VSA International Art Program

for Children with Disabilities

A Jean Kennedy Smith Arts and Disability Program

Teacher Resource Guide

Edition 2014–2015

A series of visual art lesson plans designed to engage students with disabilities.

VSA The International Organization on Arts and Disability

The Kennedy Center

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Introduction

Students in today's classrooms possess a wide range of learning styles and abilities. Each lesson plan in this Teacher Resource Guide is written broadly to include students with various needs. For this publication, we have chosen to highlight inclusive practices in blue text, so that educators, parents, and other Guide practitioners may easily note these tips and suggested practices.

We encourage you to approach this curriculum using a Universal Design for Learning framework to include students with a range of abilities, thus promoting the dignity, independence and learning of all students.

These lessons conform to the following principles of Universal Design for Learning by incorporating:

(1) Multiple Means of Representation – presenting information in multiple formats so that all students understand the content.

(2) Multiple Means of Expression – providing multiple options for students to express themselves.

(3) Multiple Means of Engagement – providing multiple opportunities for students to work in ways that are interesting and challenging for them.

In this guide, the National Core Arts Standards (see green boxes) are referenced in each of the lesson plans. The Office of VSA & Accessibility at the Kennedy Center was a partner in ensuring that the new standards reflect language that is explicitly inclusive of students with disabilities.

We hope that this Teacher Resource Guide gives you and your students the opportunity to experience the inherent joys of creating and learning in the arts. We look forward to including the work of your students as part of the online exhibition of *Yo Soy…Je Suis…I Am…The Future,* VSA's International Art Program for Children with Disabilities, through March 30, 2015 at **www.kennedy-center.org/education/vsa/programs.**

Lastly, we invite you to share your own experiences with these lessons and, if you like, to add to our library of lessons by sending us your suggestions to: **VSAinfo@kennedy-center.org.**

VSA The International Organization on Arts and Disability

NATIONAL CORE ARTS STANDARDS

Dance, Media Arts, Music, Theatre And Visual Arts

What Are The Standards?

A process that guides educators in providing a unified quality arts education for students in Pre-K through high school.

Creating

- Anchor Standard #1. Generate and conceptualize artistic ideas and work.
- Anchor Standard #2. Organize and develop artistic ideas and work.
- Anchor Standard #3. Refine and complete artistic work.

Performing/ Presenting/ Producing

- Anchor Standard #4. Analyze, interpret, and select artistic work for presentation.
- Anchor Standard #5. Develop and refine artistic work for presentation.
- Anchor Standard #6. Convey meaning through the presentation of artistic work.

Responding

- Anchor Standard #7. Perceive and analyze artistic work.
- Anchor Standard #8. Interpret intent and meaning in artistic work.
- Anchor Standard #9. Apply criteria to evaluate artistic work.

Connecting

- Anchor Standard #10. Synthesize and relate knowledge and personal experiences to make art.
- Anchor Standard #11. Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.

For further reference, please see *Students with Disabilities and the Core Arts Standards: Guiding Principles for Teachers* **http://www.kennedy-center.org/education/vsa/resources/GuidingPrinciples2014.pdf**

Thoughts from the Authors

Our predictions of the future are in a constant state of flux, and although we cannot foresee what changes will occur, we know that we are truly in the hands of our children. Reflecting on our future selves, our aspirations and dreams as well as the future world as a whole, our creative potential is unleashed. Creativity has at its root the idea of "transforming" something, from idea to actuality, from intent to action. We do this through elaborative, fluid, flexible, and original thinking. Our future depends on creative individuals able to transform the world so that it is a better place for us all. Essential questions become: how will we transform ourselves in the future? How will society be transformed, and what is my role in this transformation?

Throughout the lessons, suggested strategies have been provided to meet the needs of all students and encourage maximum participation for all. Strategies for inclusion are highlighted in blue. For additional suggestions, we would like to recommend the article *The Adaptive Art Specialist: An Integral Part of A Student's Access to Art* by Susan D. Loesl available at **http://www.kennedy-center.org/education/vsa/resources/FinalprofessionalpapersbookArticle3.pdf**

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Thanks to Dr. Sharon Malley for her assistance.

Where will I play?

GRADE LEVEL: K - 3

EXPECTED LENGTH: 1 – 2 class periods

Using simple construction paper techniques, students design a personal play space.

Student Example

MATERIALS

Construction paper scraps - a variety of colors and sizes

Scissors

Flashlight

White school glue or glue sticks

Objectives

ART MAKING:

Students will design and build a construction paper sculpture of their dream playground using a variety of colors and techniques.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Generate and conceptualize artistic ideas and work.

Enduring Understanding: Creativity and innovative thinking are essential life skills that can be developed.

CRITICAL INQUIRY

Students will examine *The Blue Whale* playground in Gothenburg, Sweden and Japanese artist Toshiko Horiuchi MacAdams' *Woods of Net* play space.

Relating artistic ideas and work with personal meaning and external context.

Anchor Standard: Synthesize and relate knowledge and personal experiences to make art.

Enduring Understanding: Through art making, people make meaning by investigating and developing awareness of perceptions, knowledge and experiences.

ART HISTORY INQUIRY

Students will examine images of *Central Park* and reflect on the need for a place for play in the midst of a city.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Perceive and analyze artistic work.

Enduring Understanding: Individual aesthetic and empathetic awareness developed through engagement with art can lead to understanding and appreciation of self, others, the natural world, and constructed environments.

AESTHETIC INQUIRY

Students will analyze the ways in which a playground can be functional as well as beautiful.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Refine and complete artistic work.

Enduring Understanding: Artists and designers develop excellence through practice and constructive critique, reflecting on, revising and refining work over time.

Key Vocabulary

SCULPTURE
A form created through various shaping techniques.

THREE-DIMENSIONAL
Object created with height, width, and depth.

TWO-DIMENSIONAL
Only involved with height and width.

EXAMPLES FOR STUDY:

MONSTRUM, *The Blue Whale,* Gothenburg, Sweden (2011)

Toshiko Horiuchi MacAdam with Tezuka Architects, *Woods of Net,* Hakone, Japan (2009)

Originally designed in 1859 by Frederick Law Olmsted and Calvert Vaux, *Central Park,* New York City, United States (Current Map)

Investigate

Take a trip to a playground. Allow students to play for a bit, then ask students to choose a favorite piece of equipment to focus on and explore.

SOME SUGGESTED QUESTIONS:

Why is this their favorite piece on which to play?
What colors are used?
How does the piece of equipment feel?

Discuss and Demonstrate

Return to the classroom and discuss playground experiences.

SOME SUGGESTED QUESTIONS:

Where do you most like to play?
What do you see and experience there?
Why do you enjoy being at a playground?

Share an image and the aerial map of Central Park. Ask students to identify all the different uses for the land within the park: playgrounds, open green space, ponds, a zoo, sculptures, etc..

To encourage full participation in the discussion, consider the following strategies:

- **Project the map on an interactive white board.**
- **Enlarge the map, and consider adding braille prompts.**
- **Create textured areas representing different locations on the map.**
- **Provide students with label cards that identify different areas that they can attach to the map in appropriate locations.**
- **Verbally describe the actions that students are taking, as if you are narrating the experience.**
- **Allow students to use preferred communication modes to respond.**

Have the students compare and contrast *The Blue Whale* playground in Sweden and the Japanese *Woods of Net*.

SOME SUGGESTED QUESTIONS:

How would it feel to play on each of these playgrounds?
How is color used in each playground?

For the purposes of tactile engagement, bring in a crochet hook and yarn and demonstrate the crocheting process. Have students feel the yarn before it is woven, as well as touch the fabric after it has been created. Similarly, provide large rubber bands for students to experience the material used to block the entrance into the whale's mouth (*The Blue Whale*).

Creation

As children at this age and stage of development are eager to simply create, limited planning is required. Simple questions are enough to get them started.

SOME SUGGESTED QUESTIONS:

What would you like to do on a playground in the future?
Would you want to climb? Float? Swing? Slide?
How can you create your playground so that everyone can play?

Begin with a 6" X 6" square of construction paper to use as the flat surface of the playground. Students can cut the paper into strips, as well as shapes, if desired.

A variety of shapes can be pre-cut and provided. If a student is able to cut with support, provide appropriate adaptive scissors to limit the amount of pressure needed. Simply holding and guiding the paper for the student may provide the assistance needed.

DEMONSTRATE A VARIETY OF PAPER CONSTRUCTION TECHNIQUES.

Accordion fold/pleating

Cut or tear paper to the desired size. Fold the paper back and forth (fan fold) based on the thickness of each fold until you are at the end of the paper.

Ribbon curl/roll over a pencil

Construction paper can be curled like curling ribbon using open scissors. A curl can also be achieved by wrapping the paper around a pencil. For both techniques, the best result comes from using a strip of paper not wider than 1 ½".

Fringing

Cut into the edge of a piece of paper. Be consistent in the depth of the cut and in leaving an uncut edge. The fringed end can be curled by wrapping it around a pencil.

Scoring

Cut paper into the desired shape. Use an open scissor or the cap of a pen to create an indentation. The indentation becomes a seam, allowing the paper to be folded. This is helpful in creating three-dimensional organic shapes.

After demonstrating each technique, pass around the sample for students to touch so that they better understand the processes.

DEMONSTRATE PROPER GLUING TECHNIQUE:

The key to working with construction paper is to have a tab to adhere paper to another surface. A tab is simply an extension piece of construction paper that can be folded and glued to another surface. Always place the glue on the smaller piece of paper. Just a dot does a lot!

White school glue, not glue sticks, provide the most lasting and durable results.

Now, allow students to construct a playground of their own, using the techniques discussed or through their own innovations.

Students with limited fine motor ability can be assisted using hand-over-hand or hand-under-hand. Special lids are made for glue bottles that simply require dabbing the tip onto the paper. These are helpful for students who find squeezing difficult.

Provide the students with the materials, make appropriate accommodations for each, and let them go!

Reflection

Turn the lights off in the classroom and set the playgrounds on a table covered with white paper. Invite a student to select a playground (not his/her own) and use the flashlight to mimic the rising and setting sun, moving the ray of light from the flashlight slowly. Encourage students to watch the shadows. Have students imagine that they are shrinking in order to play in the space. Encourage students to imagine what it would be like to walk and play in the space.

How is this future play space different from where you play now? How do the shadows create special places for you to use? How would you feel walking through these spaces?

Where will we live and work?

GRADE LEVEL: 1 - 5

EXPECTED LENGTH: 2 – 3 class periods

Students will work collaboratively to create a two-dimensional class mural representing their *Community of the Future* using tempera resist and watercolor pencils. Each student contributes to the mural by creating an individual building or structure.

