

# Minecraft: Education Edition

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## You might ask, what is Minecraft?

Minecraft is a game created by Marcus Persson and originally published by Mojang in 2011. The game is designed to allow players to build, morph, explore, collect resources and construct a three dimensional world using textured cubes.

## What is Minecraft in Education Edition?

An open world game that emphasises collaboration, creativity, and problem solving. Getting Smart (2017) claims, the only limitation is your creativity.

The interactive game promotes Social Emotional Development (SEL) for students in grades K-12 by providing a virtual world of cooperation and creativity. Students construct collaboratively through careful planning and imagination.

## Why Minecraft Education Edition?

Minecraft Education will provide a platform for engaging, problem solving, self directed learning for all student in their SEL curriculum career.

- SEL teacher and Grade level teachers can decide on objectives and task to reinforce academic challenges or support
- Students need to develop problem solving, cooperation, collaboration and creativity skills in a fun and engaging form
- Students will be required to build and explore a virtual world to develop creative works that reflect learning
- Students will work with their peers and share to promote long term memory and retention skills

## Evaluation and Vision for SEL Development

According to the Whitehead Road School Improvement Plan and Foundational Pillars of the Clarke County School District, SEL is an area of emphasis. We strive to create classroom cultures to promote student's with the capacity to communicate and collaborate with peers in meaningful ways.

Think of a time in your career when you've had to plan and cooperate with others?

## Evaluation and Vision for SEL Development

In order to develop social emotional skills, students must interact with one another. We collaborate by working towards a goal and in most occupations, technology plays an enormous role in the projects success. With Minecraft Education Edition, the platform is provide and students create cooperatively to meet an objective. Students become more engaged in the project due to Minecraft's "gamey" nature.

## Evaluation and Vision for SEL Development

Minecraft Education Edition Platform can be used to house and structure SEL learning activities.

Specifically we can target these skills:

- Creativity
- Communication
- Problem solving
- Collaboration

Students can work on projects outside of school.  
Allowing parents to connect with SEL projects.

# Population

- Whitehead Road has a population of over eight hundred students
- Approximately 93% of the student body qualifies for Free and Reduced Lunch
- 1:1 Technology implementation for grades 3-12 in the County ensures equitable access in regards to technology
- Internet Hotspots are available for families with no internet access at home
- Grades PreK-2 have iPads and computer carts
- Students in grades 1-5 would utilize the Minecraft Education Platform during SEL learning block.

## Required Equipment Technical Support

- Teachers are required to have Office 365 Education Account (This could be limited to the school counselor and teachers who wish to use Minecraft in their lessons)
- Teachers will have to watch tutorial videos and learn how to use the platform to create authentic lessons and assignments
- Pilot classrooms would be beneficial
- An SEL Gaming Team would need to meet to help design a curriculum
- Minecraft Education provides lesson, tutorials and technical support through the [Help Center](#) link
- Other supported equipment
  - ▷ Headphones
  - ▷ Microphones

## Limitations

- Developing and new curriculum takes time and commitment
- Teacher buy in is a factor as well
- Minecraft Education Edition would have to be downloaded onto all student and Teacher devices before implementation
- The project would have to be explained to parents to ensure there is no confusion on why their child is “playing a game” for school

## Cost and Funding

- Minecraft Education Edition: \$5 per user/year
- Microsoft Account Required : \$70 per user/year
- [Social Emotional Learning Innovation Fund](#)

## Classroom Vision

Teachers and Counselors plan a curriculum that develops creativity, collaboration and problem solving skills during SEL specials time block. (Already a part of our weekly schedules)

- The curriculum can be used to support deficits in each grade level such as social studies, math, ELA, and/or science projects using the Minecraft world.
- Specific objectives need to be targeted.
- Mini Lessons can target a skill and highlight objectives
- Work time can be devoted to practicing the highlighted skill through a common objective task.
- SEL doesn't have to focus just on bullying. With Minecraft Education students can build worlds together using communication and collaborative team building skills.

