

Virtual Town Planning: Planning a Virtual Town to Build in Minecraft

Tech Tool

1:1 student:tablet ratio

Kiyotaka Horii, Nishimachi International School, Minato-ku, Tokyo, gave his students the opportunity to use LoiLoNote School to brainstorm their ideas when planning their Minecraft city.

What is “Minecraft”?

Minecraft is a first-person “sandbox” game* in which players dig holes and collect blocks in a digital landscape. Its **creativity, flexibility and freedom** to build literally anything you want is considered the key to its phenomenal global success, with total sales of over 70 million copies across all platforms (June 2015).



From early on, educators and developers were quick to realise Minecraft’s **educational potential**, and its **popularity as an educational tool** has only grown ever since. There is even MinecraftEdu, a special version specifically for classroom use. To date, it has been used by over 5000 teachers in over 40 countries to **teach everything from STEM to poetry**. In January 2016, Microsoft announced the launch of a new education edition.

Mr. Horii’s first encounter with Minecraft happened a few years ago, when his son became addicted to it. He began to consider its educational applications and he now actively tries to incorporate tasks using MinecraftEdu into his lessons. As one of very few Japanese schools conducting lessons using Minecraft, Mr. Horii is always looking for **new and effective ways** to introduce it into his classroom.

**Sandbox game: A game in which there are no set rules, structure or direction as in traditional games; the term refers to a child's sandbox. Players have the ability to choose how they want to interact with the game content and gameplay is generated through the player's open-ended choices. Such games usually take place in an open-world setting and many have building and creation aspects.*

Outline of the Class

Mr. Horii recently built an activity around Minecraft for ten students at his **after-school computer club**. The goal was for each student to come up with an **idea for a building or facility** such as house, school, or fire station, that he or she wanted to build in the group’s virtual city to be built using Minecraft. Mr. Horii explained the rules of the task then let students get to work.



Mind-mapping is a well-known powerful activity to **help students visualise, order and organise their thoughts and ideas**. Since the ultimate goal of introducing ICT into the classroom is to facilitate rather than hinder progress, he gave all the students the option of using coloring pencils and paper or inputting directly into LNS.

Approximately one-third of students used colored pencils to draw a picture of their building on paper then photographed their drawing to import it into LNS. However, the majority of students chose to work directly with LNS, utilizing its wide range of **multimedia creation tools** to **express their ideas** through drawings, handwriting, typed text, symbols/emoji, photographs and Internet screenshots.

Outline of the Class

In the past, Mr. Horii has carried out project-based learning (PBL) tasks using Minecraft. For example, previously, he set his students a challenge called “Escape from Everest” in which players had to work together to construct an escape rocket from iron blocks, which helped them to **develop life skills such as teamwork and problem-solving**.



He has also used it to help students understand challenging real-world concepts. He split students into two teams and assigned each team a territory. One team had a “normal” resource-rich territory, while the other team was given a resource-poor territory lacking in natural resources. The teams were instructed to each build their own city.

At first, there was no discernible difference but, as the two cities developed, the resource-poor group gradually began to notice a difference with the resource-rich group. They were thus **confronted with the “reality”** of resource management and environmental conservation and forced to **spontaneously consider solutions**. The simulation helped students to **get to grips with difficult concepts** through virtual experience as well as theory.

Benefits for All

Mr. Horii shares his thoughts on the role and potential of ICT in education as follows:

“I believe each teacher has to utilize his/her creativity to devise strategies that promote successful and effective learning for students. We all know technology is here to stay. Schools the world over are integrating or have already integrated technology into classrooms to greater or lesser degrees.”



“We should expect those levels to increase and start to think of computers and hand-held devices as “study tools” of the future, on a level with traditional classroom tools, namely, pencils, erasers, and notebooks. Rather than be swept under by an ICT tidal wave, we as educators should be looking at ways in which to maximize the benefits of ICT in the classroom, recognizing the rich opportunities it affords students for individual learning, communication, and expression.”

Source: <http://kiyotakah.com/about-me/>