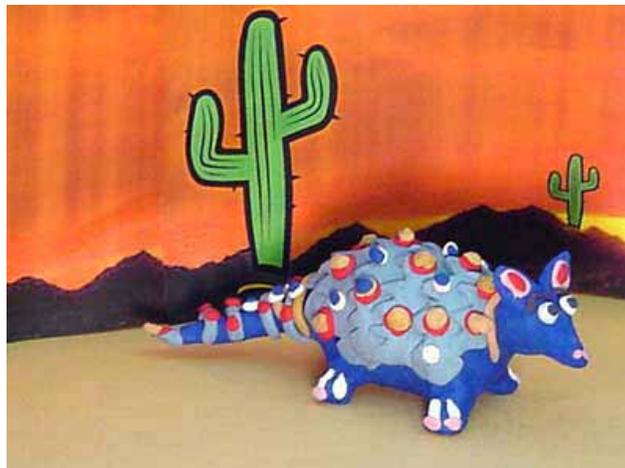
Why use claymation?

Getting students motivated and engaged in the learning process is probably the number one reason to try claymation. The content of the animation might require students to create an advertisement for a product, rewrite existing stories with new characters, locations, or endings, or offer a new solution to an existing problem.

- Claymation is a hands-on activity that engages students, especially kinesthetic learners.
- Working with clay characters and models allows students to explore abstract concepts in a tangible way.
- Creating claymations helps students build writing, planning, organizing, and teamwork skills.

Claymation can be applied to almost every subject area and grade level. The process is universal. You simply need to choose the content that is appropriate for your curriculum and classroom goals.

Storytelling and creative “writing” are some of the more obvious ways to use claymation. It is also helpful for explanations of scientific processes, human body functions, visualizing mathematical concepts such as fractions, recreating historical time periods and events, and demonstrating physical activities such as proper exercises and stretches.





Claymation helps develop essential 21st century skills

The process of building claymations helps students develop thinking, collaboration, and creative skills.

Creativity

To produce a claymation project, students must create an original production. They begin with a “blank slate” and translate ideas and their imagination into reality by bringing an inanimate clay character to life through a series of frames.

Problem Solving

The process of building a claymation in the classroom requires students to discuss, experiment, and solve a number of issues such as realizing their goals within a limited number of frames, determining what angle to use to take their pictures, and assessing how lighting and sound can affect the mood of their animation.

Self-Directed Learning

Student teams work autonomously on a claymation project while you facilitate. Students must ask questions; determine what they know and don't know, and consult “experts” on their team or on other teams.





Teamwork and Collaboration

While working in collaborative groups, students encounter a variety of perspectives that often require them to revise their thinking and change project direction as well as take different ideas from their team members and combine them into a single effective project.

As they plan and execute their project, students decide on goals for their animation and divide up tasks within their team to create characters, backgrounds, and soundtracks that communicate their ideas. They assign roles to members of their team by assessing abilities and exploring their own learning styles and skills.

Organization

While producing a claymation, students must determine how best to transform their team's vision into reality, work with limited time and resources, choose the length of the animation, and adjust the content to meet goals and deadlines.

Students must share hardware and software resources with other student teams, develop a plan of action for their own team based on time and resources limitations, as well as determining a schedule that fits everyone's needs.





Jumping into claymation

You probably don't want to keep reading, you want to get started right now! Your instincts tell you that claymation is motivating and engaging, and you probably have an idea for how you want to use it in your classroom. Claymation is not a difficult process, you just need a willingness to explore, discover, create, and solve, so jump right in!





The process in short

In the classroom, it is essential to have a topic, a plan, and a completed storyboard before you begin in order to conserve valuable classroom time. However, if you are itching to get started, begin by building the clay character. Don't worry about what you are making, just pick the first idea you have and start modeling.

As your character takes shape, and you start to conceptualize your story, begin thinking about the setting. You can make a background out of construction paper or simply grab a calendar, photograph, or painting you have nearby. You could also go outside and place your characters in the grass or in another landscape setting. Look around, you may find a useful location right behind you.

When your character(s) and background are complete, find a partner and grab a digital camera. Position the camera and adjust the view so that you can see the entire scene. While one person takes the pictures, the other team member moves and positions the characters to show movement. The process is quite simple:

Position the characters » Take picture » Repeat

When the action is complete, transfer the images from the camera to the computer. Then, import the entire folder of images into Frames, export, and voilà, you have just completed a claymation!