Student Example

MATERIALS:

One piece of white roll paper, cut 3' X 4'
Drawing paper
Watercolor paper cut in a variety of rectangle and square sizes
Wide sponge brushes and/or paint rollers
Water cups
Scissors
Graphite pencils
Watercolor pencils
Crayons
Oil pastels
Tempera paint

Objectives

ART MAKING

Students will create a class mural using tempera resist and water color pencils, focusing on creating the illusion of depth on a two- dimensional surface.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Generate and conceptualize artistic ideas and work.

Enduring Understanding: Artists and designers shape artistic investigations following or breaking with traditions, in pursuit of creative art making goals.

CRITICAL INQUIRY

Students will examine how architecture reflects its community through an examination of the Guggenheim Museum by Frank Gehry, Aqua Tower by Jeanne Gang, the Guggenheim Museum by Frank Lloyd Wright, the Heydar Aliyev Cultural Center by Zaha Hadid, the designs of Dr. Seuss, and the Cathedral of Notre Dame.

Relating artistic ideas and work with personal meaning and external context.

Anchor Standard: Synthesize and relate knowledge and personal experiences to make art.

Enduring Understanding: Through art making, people make meaning by investigating and developing awareness of perceptions, knowledge and experiences.

ART HISTORY INQUIRY

Students will discover that architectural design is driven by the ways in which buildings are used. Students will compare and contrast Frank Lloyd Wright's Guggenheim Museum of Art in New York City and the Cathedral of Notre Dame in Paris, France.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Perceive and analyze artistic work.

Enduring Understanding: Individual aesthetic and empathetic awareness developed through engagement with art can lead to understanding and appreciation of self, others, the natural world, and constructed environments.

AESTHETIC INQUIRY

Students will identify and appreciate the many functions architecture has in society.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Organize and develop artistic ideas and work.

Enduring Understanding: People create and interact with objects, places, and design that define, shape, enhance, and empower their lives.

Key Vocabulary

ARCHITECTURE
The art or practice of designing and constructing buildings, open areas, and communities.

ARCHITECTS
Individuals who are trained to design buildings.

TWO-DIMENSIONAL
Only involved with height and width.

THREE-DIMENSIONAL
Object created with height, width and depth.

ISOMETRIC DRAWING
Creating the illusion of three dimensions with simple use of parallel and perpendicular lines.

ORGANIC SHAPES
Shapes like those found in nature; more flowing than geometric shapes; free-form, unpredictable.

GEOMETRIC SHAPES
Shapes with clear edges based on geometric forms such as squares, rectangles, triangles, and rhombi.

EXAMPLES FOR STUDY:

Cathedral of Notre-Dame, Paris, France (begun 12th century)

Jeanne Gang, Aqua Tower, Chicago, United States (2010)

Frank Gehry, Guggenheim Museum, Bilbao, Spain (1997)

Zaha Hadid, Heydar Aliyev Cultural Center, Baku, Azerbaijan (2013)

Dr. Seuss, Whoville, from the set of *How the Grinch Stole Christmas* (2000)

Frank Lloyd Wright, Guggenheim Museum, New York City, United States (1959)

Discuss and Demonstrate

Students, as a group, will decide where their *Community of the Future* will be located: on the surface of the earth, under the sea, in space, or underground. Depending on the size of the group, all options could be explored.

Set the stage by reading selections from Dr. Seuss' books in which Whoville appears, such as *Horton Hears a Who!*. Alternately, videos are readily accessible. Encourage students to describe the buildings illustrated.

Examine images of Gehry's Guggenheim Museum, Frank Lloyd Wright's Guggenheim Museum, The Heydar Aliyev Cultural Center by Zaha Hadid, Aqua by Jeanne Gang, and the Cathedral of Notre Dame.

To make concepts more accessible for all, consider the following strategies:

- **Make 11" X 17" laminated copies of all images. Then, cut the buildings away from their surroundings. Students can match the building to the site. This creates a series of simple puzzles that reinforces geometric and organic shape recognition. Students can do this either by touching the outlines of buildings or through visual matching.**
- **For students using Augmentative and Alternative Communication (AAC) devices that assist them in participating through spoken word, preprogram the devices with the appropriate language needed in the lesson and target questions to these students.**
- **Provide students with simple "Yes" and "No" flags to engage students with disabilities that impact verbal skills.**
- **For students with vision-related disabilities, follow the lines of the buildings with white glue and allow it to dry. The students can follow the shapes by feeling the lines. Alternatively, cover sections of the buildings with different textured papers and/or fabrics to provide a way for students to engage with the images in a tactile manner.**

SOME SUGGESTED QUESTIONS:

What is architecture?

What buildings do we need in order to live together in community?

What buildings do we want in order to enjoy our communities?

Explain the difference between organic shapes seen in nature, and geometric shapes seen in human-made structures.

How does the architect design a building considering its surrounding environment?

- Gehry's building sits at the edge of a waterway and resembles a large ship. The surface was inspired by memories of the scales of fish his grandmother would purchase and keep in their bathtub until it was time to cook them for dinner.
- Gang's residential building is unique as the walls undulate and appear to wave, in contrast to more traditional buildings with straight walls.
- Hadid's Cultural Center capitalizes on organic shapes rising out of the flat terrain.
- The Cathedral of Notre Dame has spires pointing to the heavens. Gargoyles provide decoration and the flying buttresses provide support while reinforcing the upward focus of the building.

How can we describe the architecture in Dr. Seuss' *Whoville?*

Discuss and Demonstrate:

PLANNING FOR CREATION

Establishing the location of the *Community of the Future*

GRADES 1 – 3:

Use guided imagery to take students on a trip into the future to determine what our cities will look like. Craft a story to help students imagine and "see" their ideas.

Example: The educator could wear a lab coat for verisimilitude and use a simple cardboard box as a time machine with a sound device with recorded mechanical sounds on low.

Today we are going to travel through time…two hundred years into the future! Imagine what we might see! Now, to prepare for our trip we need to be sitting comfortably in our seats and to close our eyes! And we need to be very quiet so that the machine can work properly. This will help us focus on where we are going. Now, close your eyes. I am turning on the machine. Here we go!

There goes 2020….now past the year 2050…picking up speed now…2150…2200…slowing down a bit as we approach…2215! Here we are!

Don't open your eyes. What do you see? Where are the people of 2215 living? Are they living in space? Or under the ground? Or under the sea? Or on land like we do now? Just imagine.

Time to travel back. The return trip should be much faster – if we make it! Here we go…Pop! Back at 2015! Open your eyes!

ALL GRADES:

Brainstorm with the class to create a list of possible structures that will be in their city. From this list, students can select their building or structure to design.

Each building should reflect:

- *how it is used*
- *where it is*
- *the personality of the community*
- *a choice of shapes – geometric and/or organic - for the particular environment*

Create

ALL GRADES

Each student selects the building she/he would like to design for the *Community of the Future*.

Students draw their building, designing it to touch at least three sides of the watercolor paper. By providing papers in a variety of sizes, the buildings will naturally be a variety of sizes.

GRADES 1 – 3:

Encourage students to create their buildings using the watercolor pencils directly, without pre-drawing it with a pencil. This will result in a cleaner final drawing.

To encourage full participation in this activity, consider the following strategies:

- **A variety of adaptive tools can be used to assist students in increasing their control of the pencil.**
- **Use self-hardening modeling compound on the stem of the pencil to create a grip for a student.**
- **Place the wrist over a simple block or on a water bottle on its side to provide support**
- **Use the hand-over-hand technique to provide just enough support to allow the student to complete his/her drawing.**
- **Consider providing a variety of pre-cut images of buildings and encourage students to combine these to create new and unique structures.**
- **For students with visual disabilities, provide textured fabrics and papers to use in designing their buildings.**

After coloring their drawings with the watercolor pencils, students add water with a paintbrush to smooth out lines and fill in all spaces.

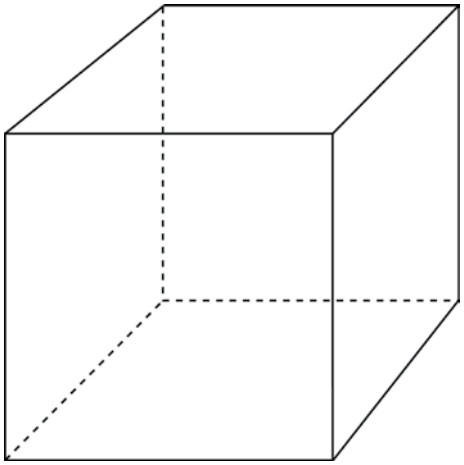
GRADES 4 – 5

Demonstrate simple isometric perspective by drawing a cube. Highlight how the farther things are away, the smaller they appear.

Students should complete one or two pre-sketches of their *Community of the Future* building on drawing paper and then select their favorite to transfer to the watercolor paper using the following tracing technique:

- Have students rub the back of their drawings with a graphite pencil to leave a layer of carbon across the full page.
- Lay the drawing (carbon side down) atop the watercolor paper, attaching it with a small piece of tape. Use drawing paper the same size as the finished paper in order to facilitate ease in transferring the drawing.
- Trace the lines of the original drawing, transferring a light carbon line onto the watercolor paper.
- Encourage students to use a light touch as heavy pressure will leave an indentation in the soft watercolor paper.

Start with the watercolor paper, if sketching first is not perceived as advantageous.



Students finish their drawings with watercolor pencils and then apply water with a brush to smooth out the watercolor pencil marks.

Consider providing a variety of pre-cut images of buildings. Students who find drawing challenging can combine these to create structures. These collages can be added to the mural, or they can be photocopied and students can add colored pencil to produce an image that is more consistent with the images created by class peers.

ALL GRADES

While students are creating their individual buildings, groups of 3 or 4 students are brought together to create the background of the mural. Depending on the location of their Community of *the Future*, students take turns adding elements to the background. Provide a maximum number of elements to be added by each student (perhaps three) and encourage students to draw their elements throughout the paper. Tell students to press hard with the crayons or oil pastels as it will create a better resist once paint is applied.

Place the roll of paper on the floor, or for students with mobility issues, tape the roll of paper to the wall.

If *Space* has been selected, students add stars, planets and other elements using a white crayon. Please note: white roll paper should be used for all backgrounds; the big "reveal" comes later once the paint wash covers the white crayon or oil pastel.

Consider using very smooth crayons made of softer wax. These require less pressure. For students needing assistance with gripping, larger width crayons, oil pastels, or triangle shaped crayons can be useful.

If *Undersea* has been selected, students add sea creatures, plants, shells, etc. using the green, white and blue crayons or oil pastels.

