!DESIGN IT!

!Where Creativity Happens!

Student work is linked Below:

Class Picture

Individual Products

Close up of individual products $\underline{1}$ $\underline{2}$

Group products

Close up of Group Products 1 2 3 4 5 6

Introduction

Rationale

Why are the skills, content, and concepts presented in this unit important for students to learn?

Students need to be able to be creative and be able to design in all aspects of life. In life, all students need to be able to be creative because creativity is found in all aspects of life. Creating comes in may forms. One of the main reasons students need to learn about creativity is because all students will have to become creative problem solvers. In life, students need to learn about how to design because it can found everywhere in life. Design is found, in the simplest of things such as designing a schedule for the week or day, to design a building or bridge. Design and creativity are both used every single day in all of our lives.

Differentiation

What elements of this unit make it particularly beneficial or appropriate for gifted learners? (Be sure to discuss the dimensions of differentiation: Content, Process, Product, and Learning Environment AND the features of differentiation: Complexity, Challenge, Depth, Creativity, and Acceleration)

This unit is beneficial to gifted learners in many ways. First, it is beneficial to gifted students because it is accelerated. These students had a much shorter timeline to learn and understand the material. The depth of the material was much more difficult than the surface level learning that might go on in a classroom. They were learning may difficult skills in Design Space the many students were having to problem solve with peers on the computer to accomplish what they wanted. The students also have a more complex report to complete while they were doing their performance task. The content that is being taught is not a traditional content that would be taught to all students, it is also connecting the content to real-world experiences that may be hard for some students to put together. The process of this learning is much more hands off then what I would do in a traditional classroom. I was allowing for more student exploration than telling the student exactly what to do because gifted students can make more of those connections. Those are just some of the reasons that this unit is appropriate for gifted students.

Goals and Outcomes

Content Goal

Goal: To develop an understanding of design and how it inspires you to become creative.

Outcomes

Students will be able to...

- determine different design types that designers use to capture their audience.
- describe how artists used their design to be more creative.
- compare and contrast different medians in designs and how it affects the creativity of the work.

Process Goal

To develop creativity skills and apply them to design

Process Outcomes

Students will be able to...

- communicate with others about ideas for creating different designs for a customer.
- operate a design program (Design Space) to create their design.
- apply their knowledge of design to create a physical project

Concept Goal

To understand the concept of design

Concept Outcomes

Students will be able to...

- Use appropriate design language while collaborating
- Transfer design skills to other life activities
- Observe and identify a variety of design in real-world settings

Assessment Plan

Assessment Plan

What evidence will show that students understand? Describe formative assessments and summative assessment (performance task) that will be used to monitor student progress in meeting established goals throughout unit. Include student work samples (copies and/or photos) that demonstrate student content knowledge, skill development, and understanding of the unit's concept.

Formative assessments:

- Day 1:
 - Exit ticket with the essential question on it, to check understanding of the concept on day 1 so it can be compared to last day of camp to see if they have deepened their understanding of the concept.
- Day 2:
 - While students are sharing what a graphic designer is, I will be assessing their knowledge of what the job entails
 - While students are demonstrating what they have learned about Design Space to the class, I will be check for students understanding of the program.
 - Students will be assessed on their personal creative project
 - Exit ticket with the essential question on it, to check understanding of the concept on day 2 so it can be compared to last day of camp to see if they have deepened their understanding of the concept.
- Day 3:
 - Students will be assessed on their final personal project.
 - students will be assessed on their creation with non-traditional mediums
 - Exit ticket with the essential question on it, to check understanding of the concept on day 3 so it can be compared to last day of camp to see if they have deepened their understanding of the concept
 - o Day 4:
 - students will receive their final exit ticket with the essential question on it, to check for understanding of the concept.

Summative assessment:

- Day 4:
 - Students will be assessed using the <u>rubric</u> for their performance task. (Rubric is attached/linked to were the word Rubric is)

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CONCEPT
Design
ESSENTIAL UNDERSTANDING
Design Inspire Creatvitiy
ESSENTIAL QUESTION
How does design Inspire Creativity?

TEACHER NAME

CRITICAL CONTENT - Students will know that...

- Students will know that
 - There are multiple steps in designing
 - In order to work in a group, you need to be able to communicate
 - Designer create products
 - A Cricut is a cutting machine
 - People design for multiple reasons

PROCESS SKILLS - Students will be able to...

