Seeking students to trial new Minecraft lessons (is this the best school test ever!)

The SPCA was developing a new learning resource and needed someone to test it out. A chance meeting at last year's INTERFACEXpo, led them to Jo Mottram and a request she could hardly refuse: "Can you and your students help us test some new learning experiences based on Minecraft Education Edition?" As Wilj Dekkers explains.

This term, students at Elmwood Normal School have been given the opportunity to help the SPCA with a very special project.

Jo Mottram's Year 5 and 6 Ruru Toru class has been asked to help develop a series of Minecraft Education Edition resources that are aligned to both existing SPCA units of learning, and the Digital Technology update to the Technology curriculum. When complete, the lessons and resources will be shared via the SPCA's Teachers' Portal.

"After a student entered our recent SPCA Safe and Happy at Home Catio Design Competition with an incredible design created in Minecraft, it inspired us to explore how we could potentially incorporate Minecraft program into otherareas of our education programme," said Nicole Peddie. SPCA's National Education Manager.

Exciting venture

"As luck would have it, we connected with impactED at the INTERFACE*Xpo* event earlier this year and this exciting venture blossomed from there.

Already having many excellent units plans and lessons freely available to New Zealand schools, the SPCA is working in partnership with Microsoft to integrate Minecraft Education Edition into several technology-focused learning experiences. The revised lessons will allow ākonga to demonstrate their creativity in new ways as they learn about animal care and welfare.

"This collaborative partnership is providing a new and unique platform for SPCA to engage and educate an audience of teachers and learners that may not have otherwise engaged with animal welfare and humane education before.

"Our education programme strives to nurture respect, kindness, compassion, and concern for people, animals and the environment. So, we are really excited about being able to provide students with future-focused education opportunities that not just support them academically, but socially and emotionally as well."

TESTING TIME: STUDENTS HARD AT WORK WITH THE NEW MINECRAFT RESOURCES.

During the term, myself and a small number of SPCA teachers will work with the tamariki to develop the resources. As a Microsoft Global Training Partner, impactED's mahi has been funded by Microsoft. This collaborative process will see Jo's class play an important part in both the development and testing of the new learning experiences.

Ideas and challenges

Both adults and tamariki will work in tandem, developing innovative ideas and build challenges that are not only engaging, but more importantly, the experience of using Minecraft will enhance the learning outcomes of the lessons.

"I am really excited to be a part of this collaborative activity," said Jo. "The SPCA provides a variety of lessons that are aligned to the New Zealand Curriculum.

If you were wondering ...

A catio is an outdoor cat enclosure, also known as a cat patio. It is an area where your cat can have access to the outdoors, without being able to roam off your property. The 'Catio Design Competition' challenged students to come up with a design that would keep a cat happy and safe at home.

The children are learning about animal welfare and care through these lessons and then using Minecraft in an authentic context to create artefacts that will solve problems.

Provide feedback

Having worked through a trial lesson and tested a new Minecraft build challenge, Jo's class provided feedback that has already been acted on, improving the timing and structure of the lesson.

"I have been using Minecraft as a tool for learning in my classroom for the past three years," continued Jo. "I am definitely not a Minecraft expert but I don't need to be.

"Children are amazing problem solvers and enjoy sharing their knowledge with others. The students in my classroom know that other children are their first port of call when they require help.

"I love walking around the classroom and seeing what the children are creating, listening to them problem solve, delegate jobs and explain to me how things work."

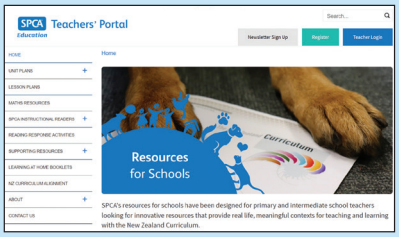
Cat puzzle feeder

The initial trial experience asked the class to work in small groups to design a cat puzzle feeder that would be stimulating and allow cats to make use of their natural hunting instincts. The class commented that Minecraft was a useful tool to use to build their prototypes in 3D and that their ideas were not limited by having to use box and tube shapes. It showed that working in small groups with Minecraft fosters communication, teamwork, and critical thinking, which are all important traits of the Key Competencies.

