



MAKING SHADOWS WITH

CATAPULT

TRADITIONS (and BREAKING WITH THEM)

Modern Dance

Modern Dance also called **Interpretative Dance** includes an amazing diversity of styles and formats. Here are some links to examples of Modern Dance. Plan to discuss with your students how different these examples are and also if they can say what they might have in common.

Paul Taylor	BRANDENBURG	https://www.youtube.com/watch?v=uPXAAyUjUGg
MOMIX	PROMO REEL	https://www.youtube.com/watch?v=XynSQXQJmgw
Nacho Duato	GNAWA	https://www.youtube.com/watch?v=wjBtja-kKHY
Elizabeth Streb	LITTLE EASE	https://corvallisreview.blogspot.com/2017/05/dancing-inside-box-six-ways-of-looking.html



MODERN

ABOUT

DANCE

1. It is one of only two art forms that were invented
in the United States!

2. Modern dance was born as a kind of rebellion
against ballet and a reflection of the changing times.

. Modern Dance was one of two Art Forms born in America. Can you guess the other art form? Hint: it is a musical form.

Answer: **Jazz music**

What do these two uniquely American art forms have in common that some would say make them American?

Answer: Both Jazz and Modern Dance place a high value on **innovation** and **improvisation**.

They both use improvisation to **spontaneously** develop material for new work. At times, dancers and musicians improvise during performances. Innovation is the act of coming up with new ways of doing things.



In Class Practice:

1. Turn on some music and let students move any way they like to the music. This is an example of improvisation.
2. Ask students if any of them know an existing dance move and can teach it to the class. Ask students to take that move and try to do it in a new way. Can they figure out a way to make it more exciting or give it a twist. This would be an attempt at innovation. Volunteers can show the class their innovative version - use music as desired to help.

HISTORY

Modern dance was born in the early 1900s as a rebellion against **ballet.**

Rebellions and revolutions can come about to free people and make a change - think about the American Revolution. They can also happen in art, culture, fashion and religion. Ballet is a beautiful form of dance but people wore corsets and stiff shoes and their hair had to be in a tight bun - only certain steps were allowed. Choreographers such as Isadora Duncan, Doris Humphrey and Martha Graham created a new art form that sought things New and Strange and Beautiful. They wanted to be free of the rules of ballet. And that is how Modern Dance was born.



Classroom Practice:

1. Copy the picture of the dragon with a black pen or pencil. You can even trace it. Take your time and try to make it perfect. Imagine doing that 50 times every day until you could draw the same dragon perfectly without looking. Technical perfection is what ballet dancers practice every day.
2. Now get fresh paper and draw your own dragon. Don't worry if it looks totally different. Use any colors you want and try to capture the emotions in the picture. Make the picture so that it pleases you. Capturing emotion and being true to one's own artistic impulses is what Modern Dancers practice every day.

What is Shadow Theater?

Artists use puppets or **cut-outs** made of paper or leather to make a shadow on a screen and tell stories. This art form has been around for THOUSANDS of years! That's right people in India, China, Thailand and Malaysia and many other places have been using shadows to tell stories for over two thousand years.

How Does It Work? It's pretty simple, really. A light source such as a lantern, candle, flashlight, projector or other is pointed at a semi-translucent screen made of cloth, paper or vinyl. In between the screen and the light source, puppeteers manipulate cut-outs and make them move around and seem to interact. It's a lot like watching a movie and in fact this ancient art form is what led to **projections** and eventually to the films we watch today.

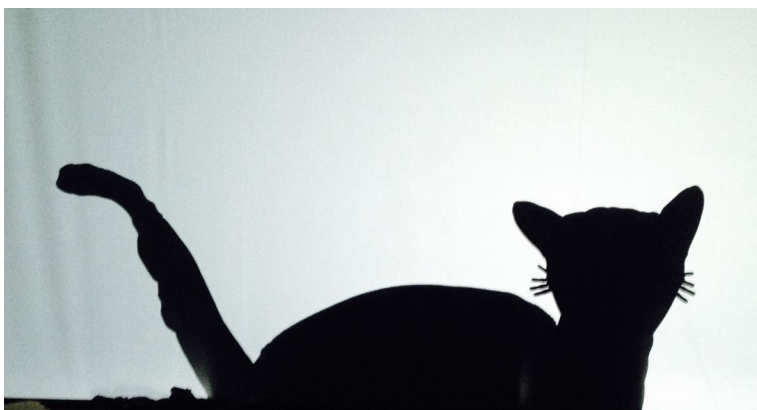


Hand Shadows Are very interesting too.

Here are some easy and some harder ones to try in class or at home.



WHAT IS CATAPULT? What kind of performing arts group are we? And what exactly do we do? Are we a Dance Company or a Theater Company or a Shadow Puppet Company? Well, we are kind of all three and something more.



We do DANCE both Modern and Ballet; We do ACT and express emotions; We do use some PUPPETS but mostly we use OUR BODIES to make shapes!

Classroom Practice:

1. Can you identify which body parts are used to make the Kitty Cat? Label the parts right on the picture and then compare notes with others.
2. Also try to guess how many people are in the shape and where they are. Now see if you can make the Kitty out of people. If you have a flashlight you can use it to see how close you came to our shape.

WHAT

TO
LOOK
FOR

IN
OUR
SHOW



BALLET: Could you identify the moments of ballet? What kind of music was playing during the moments of ballet?

Activity: Play Classical Music such as Vivaldi's Four Seasons and improvise simple movements that seem to go with the music. Does it still work to do those same movements with different music such as Rock and Roll? Did your body naturally adapt to the new music? How did the movement change when you changed the music?