- Students will be able to
 - Collaborate effectively with peers
 - analyze and apply information
 - research information
 - Discuss findings of information

MATERIALS

- Computers
- Cricut machine
- Cardstock
- Paper
- Highlighters
- Pencils

GUIDING QUESTIONS

Pre-Lesson Questions	During Lesson Questions	Post Lesson Question
 What is a Cricut machine? Why did you chose to take this class? What are you most excited to do in this class? What do you think design means? what do you think it means to be creative? what type of people create? what are some ways we can be creative? What are some different types of designers? 	 What do you think people buy this machine? What do you use the cricut machine for? What are all the different ways to use a cricut machine? What will you need to learn how to do to be able to use this machine? Why do you think we might consider a Cricut machine owner a designer? How could you be creative with a Cricut? How does using a circuit machine relate to creativity? How does using a Cricut machine relate to design? why do you think a design might pick the Cricut as a a way to be creative? 	 What was some of the information about design that stuck out to you? What part of this article made you rethink about what a design is? Why are some reasons you think designers create? How does design inspire creativity?

PLANNED LEARNING EXPERIENCES

Introduction to class-10 mins

- Tell the student about me, what I do, where I work, why I wanted to do this camp, why I chose to do circuit design, and what I use the Cricut design for.
- Get to know each other -30 mins

Name Tags:

- Have students say their name and why they decided to pick this activity along with the symbol they chose. each student will get a chance.
- Have each student fold a piece of cardstock in half. Have the students draw on the paper and put their name they would like to go by and a symbol they like or represents them. Give students 5 minutes to do so.

Name Movement Game:

 We will each chose a movement that we like, such as clapping above our heads 3 times or snap our fingers twice(each student must have a different movement). Once we all pick a movement we will go around the room and try to remember everyone's movement with their name.

• Introduction to the lesson: show them how a circuit works-15 mins

- show them a quick demo of what the Cricut is and how it works. The demo will
 not go too far into detail about the machine, just a quick demo so the students
 get a feel for the machine and what it does.
- I will be demoing how to cut my name out of cardstock.

Lesson: Students will explore websites and articles- 50 mins

- Students will use articles from websites(they will be printed) to explore what the Cricut is and how it works and why you might buy a Cricut
- o Before we started looking at the articles I will teach students how to close read
 - I will model an example of close reading to the students. I will show an example of a small informational text and that I want to look for things that have to do with_____
 - I will model by reading through the text out loud, I will show them that you should highlight anything that has to do with ______. I will also read through and write any comments and thoughts that I have while reading the text. I will tell the students that while they are doing the next activity, they are going to be using close reading.
- The students will explore the following articles with close reading. I will ask the students while reading
 i want them to focus on the following: why you might buy a machine, what you can create with it, what you can design with it.
- https://heyletsmakestuff.com/cricut-worth-it/
- https://www.practicallyfunctional.com/what-is-cricut-machine/

https://www.keystoinspiration.com/cricut-explore-buy/

http://www.doodlecraftblog.com/2017/06/5-ways-to-make-money-with-cricut.html

• https://kikicomin.com/10-reasons-you-should-buy-a-cricut-explore/

Should learn by the end what a Cricut may be used for enjoyment/hobby, work, or to test what they can do

• wrap up: talk with others about Cricut-15mins

- students will be put into groups of 3. They will be given 5 minutes to discuss what they learned while researching with the other members of their group. They will also create 3 questions they still have about the Cricut. I will give students time to research answers to the questions.
- The last 10 minutes we will talk together as a class about what they have learned.
- I will ask the students some of the Post lesson questions and give them one exit ticket that will ask the essential understanding

• name game-5mins

movement game from before

• Introduce project-25 mins

- Taking these steps helps guide the process of researching, planning, creating and reflecting on a project.
 - 1. Setting the stage.
 - I will set the stage for students to create a product design and product cost. I will show several examples of completed projects (canvas print, water bottle print, sign print). I will explain the importance of the design process and what the selling price would be for the products based on the materials used and time.
 - Tell the students that they will be completing a project throughout the week.
 - 2. Role of Project Designers
 - Show students the following scenario
 - You are working at a design firm as a graphic designer. A customer walks into your office and wants to talk with a designer to create a sign for in their office. He has already gone to another design firm but was unhappy with the product he received and has come to your firm in hopes of receiving a better product. Since he has already paid for one sign and was unhappy with it, he has a small budget to work with.
 - Your task is to:
 - Create a design using Design Space that incorporates the customer's likes.
 - Create a product the customer can hang in their office.
 - The product should be well done in execution.
 - The product should be a low-cost project.
 - They will be able to interview the customer today and ask them some questions.
 - I will then start by talking about why type of questions they will want to ask and what information they might need while

creating this project.

- 3. Criteria for Evaluation
 - The teacher will go over the criteria (rubric) for the sign with the designers.
 - The teacher tells the designers (students) the size of the sign that they have to work with to make their design fit.
- Let the students get into groups and interview the customer and brainstorm -30 mins
 - The student will get into groups of three of their choice if students cannot choose groups or do not have a group I will create them.
 - The students will have 5-7 minutes to brainstorm questions to ask their customer.
 - The students will then go group by group and have 5 minutes with the customer to ask their questions
 - The customer will also have an email address just in case they need a question answered that they forgot
 - while the other students are interviewing the customer, they will brainstorm different material or things they need to learn to complete this project.
- Name game-5mins
 - have a ball and pass it to some and say their name

ASSESSMENTS

The assessment will be the exit ticket with the essential question.