A great first project

If you just want to learn the process of creating claymations, try starting with a music video. Choose a song you like and create characters to sing and play the music. Take 6-10 pictures of the characters playing their instruments and the duplicate these when you create an animated music video.





Claymation in the Classroom

A basic clay project will require at least 6-8 hours to complete so you will need to do a bit of planning and preparation to work it into your classroom schedule and learning goals. The investments you make before you begin the process will reward you many times over once the project is in full swing.





The claymation process is the same whether you are learning language arts, math, science, or social studies. The difference is not how the claymation is created, but what topics it explores and explains. For example, in science, a claymation might show the process of evaporation, in social studies the migration of people through a region, and in math the process of adding or subtracting on a number line.

The claymation process involves sculpting characters (art), designing sets (industrial arts, drafting), writing (language arts), and computer work (technology). Partnering with teachers from these disciplines will bring additional expertise to your students and depth to their projects. It also allows you to meet curriculum standards and benchmarks in a variety of disciplines during one project.

The technology skills necessary to make a claymation are fairly easy to learn, but can get more complicated depending on the ages and goals of your students. If you are working with younger students or students new to technology, keep the process simple. As student expertise increases, you can increase the technology requirements and possibilities.

Classroom management

When planning your schedule, you should allow time for:

1. **Project introduction** (1 hour)
2. **Project planning** (1–2 hours)
research, brainstorming,
and storyboarding
3. **Character creation** (2 hours)
4. **Set design** (1 hour)
5. **Picture taking** (half an hour)
6. **Building the animation** (1–2 hours)
7. **Presenting** (1 hour) the final project





The first time you try claymation with your students, start small with a basic topic and keep the animation short. As students become familiar with the process, you can expect more from the content of the animations.

Expect a first project to take a full week to complete (50 minute class periods, once a day). This will give you more than enough time to complete the project and explore the themes and techniques for future animations. You may also choose to introduce steps during class and assign tasks as homework.

You may want to implement the first animation project before a break when you may have a little more flexibility in the curriculum and a need to increase student motivation.

It is helpful to establish check points, and/or deadlines, during the process to help keep everyone on track and to help you plan for the next steps.

Collaboration

Having students work in collaborative teams to complete the claymation project not only requires employing real world skills, it helps the teams “divide and conquer” to get an extensive project completed in a short amount of time.

Teamwork is essential to the task of taking pictures. Keeping the camera still while taking pictures is very difficult, even with a tripod. The process works more smoothly if one student takes the pictures while other team members position the characters and make the necessary scene and prop adjustments.





The Claymation Process

You probably already know why you want to do clay animation, now you need to know how. While the clay animation creation process is not complicated, it does involve several steps and requires a fair amount of time and resources. Most of the clay animation process is intuitive and you probably already use a similar process for other projects in your classroom.





Introducing the project and setting expectations

A claymation makes a great summative assessment. Discuss the curriculum ideas and concepts with your students before you begin to ensure they have basic knowledge of the topic which the claymation can reinforce.

Before they begin work on the actual claymation, make sure students are aware of your expectations for completed projects, and explain the work to be performed during the process. Share the rubric or assessment criteria for the claymations to clearly outline your expectations for the final product and their performances during the process.

While most students have probably seen a claymation television show or movie such as Wallace and Gromit, you may want to share some short examples of claymation to motivate and inspire. You can also browse the Internet for some classroom examples. Watching sample claymations will also help as you describe the technology skills needed to develop a claymation and identify which students are already experts in these areas.

Collecting materials

Creating clay characters and backgrounds requires a lot of art and craft materials. While you can find most of these materials at your local craft store, you may want to ask students to help you collect Styrofoam, aluminum foil, beads, accessories, construction paper, fishing line, scissors, and markers. You may also want to have students bring a box or container to use for storing their characters or materials.





Forming Teams

Before actual project work begins, you will want to create student teams. Try to make them as heterogenous as possible, pairing techies with non-techies, so that students can learn new skills from each other. Make sure each team has a leader, as well as a clear set of guidelines for discussion and teamwork.

Planning the Project

Planning is the most important stage of creating an animation!

The amount of work done to design, research, plan, and organize the project will dramatically affect the ease of project creation as well as the level of success. So before students jump into making characters and taking pictures, make sure the team shares a clear vision and has developed a storyboard.

