

Using Visual and Performing Arts to Boost Problem Solving

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Bruce Rawles: "In nature, we find patterns, designs and structures from the most minuscule particles, to expressions of life discernible by human eyes, to the greater cosmos"

Ideally, if art education were integrated into the curriculum and teachers were given proper training, art education could be delivered to children in a manner that would prepare them for future development in several areas including art. Art activities can be used to illustrate historical events, and place contemporary artists with certain political and social events and movements during specific time periods. Art can be used to describe stories or detail math and science projects. Drawing skills are fundamental to many occupations and to communicating concepts. Painting, drawing and sculpture are fun ways to learn problem-solving skills using right-brained thinking by experiment of trial and error. Such experimentation builds confidence and self-esteem in children and relieves the tension from other ways of thinking, such as left-brain thinking, analytical or critical thinking, reading and writing. Additionally, dual-coding has shown that more meaningful learning is transferred when text is paired with visuals (Driscoll, 2000, p.99).

Doing art is self-expressive and compliments the processing of what children learn each day, enhancing their learning experience. Art is also important to enhance the emotional and creative development of children. It gives children a visual and kinesthetic learning experience from that of the academics of reading, writing and math. Children can express themselves and build self-esteem through art, especially those children who have different learning needs or are gifted. Learning these skills can also build confidence and be a communication tool among children, parents, and teachers alike.

The following table outlines the current and desired states of performance:

Current	Desired
Children do not spend enough time doing art activities each week.	Children spend time each week developing artistic and creative skills through art activities.
Regular classroom teachers usually do not have enough education and training in art education to integrate these concepts into other areas of study. Confidence in teacher's abilities to perform art and art education is low.	Teachers are given regular instruction in delivery of art education to children in expertly developed activities, which can be integrated with other academics. Through this education the teachers develop confidence and are more likely to apply art to the curriculum, using the Visual Standards as a basis.
Administration does not spend time or money placing art education into the regular curriculum.	Administration recognizes the importance of art education and resolves to integrate it into the curriculum and allocates resources to see that there is time and money for art education each week. Through school initiatives, supports teachers process of learning art integration.
Our society may not place enough value on art education. The benefits of art education remain unknown to many people.	Society is educated to the costs and benefits of having art education in schools as early as possible. The successes of children learning more through integrated art education are sent home and viewed by parents. (Return on investment.)
The creative, emotional, psychological and artistic development and focus of our children are not being directly addressed in the present curriculum.	Art activities are used to enhance and develop our children's skills and abilities to focus, express, and communicate emotions and thinking creatively.

Web Sites

<http://www.alifetimeofcolor.com/>

<http://artsedge.kennedy-center.org>

<http://artsedge.kennedy-center.org/teach/les.cfm>

www.kidsart.com

www.artdiscovery.org

www.princetonol.com/groups/iad/lessons/drama/drama.html

<http://www.princetonol.com/groups/iad/lessons/lessons.html>

<http://artsyfartsy.theartsweb.com>

www.artsconnected.org/toolkit

www.smartmuseum.uchicago.edu/smartkids

Lesson Plans from Presentations

Cool vs. Warm Colors

This can be done alongside a preview activity to many different picture books. When flipping through the book, as a preview to reading, discuss colors and their symbolism. Talk about the color wheel and the blue greens used in illustrations are “cool” colors, orangy reds represent “warm” colors, and are used to show setting.

When talking about setting: use monochromatic art pieces and discuss why the artist uses the colors chosen.

Analogies and color: The evening sky was as blue as _____. (Starry Night by Van Gogh)

Take a piece of white construction paper and fold in half. On each side draw a plant base and stem. On one side use red and orange ink pads and fingers to create the petals of an Indian Paintbrush plant. Read Legend of the Indian Paintbrush by Tomie dePaola. (www.tomie.com is an excellent site for this author’s works) On the other side follow same routine with blue and green or white and read Legend of the Bluebonnet. Social Studies connection....Oklahoma State Flower is the Indian Paintbrush and Texas’ state flower is the Bluebonnet. (Can also be used with Roxaboxen, a story of spreading Bluebonnets.)

