

## Lesson Plan

**Title:** Sustainable Structures

**High school grade level:** 9-12

**Teachers names:** Ana, Chantae, and Sydney

**Note:** Before you plan and write art experiences; pre-assess your students based on the proposed concepts, enduring understandings, and objectives of the unit/lesson(s). You may also gather this information from (previous) teachers, by reviewing already completed artwork, consulting curriculum materials, etc., to get a better understanding of what content students already know and what they will need to know to be successful.

### Pre-Assessment:

***This will need to be done prior to teaching your lesson.*** Outline the method you will use to determine the skill/knowledge level of your students based on the concepts/enduring understandings/objectives of the lesson. (Hint: turn these into questions.) Be specific in describing what you would recognize as proficient skill/knowledge.

Prior to the lesson, teachers will send a technology survey to students to evaluate their access to technology so they can best determine accommodations for the digital drawing aspect of this lesson. The questions are as follows:

1. Do you have an I-pad or drawing device? (To determine the number of I-pads to rent)
2. Do you have an apple pencil or stylus that is compatible with your drawing device?
3. If you have a stylus/device, what digital drawing apps do you have on it?
4. Is there anything else that would be helpful for us to know

After teachers present their teaser lesson, students will be asked to fill out a survey with the following questions:

1. What does it mean to be Sustainable?
2. What does it mean to have a sustainable art-making practice?
3. Do you think everybody has the ability to experience or practice sustainability? Why or why not?
4. Do you know of any other artists who use sustainable materials?
5. What is the difference between equity and equality?
6. How experienced are you with gardening?
7. How can sustainable art methods and practices contribute to removing barriers in front of and promoting sustainability?
8. How much experience do you have with digital drawing?

Based on previous lessons and discussion, students should already know:

- How to manipulate forms 3-dimensionally

- A little bit about sustainability/sustainable practices
- How to create a classroom environment in which everyone is respectful of their tools and materials

**Performance:**

**What will students accomplish as a result of this lesson?** This can be presented to students in the form of a story. In this narrative, the students take on a role and create a learning product about a specific topic for a certain audience. (RAFT – Role / Audience / Format / Topic)

**Topic:** Students will learn about waste and sustainable forms and structures, why this needs to be happening as our world environment declines, and how artists use sustainable art-making to remove barriers to, and promote sustainability.

The lesson applies Julia Marshall's new perspective of "five strategies of integrating contemporary art" to design the roles that students can take on in three different choice stations:

**1. Rammed Earth Student Role**

Mimicry: Students would mimic a pedologist (study of soils) investigating the makeup and formation of certain soils, collecting them and utilizing them to sculpt and create sculptures. \*see concepts

**2. Planters Student Role**

Extension and Projection: Students will consider how certain plants will grow/interact with the environment.

- How can the plants/veggies you choose to plant be used in your school/community?

Mimicry: Students will mimic gardeners, considering placement, layering soils, and then designing markers for each of their plants.

Metaphor?

- How does growing sustainable foods and integrating community planters equate to social justice?

**3. Recycled Birdhouses Student Role**

Reformatting: Students will collect recycled milk cartons and materials that they can use to create a piece of architecture. Students will consider how we can re-contextualize the use of recycled materials (ex: milk cartons) to create something entirely new.

**Audience:** art education students and faculty

**Concepts: \*\***

List the **big ideas** students will be introduced to in the lesson. These ideas are universal, timeless, and transferrable. Examples of concepts used in art might include: Composition, Patterns, Technique, Rhythm, Paradox, Influence, Style, Force, Culture, Space/Time/Energy, Line, Law/Rules, Value, Expressions, Emotions, Tradition, Symbol, Movement, Shape, Improvisation, and Observation **Look for concepts in the standards, content-specific curriculum, etc.**

- Sustainability and its three pillars (*Environmental, Economic, Social*)
- Community
- Equity
- Race and class dynamics that are informed by privilege and oppression →Equality vs Equity

**Concepts:**

- Space, Sculpture, Installation, Botany/Gardening, Pedology, Time, Digital Drawing

**Enduring Understanding (s):**

Enduring Understandings **show a relationship between two or more concepts**; connected with an active verb. The best enduring understandings not only link two or more concepts; but demonstrate why this relationship is important. As concepts, they are timeless, transferrable, and universal.

