

Department of Arts Administration, Education and Policy

UNIT PLAN OVERVIEW

(Revised 2022)

Teacher Candidate	Holly Romamo
School	Hastings Middle School, Upper Arlington
UNIT TITLE	Building the Future
Length of Class Period	
Approximate Number of Students in Each class	24
Grade Level or Course Title	6th
Beginning Date for this <i>Unit</i>	November 15
Ending Date for this <i>Unit</i>	November 17

ENDURING UNDERSTANDINGS (FROM ODE 2022 STANDARDS)

- 6.1 CR** Reference multiple sources for visual expression
- 6.2 CR** Brainstorm and experiment independently with ideas
- 6.1 RE** Select relevant vocabulary to define and describe works of art
- 6.1 CO** Identify how art reflects changing cultures over time
- 6.3 CO** Link observations, life experiences, and imagination for personal and creative expression

CRITICAL ISSUE / BIG IDEA

A). Anticipatory Set (what do the students already know and how will you capture the students interest in the concepts you are presenting)

B). Rationale (why is this unit of study relevant?)

A. Students have previous experience working within a group on a project. Students will know how to brainstorm and utilize sketches during the project planning phase. Students will have been exposed to books, movies, television shows, and/or video games that are futuristic in concept. Students have had exposure to environmental concerns through society and science class. Students experience how technology has shaped our daily lives. Students live in dwellings, so they can easily consider what might be necessary to include in a design for a house. Some students will have knowledge on how to use drawing apps on their iPads. They will know how to research online.

To catch student's interest, I will be using a pop culture reference with the movie "Back to the Future 2." In this movie (released in 1989), the creators had to imagine a future home for the year 2015. As a class, we will review and discuss what technology the

movie thought we would have by the year 2015 and we will compare to what has actually been accomplished. We will also look at the work of modern architects and what some think the year 2050 will look like.

- B. By middle school age, many students have considered what types of jobs/careers they might pursue, whether self-motivated or socially motivated. “Adolescence is a period in which boys and girls explore the society in which they live, the subculture into which they are about to move, the roles they may be called upon to play, and the opportunities to play roles which are congenial to their personalities, interests, and aptitudes (Super, 1957). It is because of this that middle school is a good time for students to be exposed to possibilities within the work force, where the stakes are low and it’s easy to change course. As an art educator, it is my responsibility to cover some career options that are within the creative realm.

For this unit, students will learn about the creative field of architecture —what an architect does in their day-to-day job, what areas the focus in, and what type of education they need. Then, through the process of design thinking, the students will apply 21st Century Skills such as communication, creativity, collaboration, critical thinking, flexibility, and productivity as they work in groups to design and present a house design for the year 2053. Since this age group “strives for belonging and wants to socialize with peers, lessons should incorporate learning tasks in which they can collaborate with students” to learn how to work together effectively and engage in a lower-stakes project since they want to “avoid looking inferior to their peers at all costs” (Sickler-Voigt, 2020).

Central Focus (creating, presenting, interpreting, responding, and/or relating art to context)

- Using Design Thinking Skills, students will bring their unique perspectives and imaginations to create a home for the year 2053
- Within a peer group, students will collaborate to create and present a home design for the year 2053

Essential Questions (provocative, engaging, critical)

- What does an architect do?

- How does the client and location affect an architect’s design when they are creating a home?
- What might a home look like in 30 years?

Possible Integration

This project could be integrated with a science unit about global population and climate change, asking the students to create an eco-conscious, sustainable home.

DESCRIPTION OF THE ESSENTIAL EDUCATIONAL CONTENT OF THIS UNIT

Lesson One

Title	What is an architect?
Lesson Description	<p>To support the sixth graders exploring professional job opportunities, and to support lesson two and three of this unit, the students will get an overview of a career in architecture. They will learn about what an architect does, different types of architectural foci, and the career path to become one.</p> <p>To get a modern perspective of architecture, the students will also be introduced through a video to architects from around the world: Santiago Calatrava, Zaha Hadid, Frank Gehry, Biaka Ingels, and Norman Foster. Students will then reflect on their personal interest in the profession.</p> <p>To finish, and to support forward thinking for lesson 2, the students will view a video from “Back to the Future 2” where the movie, which takes place in 1985, predicted the lifestyle and technology of 2015.</p>
Approximately how long will this lesson take?	1 class

Lesson Two

Title	Building the Future
Lesson Description	<p>Now that the students are familiar with the professional career of architecture, they can become architects in our classroom design firm “Hastings & Associates” and design a house for the year 2053. In groups</p>

