

Informal Game Play in the Classroom: Utilisation and Integration of the Metalanguage of Games

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Abstract: This paper discusses a case study of a 28 children in a middle years (11-15 year old) classroom and the use of the "third space" between the classroom and the home as an area of play for consolidation of both the learning at school and the informal learning of the games played at home. The research aims to look at whether the third space could be a vehicle to enable participants who have identified themselves as competent in the gaming world to link those learning strategies to classroom learning and therefore transfer that success to the classroom. The research took place at an International Baccalaureate school in Perth, Western Australia and utilises the third space as a gaming server and Discord chatrooms. Data was collected from the servers, questionnaires, researcher observations, game walkthrough videos and through interviews with the participants. Being an International Baccalaureate school the children take part in a "cognitive curriculum" which is part of the metacognitive learning of the International Baccalaureate. The participants were applying these strategies to their reflections on their action within the server and these reflections then informed their further participation within the "informal" game. In this way it could be theorised that children who were skilled "shapeshifters" could be at an advantage both communicating within the collaborative group work and moving between the informal and formal spaces. The analysis of the data focuses on the ways in which the students unpacked, utilised and discussed the formal classroom learning whilst participating in the Java Minecraft server game space. The metalanguage of learning and building competence in digital games informally through play outside of the school appears to link well to the metalanguage of the International Baccalaureate curriculum. The paper investigates whether linking children's understanding and use of the gaming metalanguage to the International Baccalaureate metalanguage enables children to traverse the metalanguage of the classroom more successfully. The analysis of the data is utilised threefold in this presentation to: Identify that there is a linkage between gaming language and International Baccalaureate curriculum elements make these links apparent and show how they would apply in the classroom.

Keywords: Third space, School, Middle Years Education, International Baccalaureate, metalanguage, Minecraft

1. Introduction

This article examines informal learning in a third space offered by a Minecraft server that formed the basis of an after-school club. The Minecraft environment was built for use outside of the school setting and much of the activity happened on the server in out of school hours. The study takes place at an International Baccalaureate (IB) Middle School and looks at the children's engagement with Minecraft as a site of informal learning. The research upon which this article is based was conducted between July and December 2020. The qualitative data collected included interviews, focus group discussions walkthroughs of game plays and house builds and video footage. This was analysed through themes developed in NVIVO.

Online games are areas middle school students have power and agency. Understanding the mechanics of participation and the metalanguage allows students to participate in global meeting and creation places that most teachers fear to go. Through a socio-material framework playing Minecraft can be understood as actual building and creating in a third space, not merely a representation of building (Dezuanni, 2016). This research study looks at the use of an authentic gaming space to develop student agency whilst applying the OECD (The Organisation for Economic Co-operation and Development) Sustainable Development Goals (2018) and Goal 2 of the Alice Springs (Mparntwe) Education Declaration (2019) of resilience and problem solving.

2. Third Space as an extension of the classroom

The third space is a concept in cultural theory developed by Bhabha (2004) and has been appropriated and used in the education sphere often in conjunction with looking at the performative aspects of digital literacies education and online play (Guitierrez, 2008; Dezuanni, 2016, Impedovo and Cederqvist, 2023). Potter and McDougall (2017) argue that it is rare that a third space within school grounds could ever subvert the structures of authority that is described by Bhabha in his initial definition of a third space. This assertion explains why this type of research and the use of *Minecraft* in conjunction with the Essential Elements of the International Baccalaureate are important. *Minecraft* allows a space for the subversion to occur as the authority figures are not powerful within it and the students hold all the power through their knowledge of the game. However, the reflections through the language of the International Baccalaureate (IB) allow the researcher and educators to understand how the participants are thinking and learning within the server through utilising the metalanguage of the IB for students to explain their participation and gameplay.