- Students will learn about sustainability through artmaking processes.
- It will be important for students to understand sustainability so that they can understand the need for environmental/ social justice and how this is situated within the framework of equity.
- Students will explore the relationship between themselves, the community, and the global environment.
- Students will learn how to create art that conceptually promotes environmental justice
- Students will consider whether or not sustainable art-making practices are accessible and equitable.
- Students will learn how to digitally conceptualize their work before they create.
- Students will reflect on their pieces individually and the relationships between their pieces as they are installed within the garden space.

**Standards: (All lessons should address all standards.)**

1. Observe and Learn to **Comprehend**
2. Envision and Critique to **Reflect**
3. Invent and Discover to **Create**
4. Relate and Connect to **Transfer**

**Objectives/Outcomes/Learning Targets:**

Objectives **describe a learning experience** with a **condition → behavior (measurable) → criterion**. Aligned to: Bloom's – Standards – GLEs - Art learning and, when appropriate, Numeracy, Literacy, and Technology. **Should be written as:** Objective. (-Co Visual Art Standard: \_\_\_\_\_ - GLE: \_\_\_\_\_ -SHoM: \_\_\_\_\_ -Art learning: \_\_\_\_\_ -Numeracy, Literacy, and/or Technology)

- Using our project presentation and by working with various materials, students will understand the deeper aspects and ideas behind truly sustainable practices.
  - Standard: *Comprehend*
    - GLE: 3. Use artmaking processes as forms of inquiry to increase independent reasoning and perception skills to increase knowledge.
  - SHoM: Express, Understand the Art World
  - Art Learning: Critical reflection/aesthetics/transfer
  - Literacy: Students will engage with documentaries and videos to understand the materials that they are working with and their conceptual potential. This utilizes their listening literacy skills as well as their visual literacy skills.
- Using various materials such as soil, sand, concrete, and recycled materials, students will create new pieces of art by repurposing, recontextualizing, and ramming their sustainable materials.
  - Standard: *Create*
    - GLE: 2. Ideate and build works of art and design to demonstrate growth and proficiency in traditional and new art media.
  - SHoM: Stretch and Explore
  - Art Learning: *Techniques*: three-dimensional collage, mixing/ramming (rammed earth), and layering soil and sediment.
- Using digital drawing technology, students will digitally plan decorative designs that will embellish the 3D forms that they create.
  - Standard: *Create*
    - GLE: 2. Articulate and demonstrate that the making and study of art and design can be approached from a variety of perspectives.
  - SHoM: Envision
  - Art Learning: *Materials*: iPads, tablets, Apple Pencils, and Styluses *Technique*: digital drawing
  - Technology: Procreate, Apple Drawing features, other programs that students already have access to
- Using the presentation slides, students will learn about waste and sustainable art and architecture and why this needs to be happening as our world environment declines.

- Standard: *Comprehend*
  - GLE: 2. Interpret, analyze and explain the influence of multiple contexts found in visual art and design.
- SHoM: Understand Art Worlds
- Art Learning: Historical/multicultural content
- Literacy: Students will learn about waste and sustainable art via a documentary and articles.
- Using inquiry questions and presentation slides about equity, Earthships, and rammed earth, students will learn about privilege and class divides and they will better comprehend sustainability as costly and only accessible by privileged groups and identities.
  - Standard: *Comprehend*
    - GLE: 3. Use artmaking processes as forms of inquiry to increase independent reasoning and perception skills to increase knowledge.
  - SHoM: Observe
  - Art Learning: Historical/multicultural content
  - Literacy: Students will engage in discussion about who has access to sustainable forces and who does not.
- Using the sustainable artmaking practices of contemporary artists that were presented to them by their instructors, students will create sculptures that inform their audience about the importance of sustainable artmaking, as well as promote the process thereof.
  - Standard: *Create*
    - GLE: 2. Articulate and demonstrate that the making and study of art and design can be approached from a variety of perspectives.
  - SHoM: Stretch and Explore, Develop Craft
  - Art Learning: *Conceptual ideation*: Sustainable artmaking *Transfer*: Techniques of contemporary artists to own practice
- Using collaborative efforts, students will experience composing an *installation* of multiple works from their station practices, to create a space that expresses sustainability.
  - Standard: *Transfer*
    - GLE: 2. Develop proficiency in visual communication skills that extends learning to new contexts
  - SHoM: Develop Craft, Engage and Persist
  - Art Learning: *Installation Techniques*: nailing, stapling, grounding, layering, planting
- Using their completed work, students will be able to interpret how sustainability has affected the aesthetic and structure of their work as well as determine how sustainable artmaking can be made equitable for all.
  - Standard: *Reflect + Transfer*