*Make large number on paper. Add smaller numbers (7) in background (repetition) and geometric shapes. Break up negative space with line (use rulers if desired). Color numbers and small geometric shapes mainly with warm colors, negative space mainly with cool colors. Have students add their number 8 times and this is their title for their artwork. Great intro to multiplication.

Lines

*Discuss with the children all the types of lines they can think of. (wavy, zigzag, thick, thin, circular etc. etc.) Progress on to how lines can work together to form patterns. (bricks, circles with dots in the middle, plaid, herringbone, varieties are obviously endless!) Give students a 10 x 10 grid and have them fill each square with varying patterns.

Draw a large simple object that has a multiple of sections. Tell them to think in terms of what they might see in a child's simple coloring book. Some examples my kids have done are: A large bear dressed in a shirt and shorts with a ball at its foot: A large butterfly with lots of large sections: (Bring in coloring books for ideas). They are to now draw this onto their paper VERY LIGHTLY!!!!..with pencil. I can't stress this enough!. They need to draw this outline LIGHTLY because the final step will be to erase the outline

Using a black ball-point pen (your basic BIC is fine!) start filling in each section of their picture with one of the patterns from their own personal grids. Be sure fill in the pattern all the way to the edge. Patterns can be repeated for effect. When finished, use a GOOD eraser, and now erase the original pencil drawing so that all that remains is a paper filled with patterns in the shape of their original drawing. It is a very impressive project when finished yet very simple to do

Lines and Plants/Nature

Project 1

(What the Teacher Does)

1. Introduces O'Keeffe paintings, asking students to identify kinds of lines that define edges of flowers.
2. Showing a real plant, asks students to identify lines that define edges.
3. Models observing a plant without drawing (look at the plant to see all the types of lines that give the plant its shape).
4. Models drawing while looking at the plant (Draw the plant large enough that it reaches out and touches all the edges of the paper. While you draw press harder in areas that stand out to you and lightly in others).

(What the Student Does)

1. Observes and identifies types of lines in painting reproductions and traces fingers over curvilinear lines.
2. Observes and identifies types of lines in living plant and traces fingers over curvilinear lines.
3. Looks at and then draws plant using choice of drawing materials - or paint.

****A local florist or green house may donate use of their plants for this lesson.

There could be a follow-up on the life of Georgia O'Keeffe (just briefly - students could listen to the song about Georgia O'Keeffe by Greg Percy -*Songs in the Key of Art*. Students could create movements/dance to act out the lines/shapes present in Georgia's works). You could show some additional prints showing organic shapes - like from Henri Rousseau or Matisse (and maybe some with geometric shapes to see the

difference) and ask students to identify the organic shapes). Perhaps show a work that has both organic and geometric shapes, too. You might also introduce a three dimensional work with organic form.

Science extension: learn about the parts of the plant - life cycle of the plant (this ties in with 2nd grade science).

Reference for Science Integration:

[Botany Photo of the Day](#) - different high-quality photograph every day, complete with background information. Visitors can also view the site's archives, which date back to April 2005 and browse previously featured photographs, which are divided into categories. Art teachers have permission to use these photographs for this purpose.

Project 2

Materials:

Crayola Project Glue - (regular school glue will work - but doesn't dry as clear)

Crayola Gel FX Crayons - they are designed for black paper.

Also useful Crayola Gel FX Metallic Crayons

Crayola Gel FX Pencil Crayons

Crayola Twistable Metallic

Black Paper (Although school grade construction paper does work, the colours (colors) are not as bright and the glue lines are grey rather than black.

