Lesson Plan

Performance Objective
Upon completion of this lesson, each student will demonstrate thorough knowledge of different types of architecture, style, and construction methods seen around the world.

Specific Objectives
• Students will identify types of construction methods and architectural styles in different countries.
• Students will compare and contrast construction and design styles.
• Students will compile information and build a multimedia presentation.

Terms
• Geographical Boundaries – different regions of the earth.
• Earth House – a dwelling built into or covered with earth.
• Rondavel – a traditional circular African dwelling with a conical thatched roof.
• Trulli House – structures with conical-shaped roofs made from layers of limestone.
• Crannog – an ancient Irish dwelling or fort built on an artificial island in a lake or marsh.
• Mardin Stone House – architecture that has a strategic position on Rocky Mountains.
• Tongkonan – wooden house with curved roofs with tall gable ends that make them look like boats.

Time
This lesson should take four class days to complete.

Preparation

TEKS Correlations
This lesson, as published, correlates to the TEKS listed immediately below. Any changes/alterations to the activities may result in the elimination of any or all of the TEKS listed.

Practicum in Architectural Design
• 130.48(c) Knowledge and skills.
  o (3) The student knows the function and application of the tools, equipment, technologies, and materials used in the student's chosen field. The student is expected to:
    (D) Demonstrate knowledge of new and emerging technologies in the student's chosen field.
Interdisciplinary Correlations

English Language Arts and Reading

- 110.31 (c) Knowledge and skills.
  - (21) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:
    - (B) Organize information gathered from multiple sources to create a variety of graphics and forms.
  - (22) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:
    - (B) Evaluate the relevance of information to the topic and determine the reliability, validity, and accuracy of sources (including Internet sources) by examining their authority and objectivity.
  - (23) Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into a written or an oral presentation that:
    - (C) Use graphics and illustrations to help explain concepts where appropriate; and
    - (D) Use a variety of evaluative tools (e.g., self-made rubrics, peer reviews, teacher and expert evaluations) to examine the quality of the research.

Reading I, II, III

- 110.47(b) Knowledge and skills.
  - (2) The student acquires an extensive vocabulary through reading and systematic word study. The student is expected to:
    - (A) Expand vocabulary by reading, viewing, listening, and discussing; and
    - (B) Determine word meanings through the study of their relationships to other words and concepts such as content, synonyms, antonyms, and analogies.
  - (4) The student comprehends texts using effective strategies. The student is expected to:
    - (D) Summarize main texts by identifying main ideas and relevant details.
  - (7) The student reads with fluency and understanding in increasingly demanding and varied texts. The student is expected to:
    - (A) Read silently or orally such as paired reading or literature circles for sustained periods of time.

Public Speaking I, II, III

- 110.57 (b) Knowledge and skills.
  - (4) Organization. The student organizes speeches. The student is expected to:
    - (B) Organize speeches effectively for specific topics, purposes, audiences, and occasions.
  - (5) Proofs and appeals. The student uses valid proofs and appeals in speeches. The student is expected to:
    - (A) Analyze the implications of the audience, occasion, topic, and purpose as a basis for choosing proofs and appeals for speeches.

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(6) Style. The student develops skills in using oral language in public speeches. The student is expected to:
   (D) Use informal, standard, and technical language appropriately.

(7) Delivery. The student uses appropriate strategies for rehearsing and presenting speeches. The student is expected to:
   (E) Interact with audiences appropriately.

Technology Applications
• 126.49 (c) Knowledge and skills.
   o (1) Creativity and innovation. The student demonstrates creative thinking, constructs knowledge, and develops innovative products and processes using technology.
     (H) Identify and solve problems, individually and with input from peers and professionals, using research methods and advanced creativity and innovation skills used in a selected profession or discipline;
     (I) Develop products that meet standards identified by the selected profession or discipline; and
     (J) Produce original work to solve an identified problem and publish a product in electronic media and print.

   o (2) Communication and collaboration. The student uses digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning experience of others. The student is expected to:
     (C) Determine and implement the best method of presenting or publishing findings;
     (D) Synthesize and publish information in a variety of print or digital formats; and
     (E) Use evolving network and Internet resources and appropriate technology skills to create, exchange, and publish information.

   o (3) Research and information fluency. The student applies digital tools to gather, evaluate, and use information. The student is expected to:
     (A) Use evolving network and Internet resources for research and resource sharing of technology applications;
     (B) Apply appropriate search strategies in the acquisition of information from the Internet, including keyword and Boolean search strategies;
     (D) Acquire information using appropriate research strategies with source citations through electronic formats, including interactive components, text, audio, video, graphics, and simulations; and
     (E) Identify, create, and use available file formats, including text, image, video, and audio files.

   o (4) Critical thinking, problem solving, and decision making. The student uses critical-thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. The student is expected to:

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(A) Evaluate the design, functionality, and accuracy of the accessed information. 
(B) Conduct systematic research;
(C) Demonstrate creative-thinking and problem-solving skills;
(D) Integrate appropriate productivity tools, including network, mobile access, and multimedia tools, in the creation of solutions to problems;
(E) Use enriched curricular content in the creation of products; and
(F) Synthesize and generate new information from data gathered from electronic resources.

