Using Gaming Paratexts in the Literacy Classroom

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Abstract: This paper illustrates how digital game paratexts may effectively be used in the high school English to meet a variety of traditional and multimodal literacy outcomes. Paratexts are texts that refer to digital gaming and game cultures, and using them in the classroom enables practitioners to focus on and valorise the considerable literacies and skills that young people develop and deploy in their engagement with digital gaming and game cultures. The effectiveness of valorizing paratexts in this manner is demonstrated through two examples of assessment by students in classes where teachers had designed curriculum and assessment activities using paratexts.

Valorizing children and young people's 'gaming literacy' (Salen, 2007; 2008; Zimmerman, 2009) by including digital games is paramount in assisting practitioners in drawing upon pupils' out-of-school literacy practices to support the acquisition of traditional and multimodal literacies. While the connection between digital gameplay and multimodal literacy is clearly established (Buckingham & Burn, 2007; Zimmerman, 2009), in this paper we argue that the digital game 'paratext' (Consalvo, 2007) is central to capitalizing on pupils' out-of-school literacy practices.

In the context of digital gaming, the 'paratext' is an umbrella term covering ancillary media about digital games made by and for players (Consalvo, 2007: p. 8). Digital game paratexts provide practitioners and pupils with a strong conceptual link between gaming literacy and the acquisition of traditional school literacies. Digital game paratexts are easily accessible print and multimodal texts that connect gaming with curriculum-based literacy outcomes due to their relevance. Drawing on two urban case studies from a three-year project funded by the Australian Research Council we demonstrate the effectiveness of including digital game paratexts within the English curriculum (1). When pupils read, write and design digital game paratexts, teaching and learning can valorize their multiple literacies in ways that support the acquisition of traditional print-based literacy practices that are necessary for academic success.

Digital games and literacy

Current research argues that digital games motivate young people in ways that formal education does not (Amory et al., 1999; Dondlinger 2007; Facer et al., 2003; Gee 2003; 2007; Swartout & van Lent, 2003). More specifically, digital games increase players' ability to manage 'spatial representation' and 'iconic skills' (Greenfield, 1984), visual attention (Greenfield, 1984; Greenfield et al., 1994), and problem solving (Greenfield, 1996; Prensky, 2001; Rieber, 1996; Squire, 2002). Digital gameplay also develops skills that encourage experiential and exploratory learning (Betz, 1995; Gorriz & Medina, 2000), provides players with conceptual understandings of active learning strategies (Kirriemiur & MacFarland, 2004), and fosters social engagement and the development of collaborative skills (Galarneau & Zibit, 2007; Manninen, 2002; Squire, 2003). Other relevant studies highlight the educational potential of games (Egenfeldt-Nielsen, 2004; 2007), the experience of the player during play (Ermi & Mayra, 2005; Gee, 2003; de Kort & IJsselsteijn, 2008), and learning to play in games (Pelletier & Oliver, 2006). Through playing digital games, children and young people are introduced to contingency and risk, and explore issues of identity, possibility, and subjectivity (Walsh & Apperley, 2009). Many considered the skills, knowledges, and literacies learnt through digital games crucial to education and citizenship in the 21st century (Galarneau & Zibit, 2007; Kahne, Middaugh, & Evans, 2009; Raphael et al., 2010; Zimmerman, 2009). The positive assessment of digital games is also recognized outside the realms of educational scholarship and game studies. For example in 2008, the European Parliament's Committee on Culture and Education called on the Committee of Internal Market and Consumer Protection to incorporate the suggestion that digital games can have substantial educational advantages and be beneficial in developing intellectual capabilities and creative, linguistic, and strategic skills.

Our current understanding of gaming literacy emerges from valuable iterations of 'game literacy' (Facer et al., 2003; Buckingham & Burn, 2007), 'gaming literacies' (Salen, 2007), and the use of the term as an approach to literacy based on game design (Zimmerman, 2009). The term game literacy has been used as a means of provoking sustained discussion of how games and gaming culture can

be studied with an emphasis on a 'theory that addresses both the representational and ludic dimensions of games' (Buckingham & Burn, 2007: p. 345). We are not simply interested in how digital games work, but how they support a performative and transgressive learning stance based in play, reflective of the status of games as 'dynamic rule-based systems' (Salen, 2007: p. 307). Gaming literacies are the key to understanding the skills required to be considered literate in the twenty-first century (Beavis et al., 2009; Zimmerman, 2009).

Gaming literacies are developed through gameplay and engagement with digital game cultures. During gameplay, children and young people draw on their gaming literacies to accomplish difficult but motivating tasks and develop new knowledge by navigating the complex, changing virtual environment. Through their engagements with digital games, players often develop sophisticated 'gaming capital' (Apperley, 2010; Consalvo, 2007; Walsh & Apperley, 2009) demonstrating differing levels of expertise with a variety of digital games across a range of possible platforms. The difficulty of mastering some of the challenges set by digital games often leads to players exchanging expertise and information in order to master tasks and objectives. Gaming cultures are a key context for this exchange, particularly online gaming communities where players can use, share, and produce digital game paratexts.