DIFFERENTIATION

CONTENT		
PROCESS		
PRODUCT		

LEARNING ENVIRONMENT

• The student will be able to sit anywhere in the room they would like too for comfortability.

Abbie Oliver **GRADE LEVEL** Rising 3rd-4th graders NC CURRICULUM STANDARDS W.3.2 Writing informational/explanatory text to examine a topic and convey ideas and information clearly W.3.7 conduct research projects that build knowledge about a topic W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories S.L.3.1 Engage in a range of collaborative discussions with diverse partners on topic and text, building on others' ideas and expressing their own clearly S.L.3.2 Determine the main ideas and supporting details of a text and read aloud or information presented in diverse media and formats, including visually, quantitatively and orally CONCEPT Design **ESSENTIAL UNDERSTANDING Design Inspires Creativity ESSENTIAL QUESTION** How does Design inspire creativity?

TEACHER NAME

CRITICAL CONTENT - Students will know that...

students will know that

- graphic design is creating and manipulating images
- designers have to be able to collaborate with peers
- designers create products
- how to design using design space

PROCESS SKILLS - Students will be able to...

Students will be able to

- explore a designer software using a variety of tools and feature
- apply the tools and features of a design software
- organize step of different tools of a design software
- Collaborate with peers

MATERIALS		
Computers		
Work Packet		
Chart Paper		
Markers		

GUIDING QUESTIONS

Pre-Lesson Questions	During Lesson Questions	Post Lesson Question
 When you think of the word graphic, what do you think of? When you think of a designer what do you think of? Thinking about what the words graphic and designer, what do you think a graphic designer is? what do you think their jobs consist of doing? What are some of the tools a graphic designer uses? 	 How do you think this will help your design? What did you observe while watching this video? What is something that surprised you about being a graphic designer? What kind of work did the designer do? What characteristics does a graphic designer have? What skills are need to be a designer? How do you think the designer acted while working? How do you think graphic designer are creative? 	 What is the purpose of begin a graphic designer? What did you learn about being a designer? What does creation have to do with graphic design? Where do you see these skills being useful? How does design inspire creativity?

PLANNED LEARNING EXPERIENCES

Engage and Connect (15-20 minutes)

- Students will walk into the room, on the desk will be examples of pamphlets, and advertisement signs, the students will have time to look over these items and describe what they think of the designs and who made them.
 - I will ask the students the pre-lesson questions to activate prior knowledge and to see what students already know.
 - I will provide the students with Post-It notes. The students will be instructed to write down anything they know about graphic designers. They should write down items about what they may do during the day, work habits, ect.
 - Things they might list; working on computers, create images, make designs for companies, working in an office, need to know math, artistic. Students will have around 2-3 minutes to make their lists.
 - The students will then share their ideas about graphic designers with the class. I will write their answers on chart paper. The chart paper will be added on to after the next step.

• Explore (15 minutes)- Familiarity with the discipline

- I will show a video to the class Start at the 18-second mark and stop at 1 minute 13-second mark for the first video. The second video will be played the whole way through.
 - https://youtu.be/b3HmecDFF50?t=18s
 - https://youtu.be/BmBK0_vbYnY
- The students will be told to focus on what graphic designers do, the skills that go into graphic design and the process of creating a design while watching the video.
- After and while watching the video, the students will look back over their list and add
 anything new from the video that they learned. I will ask if there is anything else we should
 add to our list about graphic designers and what they do.
- After the video, I will explain to students that today they are going to work as a graphic designer. while they are working. They need to make sure they are working like graphic designers.

• Explore: Practicing the Discipline-30 mins

- • I will then help the students log onto Design Space
 - The students will be able to explore design space on their own for 20 minutes.
 - Their focus is to explore Design Space and write down anything that they learn how to do.
 - students will be given a graphic organizer to write down what they have learned so they can share it with the rest of the class after their explore time.
 - What the teacher might expect them to learn on their own
 - create a text box, change the font of text, change the size of the text, change the color of the text, insert an image, insert a shape, insert a graphic, change color and size of shape and graphic, group and ungroup images and words
 - Students will also write down any questions that may arise when exploring Design Space so the teacher can answer them after they are done exploring

• Explain (15-20 minutes)- Reflecting on Discipline

- Students will share what they were able to learn during the exploration of Design Space (the list in the previous step)
- Students will get to ask questions about certain tools or features in Design Space
- I will show students two features: kerning (moving individual letters), slice images (take out a piece of an image you don't want)
- I will also show them anything that they did not figure out how to do during their exploration of design space
- students will get packet showing them how to do each of the listed above activities on

- design space.
- students will be asked some of the end of lesson questions.
- students will reflect on what the purpose of a graphic designer is: to design for others and get paid to design
- we will add more to things we know chart from the beginning of the lesson(we will also use this chart to reference to while they are working on their final project with their groups)

• Elaborate (10 minutes)- Continued Practice and Reflection

Students are to go back into Design Space. I will instruct them to create a design that
incorporates their name with one image/graphic. While they design this, I want them to
change the font, change the size of the front, make it a new color, and group design
together.