Occupational Correlation (O*Net – www.onetonline.org/)
Job Title: Architects, Except Landscape and Naval
O*Net Number: 17-1011.00
Reported Job Titles: Architect; Architectural Project Manager; Design Architect; Principal Architect; Principal, Architectural Firm; Project Architect; Senior Architect/Design Manager; Senior Architectural Designer; Senior Planner; Specifications Writer

Tasks
• Prepare scale drawings or architectural designs, using computer-aided design or other tools. See more occupations related to this task.
• Plan or design structures such as residences, office buildings, theatres, factories, or other structural properties in accordance with environmental, safety, or other regulations.
• Direct activities of technicians engaged in preparing drawings or specification documents. See more occupations related to this task.
• Prepare contract documents for building contractors. See more occupations related to this task.
• Prepare information regarding design, structure specifications, materials, color, equipment, estimated costs, or construction time.

Skills
• Critical Thinking
• Speaking
• Active Listening
• Complex Problem Solving
• Judgment and Decision Making

Student Tasks
• Students will research types of construction methods, architecture, and design styles from different countries.
• Students will create a multimedia presentation showcasing construction and design from around the world.

Accommodations for Learning Differences
It is important that lessons accommodate the needs of every learner. These lessons may be modified to accommodate your students with learning differences by referring to the files found on the Special Populations page of this website (cte.unt.edu).
Preparation
- Secure the computer lab if you do not have immediate access to one in your classroom.
- Copy the handout sheets and rubric for the students

Instructional Aids
- Student handouts
- Grading rubric
- Internet

Materials Needed
- Paper and pen
- Flash drive

Equipment Needed
- Computers (for students to complete project)
- Projector (for digital presentation)

Lesson Introduction
- Use multimedia presentation and explain the concepts from early days to modern day.
## Outline

<table>
<thead>
<tr>
<th>MI</th>
<th>Outline</th>
<th>NOTES TO TEACHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assignment Outline:</td>
<td>Copy the instructions and grading rubric.</td>
</tr>
<tr>
<td>I.</td>
<td>Introduction/Notes of Global Construction and Design Around the World</td>
<td>Secure the computer lab if you do not have immediate access to one in your classroom.</td>
</tr>
<tr>
<td></td>
<td>Directions:</td>
<td>Explain to the class that great design can transcend geographical boundaries.</td>
</tr>
<tr>
<td></td>
<td>a. Class Discussion</td>
<td>Explain that many architecture and design styles fall into the categories of classic, ancient style, modern, and post modern.</td>
</tr>
<tr>
<td></td>
<td>b. Journal about travel</td>
<td>Ask the class if they have ever traveled to another country and seen famous buildings or structures.</td>
</tr>
<tr>
<td></td>
<td>c. Architecture and design</td>
<td>Hand out Student Notes Outline. Have students fill out the information during your presentation.</td>
</tr>
<tr>
<td></td>
<td>1. Earth House</td>
<td>Go over all the criteria in the assignment and check for understanding.</td>
</tr>
<tr>
<td></td>
<td>2. Rondavel</td>
<td>Explain the guidelines. Have students research construction methods and design styles for the “Passport To The World Project” and check for understanding.</td>
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<tr>
<td></td>
<td>3. Shell House</td>
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<tr>
<td></td>
<td>4. Rumah Gadang</td>
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</tr>
<tr>
<td></td>
<td>5. Toda Hut</td>
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<tr>
<td></td>
<td>6. Korowai Tree House</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Trulli House</td>
<td></td>
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<tr>
<td></td>
<td>8. Palloza</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Icelandic Farmhouse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. Crannog</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. Mardin Stone House</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Tongkonan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. House of Marsh</td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Passport To The World Project</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Directions:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Research and create a multimedia presentation illustrating the various types of construction methods and architectural design styles.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Minimum of 10 Countries</td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Grading:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Completion of passport project</td>
<td></td>
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<tr>
<td></td>
<td>b. 10 countries represented</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Multimedia presentation</td>
<td></td>
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<tr>
<td></td>
<td>d. Creativity</td>
<td></td>
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<tr>
<td></td>
<td>e. Two buildings/structures for each country</td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. Use of pictures</td>
<td></td>
</tr>
</tbody>
</table>
g. Name of structure/building and location
h. Name of architect
i. Description and inspirations of construction methods/architectural design styles

IV. Layout format must be followed

Students will create multimedia presentation.

