Unit 3: Creating Worlds

Content Area: **Technology**
Course(s): **Technology**
Time Period: **Generic Time Period**
Length: **Weeks**
Status: **Published**

Unit Overview

Students will explore a set world within MinecraftEdu, and then create their own world based on either a historical place, a piece of literature, a scientific phemomena, or a world of their choice (approved by the teacher).

Standards

TEC.5-8.	The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.
TEC.5-8.8.1.8	All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.
TEC.5-8.8.1.8.A.5	Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.
TEC.5-8.8.1.8.D.1	Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics.
TEC.5-8.8.2.8	All students will develop an understanding of the nature and impact of technology, engineering, technological design and the designed world as they relate to the individual, global society, and the environment.
TEC.5-8.8.2.8.B.1	Design and create a product using the design process that addresses a real world problem with specific criteria and constraints.
TEC.5-8.8.2.8.E.1	Work in collaboration with peers and experts in the field to develop a product using the design process, data analysis, and trends, and maintain a digital log with annotated sketches to record the development cycle.

Essential Questions

- How can Minecraft help me better understand the world around me?
- How can Minecraft help me create a realistic model of a place/event/story?
- How can playing Minecraft connect to other areas of learning?
- How does working collaboratively help me be more creative?

Application of Knowledge: Students will know that...

- MinecraftEdu can be used to interpret places, ideas, and stories
- MinecraftEdu can help expand learning to other curricula
- Working collaboratively can increase creativity and help solve problems

Application of Skills: Students will be able to...

- Collaborate to solve problems
- Create a setting based on research of a piece of literature, moment in history, or scientific phenomena
- Use the tools within MinecraftEdu to build and create

Assessments

Rubric for creating new world based on a famous place, scene from literature, scientific phemomena, or student choice.

Suggested Activities

Students will choose from a selection of worlds already created in MinecraftEdu to explore.

Suggested worlds:

- The Forbidden City -- Digital Historian Project (accurate 1:1 representation of The Forbidden City of the Ming Dynasty)
- HungerCraft (based on Suzanne Collins's *The Hunger Games*)
- Coordinate Hunt (students find 40 hidden objects within the world)
- Viking World
- Swiss Family Robinson

Students will suggest a world of their own to create and present a short written summary/design plan to the teacher for approval. Worlds can be real or imaginary (i.e. Hogwart's Castle, the Death Star from Star Wars, the town of Green Brook, the Pyramids of Giza, etc.) Within the plan, students will provide research based on what type of world they would like to create (i.e. an actual picture or description of the historical site, a summary of the scene in literature/movie/TV, dimensions/sizes where applicable, etc.)

Student will use Minecraft to create a simulation of the world and invite the class to visit and explore.

Activities to Differentiate Instruction

Advanced students can include a challenge to solve within their world -- i.e. hidden items to find, a maze or passages to explore, a survival challenge, etc.

Students can take on the role of engineer for an existing known building -- i.e. how would they improve our

school building?

Students can populate their settings with characters who will interact with the player.

Integrated/Cross-Disciplinary Instruction

Language Arts -- Retell a story through Minecraft

Social Studies -- Research and recreate a time and/or place in history

Architecture -- Design and build a model or make improvements on a building/structure

Math -- geometry, measurement, and ratios, associated with building and design

Resources

Coordinate Hunt: http://services.minecraftedu.com/worlds/node/38

Forbidden City: http://services.minecraftedu.com/worlds/node/40

HungerCraft: http://services.minecraftedu.com/worlds/node/43

Swiss Family Robinson: http://services.minecraftedu.com/worlds/node/102

Viking World: http://services.minecraftedu.com/worlds/node/92