Evaluate

• Students will save the name with graphic/image and be assessed by using the different tools or features in Design Space by designer their own design.

Student designs own item-40 mins

- Students will not be told that they will be able to design a creation for themselves to take home. They will work on designing it today, and tomorrow they will be able to physically make it and put it on a water bottle to take home.
- I will have a checklist for students to look at for their own project.
- The checklist will consist of:
 - their name
 - at least one image
 - the font needs to be changed
 - at least one slice in their image
 - at least one shape
 - all items on design need to be proportionate
 - size of the design(which I will not be able to determine until I get the water bottles)
 - the design has to be centered on to the cup
 - the design needs to have a minimal amount of bubbles once placed down
 - design needs to be as straight as possible

• Students will have time to work in their groups to work on their project

• Discussing and Accumulating Background Information-40 mins

■ The students will go through the questions and answers of the customer from yesterday. The teacher will instruct the designers to look at the gathered information and use that to help them plan the design of the sign. They will use a scrap piece of paper to formulate and ideas for the sign

Accumulating the materials

- The teacher will have a mock store for the designers to shop at that will include; Vinyl Sheet \$3, Transfer Sheet \$3 for 12x12, Wood sign \$1, tool set \$2, Card Stock \$0.50
 - Students will determine the materials (transfer paper, wood sign, toolset, and vinyl paper, card stock) that they will need to complete the project. The designers will need to keep in mind that cost of the materials to determine how much their sign will cost the customer to purchase.

ASSESSMENTS

Students will be an assessment on the project in the evaluation section.

This assessment will be done using a checklist to make sure they have included all the criteria asked for above.

DIFFERENTIATION

CONTENT

PROCESS

accelerated time for learning

PRODUCT

The student's product will all be different.

LEARNING ENVIRONMENT

student will be teaching each other, collaborative

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CONCEPT
Design
ESSENTIAL UNDERSTANDING
Design Inspire Creativity
ESSENTIAL QUESTION
How does design inspire creativity?

TEACHER NAME

CRITICAL CONTENT - Students will know that...

Students will know that

- there are multiple steps in designing
- in order to work in a group, you need to be able to communicate
- designer create products
- There are steps and a process of creating a design
- designer self-asses and fix problems

PROCESS SKILLS - Students will be able to...

Students will be able to

- Create a product
- Collaborate effectively with peers
- Evaluate a design
- Analyze and apply information

MATERIALS

- Slideshow with pictures
- handout of pictures
- waterbottles
- vinyl
- weeding tools
- Cricut Machine
- Rules
- Computers
- Design Space
- Non-traditional art items

GUIDING QUESTIONS

Pre-Lesson Questions	During Lesson Questions	Post Lesson Question
 What is an artist? What do artist means when they say "I used this as a medium?" What are some types of designs created by artist? When you think of an artist, what type of mediums do you think of them using? 	 What type of challenges do you think the artist ran into while using this medium? How did the artist overcome the challenge? why do you think the artist used those mediums while designing? why do you think nontraditional items inspire artist be creative? Why do you think artist are considered designers? What are somethings that artist create? What do you see? What do you see that makes you say that? What else do you see? How do different mediums make artist think creativity? 	 Why do you think artist use non-traditional mediums to create? Where do you see these skills being useful? How do you think designers and artist are alike? Would you consider a artist a designer, why? How does design inspire creativity?

PLANNED LEARNING EXPERIENCES

Hook

- Have some of my personal Cricut projects displayed at the front of the classroom. (a t-shirt I made for someone, and home sweet home sign I made for myself, an intricately designed mug I made to see what I could design and do, and a few other pieces)
- let student looks and examine items
- I will tell the students that these are all of my personal creations that I have made with the Cricut. Explain to students what I created and why I create it. I will explain that I create some for myself, some for others and to sell, and other I made just to see if I could actually do it.

Student personal project work time-Teaching time 20 mins/work time 40 mins

- Students will use their designer from Design Space, cut it out, and place it on their water bottle
- students will finish their design based on the following checklist.
- I will make sure to approve the design first.
- I will teach them how to make sure their design is a good size for the water bottle.
- Then I will demonstrate how we will send the item to the Cricut Machine to be cut.
- after the design is cut out, I will show students, using the tools, how to weed the excess vinyl from their design.
- I will then teach the students how to make sure their image is straight and centered on their cup using rulers.
- Students then will send their designs to the Cricut to be cut out. While students are waiting
 for their turn, they will be doing the final edits of their design and will be able to create
 more designs. Once their design is cut out they will weed the items and place them on
 their cups. one they are finished and waiting for the rest of the class to finish they may
 design on Design Space.