In the broader contexts of everyday life, contemporary media practices and sociality, *third places* are understood as ‘meeting places’ or ‘hangouts’ that sit outside the domestic environment (first place) and institutional domains such as school and work (second places) (Oldenburg, 2000). They are typically neutral ground characterised by belonging, togetherness, accessibility, and playful interaction. In game studies and social media scholarship, the concept of the third place has been appropriated to signify the way online multiplayer games and social media platforms constitute virtual meeting places or digitally mediated community gathering sites (Steinkuehler et al, 2006; Ducheneaut et al, 2007; McArthur and White. 2016). Games are now understood as important and established third places where people meet, nurture long-lasting friendships, and form persistent communities. Playing and talking together through games, especially during times of enforced physical separation such as that experienced during the Covid-19 pandemic, fosters and maintains deep connections across generations and cultures. *Minecraft* is a particularly robust and lively example of such practices (Hjorth et al., 2020).

This research both tapped into and fostered the creation of a third space that subverted the normal power bases of the school. *Minecraft*, an informal gaming world similar to those children play in out of school for leisure, is a persistent third space removed from the classroom or other societal powerbase (Callaghan, 2016). However, there is a need to build the discussion on the autonomy and agency of players as they constantly change, build and create a constantly evolving world. This is important as, in this third space, participants face a completely different set of norms, rituals and values to the outside world. The different set of norms allow the students to be the primary agents within the game which means they also have power over what they choose to learn, who they want to interact with and how they are going to develop the game play. In this co-constructed world, participants play with new concepts, ideas and game play strategies, generally without fear of approval or disapproval.

Schools have been criticised for the way in which they are not linked to the outside world which they prepare their students to enter (Zhao, 2020). This difficulty was encountered in the research process, when setting up an online space that was not within the formal school setting. This research was approved by five schools’ administrations and technology departments to be run in their schools. However due to school system firewalls and system wide blockages it was difficult to enable the *Minecraft* java server to be accessed in these school technology systems. Even with full school administration permission and a game that posed no risk to the schools or the students the firewalls could not be altered to allow the game to run in most schools. Of five schools approached in Western Australia, this International Baccalaureate school site was the only school that met the study’s selection criterion of bringing the outside world into a third space within the school by adjusting their security protocols.

The decision was made to implement *Minecraft* Java Edition on a private server rather than the schools’ *Minecraft Education Edition* as it gave student participants more agency through their actions and designs and access to the latest upgrades through mods (modifications and add-ons) made by the global community of *Minecraft* players. The student participants had power to change and create their identity and the *Minecraft* world they played in. They were able to re-design the standard template block figure (also known as Steve) to reflect how they wanted to be represented in *Minecraft*. This fits very strongly with Bhabah’s (2004) notion of the performative nature of identities where people are continually able to remake boundaries and renegotiate their own image put out to the world and where they are now, and how they may look.

3. Discussion of the student’s utilisation of the third space in the game

This option of being able to change skins, identities and essentially virtually “shapeshift” allows children in third spaces to be able to trial new ideas and strategies with the option of the worst case scenario being that they need to shapeshift to a new identity if they lose everything. This allows children room for productive failure, ref needed but it also gives room for children to escape reality- sometimes with friends from their “real” world. Online games are spaces that research has demonstrated middle school students have power and agency over their identity, play and participation. Understanding the mechanics of participation and the metalanguage allows students to participate in these global meeting, play and creation places that most teachers fear to go. Through a socio-material framework playing *Minecraft* can be understood as actual building and creating in a third space, not merely a representation of building (Dezuanni, 2016).

There were data collection points throughout the research where the participants discussed reasons why they wanted to play within the server and take part in this research. They also discussed the background of how they had become involved in playing *Minecraft* out of school as part of their initial onboarding questionnaire and in the initial focus group meetings. These stories were very insightful and gave a look into the why these spaces

are important for middle school children to be able to participate within as they are going through the shifting identity development of their early teen years. One of the children within the study discussed how they had created a creative world in Minecraft that they shared with a friend who was in the same split family situation as them. Essentially, they were moving between two very disrupted families from mother's house to father's house. They would take their Tablet device with them and play in the server at both homes. This server world was their stable world where they had control over the what they created, strategies they implemented and communications with their friends. They had divided the world into two halves- one yellow (the friend's side) and theirs was blue. They played together here and had developed a combined "zoo" where they kept a few of all the different creatures they had found in Minecraft. Online games are areas middle school students have power and agency (Dezuanni, 2020). They saw themselves as explorers of the realm

Bill: "I am an explorer and as with all explorers all through history things go wrong- you learn to deal with it—you don't get to do this in the real world anymore- everything and everywhere I can go has already been discovered."