When they first begin their project, team members usually have a lot of ideas. If not, help them with a brainstorming session. On the flip side, if the project has gotten too big, help the team narrow down their ideas and apply the KISS principle (Keep It Super Simple) to choose the most appropriate idea for their project.

As they focus their ideas, have each team articulate a shared vision so that individual team members can move forward with the confidence and knowledge that they are heading in the right direction.

Developing a Storyboard

A storyboard is a visual outline, or map, that shows how the team's vision will reach the correct destination. Storyboards are used extensively by the movie industry to help an entire group visualize the content of the different scenes that comprise a movie. A scene contains a concise amount of information or action, such as the introduction of a character or conflict. A claymation will consist of several scenes in sequence.

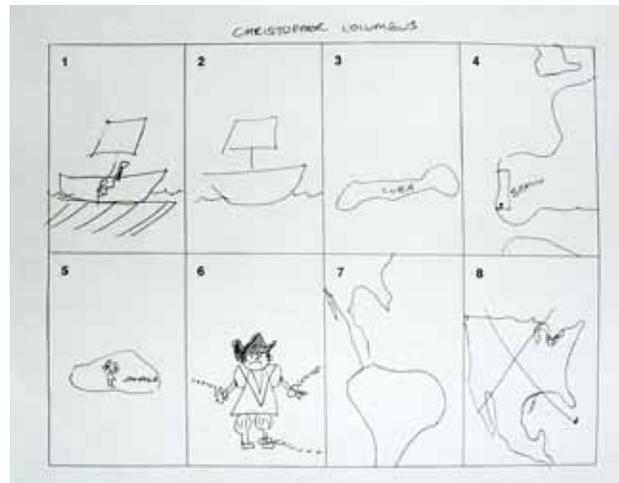
When defining the scenes in a storyboard, include construction details about the characters, camera angles, background, and the actions and interactions of the characters.

A complete storyboard will give everyone a clear idea of what will occur in the animation, when it will occur, and how it will occur, ensuring project success. The



important part is not how good the storyboard looks, but how much information it conveys.

You can find a storyboarding worksheet in Appendix B or simply create one from scratch on butcher paper, index cards, or even sticky notes.



Assigning Tasks

Once the project is outlined in the storyboard, teams can assign specific tasks to each member. How team members collaborate on a project can differ for each team depending on the work styles of the team members. Some teams will complete all tasks together and others will “divide and conquer”.

If you are recording narration (which makes for the best claymations!), at least one team member needs to translate the storyboard visuals into a written script.

Where does the research process fit in?

When and how much research students need to complete will depend on the complexity of the content or the student’s familiarity with that content. If the claymation is part of a summative assessment for a unit, you can assign research knowledge as homework. If students are exploring new themes or issues, they may need to research, brainstorm, and continue researching as they develop the storyboard and script.



Building the Clay Characters

A claymation character can be anything: a stop light, a molecule, a map or globe, or even an acorn. The only thing holding you back is imagination and time.

Characters can be almost any size, but keeping a character under 6 inches tall or long will take less time and require less materials for construction. You can also save classroom production time by getting students started during one period and giving them materials to finish their characters as homework.

You may want to work with the clay on placemats or even mats like Foamies®. Avoid using newspaper, since the ink tends to bleed and discolor your clay. Wearing aprons or old t-shirts can also help keep the pigments in the clay from staining clothing.

What type of clay should be used?

A claymation character will need to be positioned many times during the process, so be sure to build them out of clay that does not harden. Plasticene-type modeling clay, such as Claytoon™ from VanAken International, never hardens and will not dry out. It is also dense so you can sculpt long noses or big ears that won't droop or sag.





Armatures

To avoid heavy characters that keep falling over, construct an armature for movement and an understructure to reduce weight. Armatures are “skeletons” underneath the clay that give it structure and flexibility, allowing you position your character repeatedly.

An armature can be made by soldering ball-and-socket joints to small metal rods, bending 16 gauge aluminum wire, or even by wrapping chenille stems together.

Give the armature some bulk with Styrofoam, cork, and aluminum foil. Styrofoam and aluminum foil can be cut into just about any size or shape and are easily sculpted. Then, cover this thick understructure with a thin layer of modeling clay.



