Students as learning leaders: *Minecraft in context*

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Overview:

Project aims

- To increase student progress within key literacy competencies by immersing students in bespoke Minecraft worlds
- to engage students with literacy
- to improve fundamental literacy skills such as spelling, punctuation and grammar.

Rationale

- Microsoft has been working with schools using Minecraft for a number of years. One of the main problems schools face is how they can ensure that Minecraft is making a difference to the students' progress.
- Some students find it hard to master basic literacy skills, when this happens they can become disengaged from the subject. Minecraft can engage students and help them to grasp those skills**.**

Project Outline

- Create a selection of worlds in Minecraft that have literacy activities built in
- run multiple sessions with a group where students have to work together within the world
- evaluate the impact of the sessions on the students' progress.

Impact

In order to test the impact of Minecraft on students' literacy skills, I ran three sessions looking at writing to inform and writing to describe.

Session 1: during this session, students were taken through a tutorial world that explained the basics of Minecraft. Whilst in the world students had to make note of the language used throughout the world. After completing the tasks in the world, students then had to create their own tutorial world for someone who had never played Minecraft before.

Session 2: students were given a piece of descriptive text from 'The Wind in the Willows' and asked to analyse the different descriptive techniques used. After a quick class discussion, students were split into groups and tasked with building the scene in Minecraft. Once students had completed this, they were given another piece of text and asked to do the same task. This time the class was split in half and were told that they were competing against the other group.

Session 3: in the final session, students could build what they liked. After completing their build, they had to write their own story using the techniques we had looked at in the previous session to describe the work of another student.

Students' Progress

To estimate the impact of the sessions a group of mixed ability students took part in an assessed written task both before and after the sessions. This piece of work was testing the students on Competency CL.WP.02: produce clear and coherent writing in which the development, organisation, and style are appropriate to task, purpose, and audience.

The table below shows the competency levels by which the students were assessed:

Level	Competency Score	Code
Entry	Emerging	EnE
Entry	Developing	EnD
Entry	Proficent	EnP
Entry	Advanced	EnA
1	Emerging	1E
1	Developing	1D
1	Proficent	1P
1	Advanced	1A
2	Emerging	2E
2	Developing	2D
2	Proficent	2P
2	Advanced	2A

Group One: Group 1 took part in the three English sessions.

Student	Group	Feb 2017 CL.WP.02	March 2017 CL.WP.02
Student 1	1	1A	1A
Student 2	1	1P	1P
Student 3	1	2E	2E
Student 4	1	1A	1A
Student 5	1	2D	2D
Student 6	1	1A	2E
Student 7	1	1A	1A
Student 8	1	1P	1D
Student 9	1	2P	2P
Student 10	1	1P	1A
Student 11	1	1P	1P
Student 12	1	1A	1A
Student 13	1	1A	1A
Student 14	1	1D	1D

The table above shows that two students in the group made enough progress to jump up at least one competency level following these three sessions.

Group Two: Group 2 acted as the control group and did not take part in any sessions.

Student	Group	Feb 2017 CL.WP.02	March 2017 CL.WP.02
Student 1	2	1A	1A
Student 2	2	1P	1P
Student 3	2	2E	2D
Student 4	2	2D	2D
Student 5	2	2E	2D
Student 6	2	1P	1A
Student 7	2	1D	1D
Student 8	2	1A	1A
Student 9	2	1P	1D
Student 10	2	2E	2D
Student 11	2	1D	1A
Student 12	2	1A	1A
Student 13	2	2E	2E

We can see from this table that five out of the students in the group made enough progress to jump up at least one competency level.

This evidence could be interpreted as indicating that the Minecraft experience had limited impact on students' progress, but it should be noted that this method of working is relatively new to these students and that they may, therefore, need to spend more time working in this online environment in order for the true benefits of this work to become clear.

This conclusion is supported by students' responses in terms of their engagement (see below), which could indicate that if they were able to use Minecraft software on a more regular basis, their increased engagement could lead to improved results.

Student Engagement

The table below shows the results of the survey conducted on student engagement with these activities following the final session:

Student	Did using Minecraft make you feel more engaged with the work that was set?	Did you enjoy using Minecraft in your lesson?	Would you like to continue to use Minecraft across more subjects?
Student 1	Yes	Yes	Yes
Student 2	Yes	Yes	Yes
Student 3	Yes	Yes	Yes
Student 4	Yes	Yes	Yes
Student 5	Yes	Yes	Yes
Student 6	Yes	Yes	Yes
Student 7	No	Yes	Yes
Student 8	Yes	Yes	Yes
Student 9	Yes	Yes	Yes
Student 10	Yes	Yes	Yes
Student 11	Yes	Yes	Yes
Student 12	Yes	Yes	Yes
Student 13	Yes	Yes	Yes
Student 14	Yes	Yes	Yes

All students who took part in the sessions said that they had enjoyed using Minecraft and they would like to see it used in more subjects. Thirteen of the fourteen students stated that they felt that Minecraft had made them feel more engaged with the task and many students commented that they worked harder when using Minecraft.