Sue uses a paper called "Hopper Hots" which is a fade resistant light-weight card stock which is available in large sheets. Non glossy black bristle board would work. (Elementary teachers might want to try Try Ray Fade Resistant Construction paper) Pictures of flowers (You could have the students find their own for homework, or take the class to a computer lab and search/print). Actual flowers are helpful, too - OR use high quality "silk" flowers (you should have some that look realistic)

Drying Rack or space to dry (must be large enough to have all the sheets lay flat for 24 hours)

Instructions: Students should have in front of them the black paper, a bottle of glue, and their picture of a flower. Students should work direct onto the paper (pencil lines will show through the glue). Looking at the picture, students should create a basic contour drawing of the flower in glue on the black paper. To create good glue lines, the bottle should ALWAYS be pulled (not pushed), and should also be SQUEEZED at the same time (there needs to be a fairly thick line of glue created). The glue will

dry clear, and on black paper will look like shiny black. The glue drawings need to dry overnight (you can tell when it is dry).

Once the glue is dry, students can start to colour (color). Students should aim for good dimension and texture, realistic colours (colors) are not necessarily important. Using the various crayons, students should apply a thick amount of colour, blending using different coloured crayons. If crayon gets on the glue lines, they can be cleaned at the end with a slightly damp tissue and a fingernail.

Optional - color negative space.

***Alternate Lesson: Glue Line with Watercolors....These are beautiful!**

This is a popular lesson - and appeared in Arts and Activities magazine.

Materials: flowers and or plants, watercolor paper (or heavy drawing paper), glue, watercolors, brushes, ultra fine point Sharpies (optional)

Draw flowers/plants directly on the watercolor paper (no pencil outline). Draw all contours with glue (any white glue that dries clear will work) Let dry completely. Paint with water colors. When dry - outline with the ultra fine point Sharpies (optional - they look striking without the outline, too)

Many artists throughout time have been inspired by the activities of man - "men at play" (or in professional sports - "men at work"). Below are some artists who have portrayed those activities. See the colorful art of [LeRoy Neiman](http://www.leroyneiman.com/core.htm). (<http://www.leroyneiman.com/core.htm>)

Activity: Compare two artists who have chosen a similar theme. How are the works different? How are the similar?

Edgar Degas [French [Impressionist](#) Painter and Sculptor, 1834-1917]

Degas- [Jockeys Before the Race Jockey \(pastel\)](#) [Jockeys \(pastel on paper\)](#)

Degas- [Race Horses Before the Race Race Horses](#)

Degas- [Gentleman Jockeys Before the Start](#)

Degas- [Scene from the Steeplechase: The Fallen Jockey](#)

George Bellows [American Painter, 1882-1925] [Polo at Lakewood](#)

Bellows- [The Fisherman](#) (larger view [Fisherman](#))

Bellows- [Stag Night at Sharkey's Club Night](#)

Bellows- [Dempsey and Firpo](#)

Pablo Picasso [Spanish [Cubist](#) Painter and Sculptor, 1881-1973]

[Pablo Picasso Bull Fight](#) [Picasso's Bull Fight theme in drawing](#) [Picasso's Bullfight -- and others](#) [Francisco de Goya Bullfight](#) (Spanish 1746-1828)

Richard Lindner [American Painter, 1901-1978] *The Cyclist* (poster images can be found online)

Norman Rockwell -<http://www.rockwellprints.com/sports.htm>

Jim McNeill [American, 1967 -] <http://www.jimmcneill.com/ebowl.html> (Football tessellation)

***Spelling Machine** (Can also be done with math facts and science vocabulary.)

No materials needed except spelling list, facts, or vocabulary list.

The learner will spell words correctly in an improvisational format. Choose 4 - 5 students to stand in a line. The first student says the word/fact. The second student calls out the first letter/number in the word/fact. The third student says the next letter/number. This continues until the word/fact is spelled correctly. The next person says the word/fact again. Options: If a student makes a mistake they must sit down and another student takes their place. Or, each group does a set number of words, then another group is chosen. For vocabulary, go one word at a time instead of letter.

VOLLEYBALL Version: Divide class in half. Have each team take their places on opposite sides of net. (If no court is available, make an imaginary net with a line of desks and use a balloon or soft rubber ball.) Call out the word to be spelled. The person getting ready to hit must say a letter. Regular volleyball rules apply. In addition, if they miss a letter, it is like a missed ball.

Living Museum

The learner will communicate to others information about a historical figure.