	<p>of four, they will be given a “client” family to design for. As a team, they will talk through and brainstorm, with the support of an “Architectural Brief” worksheet, their design based on the client’s specific needs and the climate for which they are building, just as an architect would. Since this project is forward thinking, the students will also take technology and sustainability into consideration as these are, and will continue to be, important considerations for the future.</p> <p>With the aid of teacher support, student groups must create two 2D architectural renderings of their home design as well as a 3D model of a single room within it. Students will self-assign who will be the “drafters” and who will be the “modelers” within their groups to complete the 2D and 3D requirements for their design.</p>
Approximately how long will this lesson take?	1 1/2 classes
Lesson Three	
Title	Parade of Homes
Lesson Description	As if an architectural team presenting to a client, the student groups will each be given 3 minutes to present their home design to the class. Using their architectural brief as a guide, they will share who their client was and all considerations for their design. Their classmates, as well as the teacher, will be allotted a few minutes to ask questions per group.
Approximately how long will this lesson take?	1/2 class

Explain how technology has been used in this unit

- Students will use their iPads and Mentimeter to answer the assessment question “What does an architect do?”
- Google slides and smart screen will be used to present the lessons
- Since each student has a school-provided iPad, they will have the option of creating their

house renderings using a drawing app.

LESSON PLAN

Teacher Candidate	Holly Romano
School	Hastings Middle School

LESSON NUMBER	1
Lesson Title	What is an architect?
Length of Class Period	40 minutes
Approximate Number of Students in Each class	24
Grade Level or Course title	6th
Beginning Date for this Lesson	November 15
Ending Date for this Lesson	November 15

CONTENT STATEMENT – CREATING (CR) (FROM 2022 ODE STANDARDS)

6.1 CR Reference multiple sources for visual expression

CONTENT STATEMENT – PERFORMING (PE) (FROM 2022 ODE STANDARDS)

CONTENT STATEMENT – RESPONDING (RE) (FROM 2022 ODE STANDARDS)

CONTENT STATEMENT – CONNECTING (CO) (From 2022 ODE Standards)

Performance-based Assessment Objectives

Students will learn about the profession of architecture and will review several architects' styles to get multiple perspectives and visualize if architecture is a field they are interested in.

Performance-based Assessment Strategies

(attach assessment documents if applicable)

While learning about the profession of architecture and modern architects, students will fill out an exit slip to reflect on what they learned, which architectural foci and architects' styles they like the most to visualize if they fit into the architecture field as a future career choice.

Academic Language

Vocabulary (define each)

Architect - responsible for the design, planning, and supervision of the construction of buildings and other physical structures.

Residential architect - specializes in the design and planning of homes and residential buildings

Commercial architect - specializes in the design and planning of commercial buildings, such as office buildings, retail spaces, and hotels

Industrial architect - specializes in the design of buildings and structures used in industrial and manufacturing processes

Interior architect - specializes in the design and planning of interior spaces, such as homes, offices, and retail spaces

Sustainable architect - designs buildings with a focus on minimizing their environmental impact

Restoration architect - specializes in the preservation and restoration of historic buildings, monuments, and other cultural heritage sites

Landscape architect - specialize in the design and planning of outdoor spaces, such as parks, gardens, and campuses

Urban architect - create and implement plans for the development of cities, neighborhoods, and urban spaces, considering aspects such as infrastructure, transportation, and community development.

Additional Language Demands (*specific communication task*)

- Prior to the lesson, students will type what they think an architect does
- Students will write a new thing that they learned about the field of architecture
- Students will mark which architecture focus(es) and modern architect(s) they enjoyed

the most

Accommodations for Special Populations

- Closed captioning used for videos
- Images and words used to explain same concepts
- Students who struggle to see the screen in the front of the room can move closer
- Teacher will walk around the room so all can hear

Art/Visual Culture Examples (list all artists, artwork or media used)

- [Mentimeter](#) site
- [Architects](#): Santiago Calatrava, Zaha Hadid, Frank Gehry, Biaka Ingels, and Norman Foster
- [“Back to the Future 2” video](#)
- Career information sources:
 - <https://www.ncarb.org/>
 - <https://www.careerexplorer.com/careers/architect/>

Preparations

Materials/Resources for Teacher

- [Slide presentation](#)
- [Mentimeter](#) prep and QR code

Materials for Students

- School-provided iPads
- [Architecture notes exit slip](#)

Safety Procedures

- During the presentation, students will stay in their seats.
- If they need to use the restroom, students will grab a pass to be allowed in the hallways.

- Students will be reminded of how we are respectful of our classmate ideas and suggestions.