- GLE: 1. Use criteria and personal discernment to evaluate works of art and design, taking into consideration the variables that influence how the work is perceived.
- GLE: 3. Utilize the practice of artmaking, and research historical and cultural contexts, to discern between different viewpoints, critique social problems and effect social change.
- SHoM: Reflect
- Art Learning: Critical reflection
- Literacy: Students will discuss how their work helps them understand the equitable nature of sustainable art making processes.

**Differentiation:**

Explain specifically how you have addressed the needs of exceptional students at both ends of the skill and cognitive scale. Describe the strategies you will use for students who are already proficient and need growth beyond what you have planned for the rest of the class, as well as modifications for students with physical and/or cognitive challenges. **Students must still meet the objectives.**

<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for students to express understanding.)	<b>Access</b> (Resources and/or Process) <ul style="list-style-type: none"> <li>● If students have limited mobility, the teachers can find a way to stabilize materials so that they are easier to manipulate such as using <i>wood blocks</i> or <i>stable bases</i> for the rammed earth and birdhouses specifically.</li> <li>● If a student has specific needs the teachers can collaborate with them and assist them in figuring out which project would best suit their ability levels.           <ul style="list-style-type: none"> <li>○ For example, the garden planters and outdoor space group participants need to be able and willing to lift bags of material and rake/plant.</li> </ul> </li> <li>● Some students may not have access to laptops or tablets to participate in the digital drawing. We will be providing them with tablets as well as the free program that they can go back and use their learned skills to use in the future.</li> </ul>	<b>Expression</b> (Products and/or Performance) <p>Students will still complete a product from the chosen station/project.</p> <p>Chosen stations will come together to install in the space and assess overall performance of the group installation.</p>
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Extensions for depth and complexity:	<b>Access</b> (Resources and/or Process) <p>We will provide students with a tool for digital planning and drawing which they can incorporate into future projects.</p> <p>This project has a huge time component. <i>How will these recycled materials hold up against time? How will the plants grow and bear fruit? How does degradability/ longevity affect the art piece and the perception of the art piece?</i></p>	<b>Expression</b> (Products and/or Performance) <p>Students will produce digital drawings.</p> <p>Students will develop an understanding of the possibility of planning projects digitally.</p>
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### **Literacy:**

List terms (vocabulary) specific to the topic that students will be introduced to in the lesson **and describe how literacy is integrated into the lesson.**

**Environmental Justice:** the struggle to improve and maintain a clean and healthful environment, especially for those who have traditionally lived, worked and played closest to the sources of pollution.

**Equality:** Teachers will describe ways we can incorporate sustainable practices that are accessible to all financial backgrounds

**Equity:** Each individual or group of people is given the same resources and/or opportunities as another group. Allocating the exact resources and opportunities needed to reach the same outcome.

**Pedology:** Study of formations, characteristics, and distribution of soils.

**Race and Class:** Describe how sustainable resources and materials are typically only financially accessible to upper-class citizens.

**Recontextualizing:** Considering these recycled materials in a new or different context.

**Recycled Materials:** Reusing old materials that would typically be discarded.

**Sculpture:** Students will be creating three-dimensional art pieces and installing them in the garden space.

**Sustainability:** Reducing waste, and protecting our natural environment.

**Visual Arts:** the arts created primarily for visual perception, such as drawing, graphics, painting, sculpture, and the decorative arts.

