Unit 7: Innovation and Culminating Projects

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

Enduring Understandings

Innovation changes the world.

Not all innovators use the exact same process or sequence when

innovating, but they do use some of the same steps.

Innovation is the introduction of something new; a new idea method or device.

Essential Questions

How do we demonstrate creative thinking, construct knowledge , and develop innovative products and process using technology?

What is innovation and the design process involved in being innovative?

Content

Innovative skills

Collaborative skills

Skills

Apply existing knowledge to generate new ideas, products, or processes.

Ability to identify pros and cons when assessing innovative ideas

Resources

Dependent upon student innovation ideas/projects

Standards

CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP11	Use technology to enhance productivity.
TECH.8.1.5	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.8.1.5.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.5.A.1	Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
TECH.8.2.5	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.8.2.5.A	The Nature of Technology: Creativity and Innovation: Technology systems impact every aspect of the world in which we live.
TECH.8.2.5.A.1	Compare and contrast how products made in nature differ from products that are human made in how they are produced and used.
TECH.8.2.5.A.2	Investigate and present factors that influence the development and function of a product and a system.
TECH.8.2.5.A.4	Compare and contrast how technologies have changed over time due to human needs and economic, political and/or cultural influences.
TECH.8.2.5.C	Design: The design process is a systematic approach to solving problems.
TECH.8.2.5.C.1	Collaborate with peers to illustrate components of a designed system.
TECH.8.2.5.C.2	Explain how specifications and limitations can be used to direct a product's development.
TECH.8.2.5.C.3	Research how design modifications have lead to new products.
TECH.8.2.5.C.4	Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.
TECH.8.2.5.C.7	Work with peers to redesign an existing product for a different purpose.
TECH.8.2.5.D	Abilities for a Technological World: The designed world is the product of a design process that provides the means to convert resources into products and systems.
TECH.8.2.5.D.1	Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify constraints and trade-offs to be considered.