LEARNING ACTIVITY

Getting the Classroom Environment Ready

Teacher: “As a middle schooler, I know many of you have been thinking about, or will be thinking about, what you might like to do as a career someday. I would like to share with you some ideas for professions that are on the creative side. Today, we are going to talk about being an architect.”

Procedures for the Teaching/Learning Structure *(indicate approximate time for each step)*

Introduction – 4 minutes

Teacher: “First, I would like to find out what you already know about what an architect does, so I have created a Mentimeter survey for you all. So, get out your iPads, and open the camera app. Use the camera as if you were going to take a photo of the QR code, and you will see a link pop up. Click on that link, and it will take you to the survey. Here you can put in three things you think an architect does for their job.”

Students give answers. Teacher reviews the responses with the students.

Lesson – 10 minutes

Teacher: “Thank you for all those thoughtful responses. Let’s look at the profession of architecture together.”

Teacher goes through Google slides of what an architect does using examples of their day-to-day tasks. They will show images that give examples of types of architectural foci that an architect might work on, using local or well-known examples when possible.

Then, the teacher will give a brief overview of the path to becoming an architect, showing education, training, and licensure requirements, followed by the current income levels.

Finally, the teacher will show a video that briefly showcases 5 modern architects and their

styles.

During this time, students will be making notes on their architecture reflection slip, sharing what new information they learned, which architectural foci they are most interested in, and which modern architect(s) they liked the most.

Clean-up Procedures (Room, Materials & Work Storage)

- Students put away their sketchbooks

Closure, Review & Anticipation (what's next?)

Teacher: "Now that you understand what an architect does, and have viewed styles of modern architects, you are all going to become architects of the future in class tomorrow.

As a wrap-up for today, I want to share with you this video clip from the movie 'Back to the Future 2.' Any Doc or Marty fans in here? When this movie came out in the late 1980s it felt amazing to see what they thought the future, as in 2015, would look like. There are still jokes about people waiting for the flying cars to arrive!

While you watch this video, think about which technological advances did come true and what did not."

Supplemental Activity

- Students can be given different architectural movement/style to research on their iPads and share which one is their favorite
 - Classical, Italianate, Cape Cod, Victorian, Modern, Arts & Crafts, Art Deco, Brutalist, Contemporary

Teacher reflection focused on the lesson *after* it has been taught

- Did the students seem interested in the content?
- Did the students pay attention?
- How much did the students know prior to the lesson?

Lesson 1 Teaching & Learning materials

Google Slides

Building the Future

Architecture

1

What does an architect do?



Mentimeter

2

What does an architect do?

--- --

- Responsible for the design, planning, and supervision of the construction of buildings and other physical structures.
- Responsible for overseeing the construction process, working closely with other professionals to ensure on time and within budget.
- Strong understanding of materials and construction methods to ensure that the building is structurally sound and meets safety requirements.




3

Types of architecture

4

Residential Architecture

--- --



Single family homes, townhouses, condominiums and apartment buildings.

5

Commercial Architecture

--- --



Office buildings, retail spaces, and hotels

6

Industrial Architecture

--- --




Buildings used in industrial and manufacturing processes

7

Interior Architecture

--- --




Design of interior spaces such as homes, offices, and retail spaces

8

Sustainable Architecture

--- --



Designs buildings with a focus on minimizing their environmental impact

9

Restoration Architecture

--- --



Preservation and restoration of historic buildings, monuments, and cultural heritage sites

10

Landscape Architecture

--- --



Design and planning of outdoor spaces, such as parks, gardens, and campuses

11

Urban Architecture

--- --



Plans for the development of cities, neighborhoods, and urban spaces, considering aspects such as infrastructure, transportation, and community development.

12



13

Education/training requirements

Steps to becoming an architect:

- Bachelor's degree in architecture (usually 5-year program)
- Paid internship (usually 3 years)
- Pass the Architect Registration Examination (required)



\$48.9K \$80.2K \$130K

14



15



16

DESIGN CHALLENGE

Design a home for the year 2053

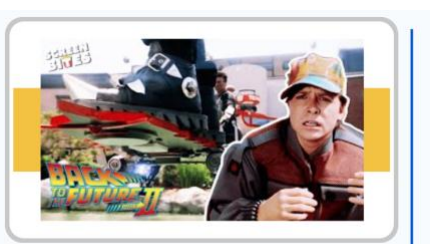


17

1985 predicts 2015



18



19

Exit Slip

Architecture Notes

Name: _____

1. Which areas of architecture interest you the most? (mark all that apply)

- Residential Commercial Industrial Interior
- Sustainable Restoration Landscape Urban