Adding clay

Modeling clay responds to temperature changes. When you first take it out of the package, the clay will be fairly hard. Tear or cut a small piece off and begin working it in your hands. You will notice it begins to soften as it warms in your hands. If the clay gets too warm and soft, place it near an air conditioner or in a refrigerator.

As you add clay to your character, be sure that the most clay (and thus weight) is at the bottom so that it can stand easily. You can give a character extra large feet... no one expects a claymation to be realistic!

Mixing colors

You can mix colors of clay the same way that you mix colors of paint. Mix a larger amount of a light color with a small amount of a dark color to prevent the darker color from overpowering the lighter one. Roll each of the colors out into long ropes, wrap the ropes together, and then work into a ball to mix.

Clean your hands each time you work with a new color to avoid mixing colors unintentionally. Baby wipes are a great way to clean clay pigment off of your hands. Because most modeling clay includes a wax base, soap and water don't always work so easily. If you need to clean off mixed colors or marks on a clay character, try using a cotton swab dipped in mineral oil.



Accessories

If you watch a claymation video or advertisement, you will see many different types of media used for characters, sets, and props. Adding accessories to your characters means you don't have to create every detail with clay. Feel free to experiment with different media. Use beads to make buttons and eyes, paper clips to make antennae, and scraps of cloth to make scarves, neckties, and other pieces of clothing.

Most students have an incredible source of accessories at home: their toy collections! They can scour their closets and share their findings with the other teams. Your local craft store may even have an aisle filled with miniature furniture, musical instruments, gumball machines, and more.



Clean up

Use baby wipes to clean your hands and soap or spray cleaner/degreaser to clean the tables where you have been working. Wrap and store unused clay and accessories so they can be used for the next project.

Store characters in a box or bin. While the clay doesn't harden, it will get dirty and can get damaged if it is dropped or tips over. A clear plastic container lets you see the contents and easily retrieve the characters you need.

Reusing clay

Since modeling clay never hardens, you can always reuse it for another project. Used modeling clay will not be clean and may be comprised of many colors, so just mix all of it together. Instead of using new clay for your next characters, reuse this clay to cover the understructure, and add a skin of clean new clay.



Designing and constructing the set

In addition to clay characters, each team will need to create, design, and build the set or scenes where the action will take place. Scenes can be highly elaborate sets or simple backgrounds made of one color.

You do not want your background to overshadow your characters. Keeping the background simple will let viewers concentrate on the action occurring in the animation. Try to keep details to a minimum and create large, simple objects.

Backgrounds created from construction paper are easy to make, and their bold and often contrasting colors look great in animations. Paper, glue, and scissors are inexpensive and provide your students with limitless possibilities for the design of their backgrounds.

Backgrounds do not have to be photo realistic. Use colors for sky and ground that contrast with the colors of your character and make them really stand out. In other words, don't put a green snake on green grass unless your animation is about camouflage.



Instant backgrounds

If you need to save time, try making backgrounds with pictures from existing student artwork, posters, calendars, or picture books. A large picture book held open with clothespins is a great time saver. Combine this with plants, paper, or other props to complete the scene.

Student dioramas also make great instant backgrounds. For example, if you are studying animals and habitats, a student could create a diorama of the flora, fauna, and terrain typical of a habitat. This activity could stand apart from the claymation and fulfill an additional learning goal or standard requirement.



Recycle old calendars you already own for more instant backgrounds. When the year changes, ask around your school, home, or office and collect the calendars that are now obsolete.

Taking pictures

Claymations are made up of individual pictures, not video. Capturing still images allows you to position and move your characters throughout the scene without taking video of your hands doing the moving. You can capture these images with just about any digital camera as well capture still frames from a web cam or DV camera.

Image size

Most digital cameras sold today take pictures at a much higher resolution than you need for claymation. For example, if you took 40 pictures for your animation at 12 megapixels (4000x3000), it will take a very long time to load and work with the images as you build your animation.

Taking pictures at a lower resolution of 1024x768 is a good standard. This picture size will still display the action in your animation, but won't take up too much storage space or require too much RAM for you to edit and complete your claymation production on the computer.

Positioning the camera

Position the camera at least 3 feet away from your scene. Zoom out so that you can see the entire set through the camera lens. This will keep you from having to move the camera and will minimize the number of pictures you need to take from different angles.





