LEONARDO DA VINCI UNIT

By: Ashley Warner

UNIT RATIONALE

Da Vinci is great to teach high school students for many reasons. First, he was interested in so many things. As a painter, he created the Mona Lisa, one of the most famous works of art in the world today. As an inventor, he made sketches of tanks, planes, submarines, and helicopters-machines that were not actually produced until hundreds of years after his death. I believe knowledge like this is important because it will encourage creative and independent thinking in students; as well as an appreciation for the potential of just one person to accomplish so many things, instilling values confidence and identity. Furthermore, because of his wide range of interests, teaching Leonardo is another way to learn core subjects without fragmenting them. This can be accomplished by taking students deep into a few subjects and connecting them to each other, such mathematics to art or science to social studies. Da Vinci also teaches important skills such as observation and visual perception. It is my hope that this unit will be able to instill many of these skills and values which I believe will help them greatly in their futures.

UNIT ESSENTIAL QUESTIONS

- In what ways do artists influence society? Society influence artists?
- How do you think Da Vinci's life would have influenced his art?
- What types of personal expression can you see from Da Vinci's work?
- How can you use your knowledge of art skills such as visual perspective to create art?
- What skills in subjects outside of art can you learn from this unit?

UNIT OBJECTIVES

For this section of study, I will be focusing primarily on drawing as it is the basis for most art works and many of the skills learned doing so will help student success in other forms of art as well as other school subjects. From there students will...

- Use drawing to convey emotion and identity.
- Incorporate subjects outside of art, such as mathematics, into their works.
- Gain a deeper appreciation for art history and skill through the study of Leonardo Da Vinci.

- Instructional Objectives
 - KS Standard 4, Benchmark 1: The student will describe how history and culture influence creation and study of art by a discussion over why they feel Da Vinci used backwards handwriting.
 - KS Standard 3, Benchmark 3: The student applies the problem-solving steps* to the creative process by creating several different backwards handwriting works themselves.

Procedure:

- Be sure students have visited the Leonardo Right to Left web page (<u>http://legacy.mos.org/sln/Leonardo/LeonardoRighttoLeft.html</u>), and encourage them to discuss what they learned from it. Make sure they understand what we mean by writing backwards. Refer to the sample of Leonardo's signature if there is confusion.
- Distribute paper and pencils and encourage students to try writing their signatures in cursive from right to left. This is challenging! If students have trouble forming letters in reverse, they should try the following exercise:
- Hold a pencil in each hand.
- Simultaneously, write backwards with the usual writing hand while writing forwards with the opposite hand.
- Having the one hand mirror the other hand's action seems to help the brain coordinate the movements.
- Have the students experiment with writing backwards alphabets and backwards sentences.
- Have them write backwards with pens and markers to make comparisons. Is one kind of writing tool easier to use this way than another?
- Distribute mirrors and show students how to position them to one side of their backwards writing to read it normally. A mirror also lets
 them check to see if they actually reversed all letters properly.
- Suggest that they try writing backwards messages to a partner who can then decipher them with a mirror.
- After everyone has begun to feel more comfortable writing backwards, gather the students and encourage them to discuss their thoughts and observations about the experience of writing backwards. When it's appropriate, introduce the following questions for discussion: Did left-handed or right-handed students have an easier time writing backwards? Which medium, pencil, pen, or marker seemed best for writing backwards? (Leonardo would have written mostly with pen and ink.) For someone who learns to write backwards as easily as they write forwards, what advantages might there be to backwards writing?

Art Historical Resources:

http://legacy.mos.org/sln/leonardo/leonardorighttoleft.html

Aesthetic questions:

- What problem solving skills did you use to create your backwards writing?
- Why do you think Leonardo used backwards handwriting?

Art Criticism Element:

Students will present backwards writings to class for discussion

Assessment Tool:

Content

Student has a clear understanding of what mirror (backwards) writing is to successfully create their own work.

2 3 4 5

Creativity

Student created at least 3 backwards writings.

2 3 4 5

Craftsmanship

Backwards writings are complete and well constructed. Letters are all facing the correct way. Can easily be deciphered using a mirror.