2. Which modern architect's style did you enjoy the most?

- Santiago Calatrava Zaha Hadi Frank Gehry
- Biaka Ingels Norman Foster

3. What is one thing you learned about architecture today?

LESSON PLAN

Teacher Candidate	Holly Romano
School	Hastings Middle School

LESSON NUMBER	2
Lesson Title	Building the future
Length of Class Period	50 minutes
Approximate Number of Students in Each class	24
Grade Level or Course Title	6 th grade
Beginning Date for this <i>Lesson</i>	November 15
Ending Date for this <i>Lesson</i>	November 17

CONTENT STATEMENT – CREATING (CR) (FROM 2022 ODE STANDARDS)

6.2 CR Brainstorm and experiment independently with ideas

CONTENT STATEMENT – PERFORMING (PE) (FROM 2022 ODE STANDARDS)

CONTENT STATEMENT – RESPONDING (RE) (FROM 2022 ODE STANDARDS)

CONTENT STATEMENT – CONNECTING (CO) (From 2022 ODE Standards)

6.1 CO Identify how art reflects changing cultures over time

6.3 CO Link observations, life experiences, and imagination for personal and creative expression

Performance-based Assessment Objectives

- Placed in small groups, and using the design thinking process, students will receive a family client for whom they will conceptualize home design
- Students will reflect how ideas for design and architecture and technology changes over time
- Students will use their observations, life experiences, and imaginations to create a home design for the future.

Performance-based Assessment Strategies

(attach assessment documents if applicable)

- Students will discuss ideas, fill out an architecture brief, and create sketches for a home design within small groups
- Students will demonstrate experimentation and problem solving while designing homes and constructing 3D models in small groups
- Students will examine how, in 1985, the creators of “Back to the Future 2” predicted the future of design and technology in architecture for 2015
- In groups, students will predict, draw, and construct a home design and a 3D room model for the year 2053

Academic Language

Vocabulary

- **Elevation rendering** – a detailed 2D or 3D visual representation of an exterior building design
- **Architecture brief** – a document used to outline the architectural project, giving details to aid the creation of the design
- **Architectural 3D model** – 3D representation architects use of a building or space
- **Design pitch** – the formal presentation of a concept made by a designer to a client

Additional Language Demands (*specific communication task*)

- Students will discuss ideas with classmates within their groups
- Students will draw ideas to share within their group
- Students will write notes and partially fill out Architecture Brief worksheet

Accommodations for Special Populations

- ELL students will be within peer groups to help support their learning and communication skills
- Students can choose group tasks that support their strengths — writing, drawing, or 3D modeling

Art/Visual Culture Examples

- [Back to the Future 2](#)
- [See How the Future of Architecture will Look in 2050](#)

Preparations

Materials/Resources for Teacher

- [Google slides](#)
- Colored folders for groups with [client info](#) (6 colors)
- Folded papers display

Materials for Students

- School provided iPads
- [Design brief worksheet](#) (24-30 copies)
- [Elevation design support sheet](#) (6 copies in plastic sleeve)
- [Elevation design example sheet](#) (6 copies in plastic sleeve)
- [Modeling support sheet](#) (6 copies in plastic sleeve)
- White paper for drawing (15-20 sheets)
- Pencils (30)
- Sharpies (15)
- Watercolor pallet (15-20)
- Brushes (15-20)
- Water cups (6)
- Rulers (15)
- Colored construction paper (30 total)
- White card stock (30)
- Medium cardboard box (6)
- Tape (6)
- Glue (6)
- Scissors (6)

Safety Procedures

- Students will be reminded of how we are respectful of our classmate ideas and suggestions.
- Student will be reminded that we treat art supplies with respect and always use safety with scissors.

LEARNING ACTIVITY

Getting the Classroom Environment Ready

- Have colored folders with client info and architectural briefs ready to hand out to table groups.
- Have support sheets in sleeves and ready to hand out to table groups
- Have supplies ready at materials table
- Have a medium cardboard box at each table
- Have slide deck prepped

Procedures for the Teaching/Learning Structure *(indicate approximate time for each step)*

Introduction: 10 minutes

Teacher: “Welcome to Hastings & Associates Architecture Firm! My name is Mrs. Romano and I am the Senior Principal Architect, which means, I oversee our design teams.

We have formed a new business partnership with Tobin Construction, run by Mrs. Tobin. Tobin Construction is a popular home builder here in Columbus. Mrs. Tobin has come here today to ask us to design homes for her clients. Now if you remember at the end of class yesterday, I said that you will be designing houses for the future. Well, Mrs. Tobin has asked us to design these homes for the year 2053 — that’s right, 30 years into the future!