If *Underground* has been selected, students add stones, worms, toads, etc. using black and white crayons or oil pastels.

If *On the Surface of the Earth* has been selected, students add plants, ground and clouds, etc. using green, brown and white crayons or oil pastels.

Encourage students to work BIG!

As drawing objects with a white crayon or oil pastel on the white surface of the paper can be difficult to see, show the students how to "see" where the mark has been made by holding the paper up to the light and moving it slightly, revealing the slight differentiation of sheen on the paper. As an alternative, have students use a yellow or other light crayon, super smooth crayon, or oil pastel.

To complete the background, students will again work in small groups using very watered-down tempera paint or liquid watercolors to cover the paper. If the paper has been taped to the wall, move it to the floor. Use a large sponge to provide flowing strokes. The crayon or oil pastel will "resist" the paint and the drawings will stand out. The white crayon or oil pastel drawings "magically" appear.

For students for whom sitting on the ground is not comfortable, a 3"-4" paint roller with an extender stick will facilitate participation.

Preparation for Mural Assembly

Prior to assembling the murals, consider ironing the paper as the dampness of the paint can leave it wrinkled. To iron, place several layers of newspaper or newsprint on a table covering a space slightly larger than the mural. Cover the newspaper with white paper – another piece of the roll paper works well - to keep the newspaper ink from bleeding onto the mural. Place the mural on top, painting side up, then sandwich it with another piece of white paper. This top layer keeps paint off the iron. Heat the iron to medium and iron the mural, moving until you have smoothed the paper.

Create

After each building is drawn, colored with the watercolor pencils, and painted, it is cut out.

Place all buildings and structures onto the prepared mural background after it has been allowed to dry. The class should arrange the structures, overlapping them to create a sense of depth. Remind students, once again, that the farther objects are away, the smaller they will appear, so arranging the buildings to reflect this concept – with closer buildings on a larger scale and farther buildings depicted as smaller objects - will automatically result in the illusion of depth.

A variety of adaptive scissors are available to assist students with cutting cleanly. Hand-over-hand or hand-under-hand can provide support if needed.

Reflection

GRADES 1 – 3

Lay the mural on the ground.

Provide students with a small toy car. Then, provide the opportunity for each student to "drive" the car and stop at a building (not their own).

To assist students with gripping, attach a handle cut from a plastic milk jug to the car.

Considering the building, have each answer:

What would you do here?
How do you know the building belongs in this environment?
Would you describe this building as organic or geometric?

GRADES 4- 5

Hang the mural on the wall.

Review the works of Frank Gehry, Frank Lloyd Wright, Zaha Hadid, and Jeanne Gang.

- *How do Wright's Guggenheim in New York City and Gehry's Guggenheim in Bilbao reflect the buildings' function within these particular locations?*
- *Compare and contrast Hadid's cultural center, Gang's residential tower, and the Notre Dame Cathedral in relation to their settings. How do they reflect their surroundings?*
- *How do the buildings designed by the class respond to the environment selected by each group (space, undersea, etc.)?*
- *How do the buildings designed by the class reflect their functions?*

What will my home look like?

GRADE LEVEL: 4 - 8

EXPECTED LENGTH:

3 – 4 class periods

Our homes reflect where we live and what we value, as well as providing shelter. While our basic need may be simple protection from the elements, we have long created homes that reflect our values and identities. Students will create paper mache homes using a found object armature, completing them with acrylic paint and embellishments.

Student Example

MATERIALS

Paper mache paste (inexpensive commercial products are available in powdered form, allowing one to mix only what is needed. Several recipes for homemade paste are readily available on the internet.)

Paint shirts/smocks

Shallow pans

White roll paper or newsprint cut into strips (1" wide)

Newspapers torn or cut into strips (1" wide)

FOR ARMATURE CONSTRUCTION:

Found objects: paper towel rolls, bottles, milk jugs and cartons, cardboard, lids

Newspapers

Masking tape

FOR FINISHING:

Acrylic paint

Paint brushes

Embellishments– beads, feathers, contact paper, etc.

White school glue

Colored roll paper (optional)

Objectives

ART MAKING

Students will create a model of their future home using found objects and paper mache, finishing the models with acrylic paint and focusing on form and balance.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Organize and develop artistic ideas and work.

Enduring Understanding: Artists and designers experiment with forms, structures, materials, concepts, media and art making approaches.

CRITICAL INQUIRY

Students will analyze how Fallingwater by Frank Lloyd Wright, homes decorated by the Ndebele women, the sculpture of Bodys Isek Kingelez, and the embellishments on the home of Isaiah Zagar reflect the residents of the structures as well as their surroundings.

Relating artistic ideas and work with personal meaning and external context.

Anchor Standard: Synthesize and relate knowledge and personal experiences to make art.

Enduring Understanding: Through art making, people make meaning by investigating and developing awareness of perceptions, knowledge, and experiences.

ART HISTORY INQUIRY

Students will investigate how the natural and found materials can be used as building materials for structures.

Relating artistic ideas and work with personal meaning and external context.

Anchor Standard: Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.

Enduring Understanding: People develop ideas and understandings of society, culture, and history through their interactions with and analysis of art.

AESTHETIC INQUIRY

Students will discover that people across cultures work to make their homes unique by utilizing materials that are decorative as well as practical.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Perceive and analyze artistic work.

Enduring Understanding: Visual imagery influences understanding of responses to the world.

Key Vocabulary

FORM
The three dimensional version of shape.

BALANCE
Harmony of design and proportion; visual weight distribution.

ARMATURE
A framework used to construct a sculpture.

FOUND OBJECTS
Materials not originally designed for use as art materials, often recycled or repurposed.

EMBELLISHMENTS
A decorative detail or addition.

THUMBNAIL SKETCH
A small sketch usually no bigger than 2" X 2" with minimal detail used to begin planning or laying out a work.

CANTILEVER
A long projecting beam used to support a balcony or building extension.

MOSAIC
A picture or pattern created by arranging small pieces of a material, often glass or tile.

INTEGRATION
A method used by architects taking into account the surroundings where the building will be placed, encouraging the building to appear as a natural extension of the surroundings.

Nbedele homes, South Africa and Zimbabwe (contemporary)

Frank Lloyd Wright, Fallingwater, Mill Run, PA, United States (1938)

Bodys Isek Kingelez, *Papillon de Mer* (1990-91)

Isaiah Zagar, *The Magic Gardens,* Philadelphia, PA, United States (begun 1994)

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Discuss and Demonstrate

Assign students to small groups. Each member of the group should be assigned a responsibility. These could include a note taker, moderator, etc. Provide each group with a laminated copy of one of the images in this lesson, along with simple background information and questions, provided below, about each work. Provide groups time to view the work and discuss the questions. Then have each group share what they have learned with the entire class.

Pair students with visual disabilities with students who can describe the images to them.

For students using Augmentative and Alternative Communication (AAC) devices, pre-program the devices with appropriate language from the lesson. Target questions to these students to allow them to answer. Providing students with simple "Yes" and "No" flags can provide the opportunity for students with less verbal abilities to participate.

FALLINGWATER (1935), FRANK LLOYD WRIGHT

This building is a private residence built for the Kaufman family in the hills of Pennsylvania. Wright's building was designed to nestle into the wooded landscape, and included a waterfall and stream as interior features. Natural stone from the site provides some of the flooring. The building itself has dynamic geometric shapes, in contrast to the natural, organic surroundings. Even so, the cantilevered levels mimic the stone outcroppings that create the natural waterfall.

SOME SUGGESTED QUESTIONS:

How can homes be integrated into their natural surroundings?
What would it be like to live in this building?

NDEBELE HOMES

The Ndebele are a southern African people with a history of decorating their homes. Traditionally, the decorations were created by running fingers through the mud used in construction of the walls of the homes. In the 20th century, this tradition changed to include the painting of dramatic patterns on the outside walls. Initially, they used only natural pigments, but now the artisans use commercially-produced paints to create brighter colors. The patterns often resemble those used historically in the beadwork of the Ndebele. Present day patterns often include symbolic representations of the goals of the homeowners.

SOME SUGGESTED QUESTIONS:

What are the hopes and dreams of the people living in this home?
What would it be like to live in this building?

PAPILLON DE MER (1991), BODYS ISEK KINGELEZ

Born in the Congo, Kingelez uses found objects, including cardboard, wood, and yarn to create what he envisions as the Africa of the future. He designs his buildings in the hopes that they will inspire cities of the future, where the structure and beauty of buildings will encourage peace and harmony among people.

SOME SUGGESTED QUESTIONS:

What about this building might encourage harmony among people?
What would it be like to live in this building?

THE MAGIC GARDENS (1994-ONGOING), ISAIAH ZAGAR

Isaiah Zagar is a Philadelphia-born artist who has made it his life's work to beautify his hometown. Through mosaics created using discarded materials (tiles, glass, bottles, mirrors, wire, steel), he has transformed his home and the surrounding area into a work of art called *The Magic Gardens*. *The Gardens* wind through rooms and levels, each unique section providing a place for quiet reflection, celebration, or exploration.

SOME SUGGESTED QUESTIONS:

With the use of materials resulting in such a busy backdrop, how has Zagar nonetheless created contemplative spaces?
What would it be like to live in this space?

Create

Students begin thinking about their home of the future by completing the idea generator (provided at the end of the lessons).

Read the questions on the idea generator and provide time for students to record their answers, either in writing, using audio, or with Augmentative and Alternative Communication (AAC) devices. Provide possible responses to questions in visual or tactile form. For example, in response to the question addressing materials that could be used, images or actual pieces of bark, stones or leaves could be provided.

Each question on the Idea Generator leads to the next decision to be made. After completing the Idea Generator, students will create simple thumbnail sketches. As much of the creation of the home will be developed in the actual building, sketches can be very simple and without much detail.

To build the armature for the structure, students select found objects to create the basic shape of their home. If a tall building is planned, a paper towel tube can provide a good starting point. For example, if a round home is envisioned, wadding crumpled newspaper in a ball can create the needed form.

Have students add objects and paper until the desired home design is reached. Masking tape should be used to hold objects and paper in place.

During the building of the armature, it is important to be generous with masking tape as this helps the students create strong foundations for their structures.

Once the armature is completed, students cover it with the paper mache. Pre-cut or tear approximately 1" wide strips of newspaper. When tearing newspaper, tear from top to bottom as this will result in the cleanest tear. For ease of handling, consider tearing long strips in two. It is helpful to provide students with strips of varying lengths.

Place the prepared paper mache paste in a shallow pan (frozen dinner containers work well). Take a strip of newspaper and place it in the paste. As you take the paper out of the paste, run the paper through two fingers to remove excess paste. The paper should be wet, but not dripping. Place the paper onto the armature and smooth it into shape.

