Hwb Minecraft Learning Centre



Could Minecraft work in a Classroom?

My first involvement with Minecraft: Education Edition started back in 2017 when I was approached by our education consortium to be a part of the 'Cracking the Code' initiative by the Welsh Government to develop coding through Minecraft: Education Edition.

I had heard of Minecraft but not in an educational context, I was intrigued to say the least and agreed in principal to take part. I took part in the Pilot project to develop coding through Minecraft and one thing stood out during the pilot phase; the engagement of the learners was substantially increased during activities involving Minecraft: Education Edition.

In the summer of 2019 I was approached by Welsh Government again to see if my school would be interested to become a Hwb Minecraft Learning Centre and I jumped at the chance to be involved.

Welsh Government invested £1.2 million to give educators and 467,000 young people access to Office 365 and Minecraft: Education Edition across Wales via the country's Hwb digital learning platform. I was delighted when Welsh Government launched the Hwb Minecraft Learning Centres initiative to use Minecraft: Education Edition as an educational tool across the curriculum. Now educators needed guidance and support on how to use Minecraft: Education Edition to teach subjects such as science, history, coding and enrich the new curriculum for Wales.

The Digital Competency Framework (DCF) was first launched in September 2016 in Wales. Finding a variety of 'digital rich skills' projects was a challenge first of all, mainly due to the limitations of software available. Minecraft: Education Edition seemlessly addressed so many of the strands in the DCF, this is what convinced me that there was milage in using Minecraft: Education Edition in the classroom.

During my first involvement with using Minecraft: Education Edition project to develop coding, it would be fair to say, the moment the learners found out we would be using Minecraft: Education Edition the engagement level rose across the board. "Are we playing Minecraft today sir?" would be a repeated question, with my answer always being "No, we're not playing Minecraft, we're learning with Minecraft".

I then challenged myself to come up with projects that would develop the learner's digital skills, communication skills and that were truly cross-curricular, that also lined up with the DCF. We have a historic Castle, built over 800 hundred years ago that sits on a rock above looking down at the school. My first project was born, re-create the Castle using Minecraft: Education Edition.

Through a combination of using Office 365 to plan the build using Word and Excel Online collaboratively, the learners researched how the Castle was built, which materials where used, the original layout of the Castle and much more. The learners were developing knowledge of local history and collaboratively creating one research document in groups of 3 or 4 using Word Online. The next phase of this project was planning out the build using Excel Online collaboratively to create one planning document. During the build learners had to use the Agent to build some parts of the Castle, this would aid the development of their computational thinking skills and coding skills.

As I was observing the learners whilst they were building in Minecraft: Education Edition I realised the wealth of other skills that were being developed. High-order thinking skills were constantly being used because the learners would often be thinking two, maybe three steps ahead sometimes. Decision making skills are a crucial part of building anything in Minecraft: Education Edition, decisions about blocks & materials are made all of the time but these decisons also had to be communicated within the group. Learners also developed their problem solving skills as with any practical build, mistakes are made and they need to be rectified.

As I mentioned previously, one of the main things I learned from using Minecraft: Education Edition in the classroom was the level of engagement. As soon as the learners hear the word Minecraft, the level of engagemnet is amplified to the nth degree. This quote from IDEO – Design Thinking For Educators says it all:

Hwb Minecraft Learning Centre



"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."

Minecraft: Education Edition allows educators to do this. It allows educators to create engaging projects, tasks, assignments for learners which are relevant, more effective and more enjoyable. In turn, learners are proud of their accomplishments, they are so keen to show you their work and take on feedback.

Another successfull project that was developed was using Minecraft: Education Edition to build a sustainable house. We had been running this project using another kind of software (Google Sketchup) but it did prove difficult, especially so for the lower ability learners. Using Minecraft: Education Edition became a level playing field as they did not need to learn about how to use the software. This meant more time could be spent on ensuring that Minecraft: Education Edition was used for learning, not learning about how to use software.

The end result from the learners was transformed due to the use of Minecraft: Education Edition. Learners were proud of their work and many would carry on with the work oustide of lesson time.

Without doubt, the introduction of Minecraft: Education Edition into the curriculum at Ysgol Ardudwy has had a profound effect on the learning outcomes. An evaluation of one of the projects written by a learner was identified as good practice for development in literacy. One main reason for this is the enthusiasm the learners have for their work and this is evident throughout the planning, building and evaluating phases of the projects.

Becoming a Hwb Minecraft Learning Centre and working with other Centres has given me more confidence to explore other parts of Minecraft: Education Edition such as the Redstone elements to go even further in the future to develop cross curricular projects using Minecraft: Education Edition.

Minecraft: Education Edition is here to stay at Ysgol Ardudwy.



Elfyn AnwylAssistant Headteacher – Ysgol Ardudwy