It is very important to keep the camera still while you are taking pictures. Using a tripod will make it much easier to hold the camera still. You can find full-size, tabletop, and clamping tripods at most electronics and camera stores. If you are careful, placing the camera on a table or even taping it down will also work.

If you don't have a tripod, use boxes, books, and other objects to get the camera at the right height and the correct angle for picture taking.

Lighting

Proper lighting will help make your images crisp and clear and taking pictures in a well-lit room or in filtered sunlight is a great first step. Experiment with lighting effects and take a few test shots before you begin to animate your character.

Be careful not to use too many lights. They can add a lot of heat to a room and might cause your characters to melt, sweat, or wilt. Don't use your flash as a substitute for proper lighting. The flash will wash out your characters and background and can add harsh shadows.

Taking pictures

The number of pictures you take will depend on the complexity of the character's movement. Professional animators usually take 30 frames per second, but this is likely to be too time consuming for making claymation in the classroom. If you have time constraints, think about taking 5 pictures per second of movement.

To capture movement for your animation, take a picture, move the character slightly; take another picture, and move the character again. Continue this process until you have completed a sequence. It's that simple!





If your character is waving or talking, you don't need to keep taking pictures for the duration of the animation. Take a few pictures, such as mouth open and mouth closed, and simply reuse/repeat these images as frames in the animation once you are working in the software.

To show movement across a location, move your character about a half inch at a time. The less you move the character each time, the smoother the motion will be, but you will have to take more pictures to create the complete animation. If your camera is zooming in or out, remember to do it slowly and in stages.

Once you have taken your pictures, follow the directions that came with your camera to transfer them to the computer and place them in a single folder.

Building the animation on the computer

Once the pictures have been taken and transferred to the computer, you need to combine them into a video. This is where it all comes together!

If you do not own Frames, you can download a trial version, as well as locate a free tutorial for creating claymations, at: www.tech4learning.com/frames.

In Frames, you can import an entire folder of images at one time. If the camera is attached to the computer (or the Flash/memory card is plugged in, you can drag the entire folder from the Library when you see the camera appear. If you have already transferred images to the computer, you can also import the entire folder.

You can set the timing, change the order, and duplicate and of the pictures you have taken.





Frames lets you add text, thought bubbles, transitions, and record narration for your animations. Adding sound to your animation will make it a truly polished product and will often help you convey the content more effectively.

Frames contains two soundtracks so you can have narration as well as music and sound effects in your claymation.

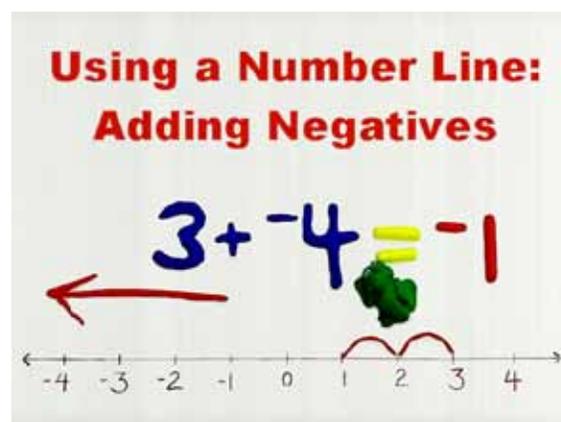
When you are finished, you can export your video as a presentation, podcast, or for web play back.

Presenting the claymations

The final claymation premiere is the best part of the entire process and a great reward for all the hard work and problem solving students have done to make the claymation production a success.

To maximize their learning, ask students to share what they learned during the process as they present their claymations. Take advantage of the results of their hard work, by having them present their claymations to other students who would benefit from the content of the animations or learn from the process.

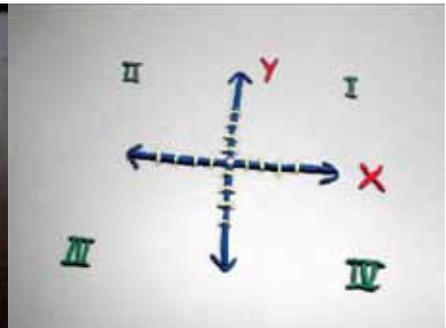
Make the presentations a festive occasion with an emcee, popcorn, flashing lights, and posters. Invite parents, grandparents, computer professionals, and other school supporters to join the celebration at your school or even a local theater that is willing to partner with you for the day.