Paratexts for literacy education

The term 'paratexts' embraces a wide range of products, activities and popular culture texts that reference digital gameplay. Paratexts are systems of media products—'communication and artefacts' (Consalvo, 2007: p. 8)—emerging from game cultures, which frame the consumption of digital games (see also: Ashton & Newman, 2010; Jones, 2008; Kline et al., 2003; Newman, 2008). Paratexts are integral to the history and success of the digital games industry (Consalvo, 2007; Kline et al., 2003) as they are used to cultivate gaming cultures through various official and unofficial publications. Widespread access to the internet, player produced guides, FAQs, and other creative products has since become common: *GameSpot* (www.gamespot.com) has over 40,000 digital game FAQs, guides, and walkthroughs; over 250,000 cheat codes; and over 100,000 reviews contributed by the community of game players. When children and young people read, research, consume and design paratexts, they are engaged in relevant literacy practices, making these activities a fluid example of situated learning (Gee, 2003; Stevens et al., 2008). Digital game paratexts 'shape players' expectations of what it means to play a game properly or improperly' (Consalvo, 2007: p. 183).

We argue that paratexts are equally important for understanding gaming literacies. Acquiring gaming literacy does not just involve learning how to play digital games, but also the navigation, comparison, and reading of the "official" and "unofficial" paratexts and contextualizing the information contained in light of the credibility of the particular sources. Alvermann (2001) provides a compelling example of a pupil's eager consumption of paratexts with her discussion of Grady, a ninth grader who disliked reading, but spent his Thanksgiving vacation poring over a Pokémon training manual in order "to get ahead" in his gaming skills. The production and design of digital paratexts also supports the development of technologically complex skills and literacy practices. This includes the design and redesign of digital games and the use—and modification—of software, and leads to basic familiarity with tasks such as copying and saving data files, connecting to networks, and burning DVDs or CD-ROMs. This demonstrates how gaming literacy facilitates and relies on technical literacies through players' engagements with digital game paratexts.

Paratexts are often descriptions, guidelines, instructions, and strategies for digital games. However, they should not be regarded as merely practical, but also as imaginative and creative outputs that include writing, digital artwork, visual and audio design, and new game designs (see: Consalvo, 2003; Lowood, 2006; Newman, 2008; Schott & Burn, 2007). This demonstrates how paratextual production is grounded in complimentary proficiencies that draw on children and young people's print-based and multimodal literacy practices that are important to literacy pedagogy. While the pedagogical value of reading, writing, and designing paratexts is clear, we argue that further work is necessary to re-situate these activities and practices in the classroom.

Context for introducing paratexts in the literacy classroom

Through a case study approach, we worked alongside two urban secondary English teachers who believed incorporating digital games into the English curriculum would engage pupils in relevant reading, writing, speaking, listening and multimodal design activities. The project utilized a practitioner action research (PAR) method. During the action research cycles which ran from mid 2007 to mid

2009 it became evident that digital game paratexts were familiar and significant to pupils. Through discussions with the teachers, we agreed the reading, writing, and designing of digital game paratexts would offer a tangible means by which to genuinely capitalize on pupils' out-of-school literacy practices, to intentionally valorize their gaming literacies and provide a platform to introduce digital games into the curriculum.

The situating context for this project was a visit to *Game On!* (see King, 2002) at the Australia Centre for the Moving Image (ACMI) in Melbourne, Victoria. The exhibit chronicles the medium's development from pre-commercial experiments to a multibillion dollar global industry. We chose *Game On!* as a catalyst to spark the pupils' interest, and to support the teachers' initial professional development by extending their general knowledge of digital games. Pupils also visited the ACMI Gameslab, where together with their teachers, we observed them play *The Elder Scrolls IV: Oblivion* (Bethesda Softworks, 2006), and a section of the best independent games from the 2007 Independent Games Festival, including *Aquaria* (Bit Bot, 2007), *Everyday Shooter* (Queasy Games, 2008), and *Samorost 2* (Dvorsky, 2003). Observing students playing digital games with the teachers was paramount in demonstrating the complexity of gameplay and the literacy practices involved. As a result the teachers were able to see firsthand how digital games established a context for situated, collaborative learning. This was the first step in designing specific class-based projects that incorporated teachers' emerging knowledge about digital games and available paratextual resources that satisfied their classroom requirements to meet state benchmark standards in literacy.

