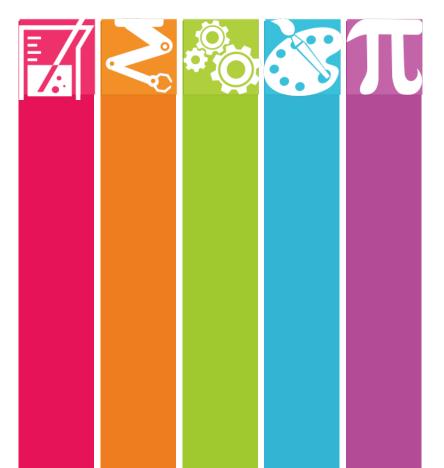
DEEP-ROOTED LEARING THROUGH



DEEP-ROOTED LEARNING THROUGH A R T INTEGRATION



INTEGRATION THROUGH:

01 Learning

Defining learning, art, connecting, imagination, and metaphor.

02 Concepts

Artmaking strategies, developing concepts, and three links.

03 Curriculum

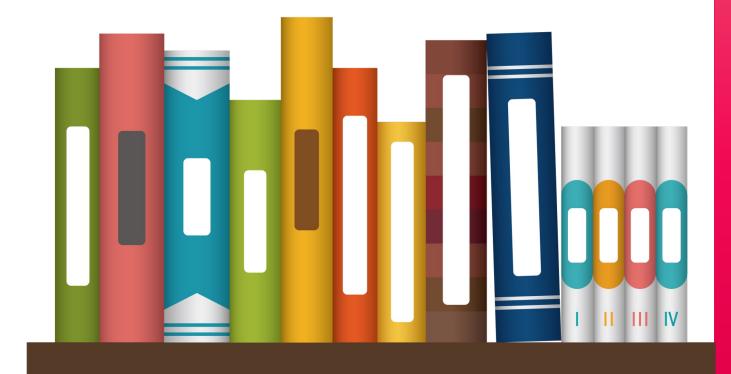
Defining curriculum – integrated, interdisciplinary, and substantive integration; More than a picture.

04 Teaching

Presenting integration through modeling, validity of art creation, and personal experience.

05 References

Learning is...



an "incremental discovery of successful levels of description— a kind of constructive representation building operation"

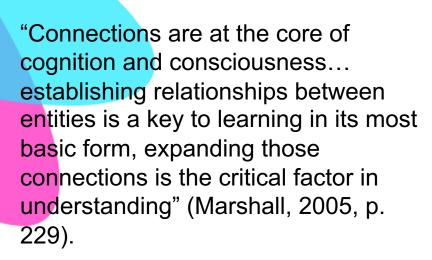
(Marshall, 2005, p. 231).



is a form of inquiry with some processes and goals that are similar to those of other areas of study" (Marshall, 2010, p. 14).

"If the aim of education is to fully activate the cognitive potential of the learner, ways have to be found to integrate knowledge from many subjects to achieve a fuller understanding than would be provided by content treated in isolation" (Marshall, 2005, p. 228).





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If "expanding connections is the critical factor in understanding" (Marshall, 2005, 229) is the priority, a deep-rooted base of finding and making connections is essential for the growth of any concept.

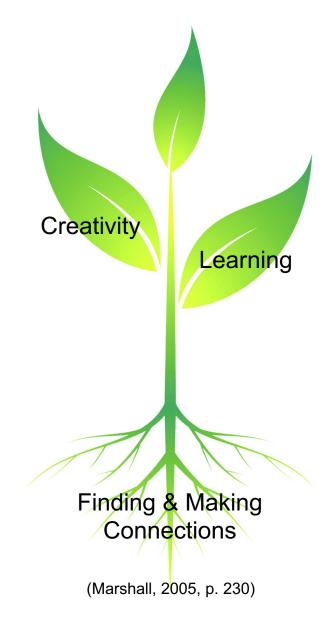
"Hummel and Holyoak (2002) suggest that creative thought is rooted in analogous thinking. As noted earlier, Lakoff and Johnson view analogous thinking as a key element in learning" (Marshall, 2005, p. 230).

Lakoff and Johnson, as quoted by Marshall (2005), state that "creativity and learning intersect" as two leaves on a plant whose roots grew through finding and making connections (p. 230). This intersection allows for future growth.

"In metaphor, 'seeing as,' which is the core of learning, becomes closely aligned with 'seeing differently,' a cornerstone of creativity" (Marshall, 2005, p. 230).

