Unit 4: Safety and Skill

Content Area: **Technology**
Course(s):
Time Period: **September**
Length: **3 weeks**
Status: **Published**

Enduring Understandings

Technology

-Safety standards and procedures must be followed and personal protection equipment, such as safety goggles must be worn, to reduce the risk of injury.

-Tools and machinery have specific guidelines for use and specific functions. Guidelines must be followed to reduce injury.

-Selecting the proper tool for a job reduces injury.

Art

-Recognizing how the arts relate to all aspects of learning in relationships to the practical characteristics of daily life enhances the ability to make connections and solve problems.

-An individual's ability to present their skills determines the quality of post-secondary choices, work, and life.

Essential Questions

Technology

-Why is following safety procedures paramount in any work environment?

-What safety considerations must be made when working with various tools, materials and equipment?

-What are the potential consequences of not following safety protocol?

-Statistically, who carries the greatest risk of becoming injured at home and in the workplace?

Art

-Why must art materials and tools be used in a safe and responsible manner?

-How do the visual arts influence other disciplines?

-What is the relationship between art and technology?

Content

Goal

The goal of this unit is to introduce students to the stage throughout history, the advancements, changes, and new ideas in regards to the production of stage design and theatre as a whole.

Suggested Activities:

-Create a model of a stage in order to better understand the importance of the layout and design.

-Create a timeline of technology and art advancements highlighting their significance and cultural impacts as it relates to the theatre.

-Compare and contrast two productions in order to see advancement in design and prduction.

Skills

-Students will be able to demonstrate and describe safe handling practices of various hand tools and machinery.

-Students will be able to anticipate the consequences of their actions when working with tools, products or systems. From this, students will make informed decisions on how and when to use specific tools or materials.

-Students will be able to collect and explain examples of how new technology has reduced adverse impacts from its predecessors.

-From a user and producer perspective, students will be able to critique various tools, materials, and processes.

-Students will be able to utilize best practices for selection of tools and materials in regards to the planning, construction and completion of large scale set pieces.

-Students will be able to justify the use of specific art based materials in the creation of a project.

-Students will be able to illustrate specific art based skills while drafting and painting.

Resources

Perspective for Interior Designers, John Pile, 1989

Scene Design: A Guide to the Stage, Henning Nelms, 1975

Creative and Successful Stage Designs: How to Make Imaginative Stage Sets with Limited Resources, Todd Muffatti, 2018

Make Space: How to Set the Stage for Collaboration, Scott Doorley, Scott Witthoft, 2012

Director and student scripts

Floorplanner software

Historical and Literature based resources (these would be different each year and specific for each show)

Assessments

Formative Assessments

-Open class discussions

-Self assessmentClass Participation

-Student Group Interaction

-Exit tickets

Summative Assessments

-Writing assignments

-Unit quiz

-Project Rubrics

-Technical Sketches

Standards

Tech

8.2.8.C.4 Identify the steps in the design process that would be used to solve a designated problem.

8.2.8.C.5 Create a technical sketch of a product with materials and measurements labeled.

8.2.8.C.8 Develop a proposal for a chosen solution that include models (physical, graphical or mathematical) to communicate the solution to peers.

8.2.8.D.3 Build a prototype that meets a STEM-based design challenge using science, engineering, and math principles that validate a solution.

Art

1.2.8.A.2 Justify the impact of innovations in the arts on societal norms and habits of mind in various historical eras.

1.3.8.D.6 Synthesise the physical properties, processes, and techniques for visual communication in multiple art media and apply this knowledge to the creation of original works.

1.4.8.B.2 Differentiate among basic formal structures and technical proficiency of artists in works of dance, music, theatre, and visual art.