The two children worked on the exploration and development of their Minecraft realm together. They were constantly problem solving in this realm to be able to keep all the animals in their zoo alive as well as searching for ways to make all objects in each side either yellow or blue. The children all agreed that understanding the mechanics of participation and the metalanguage allows them to participate in global meeting and creation places:

"It's that we all share something in common that we can talk about and inspire each other to do things. It's a bit of a break from the real world." With one of the most attractive aspects of participation being that most teachers and parents fear to go to these places, so the children are allowed to participate freely in this space. This was a topic of discussion about both Minecraft and the Discord messaging system that was used.

4. Lessons from the Server: What can we learn from this to bring into the classroom?

Benwell and Stokoe (2013) discuss the importance of space in a post-modern, Foucauldian sense impacting the development of identities more than place. This is reflected throughout this research. It was important that the space provided had the significance to the participants and would enable participation as though they were in a "cool" external space. One that resembled the home and world of popular Minecrafters as it was only through providing this type of space we could invoke the identities the participants have and have developed in these spaces (informal), rather than the identities they possess in the school (formal) place. Spaces build identities rather than identities building spaces (Benwell & Stokoe, 2013) In this case, this is significant as the Minecraft Education world puts limitations on participants whereas the original Minecraft game opens the possibilities of boundaries, powers and objects that are not available in the school space.

The java server Minecraft world was developed as a place that provided an informal enabling space where participants would feel that their "Minecraft" identity was valued and where they had agency to utilize all their skills and knowledge from "outside" participation within Minecraft. However, the Minecraft club was located within the "Place" of the school classroom. The school classroom invokes a different identity – a more formal "school" identity and with this the more formal school processes and organization and time frame. Benwell and Stokoe (2013, p.278) discuss the importance of the individual establishing the appropriate identity for the space and interacting discursively with others to build this identity During the club, there were multiple intersecting points between the formal classroom and informal third space. The participants could be drawing from the discourse of the two identities, formal and informal, at different points of the session, identifying the appropriate times to move or "shapeshift" from one identity to another. Participating in the discourse appropriately is a skill participants developed through the study. In their reflections in the formal school space about their participation in Minecraft, they interpreted, reflected and analysed their actions in the language and discourse of the International Baccalaureate. There are many cognitive thinking strategies which are part of the metacognitive learning of the International Baccalaureate and along with these there is the metalanguage to explain them. One of the key artefacts collected by the researcher in this fieldwork were narrated play and creative house build video walkthroughs. These involved the participant recording their play and then putting the recorded narrative over the top of it to reflect on and explain the gameplay that was occurring or to give a house/world walkthrough of their creation in Minecraft so that the researcher could understand the build and all the elements that had been utilized to create the special features of the building. During this the participants were applying this metalanguage of the International Baccalaureate to their reflections on their actions within Minecraft so that both the researcher and the teacher in the classroom could understand their walkthrough

videos. The walkthrough videos then also gave the students a space to reflect these reflections then informed their further participation within the “informal” server space. In this way the metalanguage of the International Baccalaureate was translated and utilized to improve the Minecraft play.