To make the activity more accessible to all, consider the following strategies:

- **Pre-cut strips of masking tape attached to the edge of the workspace can assist students.**
- **For students with a tactile sensitivity, non-latex gloves can be worn or the paper mache paste can be painted onto the paper with a wide (1") brush.**
- **Adaptive tools, such as self-hardening modeling clay on the stem of the paintbrush, will create a grip for students.**
- **Placing the wrist over a simple block or laying the wrist on a water bottle on its side can provide support for a student to better control their brush.**
- **The hand-over-hand technique can provide just enough support to allow the student to complete their painting.**

Continue until the armature has been covered with two layers of paper mache strips. For the last layer of paper mache, use strips of white roll paper or newsprint. NOTE: do not use construction paper as it will easily tear and will not provide a smooth finish.

Allow the paper mache structures to dry for a minimum of 24 hours.

After the structures have dried, students can paint them using acrylic paint.

After the paint dries, embellishments can be added to provide details to the finished homes by gluing them to the surface using white school glue.

The work can also be finished by adding a layer of colored roll paper using the paper mache paste. This can be particularly helpful for a student with fine motor challenges or if time is limited, as the colored roll paper can be added as the top layer of paper mache, eliminating the time spent on painting the works.

Reflection

To reflect, students will participate in a sticky note critique. Each is given several sticky notes and asked to comment positively about each work. Students should not comment on their own work. The instructor should be prepared to make sticky note comments as well.

Consider providing the following questions as prompts to stimulate students' ideas.

How would it feel to live in this space? What do you imagine about the owner? What makes this a home of the future?

Comments can be involved or can be as simple as one word or an image. Students can also be provided with stickers to place on their sticky notes.

Questions can be posted on the board, read aloud, and coupled with picture cues.

How can we work together?

GRADE LEVEL: **Pre-K - Grade 1**

EXPECTED LENGTH: **Two 30-minute class periods**

Our future is dependent on our ability to solve problems and support one another as we strive to achieve individual goals. Students will create a collaborative class quilt using tempera paint and newspaper, representing a future in which both individualism and collaboration are valued. They will analyze the works of Josef Albers, the quilts of Gee's Bend, and Faith Ringgold's The Sunflower Quilting Bee at Arles. Albers' work focuses on how we perceive color when tints are placed beside each other. Ringgold's story quilts combine image and text depicting community effort, while the Gee's Bend quilts reinforce the importance of individuals working together. Each student will create a simple painting. These will then be combined to demonstrate how bringing together unrelated elements can result in a powerful whole. Students will complete the work with the addition of text.

Student Example

MATERIALS

White paper – cut into 6″ X 6″ squares
A circle (3″ diameter) or a square (3″) pattern for each child
Tempera paint in primary colors + white
Egg carton palette (with just two wells)
Paintbrushes (¾″ – 1″ wide brushes)
Newspaper (classified section)
Permanent Markers
Scissors
Pencils
White roll paper to mount the quilt
Double sided removable tape

Objectives

ART MAKING:

Students will create individual quilt patch tempera paintings inspired by the work of Josef Albers' color studies, exploring color and shape.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Generate and conceptualize artistic ideas and work.

Enduring Understanding: Creativity and innovative thinking are essential life skills that can be developed.

CRITICAL INQUIRY:

Students will examine how the quilts of Gee's Bend and Faith Ringgold, fabricated from a variety of disparate scrap materials, create a new unified fabric. Students will further their understanding of collaboration through the examination of the work of Do Ho Suh.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Generate and conceptualize artistic ideas and work.

Enduring Understanding: Artists and designers shape artistic investigations following or breaking with traditions, in pursuit of creative art making goals.

ART HISTORY INQUIRY:

Students will investigate the color study paintings of Josef Albers in order to gain an understanding of how colors interact with one another.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Perceive and analyze artistic work.

Enduring Understanding: Visual imagery influences understanding of responses to the world.

AESTHETIC INQUIRY:

Students will understand how formal qualities of color and are used intentionally by artists.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Apply criteria to evaluate artistic work.

Enduring Understanding: People evaluate art based on various criteria.

Key Vocabulary

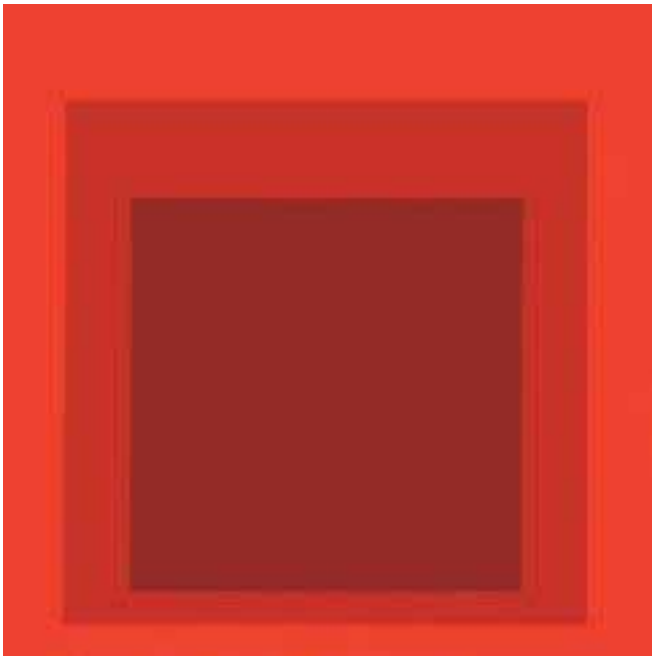
TINT
A color with white added.

SHAPE
The coutline of an area or figure.

COLLABORATE
To work together to achieve a common goal.

OPTICAL ILLUSION
The experience of seeing something that does not really exist.

EXAMPLES FOR STUDY:



Josef Albers, *Homage to the Square/Red Series* (1968)

The Quilters of Gee's Bend, *Deep Fried Kudzu* (2008)

Faith Ringgold,
The Sunflower Quilting Bee at Arles (1991)

Do Ho Suh, *Blue Green Bridge* (2000)

Do Ho Suh, *Blue Green Bridge*, detail (2000)

Discuss and Demonstrate

Have students identify a circle and square from visuals as well as through exploring physical manipulatives.

Consider displaying several Albers' works from his *Homage to the Square* series. Point out how the colors relate to each other. Have students stare at the blocks of color without blinking. What block looks closest? Farthest away? Dark colors (shades) will tend to recede and lighter colors (tints) will come forward. This creates an optical illusion as we see depth and dimension when we are simply looking at a flat sheet of paper.

Provide students with cut out shapes of circles and squares to match the shapes in the works by profiled artists. Glue lines can be created in advance, highlighting the circle and square shapes present.

Create

Each student selects a circle or a square pattern to use and selects his/her favorite primary color. Each is given one square of 6" X 6" white paper, a pencil, a paintbrush, and an egg carton palette with the selected color as well as white paint.

Students begin by tracing the outline of the circle or square in the middle of their paper.

Students with visual disabilities can be provided with several sizes of the selected shape (circle or square) to trace onto their paper. Placing paper on a soft surface (a stack of newspapers) and encouraging students to use pressure while tracing will cause a ridge to form on the reverse side. Students can then paint on the reverse side, with ridges providing a guide for the student to follow.

Students then dip their brushes into either the color or the white and fill their shape. They then dip into the white (if they began with color) or the primary (if they began with white), without cleaning the brush in between.

They use this brush to paint a line around the outside of their original shape. The students continue to paint concentric squares or circles with the paint getting lighter/darker until the paper is filled.

If needed, apply self-hardening modeling clay to the handle of the brush to create a gripper. Use hand-over-hand or hand-under-hand to help the student control their brush strokes.

For students with visual disabilities, consider adding sand to the colored paint. As the student continues to add more white paint to the brush with each shaped ring, the amount of sand will be diluted. When dried, the student will be able to feel the difference.

Discuss and Demonstrate

Share the *Deep Fried Kudzu Quilt* of Gee's Bend and have students identify and discuss how many pieces come together to become one. Explore how the use of old and worn out clothing and linens as the material for the quilts. This allows the creator to take materials that can no longer be used as they were intended and repurpose them. The new object, a quilt, is both beautiful and provides warmth and protection from the cold.

Show the image of Do Ho Suh's *Blue Green Bridge*. Have students guess what it is made of. Then show the detail, revealing the thousands of individuals working together to create a tool to help people pass from one side to the next. Suh is a Korean born artist whose work often focuses on the importance of each individuals working collaboratively to achieve a common goal.

Share Faith Ringgold's *The Sunflower Quilting Bee at Arles*. In this piece, Ringgold depicts women who have changed the world for the better and are working together to create a quilt. Explain the common practice of quilting bees, where, typically, women gather to sew individual squares together to create a final piece. Each piece is essential for the creation of this new object – the final quilt, just as each of our paintings is essential for the creation of our class quilt. Each decision we make will directly affect the future of the collective work.

Create

Take each student's painted shape and have the students determine how the pieces should be put together.

SOME SUGGESTED QUESTIONS:

What happens if we put all of the same colors together?
What happens if we mix them all up?
Why is it important to work together? What impact do we have when we work together?

Lay the pieces on the piece of white roll paper, mounting each painting next to another. Use removable double-sided tape to attach each painting to the paper. This will allow each painting to be removed later so the children can reclaim their paintings.

To complete the quilt and provide an opportunity for each student to personalize the work, have the students draw circles and squares on newspaper using marker. Each student should complete two. Provide the students with newspaper pages that have dense text rather than lots of pictures. Each student then writes his or her name across both shapes repeatedly in rows, filling up the drawn shape.

The students then cut out the shapes.

Students then place these "autographed shapes" around the paintings, framing the work.

If needed, students can use adaptive scissors to help guide their cutting or the hand-over-hand technique can be used.

Reflection

Revisit *The Sunflower Quilting Bee at Arles* by Faith Ringgold. Point out how the names of the women in the quilt are included in the quilt. Hang the class quilt and have the students pick out the painting squares that give the optical illusion of receding (going in) and those that give the optical illusion of coming forward. Explain that they have created the illusion of three dimensions on a two dimensional surface.

How did working together impact the outcome of our quilt? How different would the art have been if we did not work collaboratively? How will working together help us shape our futures?

What inventions will change the world?

GRADE LEVEL: 3 - 8

EXPECTED LENGTH:
3 – 4 class periods

Students will work individually and collaboratively to imagine and create an invention of the future.

