Critical literacy and games in New Zealand classrooms

A working paper

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NZCER
Rangahau Mātauranga o Aotearoa

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GAMES FOR LEARNING
A RESEARCH PROJECT

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Abstract

We know it is important to help students to critically engage with texts like books and movies. We want them to become skilled at questioning what's in front of them, and understand how texts are constructed, and whose interests are served. We also need to develop their critical literacy as they interact with games. So, how can we help them do this? In this paper I draw on the experiences of teachers and students in the *Games for Learning* project to explore how we can help students to develop critical games literacy through opportunities to play, question, review, modify, and make games.

Introduction

Lots of people are talking about games in schools. Some teachers are capitalising on their students' passion for gaming to teach curriculum content or skills. What's less recognised is that games offer particular ways of viewing the world (often the designer's world view). In this way, games are like texts such as books and movies. They offer particular meanings and positions to be taken up by the reader or viewer.

We know it is important to help students engage critically with texts like books and movies. We want them to become skilled at questioning what's in front of them, and to understand how texts are constructed and whose interests they serve. We need to develop students' critical literacy with games too. It is especially important with games because they are so good at drawing us into an experience that feels very like our *own* experience. This sense of autonomy is one of the great attractions of games. It's also the danger. The sense of autonomy we get from playing games makes it particularly hard to see how games position us and what world views they offer (and which ones they don't). So, if we want students in New Zealand classrooms to be critically literate in their use of games, how can we help them?

In this paper I explore some possible answers to this question by drawing on the early findings of the *Games for Learning* research project.[1] I begin with a brief overview of critical literacy and then consider why it is important for students to be willing and able to critically analyse games. Then I explore how some of the activities designed by teachers in our project could be used to support the development of critical games literacy.

What is critical literacy?

The term 'critical literacy' is used to encompass a range of approaches to teaching and learning informed by two main theoretical positions.[2] One stems from neo-Marxism and from Paulo Freire's work on developing literacy as a means of overcoming oppression in the third world. Neo-Marxist/Freirean critical literacy focuses on analysing and deconstructing text as a means of shedding light on social inequities, and challenging these inequities.

1 The *Games for Learning* project seeks to foreground the experiences of New Zealand teachers and learners (as game players, game choosers, or game creators) and to better understand how they think about games in relation to learning, what personal and pedagogical choices they make when games are used in learning environments, and what happens in the classroom environment when games are part of the picture. More information about the project can be found at http://www.nzcer.org.nz/blogs/games-learning-research-project-update-1

2 See Janks (2000) who argues that conceptions of critical literacy differ according to the relative emphases given to the concepts of domination, access, diversity, and design. Janks argues that these different orientations are in fact critically interdependent.

The other position stems from poststructuralist ideas about language, ideology, and identity. Poststructuralists draw on the structuralist insight that things do not have meaning in themselves, but are structured to convey meaning. They aim to 'show up' the limitations of meaning making through deconstructing text. This involves revealing the ideology of a text by uncovering the textual strategies used to privilege a particular world view and to suppress or cover up alternative or contradictory ideas. Deconstruction shows how discrimination is perpetuated through texts and how the ideology of a text positions readers and constructs reading subjects. According to poststructuralism, a text creates for the reader a certain way of seeing the world. We become 'subjects' of the text—that is, we see the world in the way implied by the text. However, there are many subject positions possible and we can think critically about how to read the text in different ways.

What the different approaches to critical literacy share is an interest in helping students build the capacity to choose reading positions according to their own needs, rather than succumbing to the subject position implied by the text. Students develop power over the text by learning that what a text means is dependent on the reading practices they use, and that they can choose to read a text in different ways. Students learn to identify the preferred reading of the world offered by a text, and to challenge that reading with their own.

Why is the ability to critically analyse games important?

The capacity to critically analyse games is important because games, like all texts, shape our thoughts and actions in a variety of ways that are not always immediately apparent. Critical literacy can provide students with the capabilities and dispositions needed to question how and why particular games have been constructed and the impact of these choices for the player. Critical literacy provides students with the capacity to play games in ways that meet their own needs, or to modify games or create new ones that better reflect their own values, beliefs, and views of the world.