Students should be assigned/or pick a historical figure. They need to research important facts and compile a report and notecards. (It is up to you what type of information they will need to include.) They should be able to communicate their information in 3-4 minutes. Instruct students to memorize their notecard information. On the day of the living museum, students should dress like their figure. Students should have plenty of room. As visiting students approach, the historical figure will begin their speech. Students repeat their speech each time someone approaches.

Alternate Idea: Students choose a character from a book they have read and do a "Book talk."

Science - Volcanoes

Materials Needed: Jimmy Buffet's "Volcano"

The learner will express their knowledge of volcanoes and Earth Science through the creation of new lyrics to the song "Volcano."

Split students into groups of 3 - 4 people. Each group needs to compose lyrics that state what happens when a volcano erupts. Possibly give each group a sub-title, and then put all the lyrics together for a class song.

Picture Perfect Place...Communities, brochures, letter writing

Each student can then use colored pencils to create a colorful postcard depicting a special place that they feel best represents their community. Pay particular attention to composition and color; explain to students that one role of a postcard is to "sell" a location to those receiving the postcard, so it should be as vibrant and realistic as possible.

Students can cut out their picture postcards and glue them to cardboard for added durability. On the back of the card, have students write a note about the place they've drawn telling why they feel it's an important part of their hometown. Leave space to address the postcard, as you may wish to take this project a step further and send the postcards to a primary school abroad or in another state, in exchange for postcards and letters from students in another country or another region of the United States. in to students that one role of a postcard is to "sell" a location to those receiving the postcard, so it should be as vibrant and realistic as possible.

Go to this site to download printable postcard and complete lesson plan:

http://www.alifetimeofcolor.com/res/lp_pictureperfectplace.pdf

*Math...Geometry...Circles

Mandala: A symbol of wholeness -- Mandala is the Sanskrit word for circle. In religious art, the mandala is used to symbolize wholeness - the circle of eternity. However, the pattern of a mandala -- a circle with a center -- reaches far beyond a two or three dimensional art form. Examples of mandalas are found in nature. Every cell in our body, for instance, is a living mandala. So is the iris of our eye, a snow crystal, a bird's nest -- even a bicycle wheel. Look around - Can you see more mandalas in nature? in your surroundings?

Browse this site... upper elementary could create mandalas, many cool things here.

<http://www.mandalaproject.org/>

Arts Integration Resources

Smart About Art Series:

Claude Monet and sunshine and Waterlilies by True Kelley

Henri Matisse Drawing with Scissors by Jane O'Connor

Mary Cassatt Family Pictures by Jane O'Connor

Vincent van Gogh Sunflowers and Swirly Stars by Joan Holub

Edgar Degas Paintings that Dance by Kristin N, Cole

25 Terrific Art Projects Based on Favorite Picture Books

by Karen Backus, Linda Evans, and Mary Thompson

Teaching Art with Books Kids Love: Art Elements, Appreciation, and Design with Award-Winning Books

By Darcie Clark Frohardt

Anholt's Artists by Laurence Anholt

Camille and the Sunflowers: A story about Vincent van Gogh

Degas and the Little Dancer: A story about Edgar Degas

Picasso and the Girl With A Ponytail: A story about

Pablo Picasso

Suzette and the Puppy: A story about Mary Cassatt

Leonardo and the Flying Boy: A story about

Leonardo Da Vinci

The Magical Garden of Claude Monet

Dancing Hearts by Martha Brady

Integrating Art and Language Arts Through Children's Literature

by Debi Englebaugh

Creating Meaning Through Literature and the Arts: An Integration Resource for Classroom Teachers; 2/E Prentice-Hall \$52.67

The following is taken from a workshop presentation on the University of New Mexico website. (good reference for presenting a workshop for teachers at your school)

INTRODUCTION TO WORKSHOP

Welcome. This workshop is intended to develop your skills, build confidence and instill values in integrating art education into the K-5 curriculum in your classrooms. This guide is for your use and to model future workshops after.