Student designs own item checklist

- Students will not be told that they will be able to design a creation for themselves to take home. They will work on designing it today, and tomorrow they will be able to physically make it and put it on a water bottle to take home.
- I will have a checklist for students to look at for their own project.
- The checklist will consist of:
 - their name
 - at least one image
 - the font needs to be changed
 - at least one slice in their image
 - at least one shape
 - all items on design need to be proportionate

- size of the design(which I will not be able to determine until I get the water bottles)
- the design has to be centered on to the cup
- the design needs to have a minimal amount of bubbles once placed down
- design needs to be as straight as possible

Visual Thinking Strategy lesson-60 mins

Intro-5-7mins

- Ask the students if they have every folded their napkin in a new way to make a design, or have created a crown out of paper or have tried to make a design out water?
- Tell students that when they are using these items, they are making art but with non-traditional mediums.
- Ask the pre-lesson questions.
- Tell students we are going to look at some art today.

Lesson- 40 mins

- o I will show an image in a slideshow on the board
- O I will ask the class, "What do you see in this picture?" Students give their response about what they see. Possible responses; "It is a man", "Picture of an old man", "Has glasses on", "Picture has circles"
- After each student shares a response, I will ask a follow-up question. Possible follow up questions; "What makes you say that?", "How do you know that?", "Describe that to me.", or "Does anyone else agree with that?"
- O Students will answer the question to help support their ideas.
- Once students provide an answer, I will summarize what the student said.
- Students continue to share their observations and ideas with the same repeated process listed above, I will asks follow up question, students provides a supporting answer and I will summarize what the student said. This will continue until all have shared.
- Then ask the students to think about what this artist used to make the portrait. Have students share their ideas about what is used. Then reveal the other half to show what is used.
- o If no students are able to answer correctly tell the class, "This artist used bottle caps of various colors and sizes that were strategically placed to create the portrait." Ask the student why they think the artist decided to use bottle caps as their medium? Inform students that I do not want them to answer this questions now, but I want them to think about that questions while they are continuing the look at pictures given to them.
- I will show the next image of 'Colorful Paper Village' to the class. I will tell the class to look at the image and to think about what they see. I will give the class about a minute to think.
- O I will asks the class, "What do you see in this picture?" Students give their responses about what they see. Possible responses; "It has houses", "It is colorful", "There are ladders connecting the houses", "It looks like a mythical village"
- O After each student shares a response, I will ask a follow-up question. Possible follow up questions; "What makes you say that?", "How do you know that?", "Describe that to me.", or "Does anyone else agree with that?"
- Students will answer the question to help support their ideas.

- Once students provide an answer I will summarize what the student said.
- Students continue to share their observations and ideas with the same repeated process listed above of I will ask follow up question, students provide a supporting answer and I will summarize what the student said. This will continue until all have shared.
- Then ask the students to think about what this artist used to make the portrait. Have students share their ideas about what is used.
- If student are unable to answer what is used, tell the class the artist used a variety of paper colors cut to different sizes and shapes to create the village.
- O I will tell that class, "Next we will be in groups looking at two additional artworks. Each group will have different artwork pictures. As well as getting the open-ended questions. You will get time to look at the artwork and write down what you see in the artwork. Then I will announce that we will be sharing our ideas. Example: three members of the group will share their idea and the other member will ask the open-ended question. Once the three members are done sharing it will rotate to another member in the group to ask the open-ended questions. Each group will repeat the steps until I announce that we will move onto the next picture."
- I will hand out the packet of the artwork pictures and the open-ended question for groups to use during their discussion.
- Ouring this time I will also float around to each group checking in and helping to facilitate the discussion. I will make sure students are sharing what they see and asking the open-ended questions.
- After each group has done both of their pictures, the groups will come back together as a whole class.

Discussion/wrap-up-10-15 mins

- I will ask the class, "Which artwork did you or your group find interesting and why did you find it interesting?"
- O When students in that group share their thoughts on that certain artwork ask the class, "What material do you think this artist used to make their artwork?"
- Ontinue until either all pictures have been said or all students shared their thoughts.
- Ask the student why they think the artist use non-traditional items as their medium? Tell the class that
 artists try to push the boundaries of what can be used to create artwork.
 - o ask post-lesson questions
 - have exit ticket with the questions: how does design stimulate creation?

Student exploration-20 mins

- Give students non-traditional art mediums such as: paper cups. broken crayons, paper, paper clips, staws leaves, napkins.
- Have students push what they know about these items and create something completely different.

• Group Project-45 mins

- Creating the Project
 - Designers (students) will plan out the design on Design Space using the information that they gathered from the interview. Designers will need to search and locate images that they could use as part of the design. Designers will need to focus on the size of the design making sure that it will fit on the wood sign. They will need to be aware of letter style and size as it may at times not cut out guite right.