Mrs. Tobin is here in the office with us today. Mrs. Tobin, can you share with my architects what you are looking for?”

Mrs. Tobin: “I have heard great things about Hastings & Associates! My company is looking for creative, imaginative ideas for home designs for our clients. They come to us wanting a unique home that no one else has. We are planning our home builds for the year 2053, so your ideas should be innovative and future thinking.

I would like you to present to us six home designs — each concept should have 2D architectural renderings and a 3D model. I have given you all the information we have on each of the families who we are building for.”

Teacher: “Thank you Mrs. Tobin! My designers have very active imaginations! I am sure we can

come up with some fun, unique designs for you!”

“Okay architects, let’s review what Mrs. Tobin said.”

Teacher reviews slides that show **elevation rendering**, **3D room model**, and a **design pitch**.

Teacher: “Let me first say that I will be placing you into architecture design teams, so that you can support each other in brainstorming, conceptualizing, and creating your home designs. Many designers like this because it makes coming up with ideas faster!

Mrs. Tobin asked us to make 2D architectural renderings. Each group will need to make 2 exterior renderings that will show a different angle of the house. These will be drawings on paper that will be colored in. Here is an example... (showing and explaining teacher example). I have a reference sheet here of exterior home examples, as well as a step by step of how you can create yours.

Mrs. Tobin also asked us to make a 3D model. Each group will need to make 1 interior room model that fits with the concept of your house. Here is an example... (showing and explaining teacher example). I have a step by step of how you can create yours.

Finally, Mrs. Tobin asked us to present our ideas to her. Your group will present your idea to her and the class tomorrow. Each group will get 3 minutes to present, plus a couple minutes for any questions Mrs. Tobin, or anyone else, may have.

Okay, now that you know what you are creating, let’s find out who your clients are! I am going to pass out the client information to each group. Your design team is the classmates at your table! (Teacher makes adjustments if needed if a table isn’t full) I have assigned a color to each team. This will help keep us organized. Inside your color folder, you will see your client information, as well as an architecture brief document. These briefs are used to help architects understand the focus of the project. Each member of your team should fill out this document throughout this project. You will be turning this in tomorrow.”

Teacher hands out folders to each table. Students are allowed to open them and review documents while teacher shows “Know your client slide”

Teacher: “Put your names and your design team color at the top of your architecture brief. Let’s talk about your client... let each member of your team read the client profile in your folders. This is who you are designing for.

Teacher switches to “design consideration slides”

On your architecture brief document, you will notice that the first few questions ask specifically about the client family you are designing for. When architects design a home, or any structure, they must consider the needs of the client, or anyone who will be using that building, both today and for years into the future. They think about the specific needs of that family, their budget, their lifestyle, and trends in technology and visual home styles. For us, we also need to consider the future. What do you think people and families will care about in 30 years? How do you think their day-to-day activities be affected by advancements in technology?

Architects must also consider the climate in which their structure will reside. Does the location get a lot of rainfall? Do they need to plan for floods? What about droughts or high heat? Do they live in a frigid climate? Or on the side of a mountain? Each of you client profiles will have all of the information whereas.

Work together in your team to fill out the front side of your architecture brief. Each person fills one out, but it is for your team, so each person in your group should have the same answers. Use this brief to really think about your client and how you can cater your design specifically to them. Remember, Mrs. Tobin asked us to create unique, one-of-a-kind homes. So really get creative!”

Worktime: 5 minutes

Teacher gives them 5 minutes to fill out worksheets together.

Technique instruction: 5 minutes

Teacher: “Okay architects! Now that you have created a client profile and know who you are designing for, work together to start your designs.

Each group has a box to use. This to help concept the design of your home. On the Elevation

Rendering Support sheet in your folders, I have shown how you can use the boxes, as well as other recyclables found on the materials table, to concept your home design. Using these 3D materials will help you visualize your house from multiple angles. As shown on this sheet, taking photos of your 3D concept will help you go from 3D to 2D to support your rendering drawing. These materials can be used as a guide only for size, placement, scale, etc. You don't need to literally draw what you built. These are for drawing support only to help you visualize. And feel free to add more!

This same box will also be used for your 3D room models. First, I would recommend making a sketch of the room you want to model from your home design. You can draw it like a floorplan or like a rendering, whichever works best for you. This sketch should only take a few minutes. It's just to support your model building. It is not a final rendering like the exterior one.

