



### **AGENDA**

Game-based Learning

Minecraft: Education Edition

Demo and Features



#### GAME-BASED LEARNING

Immersive engagement

Systems thinking

Peer collaboration

Purposeful learning



91% of students ages 2-17 are playing video games daily

#### Sources

https://www.npd.com/

http://www.joanganzcooneycenter.org/publication/level-up-learning-a-national-survey-on-teaching-with-digital-

<sup>3.</sup> https://www.sri.com/work/projects/glasslab-resear

## GAME-BASED LEARNING

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Systems thinking

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# Increase in learning outcomes when games are used to reinforce concepts



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http://www.joanganzcooneycenter.org/publication/level-up-learning-a-national-survey-on-teaching-with-digitalnames/

<sup>9</sup> https://www.si.com/www.le/susicete/alasalah.susacasalah



#### **EXAMPLE LESSON**

**SUBJECT:** Health/Biology/Mathematics

**GRADE:** Intermediate

#### **HUMAN BODY PROJECT:**

Students model different systems in the human body in Minecraft

#### **LEARNING OBJECTIVES:**

- Understand relationships between organs & systems
- Describe how five senses are developed through biology of the human body
- Build with proportionality and sense of scale



THE HUMAN EYEBALL

#### **EXAMPLE LESSON**

**SUBJECT**: Ecology/Biology

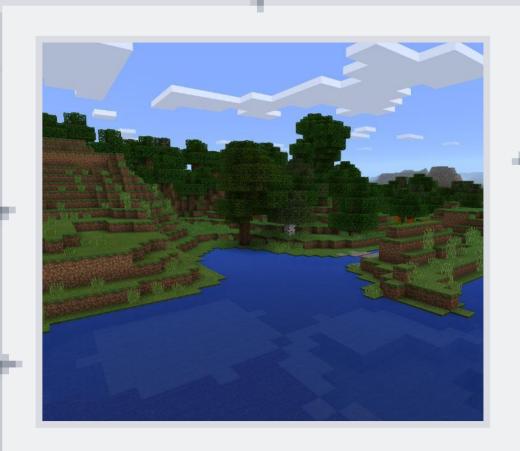
AGE RANGE: Intermediate

#### RIVER ECOSYSTEM PROJECT:

Students model a river ecosystem and present to class, use field work as baseline for measurements

#### **LEARNING OBJECTIVES:**

- Understand salmon habitat requirements
- Topography and cubic volumes
- Current and water flow (how use of dams affect ecosystem)



RIVER ECOLOGY SIMULATION



## >> STUDENT ENGAGEMENT

By using Minecraft as a platform for learning, educators can motivate and inspire every student to achieve more, and ignite a passion for learning.

"If we want to change education and learning to make it more relevant, more effective and more enjoyable for all involved, teachers need to be the entrepreneurial designers and redesigners of the "systems" of schools and of the schools themselves."

Design Thinking for Educators IDEO



# ... COLLABORATION

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."

Skills Requirements for Tomorrow's Jobs IDC





## **CREATIVE EXPLORATION**

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





MINECRAFT: EDUCATION EDITION DEMO

## SIMPLE, SECURE LOGIN

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.



# EDUCATION EDITION SKINS

Skins allow students to personalize their avatar, increasing student engagement and allowing educators to more easily differentiate students playing together.



## FLEXIBLE MULTIPLAYER

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.



## TECHNICAL REQUIREMENTS

#### Minecraft: Education Edition requires:

- Operating System: Windows 10 or macOS
- Identity: Office 365 Education account for each player
- Network: Internet access required for login and multiplayer\*

\*NOTE: Students will only be able to play with other Office 365 Education accounts in the same school domain/tenant



#### **NEXT STEPS**

Head to education.minecraft.net/getstarted

Sign up for emails at education.minecraft.net

Play through code.org/MC

Tweet at @playcraftlearn and #MinecraftEdu



## THANK YOU!

education.minecraft.net