Claymation Project Ideas

Your claymation can be about almost anything. A claymation project can explore a science process, recreate a historical time period, or be a creative writing tool. What the animations are about is up to you to decide.





Language Arts

Point of View

Many students have read or seen *Wicked*, the story of *The Wizard of Oz* as told by Elphaba, the Wicked Witch of the West. *Wicked* effectively demonstrates how the narrator's point of view affects how a reader feels about events in a narrative. Analyze a scene from a story and retell the events as they appear from the perspective of another character.

Elements

A local media company is compiling a series of animated mysteries based on the works of famous American writers and poets. They are currently accepting submissions based on the work of Edgar Allan Poe. Choose one of Poe's works, such as "The Pit and the Pendulum," "The Raven," or "The Tell-Tale Heart," and create an animation that summarizes the basic elements and identifies the emotions evoked by the work.

Video Poetry

The National Poetry Council has decided to broadcast short poems set to music and pictures to introduce TV viewers to poetry. Due to positive initial response, they need help building their collection of televised poetry. Choose a favorite poem and analyze. Explore the verse, meter, and imagery, and choose pictures and music that will help convey the author's meaning.

Youth Movement PSA

The President of the United States has decided to change the structure of the next State of the Union Address. The White House wants to include important topics affecting youth in America today, such as education, health, and social awareness. Create a short public service announcement on one of these topics to send to the President to help inform the government about how it affects the lives of youth in America.



Math

Density

The archaeology team you work with is using ground penetrating radar to determine what lies under the surface of a site suspected to contain Greek Ruins. Using the layer density data (provided), graph the results. Given accepted density values, determine what you think might be under the soil and how might your team go about excavating it. Create an animated graph to describe your findings to your team.

Surface Area

You work for a large citrus grower and need to design a package to fit 27 oranges. Each orange is X inches in diameter. Design a package to fit 27 oranges with the least amount of wasted space. If the surface area of the package is tied directly to the cost, design the most economical package. What type of package would be easiest to load? Create an animated sequence that shows how your packaging solves the problem.

Math Vocabulary

Your school's Academic Advisory Council is looking to create a series of instructional videos for students to use as extra support in their math tutoring program. Create an animation identifying the following vocabulary words: Volume, prism, cylinder, pyramid, and cone. Show formulas relating to each of these terms and a sample problem showing step-by-step solutions.

Pitch and Load

You are an architect designing a roof for a client's house in the mountains. Because of excessive snowfall, the pitch of the roof needs to be at least 30 degrees on both sides of the truss. Building code says that each truss must contain at least 3 internal structural supports and each external board in the truss must be supported by at least one perpendicular member. Design a truss system that will support a roof 30 feet wide. Show your client an animation of your design and explain why your design would be the best for the job.



Science

Weather

The Weather Channel is creating a documentary on hurricanes. You are a hurricane hunter - a scientist who flies into a hurricane to collect data. Create a travelogue on the experiences you have about what it would feel like as you fly through the hurricane's eyewall into its eye.

Plate Tectonics

Hollywood is looking for a more traditional approach to the movie Journey to the Center of Earth. You are to create a travel video on your journey to the center of Earth describing the layers of Earth through which you travel. Be sure to explain how temperature and pressure change beneath the surface.

Chemical Bonding

Pretend that you are the size of an atom, and you are observing a reaction between a potassium atom and a fluorine atom. Create a visual account of an ionic bond as the atoms react. Tell what happens to the valence electrons on each atom and how each atom is changed by losing or gaining electrons.

Solar System

You have been hired by an online intergalactic travel group to create an advertisement for the inner planets other than Earth. Design a video for your selected planet, including basic facts and descriptions of places of interest. Why would individuals choose to visit this planet over others?

Viruses, Bacteria, Protists, & Fungi

You are a detective for the Mold Prevention Agency and have been assigned to create a "Wanted" commercial for a mold that has been ruining food in kitchens. Present the mold as a "criminal of the kitchen." Include detailed descriptions of the mold's physical characteristics, what it needs to grow, how it grows, and any other details that will help families identify this mold. Propose ways to prevent new molds from growing in kitchens.



Social Studies

Diversity

Since the 16th century, immigration has played a major role in the United States. The mayor of your town is looking to celebrate the diversity of the citizens and wants to share their stories through the local cable channel. He has hired you to create a digital story based on an interview with a local individual who has migrated to the United States.