Remember that the following principles apply to meaningful learning in this workshop:

1. Value and Attitudes about art education vary – even in children’s confidence levels. *Participants should be reminded that positive outcomes depend upon their attitude and willingness to try again and again.*
2. Motor skills development takes time and practice to be successful – be patient with yourselves and your children. *"practice makes perfect Repetition and review are critical to both action and cognitive tasks*
3. Learning should be fun. By using art in the curriculum children have the dual coding learning experience (**APA reference here**)
4. If you don’t know, ask. If you discover, share. This is an interactive workshop

AGENDA, LESSON PLAN OUTLINE:

8:00 - 8:30 Introduction and Ice Breaker

8:30 Review objectives of workshop and group discussion

9:15 Lecture and slide presentation

10:00 **15 minute break**

10:15(1.5 h) Skill development activity - materials, set up and practice

11:45-12:45 LUNCH

12:45(2 h) Rajput Indian Painting

2:45 **15 minute break**

3:15 Curriculum building and lesson planning

4:00 Clean up

4:20 Conclusion and Evaluation

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LIST OF EQUIPMENT

You may want to bring:

A smock or old clothes to the workshop

An open mind

Expect to have fun

You will learn to set up the following: These items will be provided at the workshop

Box of Goodies (for painting and drawing): *Other boxes in series may contain different materials.* Place in a small storage case and mark accordingly.

(INDIAN PAINTING)

- Tempera paint: Red, yellow, blue, lots of white, and some black
- Drawing paper 9 x 12 " and 12 x 18" , comes in pads or loose leaf
- Scrap paper, newsprint, manila or butcher paper
- Brushes, both round and flat in a variety of sizes (up to 2" for large flats)
- Egg cartons, paper plates or wax-paper disposable pallets
- (Optional) Curry spices with vivid colors and music from the Hindi culture (local library)

(SCIENCE DRAWING)

- Graphite drawing pencils - variety of sizes and leads
- Gum eraser, white erasers
- Metric ruler
- Hand lens or jewelers loupe
- Forceps, optional
- Post-it notes
- Illustration journal
- Botanical and or biological specimen - can be discovered in the nearby outside environment.

Clean and set up materials:

- One or two Five -gallon buckets (and water resource - nearby bathroom)

- Small and large plastic tubs for transferring water and for washing materials (use recycled dairy containers for example)
- Tin cups from tuna cans (used for paint distribution, washes, inks, etc.)
- Rags from old t-shirts or paper towels
- Large and small garbage bags for disposal of trash and for
- Cheap or used shower curtains, plastic drop cloths, butcher paper or similar material for protecting tables (and floors if necessary).
- Old shirts to use as smocks if desired.

Terminal Objective #1:

Participants will increase their awareness and learn the value of art education by reviewing and discussing the applications of art in an interdisciplinary environment.

Enabling Objectives: Participants will:

- 1) Discuss their feelings regarding the value of art at the beginning and end of the workshop and identify ways they can make a positive change in their classroom. During these discussions objections to art will arise and questions and concerns will be addressed.
- 2) Describe three ways in which applying art education into lesson plans will benefit their students and their classroom and enhance learning.

Terminal Objective #2:

Participants will be able increase their skill and confidence levels by conducting an art activity that supports an academic standard in a one to two hour period using a limited amount of materials and space.

Enabling Objectives: Participants will be able to:

- 1) Present the slides and discuss the cultural aspect from which they will paint and draw pictures.
- 2) Set-up their work stations in accordance with the outline of the materials being presented. Create a **“box of goodies”** for their own project using the workshop materials brought by the facilitator.
- 3) Prepare a pallet with limited colors and set-up wash water; learn to mix a variety of colors using tempura paints and a pallet knife on disposable pallet material. On a stretched piece of canvas-weight drawing paper, wash various colors.
- 4) Use drawing materials such as pencil, ink, and charcoal, practice various strokes, shapes, thematic motifs and masses, on scrap paper. Apply the varied sketched drawings to the canvas based on the cultural context of the slide presentation.
- 5) Read and/or write poetry and select music from the culture that they are studying and write a synopsis of their feelings and experiences about the culture and the artwork that they completed.