# Classroom Vision

A sample Daily Focus (Class)

- **Opening**
  - ▷ Share a skill or focus
  - ▷ Get students engaged
- **Mini Lesson**
  - ▷ Direct teaching of a skill
  - ▷ Model in Minecraft or in other form
  - ▷ Discuss relation to real world application
  - ▷ Brief overview of objective for the day
- **Work Session**
  - ▷ Students practice skill
  - ▷ Complete measurable objective
- **Closing**
  - ▷ Reflect and relate

## Differentiation

- Grade level SEL curriculum will be planned with teachers input based on need
- Students build and create their own vision of the objective
- Teacher can freely discuss and provide feedback through the platform with open communication and assistance when needed
- Students can be as creative as they desire
- The assignment is their own: provided a framework

# Research

## **Dr. Michelle Zimmerman, Renton Prep Christian School**

*"We know that human connection can be powerful in many settings and environments. Gaming is no exception. Relatedness speaks to a social and emotional impact that occurs through relationships with others. Games that allow a collaborative or cooperative mode provide the opportunity for an increased sense of belonging through relatedness inside of a game environment. When learning design is built into a classroom setting with games that already intrinsically motivate students, that relatedness can extend and transfer outside of the game as students discuss and interact with each other in person as well as in the game environment." (Getting Smart, 2017).*

One of the limitations for this project would be buy in. Many would argue that a game can not influence growth in social emotional learning. I think Dr. Zimmerman makes some excellent points here. Belonging is critical to learning because when someone feels that they belong, they are willing to be more vulnerable to learning. Vulnerability fosters taking chances and creativity is fueled by taking chances. In a student's life, taking a chance can mean the difference between a possible cancer treatment and no vaccine at all. It's all about feeling a sense of belonging, being vulnerable to taking chances and experimenting and ultimately being successful.

# Research

## **Rody Boonchouy, Buck Institute for Education**

*“How do these global communities, created and driven by students, evolve in such a productive and civil way? It’s simple: they feel like they own this world. They built it, they develop it and they evolve it. That sense of ownership that’s not arbitrated by adults or by the adult world encourages deep buy-in. We call this ‘voice and choice’: they’re actively engaged and they’ll lean on their assets and how they can contribute to the learning experience. When you have agency and ownership over your environment and your contributions, that’s an engaging space to be in—and definitely opens students up to learning” (Getting Smart 2017).*

One of the most incredible experiences you can have as a student is any chance you feel autonomy. In Minecraft Education students are in charge of their learning. Boochouy points out that this opens students up to learning. I agree with this because when we as humans feel in control of our fate, we tend to pay more attention to it. This is especially crucial when the fate of your world depends on you and a decision or choice you make. Students must interact and reflect on the choices they make in order to be successful in their mission or objective. It provides a framework for student autonomy and promotes a link to real world decision making when related to others.

# Research

## Allison Renda, Common Sense Education

Minecraft: Education Edition builds on the creative potential of the original game to help enhance the learning process in virtually any subject area. From math (area and perimeter) to science (human anatomy) to history (the Roman Colosseum) and ELA (storytelling), the game empowers students to discover, create, experiment, and make mistakes through trial and error. The mix of the open-world game with added teacher controls opens up the door to a greater level of engagement when demonstrating higher order thinking; students are able to demonstrate what they know and can collaborate in a familiar, open setting, where they feel comfortable taking risks.

It would be nice if there were more worlds geared toward specific learning objectives and directly linked to lessons -- which vary in quality. And while there's no more need to set up a server, the lack of customization mods makes Minecraft: Education Edition seem even more "schoolified" (Renda, 2018)

I enjoy this because it illuminates the ideas that Minecraft Education can support students higher order thinking and social emotional skills while targeting a specific academic subject area. With targeted goals and input from grade level teachers, our SEL teacher can target and differentiate to meet students where they are. A mission of the Clarke Clarke County School District.

# Implementation Plan

## 2019-20 School Year: Pilot Year

- Apply for SEL Grant to determine Eligibility of Program
- Summer 2018
  - ▷ Trial
  - ▷ Counselors and teachers meet to plan target areas for SEL curriculum that meets the needs of students
  - ▷ Plan a Professional Learning for August
  - ▷ Determine Pilot Classrooms
- August through April
  - ▷ Document success
  - ▷ Share with Staff members in April Professional Learning
- April through May
  - ▷ Determine Classrooms that would like to implement
  - ▷ Offer training to staff at the end of May
  - ▷ Plan follow up meeting and plan for the following year

## Reflection

My greatest takeaway from this research was the ability to find a creative way to engage students. SEL is a major concept and is forgotten with high stakes testing and the ever growing expectation of student assessment importance taking the lead in our educational decisions. It was nice to find a balance. A way to engage learners through academic objectives and tasks. As I planned the implementation of this emerging technology, I realized that there is a time block that can utilize this technology (our specials SEL class) and I just went with it. Students enjoy games and in an environment where they are one-to-one and can engage in problem solving, collaboration and creativity with one platform, Minecraft. Students would still gain direct instruction for social emotional skills, but they could practice through virtual means for practice in creation and follow through on their own projects. Feedback and differentiation is easy with this emerging technology and provides many opportunities for student growth and support in their academic, social and technological skills. This is a holistic view of what our students must be able to do.

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