In the first school, we worked with Paul, who taught English to a small cohort of 'at risk' year seven pupils who struggled with traditional print-based literacies. Paul planned a digital games project where he adapted Freebody & Luke's (1990) four resources model for literacy learning. This required pupils to take up the four roles of the reader: code breaker; text user; text participant; and text analyst in their research. As code breakers, pupils explored how they played the digital game and its rules. In the role as text users, pupils were making meaning by comparing different games and gameplay across different platforms. As text participants, pupils interrogated the digital game's purpose, narrative, genre, and their own role(s) in the game. Finally, as text analysts, they explored why certain games were enjoyed over others and how digital games and the gameplay experience could be improved. Pupils researched digital games by considering the platform they played on (Nintendo DS, PC, Sony PlayStation 2, Wii, etc.), and then by playing and researching games across platforms, evaluating the usefulness of digital game paratexts including walkthroughs, reviews and FAQs.

The project's final assessment was a presentation that included a PowerPoint slideshow. Paul and his pupils generated a list of options for the presentation, including: completing a character analysis by designing character using *The Sims* (Maxis, 2000); filming or writing a walkthrough; arguing for a favourite game/character/platform; describing a scene from a game; recounting a section of a game's narrative; or teaching (and recording) another pupil through a level. Paul valorized pupils' gaming literacy in terms of school-based literacy practices, by designing the assessment in a manner that resonated with their existing paratext use and production by requiring pupils to integrate writing, reading, speaking, listening, and multimodal design activities. The slideshows demonstrated pupils' sophisticated gaming metalanguage through their evaluation of different actions, designs, situations, and systems. They also analyzed the technical details of the game, including the software interface and the inputting of information through the hardware. This assessment gave them the opportunity to present research in digital, print and speaking modes that incorporated writing, multimodal design, public speaking, listening to and responding to peers' feedback. Importantly, Paul carefully considered how this assessment task would provide students with opportunities to satisfy and even exceed year 7 English benchmarks of the Victorian Essential Learning Standards (VELS).

Paul was taken aback by the intense passion for digital games, even among pupils who had given no previous indication of interest in the topic. One pupil, James—who rarely produced any writing—spent an extended period of time researching *Dragon Ball Z Supersonic Warriors 2* (Banpresto, 2004). To prepare his slideshow he used downloaded screen shots from gaming sites, custom animations, detailed descriptions of cheat codes and macros, and strategic information on how to play the game. His PowerPoint is a digital game paratext that demonstrates a considerable amount of reading and writing, the sophisticated deployment of research skills, and multimodal design proficiency. This games-based assessment task provided James with the opportunity to draw on his existing out-of school literacy practices, gaming literacies and experiences of digital gameplay to achieve success with traditional school-based literacies.

In the second case study, Maureen—who, unlike Paul, was working with a standard cross-section of students—redesigned the literacy curriculum allowing a group of year 7 boys to design, play, and research digital games. The unit was organised into two distinct sections where pupils first engaged with digital games by visiting the *Game On!* exhibition. Visiting the exhibition allowed Maureen to valorize gaming literacy by highlighting to her pupils the cultural significance of digital games, particularly because the exhibit was evidence of a strong interest in digital games from an 'official' adult perspective. Then students joined a virtual learning environment focused on their individual gaming practices and research. The 'Game-O-Rama' wiki offered pupils' a virtual space that valorized gaming literacy by drawing on the proficiencies that they had developed as users and producers of paratexts through engaging, exploring, and extending print and multimodal literacies. Pupils authored wiki pages on elements of game design character development, colour, genre, iconography, movement, plot, point of view, and sound. Maureen taught pupils mini-lessons on authoring reviews of digital games by providing model texts she sourced from *GameSpot*. Then they wrote reviews, including key information about individual games, and then posted them on the wiki for peer-review. On interview, pupils reported they enjoyed authoring and designing the game reviews and participating in the wiki. Figure 1. (below) is a screen-shot from a pupil's review of the fan-made game *Naruto-Arena* (www.naruto-arena.com). The pupil's review is a digital game paratext with a detailed, persuasive discussion of *Naruto-Arena* that drew on his out-of-school knowledge and metalanguage of digital and card games, media (anime), and fan cultures. This assessment task provided the context for the pupils' to demonstrate and extend their proficiencies in traditional literacies and multimodal design through the presentation and combination of text, images, sound and embedded video.