*Literacy will be integrated through a secure understanding of these terms and how they apply to our planned practices in the classroom as well as literacy in the studio setting and critique.*

**Materials:**

Must be grade-level appropriate. List everything you will need for this lesson, including art supplies and tools. (These are the materials students will use.) **List all materials in a bulleted format.**

**Planters**

- Seeds/seedlings
- Soil
- Garden Boxes
- Compost (raw and processed)
- Collected Sticks
- Trash bags
- Stacking materials: wood, dried leaves
- small shovels/hoes
- wooden sticks for marking
- sharpies

**Birdhouses**

- Recycled materials - milk/juice cartons
- Hot glue
- Acrylic paint
- Chopsticks
- Sheet metal
- birdfeed

**Rammed Earth**

- Soil
- Cardboard
- Ducttape
- Concrete
- Sand
- Water
- Cardboard for forms
- Natural dyes and materials

- wooden blocks for ramming
- spatulas for mixing
- buckets/mixing bowls

#### **Resources:**

**List** all visual aids and reference material (books, slides, posters, etc. Be specific; include title, artist, etc. **Make reference to where the material can be found.** (These are the resources used by the teacher to support/develop the lesson.) **List all resources in a bulleted format.**

- **Global Institute of Sustainability and Innovation**  
Julie Ann Wrigley Global Futures Laboratory, ASU  
<https://sustainability-innovation.asu.edu/media/video/morris-collin/>
- **Vik Muniz: “Waste Land”**  
<https://colostate.kanopy.com/video/waste-land-0>
- **C.L.A.S.S. Smart Voices Fashion’s 4th dimension – The power of sharing responsible innovation**  
<https://www.classecohub.org/archives/10909>
- **Bard Graduate Programs in Sustainability: The Three Pillars of Sustainability**  
<https://gps.bard.edu/a-crash-course-in-sustainable-development>
- **Jay Wolf Schlossberg Cohen and the Jewish Community Garden**  
<https://drive.google.com/file/d/1DOJbZLN8PsoDuWFXm4NYpP3Zbo0GCVAG/view?usp=sharing>
  - **Anne Percoco and Recycled Art**  
[https://docs.google.com/presentation/d/11xXCzeE0K\\_hfl0tW6\\_wswnUS2Jx9enfPIva-ZhyhtKI/edit?usp=sharing](https://docs.google.com/presentation/d/11xXCzeE0K_hfl0tW6_wswnUS2Jx9enfPIva-ZhyhtKI/edit?usp=sharing)
  - **Sustainability Stories: Making Art with Plastic Waste**  
<https://youtu.be/F6A4vGKOQE4>
  - **Read/Seed/Write: JBLC Community Gardens**  
<https://www.justbuffalo.org/community/read-seed-write/>

- **Art and sustainable ecology and economics | Vaughan Judge | TEDxBozeman**

<https://youtu.be/hsX60N8AyZQ>

- **Katie Okamoto: “If You’re Serious About Sustainability, Social Equity Can’t Just Be Another Add-on”**

<https://metropolismag.com/viewpoints/social-equity-sustainability/>

#### **Preparation: \*\***

What do you need to prepare for this experience? **List steps of preparation in a bulleted format.**

- The teacher will prepare a slideshow to present the learning objectives as well as the background vocab/information and artists to build a student knowledge base.
  - [https://docs.google.com/presentation/d/1MSlpvC1TIEQGYGIXUgYTZhunxp\\_pecgO7i4i1tN9jo/edit?usp=sharing](https://docs.google.com/presentation/d/1MSlpvC1TIEQGYGIXUgYTZhunxp_pecgO7i4i1tN9jo/edit?usp=sharing)
- Teachers will scope out places and/or bins to have students collect recycled materials from (Milk cartons, scrap metal, compost, etc..) \*see material list.
  - Teachers will also send out a note to encourage students to bring in milk cartons or larger plastic materials for the bird-house project.
- Teachers will prepare the tablets ahead of time for students to engage in digital drawing.
- Teachers will set out planters in the garden space provided and clear the space of rocks and other wild plants.
- Teachers will create examples for the rammed earth, birdhouse, and a Tupperware of the layered earth to give students an idea of the options for activities
- Teachers will create individual slideshows for each of the activity options.
  - Rammed Earth:  Rammed Earth Earth Blocks
  - Garden Planters:  Group Three.pptx
  - Bird Houses:  Anne Percoco