Once you have your basic idea, you can trim your box, add any structure details, and then start decorating it. (teacher shows model support sheet)

I recommend having two group members work on the drawings and two group members work on the model. You can assign yourselves as drafters and modelers. Once the overall exterior concept is figured out and you have taken pictures of it, the drafters and modelers can work at the same time. Just keep in mind they all need to be the same design, so make sure you all agree on what that is before you create your final pieces.

Reminder, each design team only needs two drawings and one model.

Also, keep in mind these houses are for the future and these clients want unique homes. Tobin Construction is not looking for logical home, or realistic homes. They want creativity!

Questions – 2 minutes

What questions do you have?"

Work time – 25 minutes

Students work on designs as teacher walks around and supports their thinking and planning. Teacher plays last slide with video of future design concepts for inspiration.

During this time, teacher can continue demonstrations on drawing and/or modeling as needed.

Teacher gives 5-minute warning for end of work time, then tells students to stop in time for 5 minutes of clean-up.

Day 2

Teacher Students will be given 10 minutes at the start of next class to finish up any details.

Clean-up Procedures (Room, Materials & Work Storage)

Students put their drawings and worksheets in colored folders (or drying rack) on their tables. They can stack their 3D models along the window shelf, making sure to label which group it belongs to.

Closure, Review & Anticipation (what's next?)

Teacher: "Next class you will have the first ten minutes of class to add any finishing touches you need on your projects, and then each design team will take turns presenting your design ideas to Mrs. Tobin and the class."

Supplemental Activity

- Students can add exterior home details to the 3D room model
- Students can research and share an architect who's style they like

Teacher reflection focused on the lesson *after* it has been taught

- How well did the students do working as a group? Did everyone seem engaged and focused? Did they support each other's ideas?
- Did students struggle with the architectural renderings? Were there drawing challenges many struggled with?
- How well did the students problem-solve with the 3D models? Did they need a lot of support?

Lesson 2 Teaching & Learning materials

Google slides:

Building the Future

Architecture

1



HASTINGS & ASSOCIATES
Architecture Firm

2

HASTINGS & ASSOCIATES
DESIGN CHALLENGE

Design a home for the year 2053



3

Elevation rendering **Drafter**

2 views of the outside of your house showcasing features

- Pencil, marker, watercolor on paper or digital drawing



4

Room model **Modeler**

3D model of one room in your house

- Recyclable materials and papers



5

Proposal and presentation


Completed architectural brief and class presentation



6

KNOW YOUR CLIENT

Who am I building for?



7


Design considerations

Family size
How many adults? Kids? Pets?
Will your design have enough room for everyone?

Interests
How can you incorporate their interests into your design?

Needs
What needs does this family have? How will it affect your design?

Climate
How will the climate they live in affect your design?



8

The future of architecture?



- 2 Elevation Renderings
- 1 Single Room Model

Creativity over reality!

9

Client info

<p>RED GROUP Family of 2-3 people Small budget Loves art and music Hot climate, low rain</p> <p>Must include: 1 sustainability feature 1 technology feature</p>	<p>ORANGE GROUP Family of 5-6 people Wheelchair accessible Nature enthusiast Hot climate, low rain</p> <p>Must include: 1 sustainability feature 1 technology feature</p>
<p>YELLOW GROUP Family of 2-3 people Elderly family member Enjoy sports Temperate climate</p> <p>Must include: 1 sustainability feature 1 technology feature</p>	<p>GREEN GROUP Family of 5-6 people Small budget Lives in a hilly area Temperate climate</p> <p>Must include: 1 sustainability feature 1 technology feature</p>
<p>BLUE GROUP Family of 2-3 people Wheelchair accessible Loves to cook Cold climate, harsh winters</p> <p>Must include: 1 sustainability feature 1 technology feature</p>	<p>PURPLE GROUP Family of 5-6 people Small budget Values education/learning Cold climate, harsh winters</p> <p>Must include: 1 sustainability feature 1 technology feature</p>

Architecture brief



Architectural Brief by: _____ Group: _____

Client Overview

- Who are your clients? How many adults? Kids? Pets? How will this affect your design?

- What are the needs your family has? How will this affect your design?

- What is the climate they live in? What must you consider for their home?

- How do they use technology?

- How can you incorporate sustainability in their home?

Architecture elevation reference



Drawing support sheet



Elevation rendering support

Recommendation: Use recycled materials to help visualize house
 Take a photos of it with your iPad to help move it from 3D to 2D

Step 1: Lightly draw with pencil your general design

Step 2: Add details

Step 3: Finalize with Sharpie, erase pencil

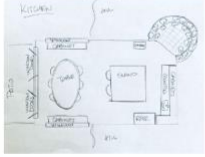
Step 4: Add color with watercolors or marker

Model support sheet

Model support

Recommendation: Sketch layout idea for your room

Architectural floorplan style



Interior rendering style



Step 1: Trim box to remove top and one side.