5. How Can These Findings Be Applied to the Classroom?

Metalanguage is taught to children in Australian classrooms as part of Literacy (ACARA nd). It is a fundamental aspect of analysing multimodal texts in a way that allows the students to systematically analyse and explain conventions authors have used in their choices of design or language to create or amplify meaning (Kress and Van Leeuwen, 2006; Lim, Cope and Kalantzis, 2022). There is also a metalanguage that is part of the reflective nature of the curriculum within the International Baccalaureate (IBO, nd). These are terms that are used to explain the learning through the attitudes and metacognitive skills that students utilize as part of their learning. Students apply this metalanguage in their goal setting and reflections on learning as part of the Inquiry programme of IB schools. When children participate in games and communicate between one another in games they are constantly analysing and reflecting and reviewing theirs’ and others’ game play- this can be seen with the popularity of YouTubers who dissect their own game play (Taylor, 2018). These Youtubers and children understand a common metalanguage for breaking down and discussing the games, builds and theirs and others gameplay. To make these accessible for the classroom to use educationally it is important that this metalanguage can be translated for teachers and a “Newbie” audience. Translating the metalanguage to a school audience is a skill in translation which the participants in this research demonstrated increasing mastery in through the duration of the study.

6. Data Analysis and Metalanguage of Games Findings

Game design and game play within the design is a specific language of its own (Harrer, 2018). Games are a multimodal combination of sound, narratives, imagery, gameplay, puzzles and backgrounds/scenes that communicate an idea or experience to a player through multiple layers of sub-text. Understanding the metalanguage of games is necessary to be able to analyse games, just as knowing metalanguage is for sports or art compositions is necessary to be able to analyse and discuss their merits. Disciplinary literacy – or understanding of the underlying metalanguage is a challenge for all learners regardless of their cultural and linguistic background. Teachers in each of the disciplines should be involved in talking about language and meaning through meta-language in their classroom (Humphrey, 2017). Participants in the study were able to bring their expertise in the game of Minecraft and the literacy involved around participation in the game to share and explain to an audience that did not have the expertise in the metalanguage of the game. They then understood that this needs to be translated to the metalanguage of the classroom to be understood. This translation of the metalanguage allowed the participants to see that their expertise in the game is valuable in formal school spaces as well. The translation also allowed the participants to use another set of analytical tools to reflect and further develop their creative builds or play. The walkthroughs used as part of this research work as a personal exploration of how the game that they have played or create, expressed their themes and purposes through the use of common game techniques from Minecraft.

The videos were analysed in NVIVO and in looking at the metalanguage of gaming used the researcher analysed the videos through the main areas of the:

- **Isolated Meaning of Features of the Game** Discussion (Music, colour palette, style, narrative of the play etc)
- **Associative Meaning of Features in the Game** Discussion (Feel of different elements of the gameplay where different elements are combined)
- **Dynamic Meaning of the Features** of the Game discussion (where new meanings and emotions are created or where the player has researched or created outside of the game to enable further participation).

These categories were taken from Floyd and Portnow’s (2017) Metalanguage of Game Design and were found to apply well to the discussions children had about their play in Minecraft. As can be seen in this very brief snapshot of the data this participant is very knowledgeable and able to express themselves in this metalanguage discussion of Minecraft at all three levels.

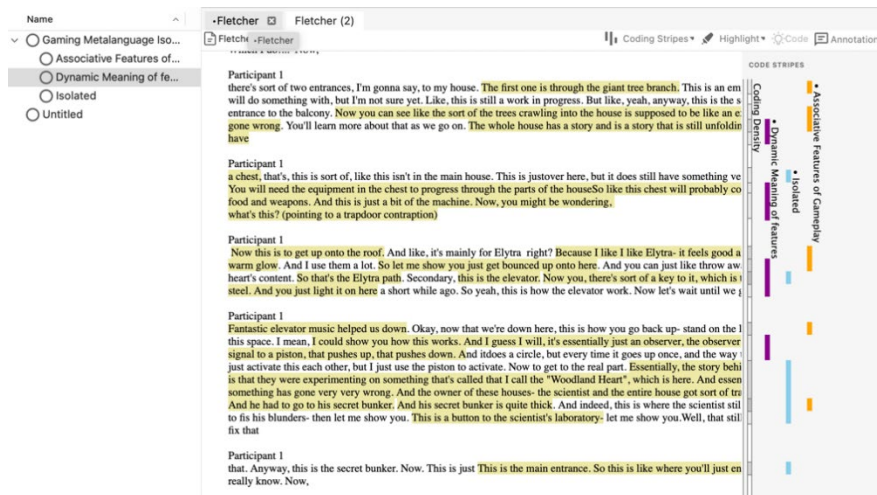


Figure 1: Transcript of Game Walkthrough Video coded for Game Design Metalanguage

What is interesting is if we then look at the comparison of the use of the Metalanguage of the International Baccalaureate within the same video to explain the Minecraft Creative build to the researcher.