Multiple Intelligences Guide

<table>
<thead>
<tr>
<th>Existentialist</th>
<th>Interpersonal</th>
<th>Intrapersonal</th>
<th>Kinesthetic/Bodily</th>
<th>Logical/Mathematical</th>
<th>Musical/Rhythmic</th>
<th>Naturalist</th>
<th>Verbal/Linguistic</th>
<th>Visual/Spatial</th>
</tr>
</thead>
</table>

Application

Guided Practice
Using the project guideline handout, the teacher will go over the requirements of this project. The student will follow along and make notes on their hard copy.

- Ask students to research 10 countries and learn about the types of architectural styles and construction methods.
- Give some ideas to students during the brainstorming session before the end of the first class period.

Independent Practice
- Students will work at their own paces to complete this activity.
- All work is to be done in class so the teacher can check for understanding.
- Students are strongly encouraged to take ownership of this activity and to establish a workable pace in order to complete it on time.

Summary

Review
- Why do architects need to be familiar with global construction methods and styles?
- Why is it important to learn about other architects and designers?
• Why are some types of construction methods and styles seen in some countries and not in others?

Evaluation

Informal Assessment
• Instructor will observe students during Independent Practice.
• Instructor will assist students as needed.

Formal Assessment
• Use the Passport to The World of Design Rubric to evaluate.
Global Design and Construction Around The World

Great design can transcend geographical boundaries.

Journal:

_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

Construction and Architecture Around the World
Passport to the World of Design Project

You are in charge of planning a trip to discover the different types of architecture and construction methods in countries around the world.

Before you plan your trip, you must choose 10 different countries from the list below to include in your trip itinerary.

- France
- Germany
- Egypt
- Italy
- Netherlands
- Greece
- Spain
- Japan
- Russia
- China
- United Kingdom
- United Arab Emirates (UAE)
- India
- Australia
- Thailand
- Taiwan
- Canada
- Denmark
- Switzerland
- Sweden
- Brazil

After selecting 10 countries for your trip, you will research and showcase two buildings/structures for each location. Your research will include:

- Notable buildings or structures found in that country
- Architects that designed the buildings or structures found in that country
- How the buildings and structures were constructed
- Inspirations for the buildings or structures

All information will be compiled to prepare a multimedia presentation to illustrate your findings for each country. Be creative, use color, and make the presentation interesting and eye-catching.

You will be graded on

- Completion of project
- 10 countries represented
- Multimedia presentation
- Creativity
- Two buildings/structures for each country
- Use of pictures
  - Name of structure/building and location
  - Name of architect
  - Description and inspirations of construction methods or design styles

This project is due on: ___________________________
Layout Format

- Student’s name and class period
- Title “Passport to the World of Design Project”
- Country Name
- Two Building/Structure samples
  - Name of city where the building/structure is located
  - Include pictures
  - Name of building/structure
  - Name of architect
  - Description of how the building/structure was constructed
  - Inspiration for the building/structure
### Passport to the World of Design Rubric

**Presentation Title:** 

**Name:** ___________________________  **Teacher:** ___________________________

**ID#:** ___________________________  **Date of Presentation:** ___________________________

<table>
<thead>
<tr>
<th>Criteria</th>
<th>16-20</th>
<th>11-15</th>
<th>6-10</th>
<th>5-0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research</strong></td>
<td>All 10 countries presented and includes two structures, two room designs, detailed descriptions, location, names of architects/designers, and inspirations. All information is accurate.</td>
<td>At least eight countries presented including two structures, two room designs, detailed descriptions, location, names of architects/designers, and inspirations. Most information is accurate.</td>
<td>At least five countries presented including two structures, two room designs, detailed descriptions, location, names of architects/designers, and inspirations. Some of the information is accurate.</td>
<td>At least two countries presented including two structures, two room designs, detailed descriptions, location, names of architects/designers, and inspirations. Some information is accurate.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>Information is easy to follow.</td>
<td>Information is somewhat easy to follow.</td>
<td>Information is challenging to follow.</td>
<td>Information has no sequence and is hard to follow.</td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
<td>Presentation had no misspellings or grammatical errors.</td>
<td>Presentation had no more than two misspellings and/or grammatical errors.</td>
<td>Presentation had three misspellings and/or grammatical errors.</td>
<td>Student’s presentation had four or more spelling errors and/or grammatical errors.</td>
</tr>
<tr>
<td><strong>Content Knowledge</strong></td>
<td>Covers topic completely and is understandable.</td>
<td>Covers topic and is mostly understandable.</td>
<td>Barely covers topic and is somewhat understandable.</td>
<td>Does not adequately cover topic and is confusing.</td>
</tr>
<tr>
<td><strong>Graphic Design</strong></td>
<td>Excellent use of design elements.</td>
<td>Adequate use of design elements.</td>
<td>Fair use of design elements.</td>
<td>Poor use of design elements.</td>
</tr>
</tbody>
</table>

**Teacher Comments:**