Sites of Interest

The online travel resource Travelocity is looking to add digital guidebooks to their site. Visitors will download the animations to handheld devices and phones to use when traveling to a chosen destination. Create an animation, in the form of a visitor's guidebook, highlighting your region's unique physical and human characteristics.

Voyage to the New World

You have been asked to write a narrative about the European Age of Exploration (1418 - 1620) as a children's book. Create an animation about the voyage of one ship across the Atlantic Ocean to the "New World." What successes and challenges did European explorers face?

Silk Road

You are a merchant traveling the Silk Road in northern China during the Han Dynasty. Along the way you meet many interesting people and trade for goods from around the world. Create a digital story of your adventures to share with generations of people to come. What was life like along the Silk Road?

Government During Disasters

You are a reporter for a local news channel creating a segment on a natural disaster in your community. Describe the functions and interactions of ways in which the three levels of government might respond to this natural disaster. It is also important for individuals to know they, too, can make a difference. How might others assist the community during this crisis?



World Languages

Animated Travel Itinerary

One of the most fun parts of learning a language is visiting the country where it is spoken and experiencing the culture firsthand. Have students create an itinerary for an ideal visit. After completing research, students create an animated version of their itinerary. They may want to create a native clay character to narrate and act as a tour guide. Have the students show these animated travel tours at an assembly or community meeting to share what they have learned about another country and to encourage classmates, parents, and community members to visit these countries.

Conversations

Learning conversational speech is the first step toward becoming comfortable speaking in a foreign language. Once students are beginning to feel comfortable, have student teams create a situation and animate basic conversations between characters. You might want to consider a greeting or exchange that would be commonplace in a restaurant or airport.

Vocabulary

Building vocabulary is easier when there is a visual connection and a context. Have student teams create a common situation such as eating in a restaurant, shopping for food at a market, or visiting a clothing store. Their animations of these scenes and situations should include text representations of vocabulary when the corresponding objects are displayed.

Customs and Manners

Customs and manners vary greatly between countries. After researching the customs and etiquette rules for another country, have students create a claymation “guide” for others to use before visiting these countries. Animations might show how students’ own customs differ from those of the subject country. You might want to make the animations available in the travel section of the local library.



Additional Ideas

Physical Education - Proper Exercise Techniques

Have students create claymations that show the proper (and maybe improper) form for stretches and common exercises such as sit-ups and push-ups.

Physical Education - Sports Plays

Have students demonstrate plays in basketball, football or other sports. For example, in basketball, students could show the difference between one-on-one and zone defense or describe the “Give and Go”. Student teams will write and design a short play that demonstrates ideas for conflict resolution for common school situations and problems. They will then create characters and animate the play. Some animations might share techniques and steps toward conflict resolution. Projects should be shown at a special assembly or broadcast on school television. Animations could also be placed on the school or district web site.

Art - Animated Paintings

Students create claymations that show the process of creating a painting. This could be a study of an existing painting or original student work.

Music - Visualizing a Musical Score

Have students choose a short piece of music and create a visual representation of the feeling that the music evokes. Fantasia is a good movie to show to students to demonstrate this connection.

Music - Music History

Much like the music videos mentioned earlier in this eBook, student teams create a claymation production that shows a famous person or persons in music history in the context of playing and/or singing their music. Characters’ clothing and set backgrounds should reflect the time period.



Conclusion

By the time you are reading this, I am guessing you have already completed at least one claymation. It wasn't really that difficult, was it? While it was challenging, it was probably so much fun your students didn't miss a single day, and you didn't either. If you haven't completed a claymation project, get going! What are you waiting for? Don't worry if you are unsure. No matter how much you plan, things will go differently and will probably work out much better than you thought they would.





Making Claymation in the Classroom

Sample Rubric

A rubric can help you assess the final claymation as well as learning that occurred during the claymation-building process.

