Report Authors

Daniel Ha is a MASc. candidate in the School of Interactive Arts and Technology and a research assistant on the Simulation and Advanced Gaming Environments (SAGE) for Learning research initiative. His research interests include social theoretic approaches to learning technology analysis and design and game-based learning.

Janet McCracken is an Assistant Professor in the School of Interactive Arts and Technology, Simon Fraser University. Her research interests include principled approaches to learning design; Learner-centred analysis methodology for instructional design based on phenomenography; Qualitative research and evaluation methods.

De Castell, S., and Jenson, J. (2003). Serious Play. *Journal of Curriculum Studies, 35*(6), 649-665

Daniel Ha & Janet McCracken, Simon Fraser University

Introduction

The phenomenon of gaming has received considerable attention from academia in recent years. In *Serious Play*, De Castell and Jenson argue that non-commercial research efforts have thus far resulted in a failure to produce educative games with wide player appeal. Such games are typically the product of partnerships between educators and games designers who lack the expertise and resources for the design of engaging and immersive games that resemble popular commercial recreational titles; commercial efforts have resulted in what critics have labeled `edutainment', or games for learning that are neither entertaining nor educative. Like their non-commercial siblings, edutainment has failed because its constituents have not achieved the gameplay fluidity and player immersion necessary for educational engagement. De Castell and Jenson's research is driven by the question, "can play and education intersect?" In this paper, we reflect on de Castell and Jenson's perspective on why many researchers and educators have failed in their efforts to produce appealing educational games and how popular commercial gaming culture can inform the development of engaging and immersive learning experiences.

Learning and Play

Deeply entrenched in our culture is a strict belief in the distinction between learning and play. Traditionally, learning and play have been defined as bipolar activities that should not intersect, not unlike the common distinction between work and leisure. It is a popular belief particularly in Western European and North American culture that work should be a preceding condition of play, in other words, first you work then you can play. In contrast,

De Castell (2004) argues that learning and play are intertwined processes; learning occurs in play and vice versa. She further argues that this distinction must be unlearned before educational researchers and instructional game designers can truly take advantage of the immersive possibilities of games.

The current space of game research literature represents six overlapping categories: play and pleasure; studies of gaming genres; game-development, systems, and content points of view; narrative and gaming; psychological, behavioral, and cognitive effects of gaming; gaming and gender, and constructionist theory and research. While not an exhaustive list, this classification serves to organize the theoretical viewpoints of the main tributaries of work in this domain.

De Castell and Jenson point out that this body of literature features two common notables that are problematic to the study and design of educative games. First, De Castell and Jenson reveal a common opinion among researchers that it is not necessary to play games in order to study them. Second, past research has looked at games in isolation from their socio-cultural contexts.

De Castell and Jenson argue that the phenomenon of gaming is more than a discreet activity or set of activities; it is a "lived culture" that reaches beyond its fundamental instruments of mediation. Games are not just played, the experience is lived and relived in online chat rooms and forums, games are altered and re-authored, and gameplay shapes players' consciousness through players' development of virtual identities and connections to communities of play. De Castell and Jenson point out the irony in the research discourse on the immersiveness of gameplay that overlooks the cultural context of gaming, which is itself highly immersive (p. 651). It is therefore important that games research applies a holistic approach that situates games in the socio-cultural contexts in which real gaming occurs.

Gaming research that underplays the socio-cultural context of gaming ignores the underlying socio-political conditions under which game themes emerge. Detractors of recreational-commercial games criticize its violent themes, but often overlook the influence of "sanctioned" societal violence as a factor in content authorship. The majority of games are also commonly viewed as masculine-oriented, but such views overlook issues of gender access to games and how this might affect gender statistics and notions of gameplay preferences.