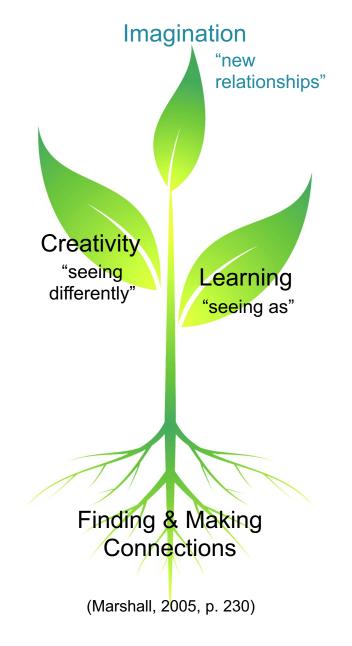
LEARNING = 'seeing as'

CREATIVITY = 'seeing differently'



When the intersection between learning and creating occurs, it sparks the new growth of imagination. Marshall (2005) noted:

Imagination, according to Ricoeur, is an active process in which the mind constructs linkages between tangible entities. A leap of the imagination occurs when the mind projects ideas and constructs new relationships. Due to the pictorial nature of the mind, imaginative links or leaps are often manifested in mental images—thus the word imagination. Because imagination operates through constructing bridges between perceived entities (connection-making) and develops further through projection, it is a closely linked to learning and understanding. (Marshall, 2005, p. 230)



LEARNING METAPHOR

Thornton, as quoted by Marshall (2005), expands on the learning process introducing the concepts of 'runaway learning, weaving, and spinning' (pp. 231-233).











When students make a connection with past experiences and knowledge "runaway learning" is occurring, also known as "recoding" (Marshall, 2005, p. 231). In a sense, it is what teachers hope every student does – become 'actively engaged' in THEIR learning.

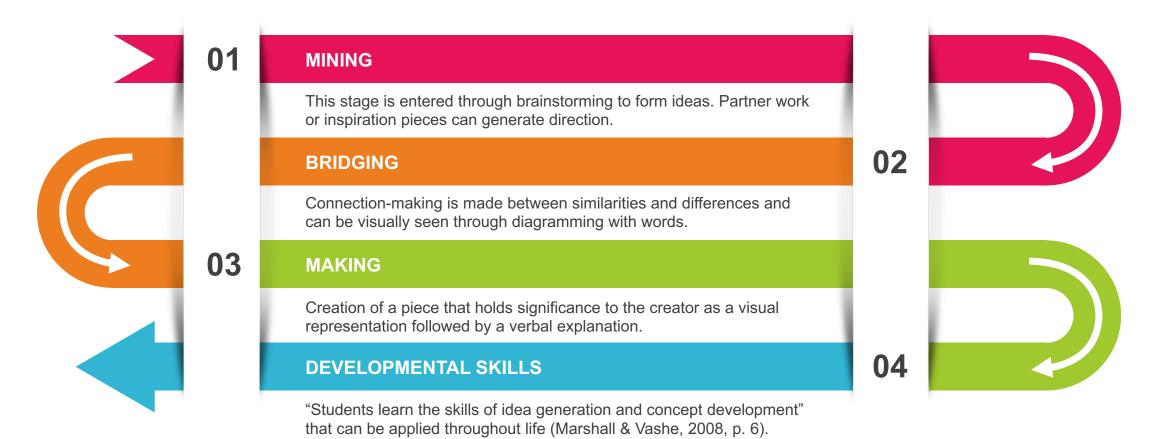
The metaphor of 'weaving' to describe connection-making was brought out by Marshall (2005). It takes a set of hands to thread the yarn in and out of the warp, thus touching and combining the two.

If you were to run out of yarn to weave, you would have to return to picking, removing seeds, hitting the cotton, and then gently pulling new string for 'spinning' (taking ideas further) to occur. If these foundational steps are skipped, there is nothing to spin or weave. Thus, pre-planning is critical in the ability to connect and create.

'Weaving' connotes a web-like configuration, while 'spinning' suggests a thread or trail. Seeing the two stages in this light helps to visualize the vital roll of each. Combined thread trails can produce unique webs when integration occurs.

"Developing & Conveying Concepts in Art"

After presenting and observing students during a project, Marshall and Vashe (2008) said, "Artmaking involves both conscious deliberate strategies and intuitive processes" (p. 12). They identified the following steps as integral parts in the process:



Conceptual Strategies

Two years later, Marshall (2010) identified the process of integration in five ways through:



DEPICTION

"Requires the learner to observe something closely and then reproduce the object" (p. 18).



PROJECTION

"Learners must analyze an idea in order to take it from what it is now to what it might be. This application requires understanding of the idea and its implications." (p. 18).



REFORMATTING

"Learners see subjects differently in new contexts, thus acquiring new understandings of those subjects [including] how visual imagery and formats convey information differently." (p. 18).



MIMICRY

"Allows learners to learn through experience, placing them in other people's shoes. This gives learners a sense of the different ways knowledge is constructed" (pp. 18-19).



METAPHOR

"Helps learners to hone their perceptual and analytical skills and fosters symbolic thinking" (p. 19).