Student Examples

MATERIALS

9" x 12" white drawing paper
Interlocking building blocks
Water-based markers
Pens or pencils
Laminated small visuals of machine parts
Visual images of Leonardo da Vinci's drawings of inventions, Rube Goldberg machine designs, Wallace and Gromit video clip, Paul Klee's *The Twittering Machine*, and the game *Mousetrap*™
Matching cards of Leonardo da Vinci machines and modern day contraptions

Objectives

ART MAKING

Students will design and create a mock-up of their invention of the future using markers and paper, focusing on line quality.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Generate and conceptualize artistic ideas and work.

Enduring Understanding: Creativity and innovative thinking are essential life skills that can be developed.

CRITICAL INQUIRY

Students will investigate how creativity and imagination drive the designs of everyday devices and inventions through examining Leonardo da Vinci's inventions, Rube Goldberg machines, a *Wallace and Gromit* video clip, Paul Klee's *The Twittering Machine*, and the game *Mousetrap*™.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Interpret intent and meaning in artistic work.

Enduring Understanding: People gain insights into meanings of artworks by engaging in the process of art criticism.

ART HISTORY INQUIRY

Students will discover how devices and inventions of today were inspired by Leonardo da Vinci.

Relating artistic ideas and work with personal meaning and external context.

Anchor Standard: Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.

Enduring Understanding: People develop ideas and understandings of society, culture, and history through their interactions with and analysis of art.

AESTHETIC INQUIRY

Students will identify the functional and aesthetic aspects of invention design.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Perceive and analyze artistic work.

Enduring Understanding: Individual aesthetic and empathetic awareness developed through engagement with art can lead to understanding and appreciation of self, others, the natural world, and constructed environments.

Key Vocabulary

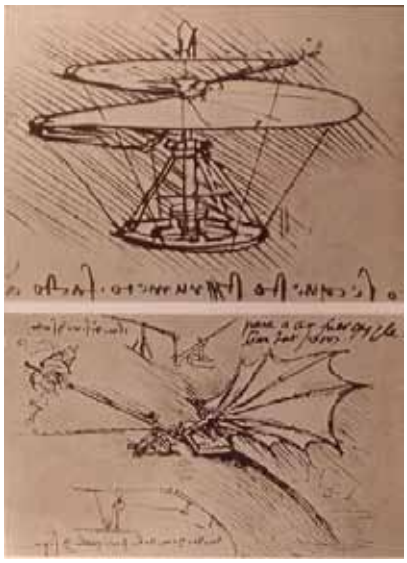
RUBE GOLDBERG MACHINE
A mechanical invention created to complete an everyday task using as many steps as possible.

PROTOTYPE
An initial drawing/design of a machine or invention.

CAUSE AND EFFECT
An action or series of actions that produces a resulting event or events.

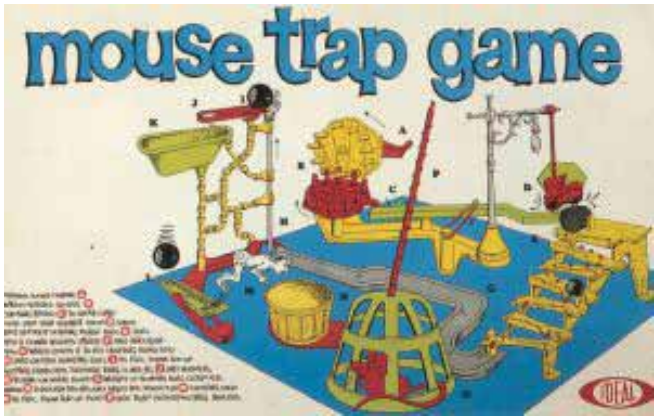
EXAMPLES FOR STUDY:

"*The Wrong Trousers*" claymation scene from *Wallace and Gromit* (1993)

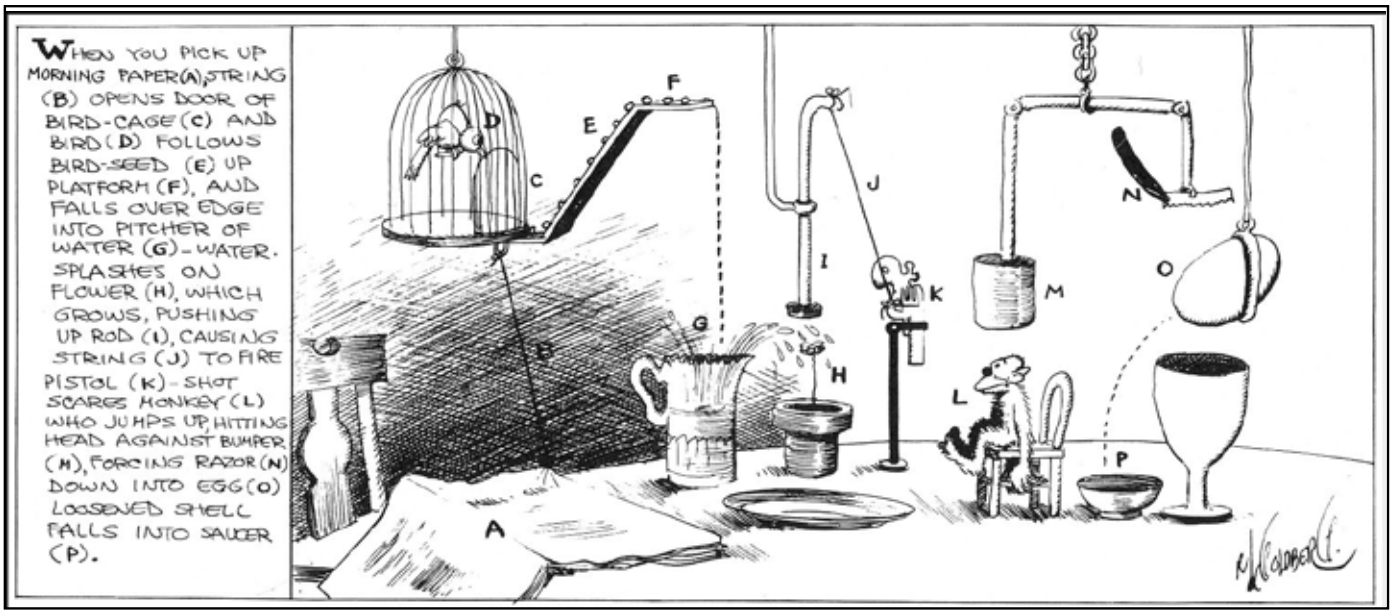


Leonardo da Vinci, designs for flying machines, from *Codex Atlanticus* (1478-1519)

Paul Klee, *The Twittering Machine* (1922)



Mousetrap™ Game



Rube Goldberg, *Loosen an Egg from it's Shell* *

Discuss and Demonstrate

Begin by showing the clip from *Wallace and Gromit* that centers on the machine Wallace uses to put on his clothes and eat his breakfast. View the video a second time and have students then count the many steps used to complete Wallace's morning ritual. As a class, make a list of the steps required by each of us to put on our pants in the morning. This list should be much shorter than the number noted in the video.

For students using Augmentative and Alternative Communication (AAC) devices that assist them in participating, pre-program the devices with appropriate language for the lesson and target questions to these students to allow them to answer.

Next, share a Rube Goldberg machine. Rube Goldberg was a cartoonist and inventor who designed very complicated inventions to complete very simple tasks. What everyday tasks are being completed? Compare the machine to an image on the cover of the game *Mousetrap*™. What similarities do you see? What differences?

Print small card-sized images of Leonardo da Vinci drawings of inventions created in the 1500s. Also print similar contemporary machines (for example: ornithopter/helicopter, armored car/tank, parachutes). Have students match Leondardo da Vinci's drawings of inventions to machines of today.

Next, have students create a list of the tasks or activities they do every day beginning when they wake up.

Focus on details such as:

Turn off alarm	Put dishes in the dishwasher/sink
Brush teeth	Get dressed
Comb hair	Get on the bus
Go to the kitchen	Enter school building
Eat breakfast	Go to locker

Follow this by sharing the Rube Goldberg machine created by a child, Eva: http://steampoweredclassroom.com/sum-up-how-to-do-a-rube-goldberg-project-and-not-lose-your-mind/ (Scroll down to find the video with a stuffed koala bear.) To create this machine, this student used interlocking building blocks and a stuffed animal. Involve students in mapping the sequence of events that occurs when the machine is put into action.

For some students, simple "Yes" and "No" flags can provide the opportunity to participate.

For kinesthetic learners as well as learners with visual disabilities, it is suggested that an actual *Mousetrap*™ game be available for touching and feeling.

Some students might need a prompt to find the "match" to a card. if needed, allow students to point to the card.

Alternatively, students can create a picture list, selecting from pre-cut clip art images.

Create

The students will now either make their own Rube Goldberg-inspired invention or create a prototype for an invention of the future. Begin with a clear statement that inventors often make mistakes when they are inventing something. Making mistakes is part of the process.

Each student should select one activity that they do each day and brainstorm about the kind of invention that would help them complete this task.

This activity can take three different directions:

1. **Draw it:** Once they have selected an activity, students decide how many steps a machine would take to complete the task. For inspiration, refer back to Leonardo da Vinci's drawings. He dreamed big! Encourage this kind of imaginative, creative thinking. Markers and pencils are recommended for their potential to create through the use of line. On white drawing paper, have students first draw their invention designs using pencil. Encourage them to label each part by function and to include a title for the invention. At this juncture, another medium may be selected to build upon this sketch. Encourage students to consider color-coding based on the function of each component or to select a medium appropriate to the purpose of the machine. Students should also craft a short description of what the invention does and include it somewhere on the page.

2. **Assemble the invention from pre-provided visual images:** An Internet search for "machine parts" or "machine parts drawing" yields many images that could be reproduced and cut out individually. To increase durability, pieces may be laminated for repeated use. Students can place pieces in an interesting way, using glue sticks to adhere them to the paper. Have students give their inventions a title. They can also add to inventions with hand-drawn elements.

For students who find drawing difficult, an invention could be constructed using pre-drawn parts.

For some students, it is helpful to verbally explain what the invention does. The students' descriptions can be audiotaped.

3. **Interlocking building blocks construction:** Students can either work collaboratively or individually on simple building block Rube Goldberg inspired inventions. For inspiration and examples, search "Rube Goldberg inventions interlocking blocks" on Youtube.com. It is important to first show Eva's feeding machine for her stuffed koala since students will most readily relate to another student's work.

This activity is well suited for students with vision-related disabilities.

Reflection:

Students should write an artist statement explaining the components of their machine and how it works. Alternatively, students can record an artist statement using Voice Thread: www.voicethread.com. For educator suggestions on how to use Voice Thread, go to http://www.freetech4teachers.com/2010/06/100-ways-to-use-voicethread-in.html#.UzF4uOewIgK. Another option is to videotape student machines in action. All students should be encouraged to share their machines with the class.