Student design activities of educative games commonly result in products that are surprisingly consistent with traditional practices and features of instructional design. A cursory examination of this phenomenon might lead to conclusions that game designers are more interested in designing for learning outcomes than for knowledge building experiences. However, an examination of the cultural-historic context in which these designs emerge suggests that these products more accurately reflect the enculturation of the distinction between education and play into design than a designers' own ideals of good gameplay. A system primarily concerned with measuring learning outcomes becomes

a hallmark of educative games because this is what education has largely come to mean for game designers.

Learning from recreational-commercial games

Educational game developers have much to learn from recreational-commercial games. Recreational-commercial games "teach" their tools and techniques in ways that are different to how traditional instruction teaches subject-matter (p. 655). Games use interactivity, focusing on negotiations in the gaming environment rather than subject-matter exposition and task completion. Games are also based on interesting narratives rather than propositional organization. Subject-matter and character identities are developed within games, which is different from self representation in edutainment. Games place players in control, whereas the program is in control in edutainment, not unlike the way that teachers are in control in the classroom. Finally, de Castell and Jenson argue that games afford an enhanced level of freedom for players, which enables solidarity with other players and not the teacher or program.

These qualities form what the authors refer to as "playful immersion" (p. 655) within a game environment. Learning that occurs in this environment is implicit: players learn in stealth as they actively participate and interact within the immersive environment in which their characters are situated. This differs from conventional classroom instruction and edutainment where instruction is rigid and explicit, and subject-matter is often passively consumed without thought about the real situations in which it applies. Developmental assessment in recreational-commercial games is seamlessly woven into the fabric of in-game activity. In contrast, assessment in edutainment is disruptive to gameplay, requiring players to fulfill specific task or to complete quizzes in order to advance. De Castell and Jenson argue that this instructional technique leaves no potential in the game for chance and "intuitive leaps or `twitch-speed' perception and skill", thereby limiting the possibility for prolonged engagement (p. 656).

Good recreational-commercial games are engaging because players are not constrained or held back. Furthermore, players learn to play in game scenarios that are logically connected to the underlying plot. Most educational games do not possess these characteristics; instead they more closely resemble the features of traditional instruction, therefore they fail to provide all the engaging possibilities for learning that recreational-commercial games have to offer.

Discussion

De Castell and Jenson's research methodology consists of a broad review of the current research literature on games and direct observation and participation in the culture of game play. Their review of the current body of literature sets the groundwork for their research. Their synthesis of the literature uncovered common perspectives and approaches that were problematic to the study and design of educational games. Most notably, the authors discovered that most research examined games out of a socio-cultural context and it appeared that most researchers did not include direct participation

with games as a methodology for their work. They concluded that most of the research results in a narrow perspective and approach on how to make games a part of mainstream education.

The authors avoided this research pitfall by constituting direct participation as part of their experiential data collection methodology, enabling a broader examination of the contexts in which gaming occurs. While this methodology is appropriate, we believe it is not sufficient for providing a framework for discovery and design.

An important omission from this methodology is an underlying theoretical social analysis framework with which to model the contextual factors of gaming. We propose that a social analysis framework could help to describe what play and learning activity looks like and the contextual differences between edutainment and recreational games. This could in turn be used to inform the design of rich educative games that resemble in form the more successful recreational-commercial games.

Conclusion

The authors argue that educational game development has generally overlooked what recreational-commercial games exploit, foster, and understand. They strongly believe that games can support educational objectives, but can only enjoy real success if they are remodeled to resemble recreational-commercial games. De Castell and Jenson used a methodology consisting of observation and direct participation in gaming culture, which is appropriate for this type of research, but is lacking a theoretical social analysis framework that can provide an overview of the potentially relevant contextual factors in game studies. The outcome of their research is not a prescription for how to design engaging educational games, but a description of design possibilities. Their work suggests a radical new direction for the design of educational games that is free of the dichotomy between learning and play, insisting instead that both should and do intersect.

References

De Castell S. (2004). *Retooling the learning game: Educational gaming and play*. Presentation at the SFU Surrey Research Colloquium, Surrey, BC.

De Castell, S., and Jenson, J. (2003). Serious play. *Journal of Curriculum Studies, 35*(6), 649-665.