Examples of students' work can be found in appendix 1.

Student and teacher comments

Student comments

"It gives a better experience as it is enjoyable, because of this, we were more interested in learning and it made us work harder."

"Minecraft benefits lessons because it engages students and makes them want to learn and try harder."

"Minecraft helps you learn together and also to work as a team with other people."

"It enables students to enjoy lessons and become more engaged with the task."

Teacher comments

"All students approached these sessions with an enormous amount of enthusiasm, with a number of students making enquiries about how they can continue on with their work beyond class time."

"Engagement in all of the activities was extremely high, and students appreciated the opportunity to conduct their studies in a new and innovative way."

"Those students who often struggle with their basic literacy, but perhaps have an aptitude for technology, became animated and ardent on reading more."

How to…

Step 1: Learn from other teachers that are using Minecraft.

Teachers from all over the world are using MinecraftEdu. Many are sharing their experience either on blogs or on the MinecraftEdu site. Reading these articles and engaging in conversations with others is a great way to ensure that you make the best possible start.

Step 2: Purchase MinecraftEdu

Minecraft Edu will run on most devices so you should not need to worry about buying new ones. A member of your I.T. Support team should be able to go through the simple setup required to get MinecraftEdu running. Buying one server license and multiple student licenses should be enough to get you started.

Step 3: Use the teacher tools

MinecraftEdu comes with a number of tools that make it easier for teachers to create and manage lessons. These include being able to place and remove multiple blocks at a time, freezing and teleporting students, setting tasks and controlling world settings. Getting used to these tools will help your sessions run smoothly and allow you to build new worlds.

Step 4: Start a Minecraft Club

It is a good idea to start a club with students who are enthusiastic about Minecraft as well as those who have never played before. To begin with start by doing single session activities, this will allow students and yourself to get to grips with the game (the tutorial world is a brilliant introduction). After a few sessions try doing a project with the students, this could link into something they are covering in lessons.

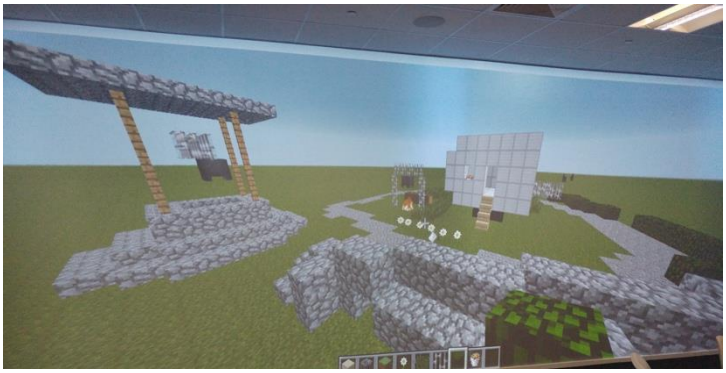
Step 5: Introduce other members of staff to Minecraft

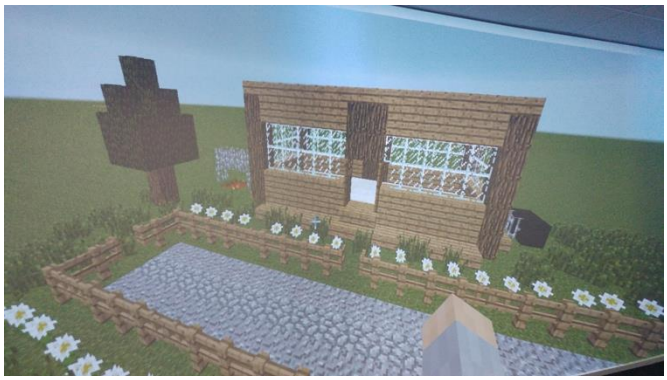
Find another teacher who is keen to get involved and work with them to create sessions for your club as well as a full lesson to do with a class. This will interest other teachers and you should then be able to work together to create a bank of lessons covering different subjects.

