Play, games, and culture
How games transformed my pedagogical practice

MARIANNE MALMSTROM

Digital games are responsible for turning my pedagogical practice on its head and landing me in New Zealand. My journey down the digital games "rabbit hole" started in 2007. Not having a map to follow ended up being revolutionary as I learnt to follow the learning. I describe four important lessons I have learnt through working with students in digital games and virtual worlds.

If you had you told me in 2006 that digital games would turn my pedagogical practice on its head and land me in New Zealand, I would have laughed and secretly thought you were daft. Back then, I was the teacher who sternly declares, "No Video Game!"

I'm embarrassed to admit that I ever held such a position given, at the time, I had 20 years of experience and a reputation for being an innovative educator. The truth is that my position on banning digital games was not based on any specific knowledge that they were harmful, it was born out of insecurity in facing a new job challenge.

In 2004 I was asked to move out of the classroom and take charge of my school's digital technology lab at The Elisabeth Morrow School located in Englewood, New Jersey, in the United States. Although I was excited by the challenge, I was also completely daunted by the task of developing a new curriculum for technologies that were emerging and disappearing at dizzying speeds. There was no precedent to guide me, or curriculum map to follow. I was scared that everyone would discover I had absolutely no idea what I was doing. To mitigate that fear, I retreated to the safety of a traditional pedagogical approach. As one former student later declared, I never let the students do anything fun those first 2 years in the computer lab.

Gratefully, my passion to keep learning relevant was far stronger than my fear of failure.

Teaching without a map

Not having a map to follow ended up being revolutionary as I learnt to follow the learning. I turned to my students for clues. I figured if I could understand how they used technology outside school, I could make better decisions about designing curriculum. What I learnt shattered everything I thought I understood about teaching and learning. Digital games ended up being the single greatest factor in changing my perspective.

Delving into that realm of video games made me nervous, at first, given all my pre-formed opinions. However, whatever I thought I knew was quickly proven to be baseless supposition.

My journey down the digital games "rabbit hole" started in 2007. The International Society for Technology in Education (ISTE) established a presence in a 3D virtual world called Second Life. I had heard nefarious things about Second Life, so I was intrigued by what ISTE was doing in such a space. I made an account the same day and my avatar, "Knowclue Kidd", was born.

At first, I was completely out of my element as I tried to navigate a 3D environment. It took me 2 days, and a couple of misadventures, before I finally navigated my way to ISTE's virtual headquarters. Once there, I was greeted by "Randall", an avatar representing the very real Randy Orwin. We later met at an ISTE conference and have remained friends to this day. In fact, I have maintained friendships with most of the educators I met there.

The time I spent in Second Life (2007–2009) was the most important period of professional development in my career. Educators from around the world ventured into that space. They all shared common traits of being curious learners, innovative thinkers, and keen to figure out how we keep learning relevant in an age of constant change. It turns out that I was not the only one on that quest. I had found my tribe! We discussed ideas, shared knowledge, mastered new skills, and built a professional learning community that, to this day, has remained unmatched

That time was critical in my journey for two reasons. First, it introduced me to the sandbox platforms of virtual worlds, which became a huge focus of my work with students. Secondly, it revealed a culture of disdain regarding video games. As educators, we were always

adamant that Second Life was NOT a game. That position was ironic given we were okay sharing a platform better known for gambling and virtual sex.

The irony of our position wasn't completely lost on us. In fact, it is what spurred an extended conversation regarding our initial negative perceptions. None of us played video games. We could not point to any real basis for our prejudice. There was only one thing to do: educate ourselves. A group of us decided to start by playing World of Warcraft. Knowing there would be safety in numbers, we created a guild for teachers called "Cognitive Dissonance". Our motto was "Learning to game, gaming to learn". It continues to be an active guild today, and a space where teachers can comfortably explore and learn.

I was blown away by two things when playing World of Warcraft; the complexity of the game and the masterful scaffolding built within the game system that guides players to successfully navigate through a complex system without tutorials. This level-up system to skilfully guide new players, is a great example of Vygotsky's zone of proximal development in action (Robertson, 2014).

Those first two experiences in Second Life and World of Warcraft built the foundation for my shift in thinking. However, it was the subsequent work I did with students in virtual worlds and digital games that truly transformed my thinking.

I knew from the first time I set foot in Second Life that I would find a way to get students into a 3D virtual space. I was lucky. I worked for a private school where teachers and students were encouraged take risks and innovate. That culture of trust made it possible for me to innovate and push traditional boundaries in ways not possible for my colleagues in the public sector.

I was given funding to create a virtual world for my students in Teen Second Life. My plan was to use that space to teach students machinima (video created using 3D games or virtual worlds). Having already built an award-winning programme in digital video, it seemed like an interesting next step in building my media-literacy programme. The students loved the challenge and created amazing political commercials for Greek Ggds. However, the greatest lessons learnt from that experience were for me.

Lesson 1: Give students time to play, explore and solve problems. Since none of the students had ever been exposed to a virtual world, they were quick to ask for help. As a dutiful teacher, I would go to them each time they asked, only to discover they had already figured out the answer. I started to pretend I hadn't heard them to see how long it took them to work it out themselves. It became clear that I was over teaching. I learnt to give the students ample time to explore the space before assigning any tasks. That play time was crucial in learning new tools. There was such a great buzz in the room as students discovered and shared with each other their newly acquired skills.

Lesson 2: Include students in designing new learning. Students had access to their virtual world at home. What I observed in their play after school hours was far more complex than the lessons I had designed for school. They were making things, creating businesses, negotiating rules, testing boundaries, making alliances, quarrelling and resolving their differences. It was fascinating! I realised that I was holding them back by my limited perception of how best to use this new technology.