How will I travel?

GRADE LEVEL: K - 4

EXPECTED LENGTH: 3 – 4 class periods

Students will work individually and collaboratively to envision and design vehicles of the future. They will then use found materials to construct a model.

Student Example

MATERIALS

Pencils

Water-based markers

Tacky glue or glue gun (with adult assistance)

Masking tape

Scissors

9" x 12" white drawing paper or 18" x 24" white drawing paper

Visual images of Art Cars, Leonardo da Vinci's drawings of futuristic vehicles, Scraper Bikes, and prototypes of future vehicles. Steampunk vehicle images may also be considered.

Found/recycled objects such as water and soda bottles, soda cans, cardboard tubes, mat board scraps, cardboard boxes, discarded items and items for adornment such as buttons, sequins, pipe cleaners

Sample materials from the visuals selected, i.e. cardboard, foil, holiday lights

Objectives

ART MAKING

Students will design and create a mock-up of their vehicle first using markers and paper to design (individually), and then found materials to construct a model (with a partner).

Conceiving and developing new artistic ideas and work.

Anchor Standard: Generate and conceptualize artistic ideas and work.

Enduring Understanding: Creativity and innovative thinking are essential life skills that can be developed.

CRITICAL INQUIRY

Students will investigate how imagination drives the design of vehicles, both real and fantastic, through an examination of Art Cars, Leonardo da Vinci's drawings of vehicles, Scraper Bikes, Steampunk vehicles and prototypes of vehicles of the future.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Interpret intent and meaning in artistic work.

Enduring Understanding: People gain insights into meanings of artworks by engaging in the process of art criticism.

ART HISTORY INQUIRY

Students will discover how vehicles of today were inspired by Leonardo da Vinci's drawings of the sixteenth century.

Relating artistic ideas and work with personal meaning and external context.

Anchor Standard: Synthesize and relate knowledge and personal experiences to make art.

Enduring Understanding: Through art making, people make meaning by investigating and developing awareness of perceptions, knowledge, and experiences.

AESTHETIC INQUIRY

Students will identify the functional and aesthetic aspects of vehicle design.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Apply criteria to evaluate artistic work.

Enduring Understanding: People evaluate art based on various criteria.

Key Vocabulary

ART CARS
An art movement in which cars are modified or decorated to reflect the driver's personality or interests.

VEHICLE
A machine designed to transport passengers or cargo from one place to another.

FUNCTIONAL AESTHETIC
The notion that a work of art should have a utilitarian purpose in order to be considered art.

ASSEMBLAGE
The construction of a 3-dimensional sculpture using found and created materials.

SCRAPER BIKE
A customized bicycle featuring oversized wheels, foil-encased spokes and a spray painted frame. The art movement originated in Oakland, California, where, to be on the scraper bike team, you have to maintain good grades.

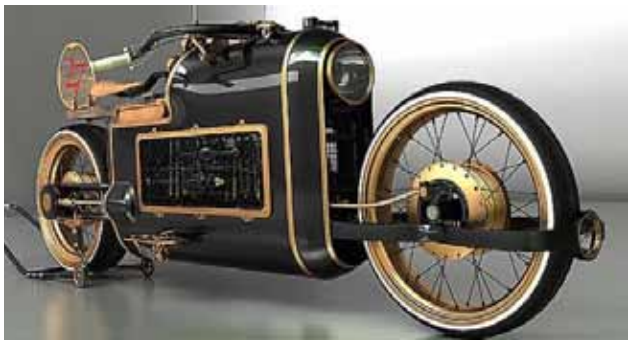
EXAMPLES FOR STUDY:

Art Cars

Scraper Bikes

Futuristic Vehicle Prototypes

Steampunk Vehicles



Discuss and Demonstrate

Begin with an investigation of the suggested vehicle images.

SOME SUGGESTED QUESTIONS:

How do Art Cars tell us a story about the person that drives them?

How do you think that Leonardo imagined vehicles that were not possible in the time that he was alive?

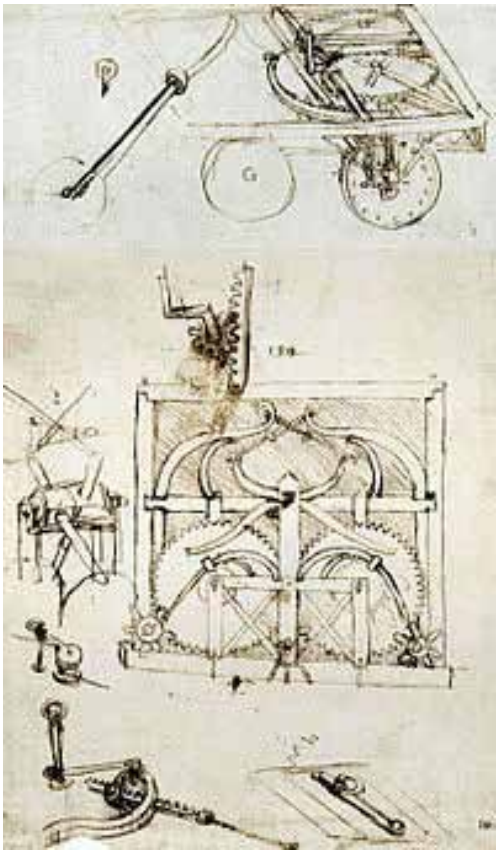
What makes the Scraper Bikes interesting? Why do you suppose riders choose to transform their bikes like this?

When looking at vehicle prototypes of the future, which of these do you think is possible? Why?

Consider what futuristic vehicles would sound like. Can you make these sounds?

To encourage full participation in the discussion, consider the following strategies:

- **In addition to a discussion of the above questions, consider providing sample materials used in the creation of the art cars.**
- **Have students feel materials and relate when they have seen or used these materials. What meaning do the materials have to each student?**
- **As an alternative form of discussion, ask students to name things they see verbally or use Augmentative and Alternative Communication (AAC) devices to identify items.**
- **For students who are non-verbal, the teacher can name items and ask students to point to them.**



Leonardo da Vinci,
Self-propelled Cart from the Codex Atlanticus (1478 – 1519)

Create:

Provide a list of items a vehicle would need to incorporate in order to be both useful and functional. These might include:

- Power source
- Place for occupant/user
- Clear line of sight
- Mechanism to stop

These can be developed using the Idea Generator sheet for this lesson. Begin by having the students think about the following questions, then guide them to complete the idea generator by writing or stating responses.

SOME SUGGESTED QUESTIONS:

If you could have any vehicle you wanted, customized to your exact wishes:

- *What would it be able to do?*
- *What would it look like?*
- *Where could you use it?*

GRADES K-2:

An imaginative drawing of a fantasy vehicle incorporating 5 student ideas is a reasonable goal. Using 9" x 12" white drawing paper (or larger, based on student needs), have students complete two drawings side-by-side: one that shows the interior, one the exterior. The drawing can first be done in pencil and then covered in marker, or students may start with markers.

Offer suggestions for filling in details, making each vehicle unique. For example: How many people can fit into the vehicle? Will there be a comfy couch or bench seating, or perhaps spinning chairs that give massages? If you like to listen to music in your vehicle, what will the music delivery system look like? What will the horn look like? What will the outside of the vehicle look like? How will it be decorated?

To encourage full participation in this activity, consider the following strategies:

- **For students who find it difficult to focus, make a list of tasks to complete. Once a task is completed, students can cross it off the list.**
- **Add handles to markers for better grips for students with motor control related disabilities. Use self-hardening modeling clay to form a grip: put clay in student's hand, then place marker in the clay so clay forms around the marker. Once dry, the grip can be removed and used on other markers.**
- **Milk carton handles can be cut out of gallon jugs and used as grips.**

• For students who have difficulty drawing, or are not yet drawing pictorially, cut out and collage images from magazines and then reconstruct them in imaginative ways. If cutting is a challenge, the student can indicate to a peer or adult the part of the image they want cut out.

GRADES 3-4:

Choose, or have students select, partners. Direct them to write or audiotape a list of ten ideal qualities that their vehicle will have.

Things to consider:

- *What will the body of the vehicle look like?*
- *How will you decorate it?*
- *What kind of driving wheel will it need?*
- *Will sensors guide the vehicle?*
- *Will it be able to read your mind?*
- *Will it be able to traverse ground, air, space, or water?*
- *What extra features will it have?*
- *Will it have a super-sweet horn that no one has ever heard before?*
- *Will it be able to shape shift to fit into any space?*

After creating the list, students should work together to sketch their vehicle. Larger paper (18" x 24") is suggested. Starting in pencil, partners sketch out components on the paper. They may or may not choose to embellish with markers to cover their pencil lines.

For extra inspiration, Steampunk images can be shown and discussed.

Discuss how commonly found objects (such as boxes, soda and water bottles and cans, cardboard tubes from paper towel or toilet paper roles, lunchmeat tubs, buttons, cardboard, etc.) can be used to construct the model sketched on paper. Allow students to fully explore materials provided for construction of models. A cardboard box can be used as a base, with objects glued on to it. Working with a partner allows students to trouble-shoot together and reinforces the importance of collaboration. The finished model may look very different from the sketch—encourage students to use the materials imaginatively. Tacky glue should be used to adhere adornment objects, or an adult can assist in the use of a low-temperature glue gun.

Appropriate for any age, students with a cognitive disabilities may take inspiration from the Art Cars and cover a medium sized toy vehicle with objects. Objects might be: bottle caps, beads, cereal pieces, feathers, pipe cleaners, etc.

Reflection:

GRADES K-2

Use guided imagery. Pass out drawings to each student, making sure that no one receives their own. Have students imagine shrinking down to be small enough to fit into the vehicle. Select as many students as possible to report back with one sentence about what it felt like to "be in" the car. Ask each student where they would imagine going in the vehicle.

GRADES 3 - 4

Have students collaborate to write an artist statement explaining the qualities that make their vehicle unique. For closure, a team presentation can be made to the class. Each team member takes a turn pointing out a special feature of his/her vehicle to the class. The presentation can also take the form of a sales pitch for their vehicle.

Becoming an Advocate: What social issues will I care about?

GRADE LEVEL: 7 - 12

EXPECTED LENGTH: 4 – 5 class periods

Students will create a call to action poster addressing a social issue. Students will create a focal point that catches the viewer's eye in an effort to persuade.

Student Example

MATERIALS

Pencils
Watercolor paper 18"x 12"
Watercolor pencils
Water-based markers
Visual images collected from magazines
Watercolor brushes
Lettering samples
Letter Stencils
Letter Stamps
Permanent Markers (variety of colors)

Objectives

ART MAKING

Students will create a call to action poster using watercolors/watercolor pencils and sharpie markers. Using James Montgomery Flagg's Army Recruitment Poster as an example, students will create a focal point (the point in the work that is most dominant or catches the eye first).

