Why are Online Games So Compelling and What Can We Learn from Them to Design Better Educational Media?

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Abstract: Poster will report Phase I of a three-phase mixed methods research project currently underway. My research explores teens' beliefs and motivations that keep them playing online games at a rate that some describe as "addiction." Early findings indicate that teens believe school is not preparing them for the future, but online gaming is. This belief may indicate a sea change in how teens feel about educational institutions and their willingness to learn from them.

The Problem Space

A number of ideas about secondary education, the future, and online gaming are currently receiving much attention in national discussions and the academic journals which report them:

- High school graduation rates are poor and many remaining students are unengaged (Ordfield, Losen, Wald & Swanson, 2004).
- American youth are not being educated to meet the socio-technical demands of the future (Sawyer, 2006; Gee, 2000)
- Computer games may be usable in education in various ways, for various purposes (Jenkins, 2006; Barab, Tomas, Dodge, Carteaux, and Tuzun, 2005)

As we review the research, we find that much of it intersects with our understandings, based on informal conversations and the emerging literature on computer gaming, about why teenagers play massively multiplayer online games and their "tremendous motivational power" (Barab et al., 2005).

Our poster will report the findings of Phase I of a three-phase mixed methods research project. The project is an attempt to delve deeper into the beliefs and motivations, as well as lived experiences, which keep teenagers playing online games. Our goal is to inform the design of other educational media.

Background

That there is an educational potential to the highly-popular interactive experiences now called massively multiplayer online games (MMOGs or MMORPGs) is not a new idea. What is new is the attention educators are paying to games because of the staggering numbers of people playing them 24/7 and with people from all over the world in collaborative, social, virtual environments (Jenkins, 2006).

Concurrent with an increase in gaming is a decrease in high school attendance. Many teens do not see high school as important to their future lives (Baines & Stanley, 2003) and others report teens feel more significant learning occurs outside of school (Kirshner, 2006). The only growth in secondary education is in online high schools and online classes to supplement available in-school options (Pape, 2005). We are suggesting that having additional ways of understanding the reasons teens are attracted to online games could help inform the development of online courses and other virtual learning environments in productive ways. Despite the attention on gaming in educational spheres, there are few systematic investigations of *why* teens play and what gaming gives them for their effort (Steinkuehler, in press). This research attempts to understand more fully the motivations and experiences teens have that maintain this compelling pastime.

Research Design and Timeline

Phase I of the project consisted of ten interviews with young men between the ages of 16 and 21, all attending or recent graduates of American high schools. The interviews each lasted about one hour. We found the participants by referral: we asked parents and high school teachers if they knew of teens "who were really into games." We sought participants who were: 1) male (1), 2) between 16 and 21, 3) "experienced" in MMORPG gaming. "Experienced" was operationally defined as either playing online role-playing games for more than one year or having reached certain levels of proficiency in certain games, such as reaching level 70 in *World of Warcraft.* To increase the variety of perspectives represented, once we got a referral, we asked the referring adult or child to refer someone else. We included the second referral in the sample also.

We analyzed the interviews using a qualitative method called "history in person" (Holland and Lave, 2001). We chose this approach because it illuminates "the historical production of persons and personhood" (p.9). The method is based on the premise that the history of a broad political struggle can be chronicled in many individual histories lived at the level of "local struggles." The "history in person" approach is usually used in large political or historical struggles, however we see MMORPGs as logically akin to "local struggles" within a greater historical struggle of the "disruptive" technology changes of the early 21st century. Thus, we

speculated that this method might help us to understand the impact of gaming on both the individual participants now and larger society as they go forth to meet the socio-technical demands of the future.

Our analysis traced the practices of identification in the local struggle, relations of those practices to broader structural forces in teens' lives, such as high school, and then the counterbalancing effects the teens had on the struggles themselves. For example, we traced participants' use of avatars and how their avatars changed over time as the participants changed their gaming activities and their decisions about what they wanted to do in the game. We looked for both how the games changed them, and how they also changed the game.

Findings

Teens are compelled by both the complexity of the social interaction skills they needed to succeed and the independent strategic thinking required to proceed in play. The participants pointed out that these are both skills that help them in all parts of their lives and will contribute significantly toward their future. They liked what they learned in games and how they developed as people. They also liked having the many different types of impact that gaming allowed them to have, impact that was rarely possible in their high schools.

Here, in summary, are the central themes that were present in teens' reports of reasons that they were motivated to play MMORPGs, and one or two examples of their comments around those themes.

1) The games developed their *social interaction skills* by increasing their abilities to play both with people they didn't know, and with people they "raided with" repeatedly under highly stressful performance situations.

- *"To log on and go on a raid with five people you don't even know, that's really fun."*
- *"If you are antisocial in an MMO, you are just basically worthless. You are not going to have fun; you are not going to go far. It's just going to be a worse experience."*

2) They found themselves developing their own *strategic thinking skills.*

- *"I discovered I can influence outcomes a lot more if I am a priest, so that's what I am now."*

3) They learned to *work in teams*, which meant developing political savvy, respecting team members, understanding authority structures, as well as developing well-defined internal judgments of other players. (2)

- *"My best friend lives in North Carolina. We are on a team from all over the country and we have to do stuff together to win. It's a really good thing to learn how to do that."*

4) They had a chance to *rehearse life*: they practiced living and dying as many different avatars and learned who they liked being, how they wanted to interact, and which reactions they most liked getting from other people.

- *"You can be whoever you want to be. If it doesn't work out too well, you just come back as another person and try it all again and see if that works out better."*
- *"Dying is a good thing. It teaches you to be brave."*

Participants echoed the themes over and over: in games, they learned a lot about social, strategic, and political realities that they would need to know to succeed in the future. In all, the gains they attributed to game playing seemed to be more social than cognitive, and those gains track well with predicted needs for the future, such as learning to work in multinational teams to achieve specific results (Gee, 2000).We suggest gaming can be described as "*sociotechnoplay,"* a term coined by game developer Deb Todd, to describe a new form of play in virtual environments that prepares teens for future work in similar highly technical and social environments. Findings also suggest a potential sea change in how teens feel about educational institutions and their willingness to learn from them.

Brief summary of the rest of the project: In Phase II (late spring), we plan to interview five developers of the MMORPGs about the motivators and challenges consciously designed into the games (Todd, 2007) to see how closely they match teen beliefs and experiences, or if our findings are unintended consequences for players of our participants' age group. In Phase III (late summer and fall), we will do an internet survey of a much larger sample of players of the same age to confirm (or refute) the findings of Phase I. Analysis for Phase III and the final report are to planned be completed by late 2008.

Endnotes

(1) Research indicates that males and females play games for different reasons (Yee, 2006).

(2) Some participants reported having to follow the orders of raid leaders without deviation, so findings about collaboration had to be tempered with the realization that teamwork did not always mean collaboration as usually defined.

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