

Communication & Design

Content Area: **Technology**
Course(s): **Tech and Eng Design Lab 1, 2**
Time Period: **November**
Length: **4 Weeks**
Status: **Published**

Transfer

Communication & Design

Enduring Understandings

There are many ways to communicate.

Exploring Inventions and Innovations can spark interest and creativity.

Using the design process to solve problems can be spread to various situation

Essential Questions

What is the design process and how is it applied to problem solving?

What is an invention?

What is an innovation?

What are copyrights, trademarks, and patents?

Content

Vocabulary

design loop, communication, verbal, non verbal, semaphore, binary, ASL, communication process, input, output, process, feedback, desktop publishing, toolbar, icon, edit, transparent background, images, copy/paste, save, guillotine, binding, clamp, porous, hobby knife, invention, innovation, inventor, patent, copyright, trademark, brainstorm, model.

Learning Objectives

Justify the use of the design process and correlate it to problem solving.

Break down the two types of communication.

Categorize what communication is verbal and non-verbal.

Distinguish the difference between invention and innovation.

Support the use of copyrights, trademarks, and patents and determine when they should be used.

Create professional documents.

Resources

Standards

TECH.8.1.8	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
TECH.8.1.8.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.8.A.2	Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for

usability.

TECH.8.1.8.A.4

Graph and calculate data within a spreadsheet and present a summary of the results

TECH.8.2.8

Technology Education, Engineering, Design, and Computational Thinking - Programming:
All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.

TECH.8.2.8.A

The Nature of Technology: Creativity and Innovation: Technology systems impact every aspect of the world in which we live.

TECH.8.2.8.B.CS1

The cultural, social, economic and political effects of technology.