Step 2: Add any structural details



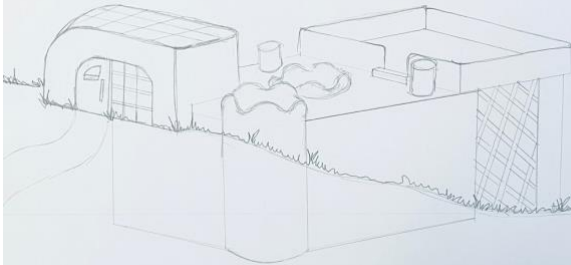
Step 3: Create walls and floor using colored paper and/or markers



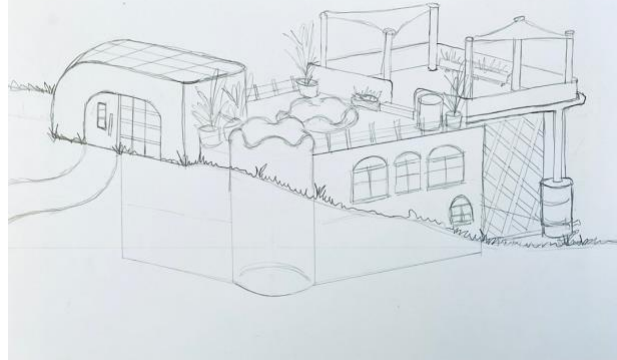
Step 4: Create furniture with folded paper structures or with recycled materials



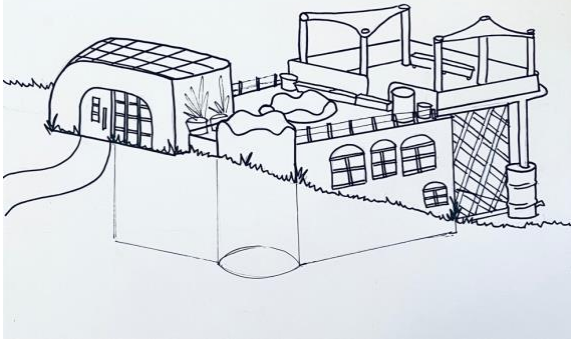
Teacher samples:



Structure building



Adding details



Marker trace



Color in



Room 3D model



Room 3D model

LESSON PLAN

Teacher Candidate	Holly Romano
School	Hastings Middle School

LESSON NUMBER	3
Lesson Title	Parade of Homes
Length of Class Period	50 minutes
Approximate Number of Students in Each class	24
Grade Level or Course Title	6th
Beginning Date for this Lesson	November 17
Ending Date for this Lesson	November 17

CONTENT STATEMENT – CREATING (CR) (FROM 2022 ODE STANDARDS)

CONTENT STATEMENT – PERFORMING (PE) (FROM 2022 ODE STANDARDS)

CONTENT STATEMENT – RESPONDING (RE) (FROM 2022 ODE STANDARDS)

6.1 RE Select relevant vocabulary to define and describe works of art

CONTENT STATEMENT – CONNECTING (CO) (From 2022 ODE Standards)

Performance-based Assessment Objectives

Students will learn terms from the field of architecture

Performance-based Assessment Strategies

(attach assessment documents if applicable)

Students will make use of architecture terms when speaking about and presenting their designs to the teacher and to their peers.

Academic Language

Vocabulary

- **Design pitch** – the formal presentation of a concept made by a designer to a client

Additional Language Demands (*specific communication task*)

- Written notes and reflection on Architectural Brief worksheet
- Oral presentation to class sharing their design

Accommodations for Special Populations

- Not every student needs to talk during the presentations to give space for shy students. Also, feedback will be written instead of spoken in front of the class.
- Students will gather at tables of groups during presentations so all can see and hear

Art/Visual Culture Examples

[Architecture Client Presentation Video](#)

Preparations

Materials/Resources for Teacher

- Slide presentation

Materials for Students

- Their completed renderings and 3D models
- Architectural brief worksheet

Safety Procedures

- Students will be reminded of how we are respectful of our classmate ideas and suggestions.

LEARNING ACTIVITY

Getting the Classroom Environment Ready

Introduction: 1 minute

Teacher: “Welcome back to Hastings & Associates Architecture Firm! I can’t wait to hear your design pitches today in our Parade of Homes!

First, you will have 10 minutes to add any finishing touches to your projects. Are there any questions before you get started?