1 2 3 4 5

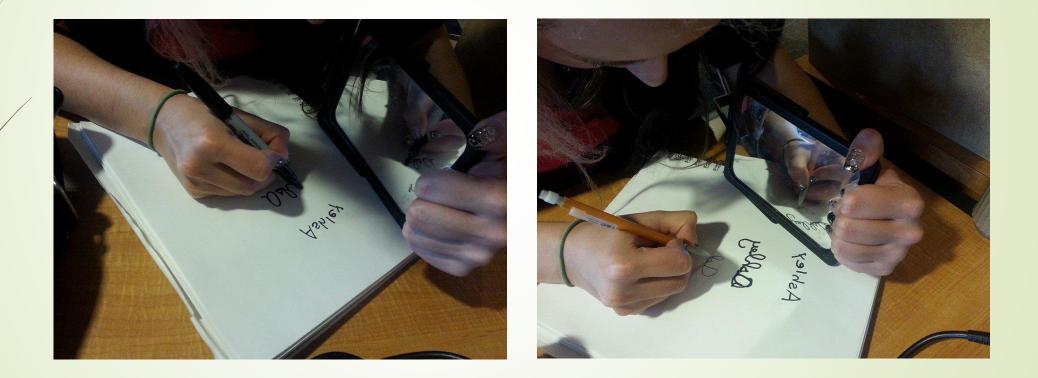
Completion

Student completed work by deadline for presentation to class.

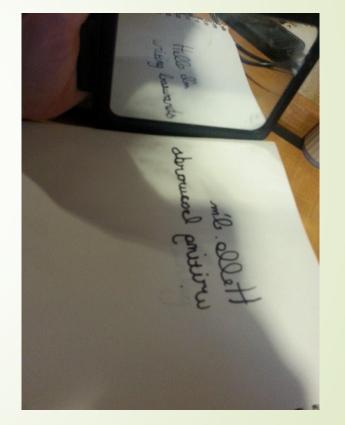
1 2 3 4 5

Modifications for Special Needs: Instead of using cursive, students will write in print. With aid of the teacher, they will write only their name as a mirrored image.











Instructional Objectives:

- KS Standard 3,Benchmark 2: The student selects and uses images, subjects, and ideas to express meaning through art by choosing a picture of their own funny face.
- KS Standard, Benchmark 3: The student applies the characteristics of a variety of media, techniques, and processes to develop manipulative skills in two dimensional works. This will be accomplished by using a digital photo and making a two dimensional drawing.

Procedures:

- First, students lay their pencils on top of their chosen photo. The pencil should be centered along an axis through the pupils of each eye. They then hold the pencil steady as they move it to their drawing paper. This is the most effective if both the photo and the drawing are vertical on an easel. They then draw a light line that matches the axis of the eyes in the photo.
- If the faces are distorted because the face is turned or foreshortened, students did one eye at a time and measured how many eyes widths there were between eyes. Their pencils angled from each corner of the eye through the pupil.
- Following the completion of the eyes, a new vertical axis line was lightly drawn from the middle of the space between the eyes, through the middle of the nose and on to the chin. When drawing the nose, students measure how many eyes long it was vertically and made a mark, then they made a light mark where part of the eye the widest part of each nostril fell directly beneath.
- When students draw the mouth, they look at the photo again to see how many eye widths it would take to place the middle lip line, lower lip line, and dimples (if any) from their noses.
- When one area of the face is complete, they could use larger measuring tools than simply an "eye's" length. This assignment is about proportion and ratio. Once the facial features are completed, students measure to see how many eye widths (or any other measuring stick they selected at that point) the chin is from the mouth, the face width from the mouth and nose, eyes, etc.
- Next, the mid-line of the face is measured to see how tall the head needs to be, how wide the shoulders should be, and so on. All lines are still lightly drawn or sketched. Once everything looks good and any adjustments are made, students can darken the contour lines of the components of the face.
- Finally, students will shade their drawings using a variety of pencil pressures. More pressure will create shadows. A lighter pressure will create highlights. Students who finish early will draw the background of the picture. If the face is expressive, the background may explain the reason for the facial expression.

- Art Historical Resources:
 - Look up Drawings of Leonardo Da Vinci at the Biblioteca Ambrosiana. Leonardo Da Vinci Online Drawings/paintings by Honore Daumier may also be used.
- Aesthetic questions:
 - What emotion are you trying to convey in your work? How can you effectively communicate this to others?
 - How do people express themselves through art today?
- Art Criticism Element:
 - Students will share their work with the class and answer aesthetic questions about it.
- Assessment Tool:

Content

Students effectively created a drawing showing human emotion?

2 3 4 5 6 7 8 9 10

Creativity

Students took initiative to alter their photos to make them humorous and unique.