"The children know that it is just one of many tools they can use for learning," added Jo. "We often discuss how it is helping develop the Key Competencies – Managing self, Participating and contributing, Relating to others, Thinking, Using language, texts and symbols – that are embedded into the teaching and learning happening when they are at school.

"Everyone in Ruru Toru is grateful to play such a key role in this project. It is exciting to know that the lessons they help develop now will one day be used in classrooms across the country."

Wilj Dekkers is a senior education consultant at impactED in Christchurch.



From lesson plans to reading activities, check out a range of resources at the SPCA Teachers' Portal.

teachers.spcaeducation.org.nz

Finally, it was time to take the plunge with Minecraft

"Minecraft Education Edition. Anybody interested in doing some professional learning?"

This is how Room 24's Minecraft journey started at the back end of Term 4 last year. An email had come round from Thomas, one of our APs, stating that there was an opportunity to undertake some professional learning using Minecraft Education Edition. You know, one of these emails that we all get 100 times a year offering free PL that you have to do in your own time.

Now, as all teachers know, Term 4 is usually a super busy term, everybody is tired and the plate is normally full.

And Minecraft? Really!

There was also a healthy dose of scepticism as to how an online building game would be relevant to the classroom environment.

Talking incessantly

However, in the back of my mind there was the thought that maybe this was an opportunity to be taken. Unless you've been living under a rock, in a dark cave on a very remote island, you will surely have heard children talking incessantly about Minecraft. It's immensely popular game that's easily accessible, free to use and simple to learn.

Maybe then, this was an opportunity to help engage the learners in my classroom with a different tool that they will clearly be interested in. Time to take the plunge!

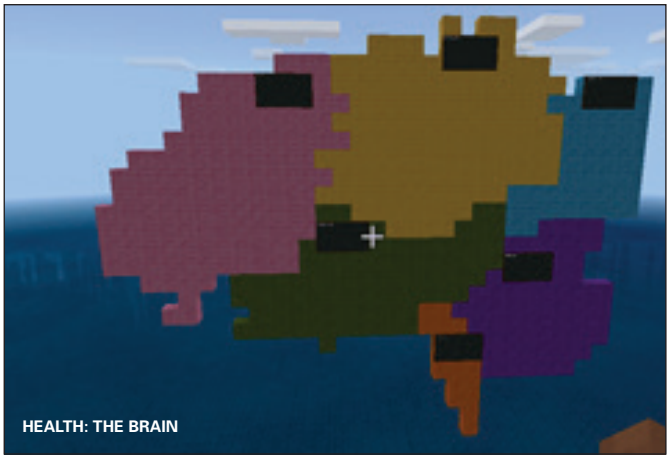
The first step I took as the class teacher was to undertake the free online modules that are offered for educators. This allowed me to learn the basics of Minecraft, although, I'm pretty sure I could have learnt most of this by just having a play myself.

After a couple of hours doing the online modules, I felt confident that I could at least start to look like I knew what I was doing in front of the class and wouldn't look like a noob. (That's the person you don't want to be in gaming. Basically, the person who makes all the classic errors.) After that, it was time to roll out the game to the class.

Teething problems

As a school, we're lucky that our Year 5 and 6 students are 1:1 with Chromebooks, so we didn't have any issues with sharing devices or having enough for the children to use. We did have a few teething problems to start with as our new 'intuitive' firewall kept trying to block the game or wouldn't allow the children to log in.

Working with Alan, our tech guy, he helped us to set up Microsoft licences (free) for all students, which linked to their Google accounts (we are a Google school). This helped us to solve the firewall problems. I would suggest that you have a go-to person within the school who can help you with this. Then we entered the sphere of making sure we had updated versions of the game. This was easy to solve, although a few kids had run out of memory on their Chromebooks. A simple powerwash freed up the space we needed (Shift + ctrl + alt + r).



HEALTH: THE BRAIN

At the time, we were looking at an inquiry unit all about exploration and space. One of the activities the class had to undertake was to design a rocket that they then had to build physically. This seemed like a good point to have a gentle start, for both me and the children.

READY TO LAUNCH: ROCKET 1

They were given the task to design their rocket in Minecraft.