Your colored folders are on your tables with your drawings and architecture briefs, and your 3D models are on the shelf.

Work time: 10 minutes

Students finish up projects while teacher walks around offering any needed support. Teacher gives two minute warning

Presentation intro: 6 minutes

Teacher: "Before you all present your designs, I have a video of an architect talking about his approach to the design pitch process. Listen to what he brings along to client meetings, and especially to how he feels about sharing his ideas with clients."

Teacher plays [video](#).

Teacher: "Did you notice what the architect said about the design process and working with a client? Did he say the architect has all the say? Does the client?" (One minute or less to answer)

Presentations: 25 minutes

Teacher: "Okay, it's time to present!"

I have put colored markers in this bag to match our team colors. Mrs. Tobin gets to pull out a marker to see who gets to go first."

Mrs. Tobin pulls first design team's color. Students present in order she draws.

Procedures for the Teaching/Learning Structure *(indicate approximate time for each step)*

Introduction: 1 minute

Teacher: "Welcome back to Hastings & Associates Architecture Firm! I can't wait to hear your design pitches today in our Parade of Homes!"

First, you will have 10 minutes to add any finishing touches to your projects. Are there any

questions before you get started?

Your colored folders are on your tables with your drawings and architecture briefs, and your 3D models are on the shelf.

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Presentation intro: 6 minutes

Teacher: "Before you all present your designs, I have a video of an architect talking about his approach to the design pitch process. Listen to what he brings along to client meetings, and especially to how he feels about sharing his ideas with clients."

Teacher plays [video](#).

Teacher: "Did you notice what the architect said about the design process and working with a client? Did he say the architect has all the say? Does the client?" (One minute or less to answer)

Presentations: 25 minutes

Teacher: "Now it's **design pitch** time! As a group, you will share with us an overview of your client, which is the family you designed for. Use your Architecture Brief as a guide to help you. Then share with us your design with your rendering and your room model. Share details that you feel are important.

I have put colored markers in this bag to match our team colors. Mrs. Tobin gets to pull out a marker to see who gets to go first."

Mrs. Tobin pulls first design team's color. Students present in order she draws.

Each group will have 3 minutes to present, then there will be 1 minute for questions."

Reflection: 5 minutes

Mrs. Tobin: "Wow, those were fantastic designs! Thank you for all your hard work and thoughtful

work.”

Teacher: “Great job everyone. As your senior lead designer, I am proud of all your ideas.

Take the last 5 minutes to fill out the back of your Architectural Brief worksheet. Artists and designers, including architects, reflect on their creative process and outcomes to help inform and improve their work in the future.”

Clean-up Procedures (Room, Materials & Work Storage)

- Students turn in worksheets and all project materials into group folders and place models on window shelf.

Closure, Review & Anticipation (what’s next?)

Teacher: “I have really enjoyed all your creative problem solving and teamwork! If architecture seems like something that interests you, there are lots of documentaries and podcasts that talk about it. My top show recommendations are “Home” on Apple+ TV and HGTVs “Extreme Homes” series. Both of these show some very unique, forward-thinking, and innovative home designs.

Supplemental Activity

After hearing all of the design pitches, students will do a gallery walk and, using Post-it notes, will leave one comment of something visually they liked about the design, and one idea they was perfect for the client it was designed for.

Teacher reflection focused on the lesson *after* it has been taught

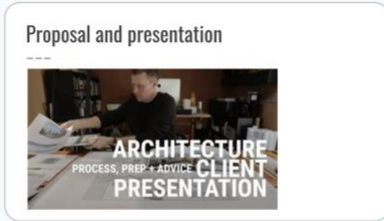
- Did the students understand how to present their ideas?
- Did any of their classmates ask questions about their projects?

Lesson 3 Teaching & Learning materials

[Google slides](#)



1



2



3



4

Architecture Brief reflection:

Design Reflection

6. What architectural position did you practice?

- Drafter Modeler Both

7. What was your biggest challenges in creating your design?

8. What do you think is the most successful part of your design?

9. How would you rate your effort towards the group? (circle one)

- | | | | | |
|-------------------------|-------------------------------|------------------------|----------------------------|---------------------|
| 1 | 2 | 3 | 4 | 5 |
| Didn't give much effort | Gave less than half my effort | Gave about half effort | Gave mostly my best effort | Gave my best effort |

References

Sickler-Voigt, D. C. (2020). *Teaching and learning in art education cultivating students' potential from Pre-K through high school*. Routledge.

Super, D. (1957). *The Psychology of Careers: An Introduction to vocational development*. Harper & Row.