The literature suggests the reason the digital game experience feels so like our own experience is because of the heightened sense of immersion, autonomy, and identification with character we experience with these games compared with other types of text. Game designer and critic Austin O'Brien (2015) argues that, while the autonomy users have when playing digital games is actually quite limited in terms of the *real* choices the game allows, players have a greater *feeling* of autonomy than when engaging with other types of texts. This is because games can create the illusion of reality. They create this illusion through the use of camera techniques (such as camera bobbing, motion blurring, and field of view);[3] the use of reality headsets with which the movement of the player's head determines their view of the game world; and simulations. And O'Brien argues that, of all types of text, digital games have the greatest potential for conveying and reinforcing ideological messages to the user because instead of having to try to feel sympathy for a situation encountered in the game the player can instead "live it out":

> [S]o long as they can be immersed in the virtual world, and are granted sufficient autonomy, the protagonist of the video game can quickly drag them into action that they otherwise wouldn't be capable of experiencing. And rather than experiencing it as a disparate third-person, they are forced to experience it first-hand and can't dismiss the real reactions that they personally have, because on some level that character is them. (O'Brien, 2015, p. 33)

The students we spoke with in the *Games for Learning* project described their experiences of playing games in ways that are consistent with Austin O'Brien's ideas. One of the Year 8 students in our study, for example, described how, "You sort of feel like you *are* the character."

3 Camera bobbing involves "matching the up and down motion of the camera to the player's walk cycle", motion blurring involves distorting the display "to match the effect our eyes have when we whip our head from one direction to another", and field of view editing involves "expanding what angle of space in front of us is visible" (O'Brien, 2015, p. 30).

How can we help students to critically analyse games?

What can we do to help students be critically literate in their use of games? We can start with metagaming activities, such as reflecting on or reviewing games—as some of the teachers in our project did. Metagaming activities are important because "it is here that reflection on the system and how it works happens" (Kafai & Burke, 2016, p. 130). Such reflection is an essential first step towards critical literacy as it requires thinking about games as constructions—things that are made by people—and so subjective and value laden, rather than 'neutral'.

Metagaming activities

Many of the teachers in our project gave students opportunities to try out and reflect on a range of different games. For example, a group of secondary school teachers running a 1-week game camp encouraged their students to try many different types of games—digital, table top, and role play—and they scheduled time after every game played for students to critically reflect on and discuss the content and mechanics of the games. The main purpose of this reflection was to help their students to build agency over the games they played and to develop 'meta-level' critical thinking skills, rather than just responding to them passively.

> Those are meta things. That's true of anything. So in gaming we get them to do that as well. (Year 9 teacher)
>
> It's not passive. We say try new ones and then we talk about what was good about the game, what wasn't. (Year 9 teacher)

Interestingly, these teachers found that of all types of games, the best for teaching critical analysis skills were role play games. This was because the mechanics of these games are more transparent and so easier to deconstruct than other games in which the mechanics are less visible.

> You can always interact with a board game and it is great fun but there's a mechanic that can sometimes be very opaque. And then you can't get past that, whereas in role playing you want to break that. And that's what we do with the kids. (Year 9 teacher)

Primary school teachers also provided their students with opportunities to review commercial games. One got her students to play and provide feedback on the mechanics and content of a card game being developed by the education ranger at the Zealandia wildlife sanctuary for the purpose of teaching about the conservation of birds. Another showed her students the digital game *Never Alone* along with published reviews of the game, to help them to write their own reviews of other commercial games.

Reviewing games often involved analysing the different parts of a game and how they worked together, and the use of audio, visual, spatial, gestural, temporal, and linguistic elements for particular effects.

> I think so far, they've learned to identify what makes a game, the components. (Years 4–6 teacher)
>
> Actually starting to look at ... all the different language ... similes, metaphors ... figurative language. (Years 7–8 teacher)
>
> Understanding language, text, and symbols ... when you see the sign do you just read it visually, or what does it tell you? What text comes to your mind? (Year 10 teacher)

Asking critical questions of games

A recognition of the constructed nature of games—or any text—leads to questions about how and why decisions about making the game have been made. Many of the teachers in our project encouraged students to ask such questions of games. Some teachers got their students to think about the sorts of people represented in the games they played (for example, their gender), and on *how* the characters in

their games were portrayed. Others got their students to think about the choices that were available to the player and the choices that were unavailable, including the perspective that the game could be played from. One of the secondary school teachers running the game camp observed that getting students to role play characters that were very different from their own sense of identity helped students to think about games and how they are constructed in new ways. He gave the example of a Year 9 boy playing the part of a female cleric, and the conversations that ensued from this experience.