If there was anybody who had not used Minecraft before, they had to undertake the simple tutorials contained within the game to enable them to get up to speed quickly. Bear in mind though that 85 per cent of the class had stated that they had used Minecraft before, meaning only a handful needed additional support.

Taking off

In my mind, as the teacher, I had an idea of what direction students would go in. I was so wrong! Several of my students asked if they could collaborate with one another in the same world. Sure didn't know you could do this!

"Can we design the inside of the rocket?" they asked. Totally! I thought that they would only have time to do the outside.

After a couple of days of refining and editing, and making sure that they had met the design requirements, they then showed off their rockets by taking screenshots and publishing them on to Seesaw. As you can see, their work was impressive, detailed and they went to great lengths to make them look authentic by adding flames and smoke as if the rockets were taking off.

After our first attempt, the class continued to develop their new skills, especially around the use of tools. These tools, which you can equip the whole class within Minecraft, are really useful for taking notes, pictures and adding information throughout your world. We were also lucky enough to have a couple of sessions with Brad from Cyclone, who helped teach and upskill the whole class (including myself) on things that we could create and tools that we could use to make our experience as useful as it could be as well as authentic.

Although chasing after the sheep is fun, it doesn't help us with our learning! To help practice our skills and put our learning to good effect, I designed some activities for the children through this term's inquiry all about the Olympics and the human body. Their first task was to show their knowledge and understanding of a body system using Minecraft. They had to also teach others about this body system.

Different direction

As before, the children took this in interesting and different directions. We had Minecart rides around the digestive system and models of what a healthy lung looked like compared to one that had an infection. We also had a tour of the different chambers of the heart.

Again, rich in depth learning where students were engaged throughout the whole process. They still had to do their research, talk to each other and engage with their learning. Minecraft allowed them to do far more though, such as make 3D models, which would normally not have been achievable in class. A win for all?

As a class teacher, I'm really excited now in the direction that can be taken in the world of Minecraft. The idea is to now plan for specific experiences and allow the children to use the program as another tool to help with their learning.

I see many possibilities for it to be used in literacy and numeracy, as well as inquiry, and this is something that we shall be exploring for the remainder of the school year. It's great to have an authentic tool that engages the children by not only tapping into their interests but also giving them more freedom to explore how a task can be completed.

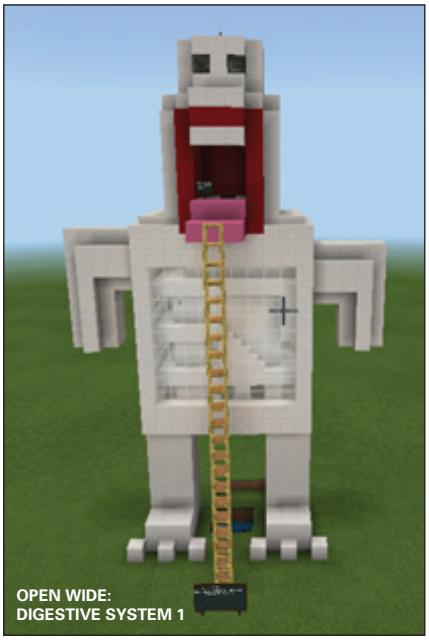
For me as an educator, I'm going to be looking to link up with some like-minded people, who can share their experiences and ideas, so that I can grow my authentic use of Minecraft in the classroom. These are exciting times for Room 24 and, although we are only at the start of our journey, I see endless possibilities ahead.

Richard Loten teaches at Oratia District School in Auckland.


INSIDE: DIGESTIVE SYSTEM 2


READY TO LAUNCH: ROCKET 2


READY TO LAUNCH: ROCKET 3


OPEN WIDE: DIGESTIVE SYSTEM 1

More about Minecraft Education Edition

This is a game-based learning platform that promotes creativity, collaboration and problem-solving in an immersive digital environment. Thanks to the schools' agreement between Microsoft and the Ministry it's available for free to use. Plus, with 100s of standards-aligned lessons, classroom-friendly features, tutorials and challenges, teachers can access everything they need to get started with no experience required. Learn more and get started at **education.minecraft.net**

Our student Minecraft competition is back in Term 1 next year!
Find out more on page 7.