**Safety: \*\***

Be specific about the safety procedures that need to be addressed with students. **List all safety issues in a bulleted format.**

Birdhouses: Students will need to be aware of the safety hazards that come with using box cutters, and the ways to use them properly (stabilize material, cut by pulling the blade toward your body not away, close blade when not in use, awareness of peers and space around while using them)

Rammed Earth: Students will need to exercise caution when ramming the earth with the wooden rods as well as being aware of their peers around them and not swinging the rods around. Concrete, sand, and soil are messy and somewhat abrasive to the hands (concrete is actually toxic to bare skin). Students will use gloves and cups to scoop the materials.

Garden Planters: Soil and wood and compost may be dirty and somewhat abrasive to the hands so students will use shovels and gloves. Students will need to be aware of others around them when using the shovels.

**Action to motivate/Inquiry Questions: \*\***

Describe how you will begin the lesson to **stimulate the student's interest**. How will you pique their curiosity and make them interested and excited about the lesson? **What inquiry questions will you pose?** Be specific about what you will say and do to motivate students and get them thinking and ready to participate. Be aware of the varying range of learning styles/intelligence of your students. Some ideas might include: telling a story, posing a series of questions, role-playing, etc.

Teachers will ask students more personal inquiry questions after they complete their quick-write regarding sustainability.

- Quick Write: What is sustainability? What do you know about this topic? Make a list or jot down some thoughts on a scratch piece of paper and write it on the whiteboard up front!

Inquiry Questions for Further Discussion in Jigsaw Activity:

1. *Does your household recycle? - To what extent does your family/household care about recycling?*
2. *Have you ever made art from recycled materials? Explain!*
3. *What examples of sustainable architecture or green living can you think of/ have you seen?*
4. *What's your experience with plants and gardening?*
5. *What's an example of equity you can think of within your own community?*

Students will also likely be inspired/excited about the teaser videos and the opportunity to sculpt with foreign materials and utilize iPads.

**Ideation/Inquiry: \*\***

Ideation is the creative process of generating, developing, and communicating new ideas, where an idea is understood as a basic element of thought that can be visual, concrete or abstract. List and describe inquiry questions *and* processes you will engage students in to help them develop ideas and plans for their artwork.

Teachers will guide students in these inquiry questions as they digitally draw/ideate their thoughts. They sketch/draw/collage images that demonstrate how sustainable artmaking contributes to the conceptual nature of their work.

**Inquiry Questions:**

- What artists' work stood out to you and why?
- To what extent does your family/household care about recycling?
- What examples of sustainable architecture or green living can you think of /have you seen? Is what you have seen economical/equitable?
- Have you ever made art from recycled materials?
- How can you manipulate your materials in a way that honors and promotes sustainability?
- What kind of experience do you have with plants and gardening?

**Instruction:**

Give a detailed account (**in bulleted form**) of **what** you will teach. **Be sure to include approximate time for each activity and instructional methodology: skills, lecture, inquiry, etc.** Include motivation and ideation/inquiry where appropriate; including what students will understand as a result of the art experience

Day	Instruction - The teacher will... (Be <b>specific</b> about what concepts, information, understandings, etc. will be taught.) <b>Identify instructional methodology. KNOW (Content) and DO (Skill)</b>	Learning - Students will... i.e.: explore ideation by making connections, comparing, contrasting; synthesizing possibilities for each painting technique; etc. (Be <b>specific</b> about what will be the <b>intended result</b> of the instruction as it relates to learning.) <b>UNDERSTAND</b>	Time
1	1) Teachers will instruct students to complete a “what do you think sustainability means” quick write to	1) Students will explore ideation by making connections to their personal lives	Quick-write: 3 mins