1 2 3 4 5 6 7 8 9 10

Craftsmanship

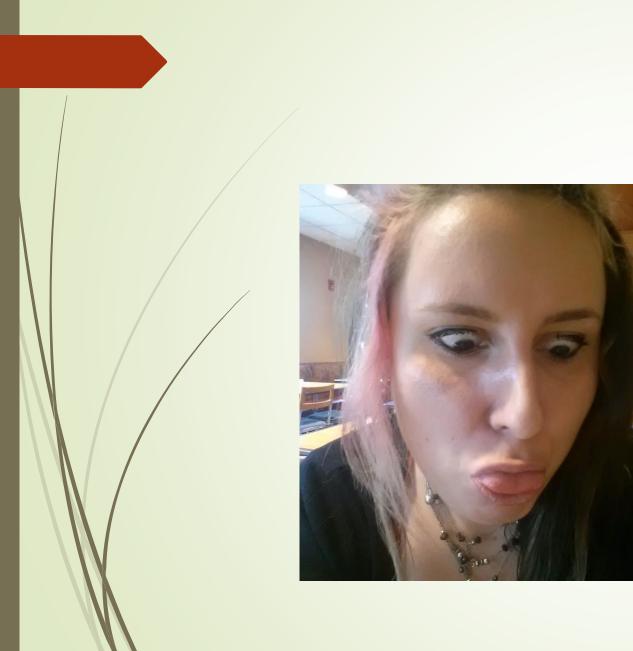
Students used pencil to shade and show values?

1 2 3 4 5 6 7 8 9 10

Completion

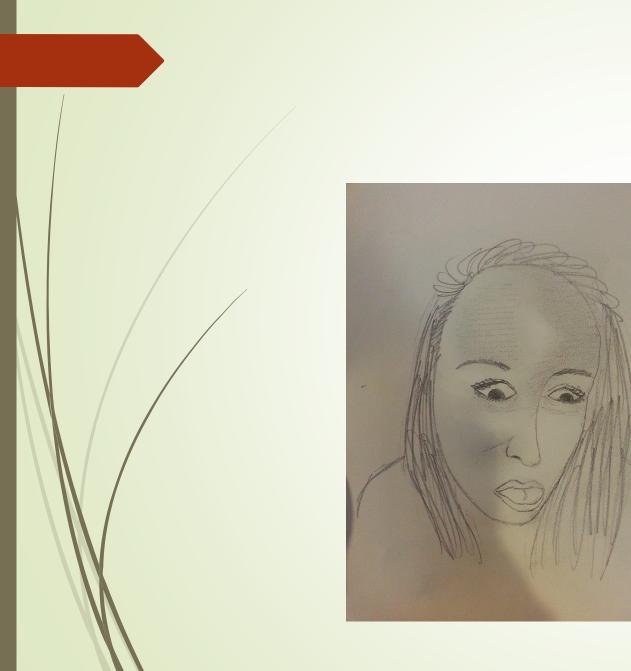
Student completed work by deadline for presentation to class.

1 2 3 4 5





PROCESS



PROCESS

Modifications for Special Needs:

 Students will draw the outlines of their features. Proportion doesn't have to be exact. Values are not necessary.

- Instructional Objectives
- KS Standard 6, Benchmark 3: The student demonstrates ways in which art concepts are interrelated with non-art disciplines by using mathematics in their drawings, such as proportion and measuring.
- KS Standard 2, Benchmark 1: The student recognizes and identifies the elements and key principles of design used in works of art such as line, value, unity, etc.

Procedure:

- Have students begin by looking in a mirror at themselves.
- For a front-view portrait, have the students start with an egg-shaped oval with the larger end being at the top of the face. Before actually drawing facial features, have them study their own bone structure, observing how it is different from the basic egg shape, and make corrections.
- Have them lightly sketch this beginning foundation so that it is life-size or nearly so. Demonstrate how to lightly sketch a guideline to indicate the center of the face. At this point, include a discussion of types of balance, pointing out that this is an example of symmetrical balance. Then show how to softly sketch guidelines to indicate the locations of facial features. Locate the guidelines in the following ways:
- Draw a very light line about halfway between the top of the skull and the bottom of the chin. The line falls through the center of the eyes.
- Sketch a guideline about half the distance between the eye line and the bottom of the chin. That indicates where the bottom of the nose will be located.
- Sketch a guideline for the middle of the lips about one-third of the distance between the bottom of the nose and the chin.
- Other tips to review to help the students approach the drawing with confidence (Arttalk teacher's edition, p. 268):
 - The face is about three nose lengths tall. The eyes are one eye's width apart. A third eye would fit exactly into the space between the eyes. The eyes and the tops of the ears are aligned with each other. The tip of the nose and the earlobes are aligned with each other.
- After the students lightly sketch in the guidelines and carefully observe and lightly draw the facial features in pencil, demonstrate how to obtain line quality by drawing with thick and thin lines. Also demonstrate how to create value if needed.
- Students will then lay in darker lines and values to finish drawing.