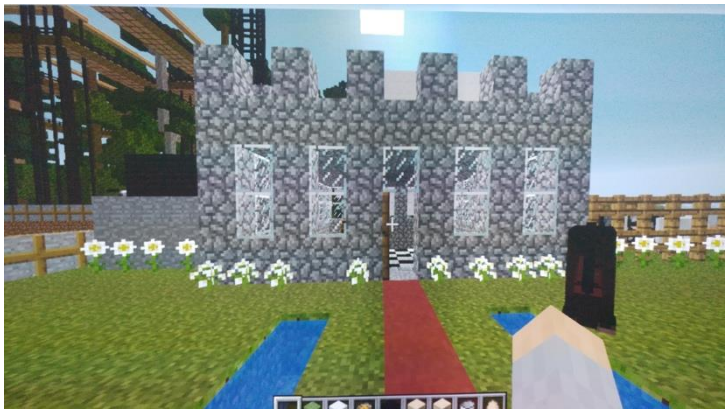
Step 6: Present Minecraft

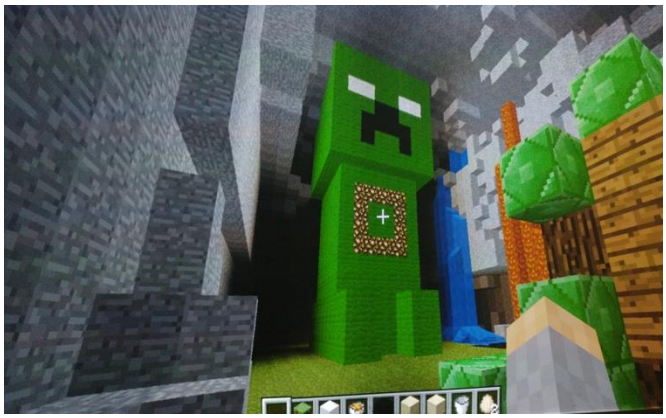
Before you go any further present the work you have done so far to your senior leadership team. Make sure they are aware of what you plan to do with students both in the after school club and during lessons. From here, you will have the backing you need to embed Minecraft into your curriculum.

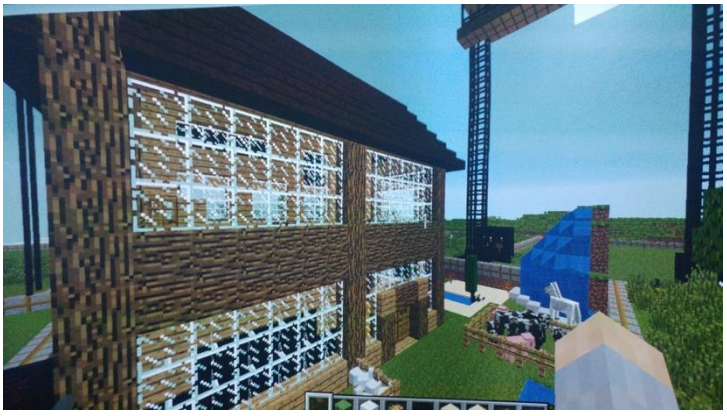
Appendix 1: Examples of students' work within Minecraft

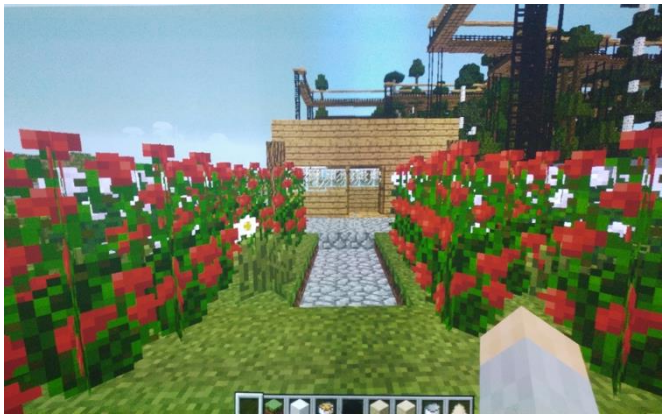












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Examples of students' written work

"There was a tall dark house with long windows. As I walked further into the colossal building I saw a mine. Inside the mine there was lava on one side and on the other there was a waterfall pouring down from the ceiling into a deep pool of water. On the floor the grass was really wet. When I looked around I spotted some jewels and diamonds - they looked beautiful. I quickly ran up the slope and carefully took a diamond because they looked like they would make me rich."

"Daisies and tulips scatter across the greenery as ponies and roses line the cobblestone path. A stream of water flows around the wooden log cabin, mirroring the bright, blue sky. The glistening sun reflects on the glass, and through it you can see furniture, welcoming, colourful and spacious. The sweet, fresh aroma wafts through the air, complementing the beautiful surrounding scenery"