	<p>pre-assess students' knowledge of what Environmental Justice is to them and what sustainability is/looks like to them. (<a href="#">slide 4</a>)</p> <p>2) Teachers will pose inquiry questions for further discussion and to interest students (<a href="#">slide 5</a> )</p> <p>3) The teachers will present the work of Vik Muniz and have students do a cold read of his work. The teacher will ask guiding questions to aid discussion. Teachers will show a short intro to the documentary: <i>Wasteland</i> (<a href="#">slides 6 -10</a> )</p> <p>4) The teachers will give a group presentation on the overall big idea: sustainable structures and equity; defining key terms and asking ideation questions so students can make connections (<a href="#">slides 11-18</a>)</p> <p>5) The teachers will then provide descriptions and examples of each project students will have the option to work on. (<a href="#">slides 19-25</a>) The teachers will then have students pick numbers</p>	<p>Students will explore what they see in the world around them in terms of sustainability and why they think it is important as well as ways they can connect to acts of sustainability and taking care of their own environment.</p> <p>2) Students will engage in discussion surrounding topics of community gardens, sustainable materials, and equity. Illustrate their understanding of the content through think/pair/share.</p> <p>3) Students will engage with documentaries and videos to understand the materials that they are working with and their conceptual potential. This utilizes their listening literacy skills as well as their visual literacy skills.</p> <p>4) N/A</p> <p>5) N/A</p>	<p>Discussion: 3 min</p> <p>Vik Muniz: 8 mins</p> <p>Group presentation: 15 mins</p> <p>Present project options/assign groups: 5 min</p>
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	<p>from a bucket to determine the order in which they get to choose their station/role.</p> <p>6) Teachers will provide iPads for students who need them. Students will be instructed to download an ideation sheet located on the teacher blog (<a href="#">link here</a>) with a digital drawing demo.</p> <p>7) Teachers will break students into individual groups to give specific instructions, ask questions about students' ideation process, and how the conceptual nature of their work contributes to the overarching idea of sustainability and equity. Teachers will also introduce specific artists that practice the methodologies of sustainability.</p>	<p>6) Students learn how to use digital drawing to develop their ideas. Drawing inspiration from the contemporary artists that were presented to them, students will create sculptures that inform their audience about the importance of sustainable artmaking.</p> <p>7) Students will learn more about their assigned project and ask all questions they may have before beginning their ideation process.</p> <ul style="list-style-type: none"> <li>a) Garden: Students will synthesize the design possibilities for the garden layout and learn more about Christina Vega-Westoff (<a href="#">link here</a>)</li> <li>b) Birdhouse: Students will learn about the work of Anne Percoco, collaborate, and work through birdhouse designs (<a href="#">link here</a>)</li> <li>c) Rammed Earth: Students will learn more about the rammed earth process by analyzing the work of Andy Goldsworthy</li> </ul>	<p>Digital drawing demo: 5 mins</p> <p>Individual project introduction: 15 mins</p>
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	<p>8) Teachers will allow students time to begin working on their final pieces for the remainder of the class period.</p> <p><b>Rammed Earth:</b></p> <ul style="list-style-type: none"> <li>→ Teachers will instruct students to exercise caution when ramming the earth with the wooden rods as well as to be aware of their peers around them and not swing the ramming tools. Concrete, sand, and soil are messy and somewhat abrasive to the hands.</li> </ul> <p><b>Garden Planters:</b></p> <ul style="list-style-type: none"> <li>→ Teachers will: <ul style="list-style-type: none"> <li>◆ instruct students on the proper use of gloves.</li> <li>◆ Instruct students on the hazards of using shovels and the importance of spatial awareness</li> </ul> </li> </ul>	<p>architects from around the world (<a href="#">link</a> here)</p> <p>8) Students will use their collaboration skills, brainstorming, and creative problem-solving skills to choose sustainable materials and create various sculptural forms.</p> <p><b>Rammed Earth:</b></p> <ul style="list-style-type: none"> <li>→ Students will learn to exercise caution when using art materials.</li> <li>→ Students will learn how the material of the thing contributes directly to its conceptual nature.</li> <li>→ Mimicry: Students will mimic a pedologist (study of soils) investigating the makeup and formation of certain soils, collecting them and utilizing them to sculpt and create their bricks</li> <li>→ Students will use gloves and cups to scoop the materials.</li> </ul> <p><b>Garden Planters:</b></p> <ul style="list-style-type: none"> <li>→ Students will learn to exercise caution when using specific tools and materials.</li> <li>→ Extension and Projection: Students will consider how certain plants will grow/interact with the environment, asking questions like how can the</li> </ul>	<p>Work time: 1.25 hours</p>