- During this time, I will be walking around serving as a coach asking questions to the designers (guiding questions above) and to herself.
 - Do students have a clear understanding of the task?
 - Are students attentive and working cooperatively together?
 - Are any groups faltering because of the skills needed?
- As the design teams finish creating their design on Design Space, they will use the card stock as a rough cut to make sure the design cut out right before using the vinyl paper.
 - If it doesn't work on their rough cut, the team will go back and fix the mistake

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The students will be assessed by an exit ticket

DIFFERENTIATION

CONTENT

acculturated time for learning material

PROCESS

PRODUCT

Same product material but different design on the product

LEARNING ENVIRONMENT

Collaborative

Abbie Oliver **GRADE LEVEL** Rising 3rd-4th graders NC CURRICULUM STANDARDS W.3.2 Writing informational/explanatory text to examine a topic and convey ideas and information clearly W.3.7 conduct research projects that build knowledge about a topic W.3.8 Recall information from experiences or gather information from print and digital sources; take breif notes on sources and sort evidence into provided categories S.L.3.1 Engage in a range of collaborative discussions with diverse partners on topic and text, building on others' ideas and expressing their own clearly S.L.3.2 Determine the main ideas and supporting details of a text and read aloud or information presented in diverse media and formats, including visually, quantitatively and orally CONCEPT Design **ESSENTIAL UNDERSTANDING** Design Inspire Creativity **ESSENTIAL QUESTION** How does Design Inspire creativity?

TEACHER NAME

CRITICAL CONTENT - Students will know that...

Students will know that

- there are multiple steps in designing
- the price of an item is determined by the cost of materials and time spent
- in order to work in a group, you need to be able to communicate
- designer create products
- designer self-asses and fix problems

PROCESS SKILLS - Students will be able to...

Students will be able to

- Create a product
- Collaborate effectively with peers
- conduct a cost analysis
- evaluate their project
- analyze and apply information

MATERIALS

- Computers
- Cricut Machine
- Vinyl
- Rubric
- Guide Line
- Weeding tools
- Card Stock
- Wood
- Ruler

GUIDING QUESTIONS

Pre-Lesson Questions	During Lesson Questions	Post Lesson Question
 Why would you create a design for someone? Why do you think it matters if people do not pay the same price for something? what do you think labor cost means? What is a profit? What is Revenue? When you create a design for someone, how would you decide how much they will pay you? 	 Why does a competitor price matter? What is your role in the project? How did you over come that challenge? why do you think it is important to add in the labor cost of an item? why do you think designers needs to add in labor cost? Is it important to think about the quality of the product you are producing? why do you think you should be paid for your time while you are creating your design? when creating for a customer, why does it matter if the customer is happy with the design? 	 What goes into designing a creation for someone else? what were some of the advantages of working with peers? why is important to make sure prices are fair between customers? How does design encourage creation?

PLANNED LEARNING EXPERIENCES

- Lesson- 85 mins
- Engage-15 mins
 - Students will be shown a video about maximizing profits and production costs on Discovery Education. https://app.discoveryeducation.com/learn/videos/6446242f-3aa8-40dc-b600-07dcfa6f5e8b/
 - After the video is over there will be a class discussion on what needs to be considered when pricing a product, what competitors are pricing their similar product at, how to determine the cost of material used to make the product and the cost of labor to make the product, what the effect was when pricing a product too high.
 - I will ask them the pre-lesson questions from the video

• Problem Engagement- 15 mins

- Place students in groups of 3
- show the students the following scenario
 - two customers come into your store to buy a mug. One of the customers you charge 2 dollars for the mug. The other customer you charge 20 dollars for the mug. The customer who was charged 20 dollars is upset. On top of that, you lost money on the 2 dollar mug but you gained a lot of money on the 20 dollar mug. how can you prevent this from happening again?
 - Discuss with the class the key problems in the story. help the students flush out the most important problem in the scenario (this should be that the store owner needs to make sure their prices are consistent and will still make them money)

Inquiry and Investigation -20 mins

- students will get into their group to work on the following things:
 - what they already know about the problem
 - they know what to solve for, what the purpose is for solving the problem, how to figure out the cost of material, how to figure out the cost of their labor
 - students will decide what they need to know to solve the problem
 - the specific cost of materials, where to find the costs of materials, what their labor cost is per hour, an estimate of time to make the product, competitor's prices for similar product
 - Discuss possible resources
 - computer to look up costs of materials, rulers
 - Assign task and responsibilities
 - Researching the information needed to solve the problem

Problem Definition- 5 mins

• After completing their research, group members will discuss and determine what material cost and labor cost will be best when pricing their product

• Problem Resolution-20 mins

- Students will prepare and present their solution to the class
 - This will include what type of material they choose (quality and price), how much their labor cost is per hour, size of the design, comparing their mug to competitors, why it is important to have prices that are similar, and if the price is too high or too low what might happen

Problem Debriefing -10 mins

- The teacher will discuss why keeping prices fair and consistent is important, review why having prices too low can hurt a business, and adding in their labor so not to undervalue their product when selling.
- Students will reflect on how producers price an item that they may find in the store and

think about all that goes into pricing the product.