One of the primary school teachers considered that an important first step in getting her students to ask critical questions of games was to question for herself the games *she* played.

> I've done that myself this year where I've found a couple of games which I've played and tried to look at it from the perspective of 'Why do I enjoy this so much?' (Years 3–4 teacher)

Teachers might help students to ask other critical analysis questions of games too. They could get students to focus on the interests and world views served by the game. Students could question how the game might differ if created to serve different interests. This last question leads nicely to the activity of students creating adaptations of a game or developing completely new games which 'talk back' to misrepresentations or omissions—the topic I turn to next.

Modifying games

Games, like all texts, provide spaces and choices that enable the player to insert themself and their world views (for example, opportunities to modify the appearance of an avatar). For this reason, DeVane and Squire (2008, p. 281) advocate viewing video games as "possibility spaces" or "open work[s] that allow the player many potential actions and thus styles of play". Decisions about the 'look' of an avatar may be made for intentionally social and political ends (such as addressing gender stereotyping or the omission of certain ethnic groups) or simply through the desire to represent yourself in a game. Either way, the end product can challenge game norms. Apperley and Beavis (2011) provide an example of this occurring in one of their studies in which a girl from a Middle Eastern background "writes back" to the game by creating a character who, in keeping with the conventions of the game, has magical powers and is also female and Middle Eastern looking—a character not typically found in commercial games.

Taking this experience further in terms of critical literacy might involve the teacher drawing students' attention to the choices offered players in terms of the look of avatars and the opportunities of players to challenge those. Teachers might ask questions such as: "What ways are you able to change the appearance of your avatar?" "Are there any changes to the avatar you might want to make that are unavailable to you?" "Why has the creator of the game given some choices but not others?" "What sort of person may not be able to change their avatar in the way that they wanted to?" "If you were using the choices made available to you in unexpected ways to challenge the dominant view of the game, what could you do?"

Playing against the grain

As well as intentionally constructing opportunities for choice, texts also contain spaces and opportunities for choice that have *not* been intentionally designed but which nonetheless may be found and exploited by readers. Readers who find these spaces in literary texts and use them to build interpretations for their own purposes are sometimes described as 'reading against the grain'. Likewise, players can, and do, 'play' against the grain; that is, play the game in ways unintended by the designer. The research literature is full of examples in which players find alternative ways of playing commercial games. Engaging in such forms of game play is not necessarily a conscious act of subversion on behalf of the player and may be motivated by the need for entertainment or curiosity—to find out what happens. Indeed, one of the students in our study described how she sometimes creates characters with "silly" traits just for fun. Eliciting conversations with students about their experiences of playing against the grain provides

opportunities for them to consider and discuss what a particular game allows and disallows, and the potential ideologies that are at play. The job of the critical literacy teacher is to draw students' attention to, and make explicit, the ideology that sits behind any particular game.

Making games

Some of the teachers in the *Games for Learning* project provided students with opportunities to create their own table top or digital games and this proved to be one of the most powerful ways of helping students to understand the constructed nature of the commercial games they played. Students came to understand that designing and making games involves a myriad of decisions and that the choices game designers make, right from the coding stage, are influenced by their interests and values, by their purposes and intended audiences.

Comments from the students in our study who made their own games suggest that they gained an awareness of the constructed nature of the commercial games they played. The quote below is an example of a typical answer to the question, "What are the main things you have learned from making your own game?"

> How the games you play work—I find that really interesting. Like the games that you play, someone has put a whole lot of work into creating them and I find it's quite interesting looking at that. (Year 7 student)

This finding is consistent with findings from other researchers and academics working in the field of games and education. Kafai and Burke (2016), for example, conclude that:

> By making artifacts, students gain insights about the physical production of the technology itself and make visible how things actually "work". This is not common with 21st century technologies. Most of today's technology designs intentionally hide or make invisible what makes them work. (p. 87)

Making games also enables students to 'write back' against genre conventions, biases, omissions, or misrepresentations of conventional games. For example, Buckingham and Burn (2007) describe how a girl in one of their studies "subverted the stereotypically feminine activity of shopping that features in many games by proposing a shoplifting game" (p. 339).