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<ul style="list-style-type: none"> <li>◆ Teach students about the relationship between plants and their environment</li> <li>◆ Teach students about the proper placement and layering of soils</li> <li>◆ Connect with inspiring artists and equate how the growth of gardens and community planters equates to social justice</li> </ul> <p><b>Recycled Birdhouses:</b></p> <ul style="list-style-type: none"> <li>→ Teachers will:           <ul style="list-style-type: none"> <li>◆ Instruct proper safety practices that come with using box cutters, and the ways to use them properly (stabilize material, cut pulling the blade toward your body not away, close blade when not in use, awareness of peers and space around while using them)</li> <li>◆ show how designs are transferred onto final art piece and possible painting techniques</li> <li>◆ Connect with inspiring artists and equate how the recycling and repurposing of commonly discarded materials make sustainable practices more affordable and accessible</li> </ul> </li> </ul>	<p>plants/veggies you choose to plant be used in your school/community?</p> <ul style="list-style-type: none"> <li>→ Mimicry: Students will mimic gardeners, considering placement, layering soils, and then designing markers for each of their plants.</li> <li>→ Metaphor: Students will understand how growing sustainable foods and integrating community planters equates to social justice</li> </ul> <p><b>Recycled Birdhouses:</b></p> <ul style="list-style-type: none"> <li>→ Students will learn to exercise caution when using specific tools and materials.</li> <li>→ Students will synthesize design possibilities and painting techniques</li> <li>→ Reformatting: Students will collect recycled milk cartons and materials that they can use to create a piece of architecture. Students will consider how we can re-contextualize the use of recycled materials (ex: milk cartons) to create something entirely new?</li> </ul>	
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	<p>9) Teachers will instruct students to clean up, gather back in the main classroom, and thank them for their contributions to the day.</p>	<p>9) Students clean up and then they will be invited to share one thing that they have learned and one thing they are looking forward to on Wednesday</p>	<p>Cleaning/closing: 15 min</p> <p><b>Total time:</b> Approx 3 hours</p>
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Day 2	<p>1) Teachers will give a short introduction to the entire class and let students know the layout of the day and split into individual group</p> <p>2) Teachers will guide students in continuing to work on constructing their sculptures and installations for the garden! After most students have completed their projects, Teachers will instruct students as to how they can connect all of their work together with the addition of decorative “trash.”</p> <p>**Students who finish early will assist the garden group in finalizing their processes of using trash to create decorative designs on the sides of the planters.</p> <p>3) Teachers will guide students in a reflection on their individual work and symbolically plant seeds to recognize their newfound knowledge, contributions, and obligations to the land and to each other.</p>	<p>1) N/A</p> <p>2) Students will utilize the practice of artmaking, and research historical and cultural contexts, to discern between different viewpoints, critique social problems and effect social change. Students will understand how to transfer their learnings regarding sustainability and equity to their finalized art pieces and consider how all of their artwork relates to one another.</p> <p>3) Students will discuss how their work helps them understand the equitable nature of sustainable art-making processes.</p>	<p>Small intro: 15 mins</p> <p>Individual project work: 1.75 hours</p> <p>Clean-up / Reflection: 30 min.</p>
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	<p>4) Teachers will instruct students in the rammed earth and birdhouse groups in installing their work in the garden space as well as planting seeds in the garden.</p>	<p>4) Students will wrap up the lesson by planting seeds as a symbol of their learning! Those who need to install their work will do so with nails and staple guns whereas others whose installation processes are simpler will assist with the gardening process. Using collaborative efforts, students will experience composing an installation of multiple works from their station practices, to create a space that expresses sustainability.</p>	<p>Install 30 min.</p> <p>Total time: approx 3 hrs.</p>
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**Student reflective/inquiry activity: \*\***