Conceiving and developing new artistic ideas and work.

Anchor Standard: Organize and develop artistic ideas and work.

Enduring Understanding: Artists and designers balance experimentation and safety, freedom and responsibility while developing and creating artworks.

CRITICAL INQUIRY

Students will identify social issues addressed in the works *The Fundred Dollar Bill Project* by Mel Chin, the *Homeless Vehicle Project* by Krzysztof Wodiczko, and fifth grade student Melissa Antonow's *Come to Where the Cancer Is.*

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Perceive and analyze artistic work.

Enduring Understanding: Visual imagery influences understanding of responses to the world.

ART HISTORY INQUIRY

Students will investigate how both artists and advertisers attempt to persuade viewers.

Relating artistic ideas and work with personal meaning and external context.

Anchor Standard: Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.

Enduring Understanding: People develop ideas and understandings of society, culture, and history through their interactions with and analysis of art.

AESTHETIC INQUIRY

Students will investigate how their own ideas about issues are impacted as a result of viewing and engaging with art.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Refine and complete artistic work.

Enduring Understanding: Artists and designers develop excellence through practice and constructive critique, reflecting on, revising, and refining work over time.

Key Vocabulary

ADVOCATE
A person who feels strongly about a social or political issue and wants to see it highlighted or changed.

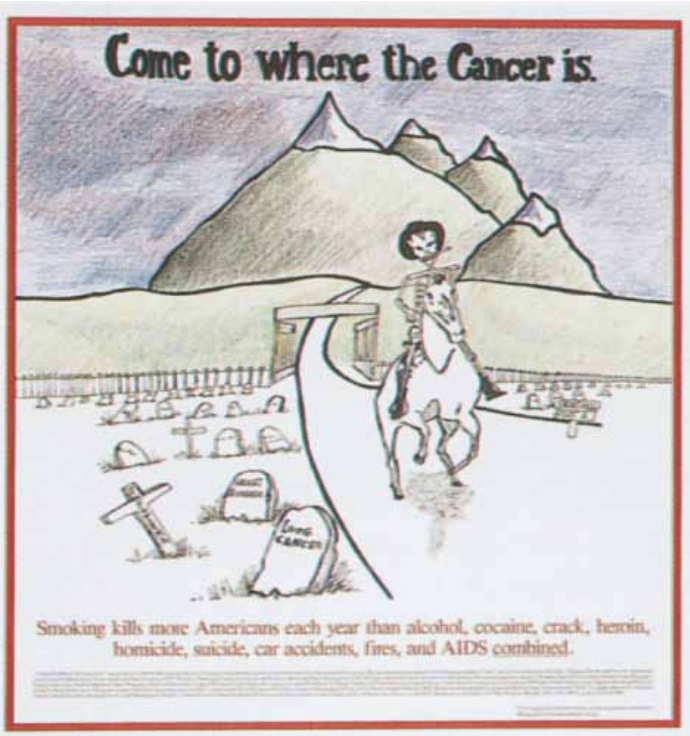
SOCIALLY TRANSFORMATIVE ART
Art created to illuminate an issue of interest to the artist.

FOCAL POINT
The location in an artistic composition that attracts the eye.

POSTER
A large picture, advertisement or notice, often displayed in a public space.

CONTRASTING OR COMPLEMENTARY COLORS
Colors on opposite sides of the color wheel that create a clear differentiation when placed next to one other.

EXAMPLES FOR STUDY:

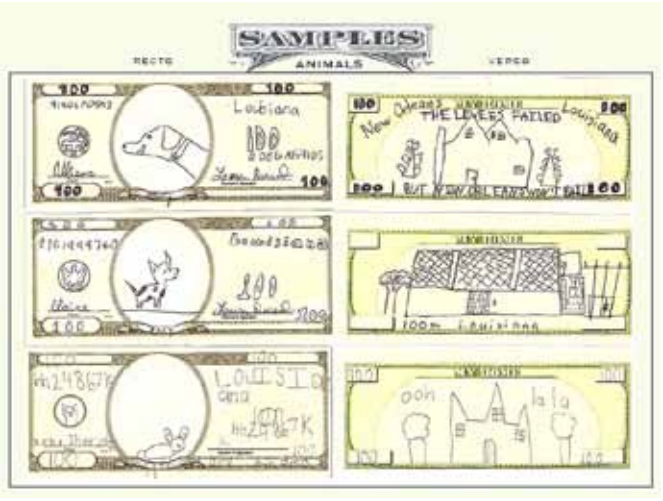


Melissa Antonow, Fifth Grade Student, *Come to Where the Cancer Is* (1991)

James Montgomery Flagg, *Army Recruitment Poster* (1917)

Krzysztof Wodiczko, *Homeless Vehicle Project* (1988-89)

EXAMPLES FOR STUDY:



Mel Chin, *The Fundred Dollar Bill Project,* (2007 – ongoing)

Discuss and Demonstrate

To discuss the works, *The Fundred Dollar Bill Project* by Mel Chin, the *Homeless Vehicle Project* by Krzysztof Wodiczko, and fifth grade student Melissa Antonow's *Come to Where the Cancer Is*, create a set of small-sized cards of the art and a set of accompanying small-sized cards with the issue being addressed in each. Students in pairs or teams match up issue cards with appropriate art cards. If students readily demonstrate understanding, move on to the webbing exercise below.

For students with vision-related disabilities, describe pictures on the cards. Reading the issue cards aloud will reinforce concepts for many students.

Create

To help students generate their ideas, consider using a webbing exercise:

- On the board, draw a circle with the words *Important Issue* in it or utilize the Idea Generator in this Guide.
- Brainstorm: *What do you want to change?*
- Next, have students draw a line between the *Important Issue* and each student idea.
- Continue until the board is full of possibilities.

Each student then selects an issue and does basic research on that issue.

SOME SUGGESTED QUESTIONS:

Who is impacted by the issue?
What needs to change?
What will happen if there is no change?

Have students collect images from the Internet or from magazine articles that reflect aspects of their chosen issue.

Discuss and Demonstrate:

Present samples of commonly seen slogans. Why do these work? Provide examples of advertisements and posters/billboards with different typeface choices to demonstrate how the shape of the letters can reinforce the message. Examine the relationship between text and image, particularly focusing on how the size and placement of each supports the message. Laminate the slogans of companies and company names to create a simple game. Students should match the slogan with the company. Some examples would be:

I'm lovin' it	McDonalds
Just Do It	Nike, Incorporated
Your world. Delivered	AT&T

What's in your wallet?	Capital One
Got milk?	American Dairy Association
Building a smarter planet	IBM
More saving. More doing.	The Home Depot
A family company	SC Johnson Company

Share James Montgomery Flagg's *Army Recruitment Poster.* Consider grouping students into teams of 4 – 5, each with their own copy of the image. Also, disseminate the following simple background information about the image.

The poster was created by Flagg and initially published as a cover of Leslie's Weekly magazine in 1916. It asked Americans to consider what they could do to prepare for the war effort. It was then used as a recruitment tool with the addition of the phrase, "Uncle Sam Wants You for the US Army." The poster was so successful that it was used again during World War II. It has long been considered one of the most effective tools in 20th Century recruitment.

Each group begins by describing in the image. Provide a list of questions.

- *What is the purpose of the work?*
- *Who is the man in the image?*
- *What is your reaction to this work? Does it make you feel patriotic?*
- *What would the man (Uncle Sam) look like if you were to design this poster today?*
- *What is the focal point? Where do you look first?*

Create

Students revisit their chosen issue and collected images and decide how, using art, to communicate their message. For some students, it may be helpful to write a slogan. Students then draw their selected images on paper and add color using watercolor pencils. The pencils can be used to simply start the placement of color and then, when washed and pulled with the watercolor brush with a bit of water, large areas can be filled in. Encourage students to determine the focal point in their work, the place where they want the viewer's eye to be drawn first upon looking at the finished poster. Explain the techniques that can be used to make sure this area stands out to the viewer, such as using contrasting colors and size hierarchy.

After the paper has dried, students may add their slogan using permanent marker. Students can hand letter this using a sample typeface or can create their own.

If motor control does not allow for the use of watercolor pencils, water-based markers can be used. The color can be manipulated with a paint brush using water on the marker lines to fill the space. Another option is to have the students use images collected from a visual file, layering them on the paper to create a collage.

Another option for students is using stencils or letter stamps to create a slogan.

Alternative Creative Path for Students with Visual Disabilities:

- **Have students listen to audio of advertisements. After students identify an issue to address,**
  - **have students consider key words or phrases**
  - **develop a slogan**
  - **use simple hard claps or table beats to translate the slogan into a jingle or rap**
  - **record the jingle or rap**

Reflection

Hang all posters so that students in the class can see their exhibit. Have students orally describe each poster and, if a student created a jingle or rap, have it performed or played. Then, have all students participate in a class discussion focusing on the following questions.

How will the world be different if we address the issues in the posters?
How have the posters changed our thoughts and feelings about an issue or issues?
Where should my poster be posted in our community in order to make an impact?

How does the past inform my future?

GRADE LEVEL: 7 - 12

EXPECTED LENGTH: 3 class periods

In this lesson, students will create a layered collage representing elements of the past. This collage will then be reproduced and a final layer of color will be added as a metaphoric representation of the future.

Student Examples

MATERIALS

White drawing paper 8" X 8" square

Variety of colored papers – can be textured, smooth, solid and patterned

Fabric scraps, beads, cardboard, feathers

Black construction paper

White chalk or white colored pencil

Objectives

ART MAKING

Students will create a layered primary color collage.

Conceiving and developing new artistic ideas and work.

Anchor Standard: Organize and develop artistic ideas and work.

Enduring Understanding: Artists and designers experiment with forms, structures, materials, concepts, media and art making approaches.

CRITICAL INQUIRY:

Students will investigate how the artists Diana Al-Hadid and Audrey Flack use artistic ideas from the past as a basis for creating works that representing both their own eras and their imagined futures.

Understanding and evaluating how the arts convey meaning.

Anchor Standard: Interpret intent and meaning in artistic work.

Enduring Understanding: People gain insights into meanings of artworks by engaging in the process of art criticism.

ART HISTORY:

Students will explore *vanitas*, a 17th and 18th Century genre of symbolic still life painting.

RELATING ARTISTIC IDEAS AND WORK WITH PERSONAL MEANING AND EXTERNAL CONTEXT.

ANCHOR STANDARD: Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.