Some of the teachers in our study were aware of the possibilities for agency afforded by making games, and the political and social implications these possibilities allowed.

> I think games allow a really simple format to [represent your own ideas]. Say you are making a game, now you need to, say, put in a Māori character—without being tokenistic—and [you can because] … it's a real flexible environment … So you can essentially make it anything you want. (Years 4–6 teacher)

In other words, making games gives students the power to represent themselves and their own world views. The students in our study involved in making games were aware of this.

> You can like make it [the character/avatar] your*self*. You can make it look like *you* so you're actually in the game. (Year 7 student)
>
> *Scratch*—you're programming it in *your* own way to make it happen. (Year 5 student)

For many of the teachers we talked with, one of the main motivations for using games for learning was the agency it allowed their students.

> I think they [the students] are starting to see that there are different platforms and that you can make your own games. I think for them they wouldn't have really known that before, and they are starting to see how easy it is … It is so powerful and so simple that it's just like mind boggling. (Years 4–6 teacher)

But won't analysing games spoil the fun of playing them?

One of the concerns that critically analysing games is likely to elicit is that it will spoil the fun of playing them. It will 'schoolify' the gaming experience. A similar criticism is levelled at the close reading and analysis of other types of text in school such as poems, plays, and novels leading to comments such as, "Can't we just read and enjoy them?"

So will critically analysing games spoil the fun of playing? Will it schoolify games? Yes it will. Playing games for entertainment is very different from playing games for critical literacy purposes. And we want students to know the difference—that is the point of critical literacy. Teachers can still provide students with opportunities to play games in class 'just for fun'—maybe even for the very purpose of helping them to understand the difference. In a project on integrating critical literacy into guided reading projects, Sandretto et al. (2006) found that having students do two readings of a text—the first for guided reading and the second for critical analysis—worked well. In the context of games a similar approach could be taken, with students playing a game first for fun, and then for critical analysis. What matters is that the different purposes are explicit.

And engaging in critical analysis of texts brings a fun experience in and of itself—albeit a very different kind of fun from playing games. Students can and do find the experience of text analysis motivating. Locke et al. (2009) found that, overall, students were engaged and empowered when critical literacy approaches to the study of text were used and that a critical literacy approach to reading " invites and empowers students to construct their own versions of literary texts" (2009 p. 3).

Where to from here?

There is a risk that as games become a common part of the classroom landscape the focus will be on the 'what' of these texts (on the coding and decoding) rather than the 'how' and 'why' (critical analysis). This is what has tended to happen in traditional approaches to literacy instruction with linguistic/print texts in New Zealand classrooms (see, for example, Locke et al., 2009; McDowall, 2010; Sandretto with Klenner, 2011). It is especially important that this does not happen with games because of the success of gaming approaches in immersing the player and making invisible the world view—or ideology—of the game.

So, where do we start? There are some existing frameworks and models already available to help us on our way. These include frameworks designed to teach critical literacy such as *The Four Resources Model*[4] (Freebody & Luke, 1990; Luke & Freebody, 1999) which involves critically analysing text, and *A Pedagogy of Multiliteracies*[5] (The New London Group, 1996) which involves "Critical Framing"—standing back from what they are studying and viewing it critically in relation to its social and cultural context. There are research findings on the application of these models in the New Zealand context (Sandretto, Tilson, Hill, Upton, Howland, & Parker, 2006; Sandretto & The Critical Literacy Research Team, 2008; Sandretto & Tilson, 2013; Sandretto with Klenner, 2011) and tools for teachers to use in their classrooms (Tilson & Sandretto, 2016).