Sample questions and activities (i.e. games, gallery walk, artist statement, interview) intended to promote deeper thinking, reflection, and refined understandings precisely related to the grade-level expectations. How will students reflect on their learning? A participatory activity that includes students finding meaning, inquiring about materials and techniques, and reflecting on their experience as it relates to objectives, standards, and grade-level expectations of the lesson.)

During their reflection, students will have the opportunity to teach the other two groups about their specific activity, their project, and how it connects to sustainability and environmental justice. This will be both reflective and informative because the individual that is presenting will have the opportunity to deepen their understanding by being able to explain it to others, and the groups that are listening will be learning takeaways that differ from their own activity. Students will also be planting seeds in the garden to represent/recognize their newfound knowledge, contributions, and obligations to the land and to each other. Students will be asked to explain how their projects answer the overarching question: **How can sustainable art-making processes and methods contribute to removing barriers to and promoting sustainability?**

<p><b>Post-Assessment (teacher-centered/objectives as questions):</b> Have students achieved the objectives and grade level expectations specified in your lesson plan?</p>	<p><b>Post-Assessment Instrument:</b> How well have students achieved the objectives and grade level expectations specified in your lesson plan? Include your rubric, checklist, rating scale, etc.</p>
<ul style="list-style-type: none"> <li>• Did students learn about sustainability through artmaking processes?</li> <li>• Do students understand the need for equity when it comes to sustainability and sustainable practices?</li> <li>• Can students recognize the relationship between themselves, the community, and the global environment?</li> <li>• Have students designed and created a piece of art that promotes sustainability, reduces waste, and confronts the realities of sustainable practices?</li> </ul>	<p>For the post-assessment teachers will ask students to stand up and share their projects with the rest of the class. They will be asked to describe how their project design promotes sustainable practices, using the knowledge they learned throughout the entire process!</p> <p>Teachers will also facilitate a final discussion as a class about how all three projects are interrelated and how they connect to the overall idea of accessible sustainable practices.</p> <p>Teachers will also utilize the post-assessment surveys that students filled out as directed by Dr. Chien.</p>

Each writer please write your own reflection for the entire peer teaching. Identify your name at the beginning of your reflection.

**Self-Reflection:**

*After the lesson is concluded, write* a brief reflection of what went well, what surprised you, and what you would do differently. Specifically address: (1) To what extent were lesson objectives achieved? (Utilize assessment data to justify your level of achievement.) (2) What changes, omissions, or additions to the lesson would you make if you were to teach again? (3) What do you envision for the next lesson? (Continued practice, reteaching content, etc.)

**Sydney's Reflection:** [link here](#)

**Chantae's Reflection:** [!\[\]\(5f2ad55541d1c76614ad618336f6fa7b\_img.jpg\) chantae reflection](#)

**Ana's Reflection:** [link here](#)

**Documentation**

Please identify each person's duty for your lesson documentation on the peer teaching blog. Everyone must take an equal part in the duty.

Pre-assessment instruments and teaser: All

Day 1 teaching and learning documentation: All

Day 2 teaching and learning documentation: All

**Appendix:** Include all handouts, prompts, written materials, rubrics, etc. that will be given to students.

Presentation Link:

[https://docs.google.com/presentation/d/1MSlpvC1TIEQGYGIXUgYZbhunxp\\_pecgO7i4i1tN9jo/edit?usp=sharing](https://docs.google.com/presentation/d/1MSlpvC1TIEQGYGIXUgYZbhunxp_pecgO7i4i1tN9jo/edit?usp=sharing)

Ideation Sheet:

[https://docs.google.com/document/d/16Kpeef8nX0E\\_sWtQul7LLMU\\_TXKfHcpaM2Zv2dNvKAY/edit?usp=sharing](https://docs.google.com/document/d/16Kpeef8nX0E_sWtQul7LLMU_TXKfHcpaM2Zv2dNvKAY/edit?usp=sharing)