Unit 8: Universal Design: Cultural Tiny House Design Project

Content Area: **Technology**
Course(s):
Time Period: **April**
Length: **12 Blocks**
Status: **Published**

Enduring Understandings

1. The design of a house plan is strictly dependant on the design requirements of the client

2. Cultural Architectural design is highly influenced by cultural traditions and customs

3. The priorities of a client are directly influenced by the culture of the client

4. Space planning and view points directly influence the experience of the environment

Essential Questions

1. How does a culture's history influence the architecture of the design?

2. How do materials change based on the region of the culture? Why do they change?

3. What is the main influencing factor for defining a culture's architecture?

4. What are a few key features of a TIny House?

5. What makes a Tiny House an appealing housing option?

Content

Universal Design, Workbund, Bauhaus, Prarie Style, Tiny House

Skills

1. Students will be able to conduct research on a culture in a group and present their findings

2. Students will be able to identify cultural specific design features and use these elements in their own designs.

3. Students will be able to compare and contrast various styles of design and make a connection to each design

feature

4. Students will be able to organize the space of an architectural design concept to meet the specific design requires of the client

5. Students will be able to create a unique and strategic architectural design experience using design elements and present their overall strategy

6. Students will be able to use architectural design specific vocabulary when communicating their design concepts

Resources

AutoCAD (Latest Version), Sketchup (Latest Version), VRay Plugin (Latest Version), Physical Modeling Materials, Educational Film: "Urbanized"

Standards

9.3.12.AC-DES.7 - Employ appropriate representational media to communicate concepts and project design.

CTE 9.3.12.AC.6 - Read, interpret and use technical drawings, documents and specifications to plan a project.

CTE 9.3.12.AC.1 - Use vocabulary, symbols and formulas common to architecture and construction.

CTE 9.3.12.AC-DES.6 - Apply the techniques and skills of modern drafting, design, engineering and construction to projects.

8.2.12.D.1 - Design and create a prototype to solve a real world problem using a design process, identify constraints addressed during the creation of the prototype, identify trade-offs made, and present the solution for peer review.

8.1.12.A.1 - Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.

8.1.12.A.3 - Collaborate in online courses, learning communities, social networks or virtual worlds to discuss

a resolution to a problem or issue.