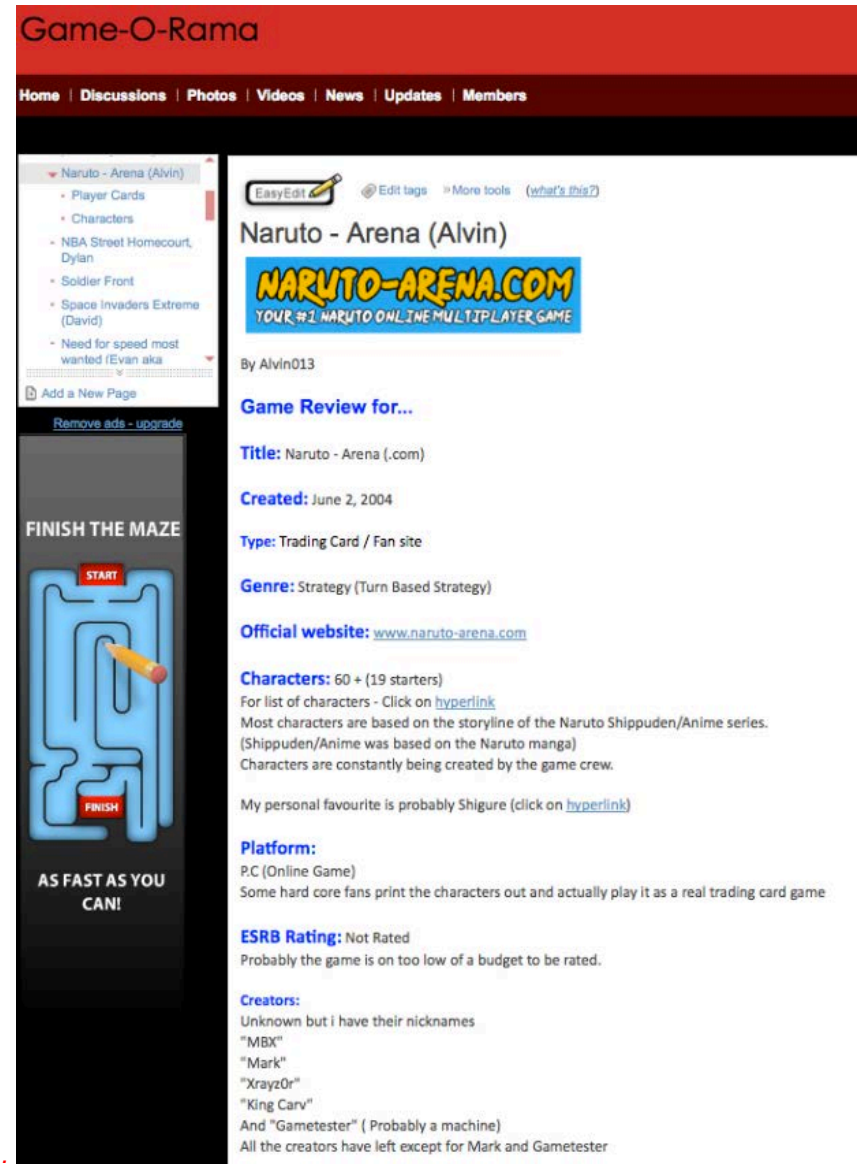

***Figure 1*: Gaming wiki page**

Through discussions with Paul and Maureen, in-class observations, and interviews with pupils, we gained valuable insights into the demands of introducing digital games and paratexts into the school curriculum. We realised practitioners face considerable challenges when including digital games in classrooms and other settings: accessibility, bias against digital games, inadequate technical and administrative support, and perceptions about appropriate content. However, we believe that using paratexts in the classroom is a viable alternative to using digital games themselves provides practitioners with a way of leveraging children and young peoples' interest in digital games to support school-based print and multimodal literacy practices whilst also avoiding the possible costs associated with the technical infrastructure and support necessary to use digital games in the classroom. Technology issues aside, many educators remain biased against digital games, even to the extreme of arguing that they inhibit learning. In the face of such attitudes, paratexts present practitioners with more palatable way of incorporating and capitalizing on digital games in the classroom and curriculum. Using paratexts, they can successfully design curriculum that includes the learning and literacy activities associated with digital games and game cultures, and valorize and extend pupils' out-of-school experiences in ways that allow them to experience success in traditional school-based literacy practices.

Conclusion

A great deal of scholarly work indicates that digital games have significant educational value, particularly in the area of literacy. Furthermore, they have an important role to play in classroom activities. The two case studies show how teachers have successfully capitalized on gaming literacy through developing curricula focusing on digital game paratexts. The available activities in both case studies included the reading, writing, design and use of paratexts. These case studies demonstrate how by valorizing pupils' out-of-school literacy practices teachers were able to produce curriculum that developed pupils' print-based and multimodal literacies and met key assessment criteria.

The use of digital game paratexts is a practical starting point for introducing digital games into the curriculum for two reasons. First, because paratexts require less experiential and technical knowledge of digital games to teach they are easier for practitioners unfamiliar or distanced from the cultures of digital gaming to integrate in their teaching and learning activities. Second, because children and young people' are already familiar with paratexts—as users, not necessarily as producers—from their leisure practices. Our goal is to enable and encourage teachers and practitioners to valorize children and young people's gaming literacies by developing curricula that addresses the relevance of digital games to children and young people's lives.

Endnotes

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