• Group Project- 110 mins

- Creating the Project continued-20 mins
 - Designers will continue to work on their project. They will be cutting out their design on their vinyl sheet, weeding the design, and transferring it onto the wood sign
- 7. Preparing to Present the Project -40 mins
 - Designers will write up a report in which they describe the process the group went through to create their project. They will include in the report all the steps they took and the decisions that they had to make. They will write about their design and why it should be picked based on the quality and appearance of their final product and why it symbolizes the customer which will be presented to the customer.
- 8. Present the Project- 30 mins
 - Designers will present their project to the customer. They will tell the customer about their design which will be about what they choose to incorporate that represents the customer. As well as why the customer should choose their sign. They will present to the customer the steps they took to create their product and the role of each person in the group.
- o 9. Reflect and Evaluate the Project- 20 mins
 - Designers will reflect on the steps and how each member of the team contributed to the completed project. They will each write their own report on how they think the project went and how they fell like it came together. They will evaluate themselves using the rubric and then compare it to the rubric evaluation that the teacher fills in.

ASSESSMENTS

The students will be assessed on the item they have made. This will be based on a rubric with a score of 1-3 in 3 different categories: teamwork, neatness, related to customer (I have rubric complete but I don't know how to attach it or copy and past it in here to make it look like the rubric).

DIFFERENTIATION

CONTENT	
accelerated time for learning	
PROCESS	

PRODUCT

The student's product will all be different.

LEARNING ENVIRONMENT

student will be teaching each other, collaborative

Unit Resources

Provide a listing of books, Web sites, videos, and/or other instructional materials that are intended to supplement the unit. Include resources intended for both teacher and student use. Be sure to use APA style for books/articles and provide a brief (1-2 sentence) annotation for Web sites and instructional materials.

VIDEOS

Centre Communications. (1996) *Maximizing Profits*. [Video Segment]. Retrieved from http://www.discoveryeducation.com

• This is a video of children creating a mud pie business and describing how to make and maximize profits while selling.

ConnectEd. (2013, January 9) Day in the Life: Graphic Designer [Video file]. Retrieved from https://www.youtube.com/watch?v=BmBK0 vbYnY&feature=youtu.be

• This is a video of a Graphic Designer explain what they do, day to day, what the job entails, and skills need for the job.

Seek Learning. (2015, August 20) A day in the life of a Graphic Designer [Video file]. Retrieved from https://www.youtube.com/watch?v=b3HmecDFF50&feature=youtu.be&t=18s

• This is a video of a Graphic Designer explain what they do, day to day, what the job entails, and skills need for the job.

ARTICLES

Comin, K. (November 26) *10 Reasons Why You Should Buy A Cricut Explore*. Retrieved from https://kikicomin.com/10-reasons-you-should-buy-a-cricut-explore/#comments

• This article discusses the reasons why a person might want to buy a Cricut Machine.

George, C. (2018, February 18). *Is Buying a Cricut Worth It?* Retrieved from https://heyletsmakestuff.com/cricut-worth-it/

• This article discusses if buy a Cricut is worth the investment.

Holder, C. (2016, November 15) Which Cricut Should I Buy? Retrieved from

https://www.keystoinspiration.com/cricut-explore-buy/

• This article discusses and compares the different types of the Cricut Machine.

Shaw, N. (2017, June 2) *5 Ways to Make Money with Cricut Explore Air 2*. Retrieved from https://www.doodlecraftblog.com/2017/06/5-ways-to-make-money-with-cricut.html

• This article discusses the way you can make money using a Cricut.

Wohlwend, J. (2017, June 29) What Is A Cricut Machine & What Can I Do With It? Retrieved from https://www.practicallyfunctional.com/what-is-cricut-machine/

• This article discusses what all the different things you can do with a Cricut Machine.

PICTURES

Beltran-Herrera, D. (Sculptor). (n.d.). European Birds. (Paper sculpture). Retrieved from https://www.creativeblog.com/graphic-design/paper-art-1131666

• This is a picture of a Bird made of paper.

Drenk, J. (sculptor). (n.d.). *Implements*. (Pencil sculpture). Retrieved from https://www.ignant.com/2014/03/06/top-10-wooden-sculptures/

• This is a picture of a sculpture made for pencils.

Siakkou-Flodin, M. (Sculptor). (n.d.). *Tire-Serpent*. (tire sculpture). Retrieved from https://insteading.com/blog/tire-art/

• This is a picture of tires made into a serpent.