Models designed specifically for teaching how to critically analyse *games* are also beginning to emerge. Apperley and Beavis (2013) developed a model for games literacy as part of a 3-year project on the use of games in English and literacy classrooms. The model focuses on games as action and as text. *Games as action* is about the interaction between the game and the player(s). *Games as text* is about the wider

4 *The Four Resources Model* (Freebody & Luke, 1990; Luke & Freebody, 1999) separates the repertoire of literacy practices into four main roles—code breaker, meaning maker, text user, and text analyst—emphasising that each of the roles is necessary but not sufficient in any act of reading.

5 There are four main components to The New London Group's (1996) *Multiliteracies Pedagogy*: Situated Practice (immersion in meaningful experience); Overt Instruction (describing patterns in meaning through explicit teaching); Critical Framing (explaining the purpose of text, and whose interests it serves); and Transformed Practice (applying new learning to meet the goals of the learner).

context. It covers the role of meaning making in the formation of values, identity, and community, knowledge about games, how we are positioned and represent ourselves in games, the world around the game, and learning through games.

No text is neutral. All texts are shaped by the purposes and world views of their designers—even if unintentionally. And games are no exception. Students need to be able to critically analyse games; first, so that they can *recognise* the way certain world views, groups of people, or ideas are represented (or omitted) and, second, so that they can challenge these representations and omissions.

There is no one right way to teach critical literacy—different teachers will find approaches that best suit them and their students. And as these approaches emerge in the New Zealand context we can begin to build models of our own.

References

Apperley, T., & Beavis, C. (2011). Literacy into action: Digital games as action and text in the English and literacy classroom. *Pedagogies: An International Journal*, *6*(2), 130–143.

Apperley, T., & Beavis, C. (2013). A model for critical games literacy. *E-Learning and Digital Media*, *10*(1), 1–11.

Buckingham, D., & Burn, A. (2007). Game literacy in theory and practice. *Journal of Educational Multimedia and Hypermedia*, *16*(3), 323–349.

DeVane, B., & Squire, K. (2008). The meaning of race and violence in Grand Theft Auto: San Andreas. *Games and Culture*, *3*(3–4), 264–285.

Freebody, P., & Luke, A. (1990). Literacies programs: Debates and demands in cultural context. *Prospect: Australian Journal of TESOL, 5*(7), 7–16.

Janks, H. (2000). Domination, access, diversity and design: A synthesis for critical literacy education. *Educational Review, 52*(2), 175–186.

Kafai, Y. B., & Burke, W. Q. (2016). *Connected gaming: What making video games can teach us about learning and literacy*. Cambridge, Massachusetts: MIT Press.

Locke, T., Cawkwell, G., & Sila'ila'i, E., with Cleary, A., de Beer, W., Harris, S., Lumby, E., Riley, D., Sturgess, J., & Thumath, J. (2009). *Teaching literature in the multicultural classroom*. (Summary report). Wellington: Teaching and Learning Research Initiative. Retrieved from http://www.tlri.org.nz

Luke, A., & Freebody, P. (1999). A map of possible practices: Further notes on the four resources model. *Practically Primary,* 4(2). At http://www.alea.edu.au/freebody.htm.

McDowall, S. (2010). *Literacy teaching and learning in e-learning contexts*. Wellington: Ministry of Education.

O'Brien, A. (2015). Through player tinted glasses. *English in Aotearoa*, *85*(April), 28–34.

Sandretto, S., with Klenner, S. (2011). *Planting seeds: Embedding critical literacy into your classroom programme.* Wellington: NZCER Press.

Sandretto, S., & The Critical Literacy Research Team. (2008). *Collaborative self-study into the development and integration of critical literacy practices*. (Final report). Wellington: Teaching and Learning Research Initiative. Retrieved from http://www.tlri.org.nz

Sandretto, S., & Tilson, J. (2013). *Reconceptualising literacy: Critical literacy for "new times".* Wellington: Teaching and Learning Research Initiative. Retrieved from http://www.tlri.org.nz

Sandretto, S., Tilson, J., Hill, P., Upton, J., Howland, R., & Parker, R. (2006). *A collaborative self-study into the development of critical literacy practices: A pilot study.* (Final report). Wellington: Teaching and Learning Research Initiative. Retrieved from http://www.tlri.org.nz

The New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review, 6*(1), 1–20.

Tilson, J., & Sandretto, S. (2016). *Integrating critical multiliteracies using the Four Resources Model.* Wellington: NZCER Press.

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