3 Links from the 5 Conceptual Strategies

As concluded by Marshall (2010):



FIRST

"The conceptual strategies artists use to make meaning, not on their style, materials or technique" (p. 19).



SECOND

"Students can use these five [conceptual] strategies within current concept-based models of art integration to explore key trans-disciplinary ideas" (p. 19).

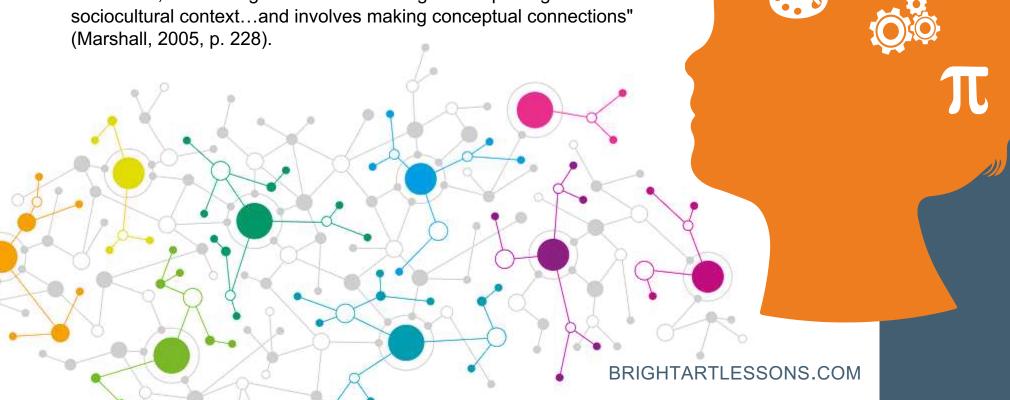


THIRD

"Using these strategies fosters an understanding of art in the context of the academic disciplines; art as a form of inquiry is emphasized and linked with specific techniques for investigation and interpretation" (p. 19).

CURRICULUM

Marshall (2005) points out two different types of curriculum – integrated and interdisciplinary. "A truly integrated curriculum is organized to show the connectedness of things, while an interdisciplinary curriculum is organized in ways that reinforce the separate and discrete character of academic disciplines" (Clark as cited in Marshall, 2005, p. 228). After which, she presents a third category suggested by Clark as a 'substantive integration.' This she defines as a curriculum that "resists simply depicting subject matter outside art, addressing social issues through art or placing art in its sociocultural context...and involves making conceptual connections" (Marshall, 2005, p. 228).



More than a

PICTURE

"IMAGE"

Stafford (1996) suggests that the term image signifies all forms of visual representation. She makes a distinction between two kinds of image: expressions, which are "untranslatable constructive forms of cognition" and illustrations which are "images equivalent to discourse" (p. 27).

"[She] argues that an illustration is essentially the rendering of an existing text, while an expression generates new discoveries or meanings in the process of its creation" (Marshall, 2004, p. 138). Both have weaving applied to past connections.



Allowing students to express their thoughts, ideas, and imaginations through creating images creates another layer of weaving in their cross-curricular connections. When given the chance to make a visual metaphor, higher-level thinking is present, accompanied by connecting to past information.



"... I believe that painting and drawing can still be a fundamental source of knowledge, rather than mere illustration." In my development, it has been the pictorial process that has led me to understand the subject. (Hesse-Honegger, 2001, p. 7)





"Hesse-Honegger's insights have profound implications for art education. They affirm the role of image-making as a vital and distinctive form of research -a hands-on, exploratory way of learning" (Marshall, 2004, p. 150). Thus, combining art with core subjects gives students deeper learning connections and experiences.



Putting Theory into Practice: A LESSON ON INTEGRATION EVOLUTION

Art is more enjoyable when I can integrate multiple disciplines into our project. I wanted to do a self-portrait with the students that was different than I'd done. I looked to history curriculum for my launch pad. Fourth-grade students learn about state history. The immigration of pioneers established the western states. The time of the trek West was during the mid to late 1800s, just the time the camera evolved, and the art of *Silhouettes* became an affordable portrait option.



Athenian Vase Painting
The Metropolitan Museum
of Art



Etienne de Silhouette



Silhouette Machine, c. 1780 Invented by Johann Caspar Lavater

From shadow portraits to silhouettes, this art technique is seen as early as Greek and Egyptian times. Their popularity ebb and flows throughout time. It wasn't until the 19th century that the term *silhouettes* identified these black cutouts. The cheapest way to record your image was through the craftsmanship of cut paper. Later, synonymously nicknamed for their inexpensive application, Etienne de Silhouette, a General of Finances under Louis XV of France, was the treasury chief and penny-pinched the people. Politics and art merged with science, searching for improvements.

