Using Minecraft In the Classroom

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Learning Goals

I can:

- engage in a conversation about the positives of Minecraft Education Edition in the classroom.
- share examples of how content standards can be met through the use of Minecraft Education Edition.
- discuss how students can be engaged in collaboration, creativity, critical thinking, communication, and digital citizenship through Minecraft Education Edition.
Why Minecraft?
Why Not?

- Student Engagement
- Collaboration
- Creative Exploration
- Student-Centered Outcomes
By using Minecraft as a platform for learning, educators can motivate and inspire every student to achieve more, and ignite a passion for learning.

“Motivation is such a huge part in what ends up differentiating student outcomes. Everyone has the ability to do fantastic work at a high level. It’s just, without the right teacher and the right motivation, you don’t always get there.”

Bill Gates
Minecraft: Education Edition is designed for students to play together – whether that’s working in teams to solve a problem, or collaborating as an entire class complete learning activities.

“To function effectively in increasingly complex business structures and organizations, employees must become more comfortable with ambiguity, take initiative, and be able to work in a team-based environment.”

IDC Skills Requirements for Tomorrow’s Best Jobs (2013)
There are no step-by-step instructions in Minecraft – students must try, fail, and try again to achieve the result they want. This open canvas encourages independence and self-direction, where students are able to express themselves and their ideas in unique ways.

“Imagination is the source of every form of human achievement. Creativity is as important now in education as literacy and we should treat it with the same status”

Ken Robinson
Learning-by-doing in Minecraft teaches students independence and perseverance, giving them great satisfaction and sense of accomplishment when they can demonstrate their knowledge.

“Education is a natural process carried out by the child and is not acquired by listening to words but by experiences in the environment. And Education should no longer be mostly imparting knowledge, but must take a new path – to seek the release of human potential.”

Maria Montessori
Education Edition Features

- Access and Personalization
- Setting Up Your World
- Bring Learning To Students
- Demonstrating Student Learning
Students and educators use Office 365 Education accounts to log in to Minecraft: Education Edition.

This ensures secure access to the game and student data privacy.

This also ensures wherever, whenever learning.
EASY CLASSROOM COLLABORATION

- An entire classroom can play in the world together, without any need for an external server.
- Using the “Friends” tab, students can collaborate in small or large learning groups and create and learn together.
ALLOW & DENY BLOCKS

• These blocks allow educators to set editable or read-only areas of the world – allowing, or denying students the ability to build and focusing the learning to specific spaces.
Border Blocks help teachers define areas in the game that their students can build and play in.

- Students cannot go over or under the block.
Fixed Inventory Slots provide educators with an opportunity to define specific inventory available to students, such as a camera, portfolio, or other blocks or tools.

These can be adjusted to fit the task the students are working on.
A Non-Player Character, or NPC, can be placed in the game to provide information to students, give direction, and link to other resources. These are exclusive to Minecraft Education Edition.
Educators can use 3 different sized chalkboards to communicate learning goals, or challenge students with problems to solve within the game.

Slate, poster, board.
The Camera allows students to take screenshots of their work.

Can also take “selfies” with work in background.
PORTFOLIO

• The portfolio is a place where students can save the screenshots they’ve taken with the Camera and add notes.
• Images can be exported to your device.
Classroom Mode is a partner application that empowers educators to interact, monitor, and facilitate purposeful learning for one or many groups of students.
How We Started

• We played!
• Learned from the experts – students!
• Minecraft Education website
Kahoot! Minecraft Challenge

Kahoot! Facts about Minecraft

• See if you can determine how you can use these aspects in your classroom.
• Share with partner
Implementation Examples

- Kdg. – 1st: Social Studies
- 2nd – 3rd: Math
- 4th – 5th: Social Studies – Economics
- 6th – 8th: Science

Check out our article in the April 2017 NETA Newsletter.
Kdg. – 1st: Social Studies

• Lesson name: Building a Community

• Standards:
  – SS 0.1.2a Model citizenship skills (e.g., respect, courtesy, honesty, voting)
  – SS 0.3.1 Students will explore where (spatial) and why people, places and environments are organized in their world.
  – SS 0.3.2.b Identify human characteristics of place (e.g., cities, buildings, farms, roads, highways)
  – SS 1.3.2.b Identify and differentiate between human features (e.g., cities, buildings, farms)

• Lesson by: Megan Rogers - @mmrogers0109
2nd – 3rd: Math

- **Lesson name:** Graphing in Minecraft
- **Standards:**
  - MA 2.4.1 Display and Analysis: Students will organize, display, compare, and interpret data.
  - MA 3.4.1.a Represent data using horizontal and vertical bar graphs
  - MA 3.4.1 .c Interpret data using horizontal and vertical bar graphs
- **Lesson by:** Mark Dowling - @markdowl
Lesson name: Making a Minecraft Business

Standards:
- SS 5.2.1 Students will analyze various markets where buyers and sellers exchange goods or services.
- SS 5.2.1.a Describe how competition among sellers results in lower costs and prices, higher product quality, and better customer service

Lesson by: Devin Jamshidi- @DevinJamshidi
6th – 8th: Science

- **Lesson name:** Energy Flow in an Ecosystem
- **Standards:**
  - SCI 8.3.3.a Diagram and explain the flow of energy through a simple food web.
  - SCI 8.3.3.b Compare the roles of producers, consumers, and decomposers in an ecosystem.
- **Lesson by:** Tom Gamble - @gambletg
THE Resource

https://education.minecraft.net/
- Tutorials & Professional development
- Lesson plans
- Biomes & Worlds
- Community of educators

**Landmarks in Our Community**

**Introduction/Background**
- Students must be able to identify the physical and human characteristics that make up a neighborhood, community, city, town, state, and nation. Natural and manmade landmarks help students identify the significant aspects of each geographic area. By understanding where landmarks are and why they are significant, students gain an understanding of the community in which they are studying. This helps to build a foundation for understanding the people and culture within a geographic region.

**World Required**
- N/A, create new creative world, with ability to connect regions later

**Age Group(s)**
- Ages 5-8
- Ages 8-10
Tips & Tricks

• Digital citizenship & classroom culture
• You don’t have to be the expert
• Portfolio-use it!
• Others?

Classroom Charter

We the students agree to the following expectations as Minecraft citizens:

- Do not damage or change anyone’s property.
- Do not do anything to other players.
- Keep the world as it was created.
- Hands off TNT and bombs.
- Keep chatting to content related questions.
Next Steps

- Head to education.minecrat.net/getstarted
- Follow @playcraftlearn and tweet at #MinecraftEdu
- Minecraft Poster Session-Friday @ 12:15
- Purchasing details: https://education.minecrat.net/how-it-works/tech-specs
- Start with just one lesson, just one build!