



ClarksonTM
INSTITUTE FOR STEM EDUCATION



ST. LAWRENCE-LEWIS
BOCES

Minecraft for Education

Developed by: Heather Delity, Gouverneur CSD and Rebecca Rose-Hitchens, Parishville-Hopkinton CSD

Standards/Curriculum Connections:

7-8.IC.1 Compare and contrast tradeoffs associated with computing technologies that affect individuals and society.

7-8.IC.6 Assess the accessibility of a computing device or software application in terms of user needs.

7-8.CT.1 Compare the results of alternative models or simulations to determine and evaluate how the input data and assumptions change the results.

7-8.CT.10 Document the iterative design process of developing a computational artifact incorporating user feedback and preferences.

7-8.NSD.1 Design a user interface for a computing technology that considers usability, accessibility, and desirability.

7-8.NSD.5 Summarize how remote data is stored and accessed in a network.

7-8.DL.2 Communicate and collaborate with others using a variety of digital tools to create and revise a collaborative product.

7-8.DL.4 Select and use digital tools to create, revise, and publish digital artifacts.

7-8.DL.5 Transfer knowledge of technology in order to explore new technologies

4-6.CT.8 Develop algorithms or programs that use repetition and conditionals for creative expression or to solve a problem.

Lesson Procedure:

Total Time: Dependent on Activities Assigned

Pre-class activity (5-10 minutes): Students should be able to join a world in Minecraft, navigate the basic menus, add and use inventory (including camera, book, and quill), and save progress. To learn or review these skills, complete this activity: HOW TO PLAY in the Minecraft View Library.

Task 1 (10 minutes total): Whole-Class Discussion

- Introductory Questions- Begin by facilitating a discussion about identity and the key terms. Within this discussion consider the Guiding Questions:
 - What social factors determine who you are?
 - Are there parts of your identity that may be socially constructed? If so, which ones?

- How might the socially constructed factors change over time?
- What personal characteristics do you associate with your identity?
- Which characteristics are visible, non-visible, and/or likely to change over time?
- Which characteristics are most important to you? Will that change over time?
- What are the things you notice first about others?
- Do any of the identity characteristics of others influence your interactions?
 - Visible
 - Non-visible
- How might your views of yourself affect your interactions with others?

Task 2 (40-45 minutes total): Fishbone Diagram and Identity Template

- Complete the [Fishbone Diagram Chart](#) for each key term
- Complete the [Identity Chart](#)

Task 3 (20 minutes total): Code building in Minecraft

- Introduce and demonstrate Code building in Minecraft using MakeCode or Python
 - Depending on prior student knowledge

Task 4 (50 minutes): Guided Minecraft Practice Activities

- Put students into small groups or allow them to work individually
- **Have students analyze their anchor charts and categorize their identity components that are static versus those that are dynamic.**
 - Pair up small groups, students will then share their results and discuss
- Students will determine what visuals, artifacts, and potential builds they might use to represent each component of their identity

Task 5 (Individual Activity): Optional

- Minecraft EE: A Museum of Me (2 class periods)
 - Students will open the museum build in Minecraft
 - Students will build and then curate a “collection” for a display of the representations of their identity.
 - Students will write a code in Minecraft code building using loops and conditionals to automate the creation of at least one of their artifacts.
- **Assessment Optional:** Students will create a short written Book and Quill reflection of their museum exhibit
- **Assessment Optional:** Students will present their exhibit in a walkthrough shared with the class.

Task 6 (25 minutes): Reflections

- Students will create a short written response in Book and Quill based upon the following prompt: **Why is it important for us to better understand ourselves in order to better understand others?**

Optional Lesson Extensions:

- Students will design their identity representations in order of importance
 - Students will create a screen capture video narrating your journey through their curated collection
- Students will serve as the designated collection curator for a classmate. Through interviews and research, each student will then create a Minecraft collection of a classmate.
- Students will share their identity exhibit with Kindergarteners and use Ozobots for a Kindergarten coding activity of navigating through a library.
- Students will choose a name from a hat of another student and will create an artifact of positive attributes of the name chosen.
- Students will create a wall that includes the top (or top 2) icons that represent them in a group wall that will portray everyone as a unit.

Materials:

- Student devices
- Minecraft for Education software
- [Identity Chart](#) for each student
- [Fishbone Diagram Chart](#) for each student

External References:

- [Understanding Identity](#)
 - Students will identify social and cultural factors that help shape their identities.
- [Unpacking Identity](#)
 - Think about how a person's different identity categories might create sameness and uniqueness.
- [Collins Dictionary](#)
 - Free online dictionary, thesaurus, and reference materials
- [Minecraft World File](#)
 - Minecraft World to support the lesson activities. The link will open in Minecraft: Education Edition.

Assessment:

- Students submit their reflection activities

Objectives:

- develop an understanding of what their identity is, how it can be shaped, influenced, and (in)validated based upon their interactions with others (personal and social context.)
- recognize and understand their own identity within a personal and social context, and gain a deeper knowledge of identity terminology.
- understand more about interpersonal similarities and differences.
- design and code in Minecraft digital artifacts that represent their identity.