ACTING: We don't use words in the show but we still tell stories. How did we do that? Can you describe moments in the show that were more acting than dance?

Activity: Create a list of emotions or attitudes and have students try to embody that emotion or attitude with a body posture or a single gesture. The rest of the class can guess what they are communicating. Keep it simple and as authentic as possible and of course no words allowed.

STORY-TELLING: : I see similarities between our Shadow Stories and the following forms of storytelling: Film; Short Story; Poetry; Comics. See if you can say why you agree or disagree.

Activity: Have students use one of Catapult's dances as inspiration for either a poem, a short story or a comic strip using 6 or 8 boxes. Their comic strips do not need to be black and white



SCULPTURE: Making shapes with our bodies is kind of like sculpture – The shadow that you see is 2 dimensional like a painting. Is creating shadows more like sculpting or painting? Some of both or neither - What do you think?

Activity: Make a sculpture out of clay of an animal such as a dog or a horse or cat. Tape a piece of paper to the wall. With a partner: one of you shines a flashlight on the shape while the other makes a tracing of the shadow on the paper. What did you discover? Play with the position of the sculpture and the angle of the light. You will notice many changes when you change the positions of the sculpture and the light.



THE SCIENCE OF SHADOWS

An additional Study Guide for classrooms that would like to use the Catapult show in Science class

WHAT IS LIGHT?

Light is made of energy filled particles called photons. They travel at incredible speed (the speed of light). They hit things and bounce off (reflect) and that allows us to see that thing! Light is made up of many spectrums. In the picture to your right, we used the Infrared spectrum to create the effect that you see on the screen.



WHAT IS A SHADOW?

A shadow is the absence of light. Your own shadow can only exist when your body is being hit by a light source. When light is being blocked by your body, your shadow appears like a cut-out of you! *Where* your shadow appears and *what* it looks like depends upon the kind of light and the angle of light.

Activity:

Students can work in groups. Each group has a flashlight and the lights in the room are dimmed.

1. One student holds his/her hand with fingers spread a foot above their desk. Another student places him/herself one arm's length distant and shines the flashlight directly above the outstretched hand. It is important to hold the flashlight still.

Observe the position of the shadow (tape paper to the desk and trace the position and outline of the hand with chalk or marker.)

Observe the edges of the shadow are they fuzzy or distinct?

2. Now slowly move the flashlight farther away by a few inches or a foot and make a new tracing. Then move the flashlight much closer to the hand and make another tracing

What happened? Note your observations.

Now move the flashlight off to one side and point the flashlight at the hand so it is now at an angle. Make a tracing. Move the flashlight to the other side of the hand and do the same

What happened? Note your observations. Can you venture any conclusions?

3. Can you make the shadow fingers elongate? Can you make them [foreshorten](#)? Play around with moving the flashlight but also the hand itself.

If you succeeded, how did you make it happen?

Note your observations and see if you understand well enough to repeat those examples of [distortion](#).





CREATIVITY AND SCIENCE COME TOGETHER

Have students brainstorm a short shadow performance incorporating the phenomenon they observed regarding the behavior of light and shadow. The demonstration should be transferred from desk top to a blank spot on a wall so everyone can see. This can be a dance or simply a show and tell of the phenomenon they discovered.

Students can break into groups and brainstorm ideas, everyone gets their say
They pick some ideas to try and see if they can discover other ideas as a result
Students finalize an order of events and then practice
Students should consider adding music to make it more engaging for their audience.

Note: Students are free to use their hands or objects or to make shadow shapes with their hands. They can scout the room for fun things to use or even make their own cut-outs. If you wanted to give them more time with this activity, you could ask them to create a shadow presentation about a topic you are working on instead of or in addition to writing a paper. Eg. dramatise through shadows one of the most important moments in the book they just read or the moment in history they just studied or even how Pipefish move through their environment. Encourage them to use the techniques they experimented with regarding the behavior of objects and light source in their presentation. Use your imagination and let them use theirs.





VOCABULARY LIST

Ballet - A courtly style of dance invented in Italy and was then refined in the court of Louis XIV in the 17th century

Contemporary Dance - Is a fusion genre which incorporates elements of Modern, Ballet, Jazz and Ethnic dance. It was born in the mid 1900s.

Cut – Out - A flat shape cut from cardboard, leather, Foam Core etc. and used to complete a shadow shape or to cast a complete shadow shape.

Distortion (visual) - Any change in a shadow caused by a change in the angle of light. Extreme angles of light cause extreme distortions.

Foreshortening - As the angle of an object or body part increases or decreases from 90 degrees (perpendicular to the light source) the object's shadow becomes shorter. In Art foreshortening is a technique to create the illusion of depth in a painting

Improvisation - created spontaneously and without preparation

Innovation - Something new, a new idea or method

Interpretive Dance - Often used as a synonym for modern dance it seeks specifically to translate human emotions, situations, fantasies into dramatic movement.

Modern Dance - Came about in the late 19th century as a rejection of ballet. It reflected the changing environment and was a search for greater freedom of movement

Perpendicular - An intersection of two lines or objects at 90 degrees

Photon - an elementary particle of light but also any electro-magnetic radiation

Plane - An imaginary flat surface such as the horizontal plane or the vertical plane (called the table plane and the door plane in dance)

Projection - an image projected on a surface such as a wall or screen

Reflection - Light, heat or sound that bounces off of something because it has not been absorbed

Shadow Puppet - a character, animal or shape cut and painted, designed to be used in shadow theater

Spontaneous - spur of the moment, impulsive