ENDURING UNDERSTANDING: People develop ideas and understandings of society, culture, and history through their interactions with and analysis of art.

AESTHETIC INQUIRY:

Students will identify the mimetic (realistic) qualities in Audrey Flack's work, *Marilyn*, Eleanor Antin's *The Golden Death* and Diana Al-Hadid's work, *Nolli's Orders.*

UNDERSTANDING AND EVALUATING HOW THE ARTS CONVEY MEANING.

ANCHOR STANDARD: Perceive and analyze artistic work.

ENDURING UNDERSTANDING: Visual imagery influences understanding of responses to the world.

Key Vocabulary

MIMETIC
Images rendered realistically.

VANITAS
A style of still life painting dating from the 17th century using realistically rendered symbols to represent themes.

STILL LIFE
A painting or drawing of a group of objects.

APPROPRIATION
The practice of creating a new work of art by using pre-existing images, text, or content borrowed from another source.

METAPHOR
Something that represents or symbolizes something else.

EXAMPLES FOR STUDY:

Diana Al-Hadid, *Nolli's Orders* (2012)

Eleanor Antin, *The Golden Death* from *The Last Days of Pompeii* (2001)

Audrey Flack, *Marilyn* (1977)

Pieter Claesz, *Vanitas* (1625)

Discuss and Demonstrate

Provide laminated copies of the artworks for students. Encourage them to find similarities between the works and to look for common imagery and themes. Next, provide information about the works (below) and encourage students to continue to examine the images. Provide opportunities for each student to participate.

If needed, for students using Augmentative and Alternative Communication (AAC) devices that assist them in participating, pre-program the devices with the appropriate language needed in the lesson. Providing students with simple "yes" and "no" flags can provide the opportunity for students with speech-related disabilities to participate.

In *Nolli's Orders*, Al-Hadid reflects on the map of Rome created by architect Giambattista Nolli in the 18th century. The artist includes architecture from the Renaissance as well as figures seen in Mannerist paintings. She combines these to create a vision of contemporary life.

Flack updates the *vanitas* paintings of the 17th and 18th centuries (see the work by Claesz). By using the same symbols employed in the past (candles, rotting fruit, skulls , etc.) that show the passage of time, she creates a modern day *vanitas* work which reinforces the timelessness of symbolic imagery.

Antin's work, with its attention to material goods, compares present day American culture to that of ancient Pompeii. She reminds us of the need to always be aware of the past.

Making use of the *Idea Generator* worksheet, ask students to consider their own past, and then imagine the future of their family, city, and favorite activities.

Create

Students begin by creating a short story. (See the *Idea Generator* in the Guide). Encourage students to speak to their parents/guardians to provide information about the past.

The *Idea Generator* can be completed with written words, images or photographs, pictures selected from an Augmentative and Alternative Communication (AAC) device, or done orally and audiotaped.

Preparation

Collect a variety of papers (scrapbooking papers with various patterns and textures, construction paper, sample papers sent by paper companies and supply houses, wall paper samples) and arrange in individual containers. One container should be used for each primary color. Next, create containers of thicker items: fabrics, yarns, ribbons etc., again sorting by primary color.

Containers can be labeled with braille to identify the color in each.

A third set of containers holds three-dimensional items such as beads, buttons, stones, straws, raffia, etc., also sorted by primary color. Objects should be no thicker than ¼" for best results.

Create

Students are given an 8" X 8" square of white drawing paper, and instructed to sit at the table with containers holding materials of their favorite primary color.

Students first choose flat papers making selections that they feel represent their past. For example, a student from an oceanside city may select blue paper to represent the water of his hometown. The papers can be cut or torn and are then glued onto the white paper.

When it appears that students have exhausted their use of the papers, introduce materials for the next layer, the thicker items. Using the same primary color, students should select materials that they feel reflect their past. These items can be altered (cut, shaped, etc.) and then glued onto the surface of the paper, overlapping and layering on top of the papers.

Adaptive scissors should be provided as needed. In addition, if a student wishes to tear his/her paper but is unable to use both hands, a teacher or partner holding the paper will provide enough support for the student to make the desired tear.

Repeat, using the third container of three-dimensional items. Note that this is an abstract process, not mimetic. Though the concepts are rooted in memory and life experience, help students understand that the work will not necessarily resemble their lives mimetically, but rather metaphorically.

Preparation

Allow plenty of time for the collages to dry. When they have dried completely, make a photocopy of each collage. It may be necessary to adjust the foreground and the background of the print to retain as much detail as possible.

Create

Working with the photocopied images, students use colored pencils in the complementary color of their primary choice. If red was their chosen primary, they should use green, lime green, dark green. If blue was the primary, the student should use orange, red orange, peach. If yellow was the choice, violet, blue violet and magenta can be used. The addition of the complementary color represents their future being layered on top of their past. As the photocopy provides the gray tones to the work, the colored pencil addition accentuates the illusion of depth. As colored pencils have a soft lead they should not be sharpened to a point.

Make grippers available for students as needed, using self-hardening modeling clay, a tennis ball, or a milk carton grip. If colored pencils require too much pressure, consider having the student use watercolors of the same color palette.

When drawings are completed, mount them on black construction paper next to the original collages. Students can then write elements of their story around the borders of the works.

Stamps can be used as an alternative to writing. Consider using found objects as the source of the stamps and adding a key to explain what each represents. In addition to prefabricated shapes, or found objects, vegetables can also be used: celery stalks create a crescent shape, carrots cut in half form a circle, small onions provide concentric circles.

Reflection

Post all student work. Invite students to present their stories. By making an additional photocopy of the original collage, students can cut out objects and attach them, with explanation, to a key. The personal meaning of the item can be listed beside it.

HOW WILL I TRAVEL?

MY VEHICLE WILL BE POWERED BY

My feet/hands _____

A motor _____

The wind _____

Other _____

I WILL

Sit _____

Stand _____

lay down _____

Other _____

I WILL LOOK OUT THROUGH A

Windshield _____

Open space _____

Other _____

I WILL STOP BY USING

My feet _____

Reversing wind _____

Turning off the motor _____

Other _____

What Will My Home Look Like?

Where will I live?

What materials could be used in my home?

What will I need to have in my home?

Create three thumbnail sketches of your home:

HOW WILL I BUILD ON THE PAST TO CREATE MY FUTURE?

◀◀ In the past my family

_____
_____
_____
_____
_____
_____
_____
_____.

▶▶ In the future my family will

_____
_____
_____
_____
_____
_____
_____
_____.

◀◀ In the past my city

_____
_____
_____
_____
_____
_____
_____
_____.

▶▶ In the future my city will

_____
_____
_____
_____
_____
_____
_____
_____.

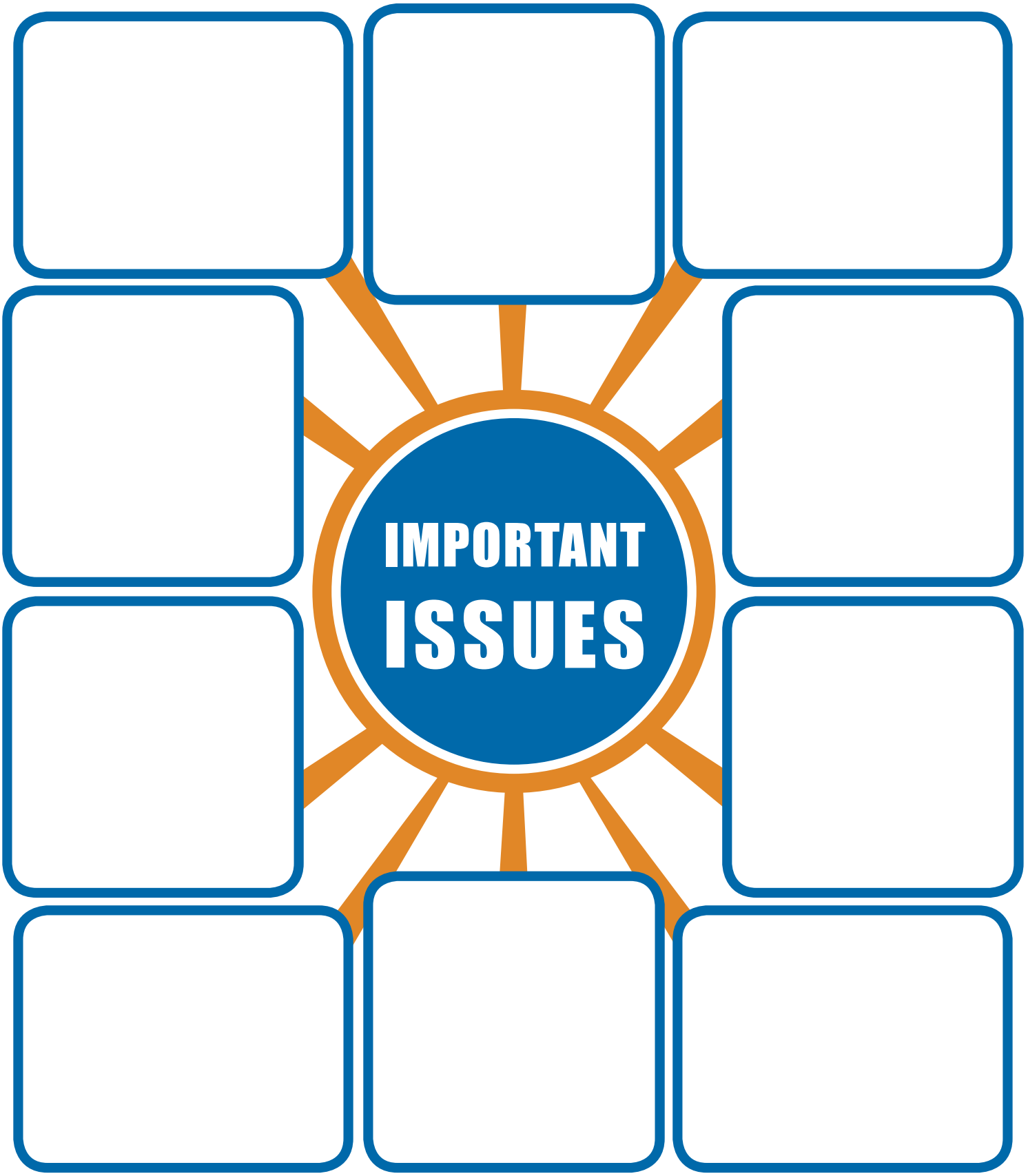
◀◀ In the past I enjoyed

_____
_____
_____
_____
_____
_____
_____
_____.

▶▶ In the future I will enjoy

_____
_____
_____
_____
_____
_____
_____
_____.

What Do I Want to Change?



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