- Art Historical Resources:
 - http://www.theartwolf.com/self-portraits/10-self-portraits.htm
- Aesthetic questions:
 - How can we use design principles to organize ideas and create a work?
 - How are subjects outside of art being used in your pieces?
- Art Criticism Element:
 - Teacher will speak to students individually about their pieces.
- Assessment Tool:

Student drew a proportional self portrait.

Student used varied lines and shading creating values and contrast in appropriate areas.

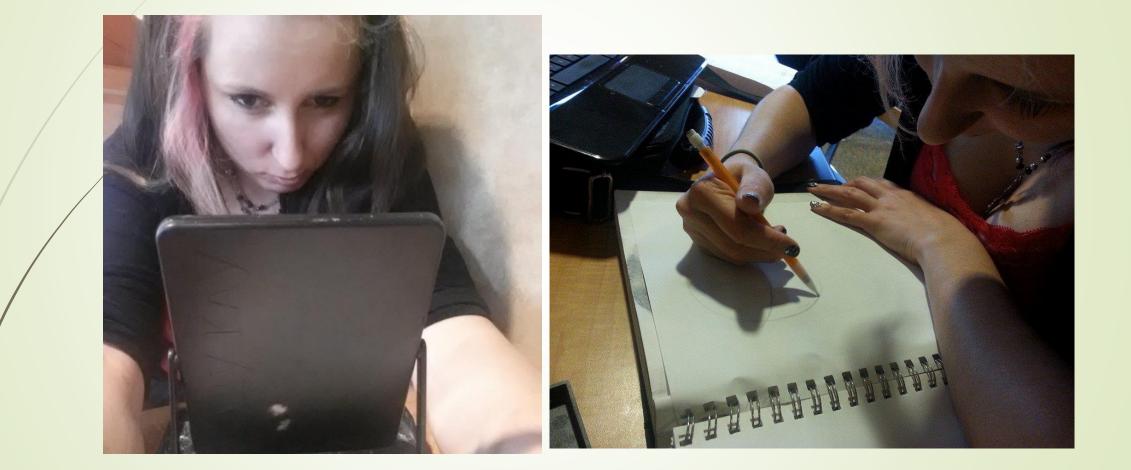
Drawing was clean and complete with all beginning proportion lines and any extra pencil marks erased completely.

Student completed drawing on time.

Modifications for Special Needs:

Students will follow same directions for funny faces self portrait.

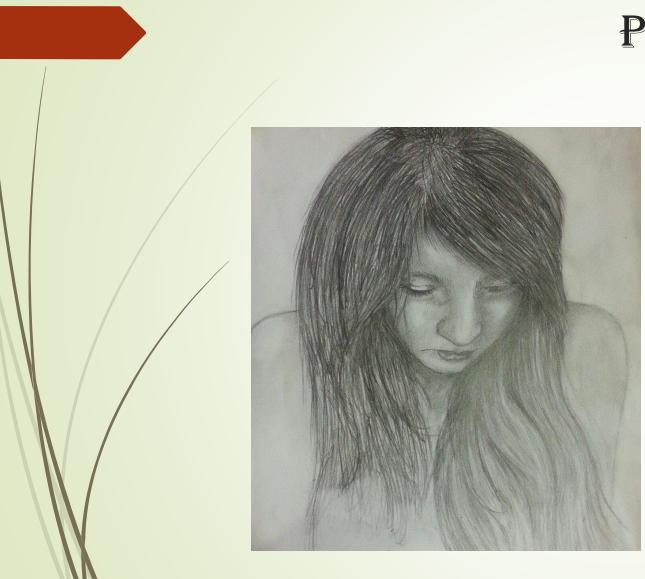




PROCESS







PROCESS

SUMMATIVE ASSESSMENT

Students will write a small essay over what they have learned from the unit (This will also incorporate English and writing skills into the unit). The essay needs to be a minimum of four paragraphs. It must include an introduction, two body paragraphs, and a conclusion. In it, students must include what they have learned about Da Vinci, specifically in reference to the lessons. They should cover his personal expression as well as including what inspired their own use of expression. Students should also include any new skill they feel they have learned, and how this unit has helped them to improve their previously learned skills. They could also include how the usage of other subjects was included in the unit, and if they feel in helped them more in those areas as well. The essay should be concise, well written, and properly reflected. It will be worth 100 points.