<i>Criteria</i>	<i>Novice</i>	<i>Apprentice</i>	<i>Proficient</i>	<i>Distinguished</i>
Animation meets its purpose and skillfully answers the question posed.	Subject knowledge is not evident. Information is confusing. Does not answer the essential question.	Some subject knowledge is evident. Some information is confusing. Question is stated but not clearly answered.	Subject knowledge is evident in much of the product. Information is clear, appropriate, and correct. Essential question is answered.	Project has gone above and beyond. All information is clear, appropriate and correct. Essential question is clearly answered. Subject knowledge is evident throughout.
Quality of Design. Is it visually pleasing, original, creative, or organized?	Quality is weak. There is no evidence of logical flow or use of new ideas. No visual impact.	Random presentation of material with little attention paid to quality.	Media used demonstrates adequate and clear sequencing of material using creative graphics.	Media shows superior evidence of continuity. There is a logical intuitive sequence of information.
Storyboarding and planning	Did not utilize storyboard during process or storyboard is incomplete.	Basic storyboard. Does not answer essential question. Referred to storyboard during project building process.	Strong storyboard that answers the essential question. Storyboard used as a guideline for project development.	Fully developed storyboard that answers the question and is organized in coherent pieces. Used storyboard extensively during project development for goal-setting, organization
Presentation style including, eye contact, voice, and appearance	No eye contact. Low, soft, or monotone voice. Script reading. Appearance is too casual or sloppy. Posture is slouched.	Some eye contact. Voice is soft or monotone. Appearance is casual, but neat. Presenter rocks back and forth.	Some eye contact, but only in one direction. Voice is steady and clear. Presenter shows some facial expression, uses appropriate gestures, and knows the content well. Presenter is dressed up and has good posture.	Eye contact moves among the audience. Presenter is confident, expressive, and know their content. They are dressed up or in appropriate costume. They have good posture, are mobile, and use facial expressions and gestures to make their point.

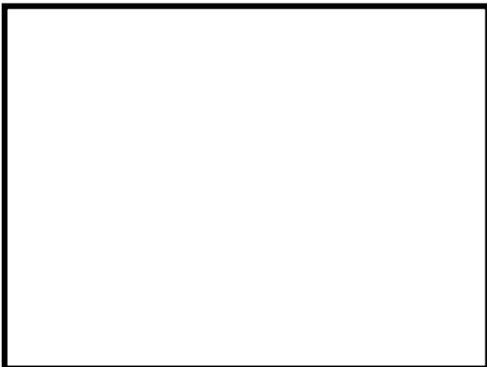


Making Claymation in the Classroom

Storyboard Worksheet

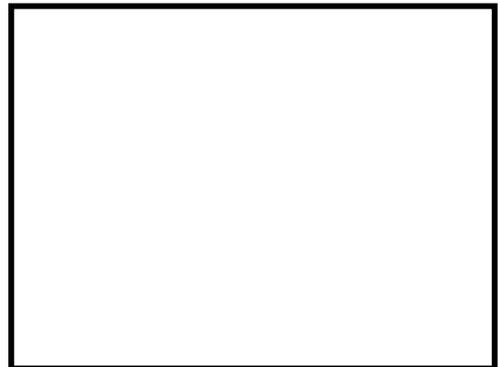
A storyboard is a combination of outlines and visual sketches that map out the contents and direction of your story. Use the storyboard to show what will happen in each scene of your animation. A scene can be made up of multiple frames.















About Frames

Frames helps students create stop-motion animation, claymation, and digital stories. Students can use Frames to create movies, animated GIFs, and Flash animations to share their ideas and stories with the world.



About Tech4Learning

Tech4Learning develops award-winning educational software. Our creative software tools support effective use of educational technology and help build 21st century skills. Our goal is to improve classroom technology through strategies like project-based learning and differentiated instruction.



About Melinda Kolk

Melinda is one lucky lady. As a trainer and writer for Tech4Learning, she has managed to find a job that lets her play almost every day. If you have attended a workshop with Melinda, or have seen one of her presentations, you know that she is an incredible teacher, and a passionate believer in creativity, imagination, and yes, having fun while learning.

As she travels around the United States, Melinda gets to visit classrooms and meet fantastic educators doing creative and exciting projects with their students. She hopes that by sharing her ideas and experiences and their stories in this book, you will be inspired to begin your own classroom clay animation adventure!

Making Claymation in the Classroom



This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License :

www.creativecommons.org/licenses/by-nc-nd/3.0

Apple is a registered trademark of Apple Computer, Inc.

All other software and screen captures used with permission of their owners.

Tech4Learning, Inc.

10981 San Diego Mission Road, Suite 120

San Diego, CA 92108

www.tech4learning.com