I became more comfortable taking risks, letting go of my need to control content and trust my students to help find new learning paths. That philosophy turned my lab into a dynamic learning space with new lessons for me to learn.

Lesson 3: Agency leads to ownership. Ownership leads to complex learning. I offered students the opportunity to choose their own projects for their Year 9 tech class. One boy asked to build a paintball game. I was nervous about signing off on a shooting game, but he lobbied me hard. I made a deal that they could build it but would have to get approval from the Head of School once he completed a prototype. He agreed, got some friends together and went to work! While they worked diligently all semester, they never quite got finished. Clever!

I finally asked them to present to a group of international educators online and make a case for paintball in school. It was a magical learning moment. All of the educators had a blast playing the game. More importantly, we all marvelled at the pride and ownership the students conveyed as they shared their work. The most remarkable moment was when an error in their design was discovered. Without missing a beat, the students fixed the issue while carrying on with their presentation. Their project was intricate in both the design and the amount of collaboration it took to execute. It was certainly more complex than anything I would have assigned in class.

Virtual worlds gave way to digital games as I continued to explore relevance in learning. New technologies meant new problems to solve such as online safety and citizenship. I started to explore the use of multiplayer online games to model and practice positive norms with a trusted adult while at school. Just as it would be impossible to teach swimming without water, I believed you needed digital social spaces to teach online citizenship and safety. Dr Bronwyn Stuckey (2013) refers to this practice as teaching a "Lived Curriculum".

Although my work using online games to model and foster safe and civil behaviour was successful and gained international recognition (Collier, 2012), it was the learning I observed in these new spaces that continued to fascinate me. Minecraft was the single greatest game changer to my thinking about teaching and learning. When I first saw the game in 2010, I was underwhelmed and unimpressed. I was quite surprised when my students

campaigned to bring it into school. Having learnt to trust their voice, I agreed and entered a whole new world of learning. It led to an invitation for me to write a three part guest blog for Net Family News (Malmstrom, 2012).

Lesson 4: Focus on creating content to learn rather than learning content. At first, I recognised many of the same play behaviours that I had observed in those earlier virtual worlds. Minecraft, however, afforded something new, choices between creative play in sandbox mode or game mode focused on survival. Beyond these two basic modes, users were modifying game scripts and manipulating the game engine to perform other functions. It was absolutely fascinating to watch how students occupied this space.

What surprised me most was that students were creating games within the game. Once again, I recognised the limited scope of my imagination. I started to look at the actual learning embedded in this process. Although it may seem like child's play, the act of designing a game is rather complex, requiring systems thinking. It shifts the focus from learning content to learning to create content.

In a world of rapid change, the one constant we know students will need is the ability to be agile and adept at learning. This has become central to my mission as a teacher.

There are many more lessons I have learnt along the way, but these four have fundamentally changed my thinking about teaching and learning. I've learnt to:

- stop teaching content in favour of focusing on learning through students creating their own content.
- stop explaining everything in favour of letting students figure out things for themselves.
- plan learning objectives rather than planning the learning.
- trust my students' ability to choose their own learning path, based on those learning objectives, and to write their own assessments.

I no longer think of myself as a teacher. I feel more like a dungeon master whose job it is to keep the players in that sweet space described by Vygotsky as the zone of proximal development (1978).

Finding a map in *The New Zealand Curriculum*

In 2014, I discovered *The New Zealand Curriculum* (Ministry of Education, 2007) (*NZC*). It is a beautiful learning map! I was especially intrigued by the key competencies as they provide a framework to describe the lessons I have learnt through working with students in digital games and virtual worlds. Ready for a new challenge, I set my sights on teaching in New Zealand in order to learn more about *NZC*.

In 2017, Newlands Intermediate School hired me to further develop their new tech course for digital design. I was given the brief to build a programme that would fill students with awe and wonder. Since the key competencies and learner agency were already central to the school's philosophy, I knew it would be the perfect place to integrate the lessons I've learnt with *NZC*.

The learning in my classes is almost entirely student driven. The room buzzes with the sound of engaged learners focused on a variety of tasks. It's a model that has captured the imaginations of my colleagues. This year, our entire tech syndicate redesigned our assessment criteria based on key competencies. Our team is finding new ways to balance teaching essential skills, such as equipment safety, with creating space for student-driven projects. When possible, students are choosing, planning, and executing their own learning goals. The ownership and pride they feel regarding their work is clearly reflected in the report cards they write themselves.

Shifts are starting to take place in other parts of the school, as well. Teachers, inspired by what is happening in the tech syndicate, are embarking on their own journey to explore what student-driven learning looks like in their own classroom. The key competencies provide an outstanding map, and the lessons learnt through games and play have provided many clues to get started.

References

Collier, A. (2012, March 13). Save the universe: Clear space for learning [Blog post]. Retrieved from https://www.netfamilynews.org/save-the-universe-clear-space-for-learning

Malmstrom, M. (2012, December 12) Mining Minecraft, part 1: Little gamers' digital play through a teacher's eyes [Blog post]. Retrieved from https://www.netfamilynews.org/mining-minecraft-part-1-little-gamers-digital-play-through-a-teachers-eyes

Robertson, D. (2014, August 12). If Vygotsky played Minecraft [Blog post]. Retrieved from http://hotmilkydrink.typepad.com/my_weblog/2014/08/if-vygotsky-played-minecraft.html

Stuckey, B. (2013, November 14). Lived curriculum [Blog post]. Retrieved from https://communitycapers.wordpress.com/2013/11/14/lived-curriculum/

Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Marianne Malmstrom's 35 years of teaching and administrative experience spans from early childhood to intermediate school. She is now a digital design teacher at Newlands Intermediate School.

Email: marianne.m@newlandsint.school.nz