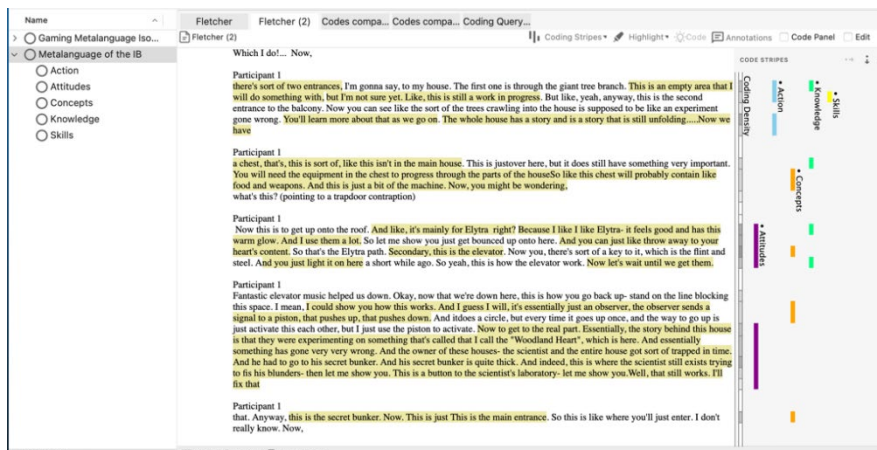


Figure 2: Transcript of Game Walkthrough Video coded for International Baccalaureate Metalanguage

The participant knowing the audience they have produced this for, has used the elements of the metalanguage of the formal IB classroom to be able to explain it – and without realising demonstrated how this can be viewed from a “formal learning” perspective. Metalanguage use within games was one of the categories of demonstrating advanced Gaming literacy (Apperley and Walsh, 2012). Gaming literacy per se is not one of the outcomes of the International Baccalaureate curriculum however meta-cognition, attitudes and learner attributes are. The participant has aligned these in his description of his activity within the game in order to allow the researcher to see the inherent value within his gameplay.

7. Conclusion

On the last day of the fieldwork after the participants completed their final reflection, the teacher who had been assigned by the school to work within the project commented: *“thank you for advocating for our children”*. This was significant as the classroom teacher could see that through researching popular gameplay from the children’s perspective adults can view the online play from the perspective that the participants see it. The teacher also discussed that the idea of Productive Failure being inherent to learning within the game and that being reflected in the attitudes to playing by the children enabled a lot of the anxiety of trying new ideas to dissipate. She commented in her reflection that: *‘seeing these children try without fear of failure is very much apparent within the game and it is good to see students in the group who are often not engaged interacting and laughing but trying again when things went wrong in the game.’*

Student agency for 2030 is rooted in the belief that students have the ability and the will to influence, positively, their own lives and the world around them. Student agency is defined as the capacity to set a goal, reflect and act responsibly to effect change (OECD 2030 Map, 2018). The International Baccalaureate focuses on a

curriculum that prepares students for the 21st Century through a Cognitive Curriculum that explicitly teaches the metalanguage of metacognition. This teaches students how to set goals, map a plan to achievement of goals and then reflect and is in line with the OECD 2030 map. This terminology can assist children in utilising the metalanguage of digital games, such as Minecraft, to be able to translate this into terms that are understood within the formal classroom. Thus, allowing students to be able to communicate their depth of knowledge in games as well as display their digital literacy skills. The research indicates that Multi-Modal literacies are ever expanding and understanding the metalanguage of games could become an important skill as we head towards 2030.

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