Thomas, L., Zimmerman, T. (Scupltor). (n.d.). *Forest Folks*. (Paper Scultpure). Retrieved from https://www.creativebloq.com/graphic-design/paper-art-1131666

• This is a picture of a villiage made for paper.

Unknown. (n.d.) Bottle Cap Portrait (Portrait). Retrieved from https://list25.com/25-impressive-works-of-art-made-from-recycled-materials/

• This is a picture of a man that had been made of bottle caps.

Unknown. (n.d.). Computer Key Bag. (sculpture). Retrieved from https://list25.com/25-impressive-works-of-art-made-from-recycled-materials/

• This is a picture of a bag/purse that had been made from computer keys.

Unknown. (n.d). Wave made from Old Records. (sculpture). Retrieved from https://list25.com/25-impressive-works-of-art-made-from-recycled-materials/

• This is a picture of waves that have been made out of old vinyl records.

Valcarcel, M. (Sculptor). (n.d.). *The Tree of Knowledge*. (Paper sculpture). Retrieved from https://www.creativebloq.com/graphic-design/paper-art-1131666

• This is a picture of a tree made form the paper of a book.

Webb, D. (Wood Crafter). (n.d.). *Woodylion*. (Wood sculpture). Retrieved from http://twistedsifter.com/2012/10/wood-sculptures-dan-webb/

• This is a picture of a dandelion that is made for a piece of wood.

Webb, D. (Wood Crafter). (n.d.). *Drop*. (Wood sculpture). Retrieved from http://twistedsifter.com/2012/10/wood-sculptures-dan-webb/

• This is a picture of a drop on the top of a piece of wood that has been carved.

Webb, D. (Wood Crafter). (n.d.). *Always/Never*. (Wood sculpture). Retrieved from http://twistedsifter.com/2012/10/wood-sculptures-dan-webb/

• This is a picture of two different wood peices, once is a new candle, and the other is a picture of a used melted candle.

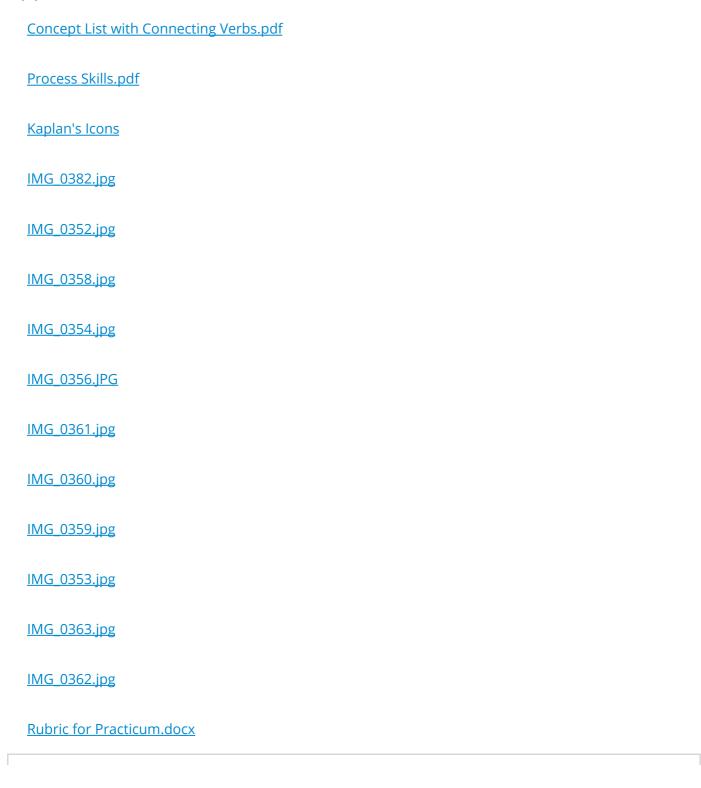
White, D. (Sculptor). (n.d.). *Dazed and Confused*. (Tire sculpture). Retrieved from https://insteading.com/blog/tire-art/

This is a picutre of tires made into a sculpture that looks somewhat like a tree.

Wilson, M. (sculptor). (n.d.). Bird made from metal utensils. (Metal sculpture). Retrieved from https://www.atlasobscura.com/articles/cutlery-silverware-birds-creatures-art

•	This is a picture of a brid that had been made from dining utensils.	

Appendix



Appendix item: IMG_0382.jpg Show location





Appendix item: IMG_0352.jpg Show location





Appendix item: IMG_0358.jpg Show location





Appendix item: IMG_0354.jpg Show location





Appendix item: IMG_0356.JPG Show location





Appendix item: IMG_0361.jpg Show location





Appendix item: IMG_0360.jpg Show location





Appendix item: IMG_0359.jpg Show location





Appendix item: IMG_0353.jpg Show location





Appendix item: IMG_0363.jpg Show location





Appendix item: IMG_0362.jpg Show location