MORE THAN JUST PAPER AND SCISSORS

How do you add value to cut-out paper? I've found it's through including multi-disciplinary facets. In this lesson, we integrated through:

LANGUAGE

-Define silhouette and use application

HISTORY

- -Identify Greek, Roman, and Egyptian examples of side views of people
- -Look at the 1699 trendsetting silhouettes of King William III and Queen Mary.
- -Learn about Etienne de Silhouette

SCIENCE & MATH

- -The invention of the silhouette machine by Johann Caspar Lavater.
- -The pantograph invention allowed artists to change the proportions of their drawings.







TECHNIQUES

-2 Techniques:Hollow-cutCut-and-paste

- -Distinguish the differences from silhouette examples.
- -Tools used in the 1800s to create the art.

ARTIST INSPIRATION

- -Everett Howard (known for his supreme cutting skill and composition)
- -William Henry Brown (Distinguished clients and added backgrounds)
- -Martha Ann Honeywell (Born without arms, held the pair of scissors in her mouth and cut finely detailed silhouettes)

GROWTH MINDSET

Encourage students they have hands to hold the scissors and make a silhouette!

TEACHER DEMONSTRATION

Preparation: Take a side view picture of each student, resize it in Photoshop as needed, and print it on white paper.

Method: Cut-and-Paste

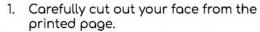
Modeling: Demonstrate how the scissors could make long and short cuts. One hand can guide the paper while the scissors are ajar in the other, versus the scissors trying to fit around tiny edges.

Guidance: Leave step-by-step instructions on the screen for students to work independently after project demonstration.



Pantograph Image

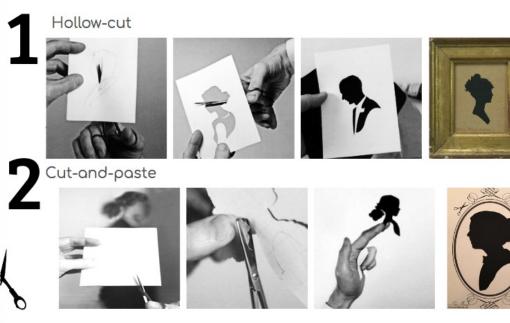




- 2. Using blue tape, tape the cut out on black cardstock.
- With a pencil trace the outline of the face
- 4. Carefully cut the black cardstock following the lines.
- 5. Glue the white oval circle to a new black cardstock.
- 6. Place glue on the silhouette side you can see the pencil marks. Flip over and place on top of the white oval. Make sure all the edges are well glued.
- Sign your name with a fine-point black Sharpie at the bottom of the bust







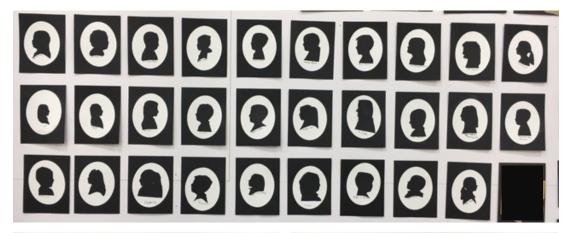


LESSON REFLECTION

We had the opportunity to see alternative ways to capture a picture for pioneers who could not afford photographs at the time. Traveling artists cut out the image of a loved one. Mimicry in large format made us appreciate the fine detail of historic ones.

This single project incorporated multi-disciplinary subjects while having individual significance, purpose, and challenge for each student. The takeaway was not just a tracing of their face but the development of the art process. Throughout the project, we discussed the exemplary patience of artists like Martha Anne Honeywell. Her art contributions are masterpieces of dedication and perseverance, and she is an admirable example of not giving up and finding her place in the world.

I enjoy teaching more when I can share multiple influences of art. In reverse, art inclusion can strengthen any subject. Applying varied disciplines of knowledge increases my appreciation for artwork and the individual and makes the value of cut-out paper turn into a treasure!







4th Grade student examples of Self-Portrait Silhouettes

REFERENCES

- Hesse-Honegger, C. (2001). *Heteroptera: The beautiful and the other or image of a mutating wor1d.* Zurich: Scalo.
- Marshall, J. (2010). Five ways to integrate: Using strategies from contemporary art. *Art Education*. *63*(3), 13-19.
- Marshall, J. (2005). Connecting art, learning, and creativity: A case for curriculum integration. *Studies in Art Education*, *46*(3), 227-241.
- Marshall, J. (2004). Articulate images: bringing the pictures of science and natural history into the art curriculum. *Studies in Art Education*, *45*(2), 135-152.
- Marshall, J. & Vashe, M. (2008). Mining, bridging, and making: Developing and conveying concepts in art. *Art Education*, *61*(1), 6-12.
- Stafford, B. (1996). Good looking essays on the virtue of image. Cambridge, MA: MIT Press.