Using a designed, online games based affinity space as a quasinatural ethnographic context and experiment lab

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Abstract: This poster outlines an two-year ethnography of an informal after school lab for adolescent boys using the online game *World of Warcraft*. The purpose of the lab was to promote academic interests and practices to participants who were generally disengaged in traditional school settings. A variety of data was collected including chatlogs, multimedia fieldnotes, etc. The data was coded and analyzed, and general findings show that academic skills were used in a non-academic setting.

Introduction

For the past two years, we have hosted an informal after school lab called the GLS (Games, Learning, and Society) Casual Learning Lab on the University of Wisconsin-Madison campus for adolescent boys from local (mostly rural) areas using the online game *World of Warcraft* as a vehicle for the development of pro-academic practices and dispositions such as digital and print literacy, problem solving, and prosocial skilk (Steinkuehler & King, 2009). Twenty-two local male youth ranging in age from 12-18, six undergraduate students, and six education researchers met regularly during the week for gaming sessions (as part of an in-game "guild") and monthly for face-to-face Saturday pizza parties on campus over the period of eight months (two years if we include the pilot). The pilot program ran from October 2007- May 2008, while the official program was from October 2008 – May 2009. The boys chosen for participation were described as "at risk" or chronically "disengaged". This population, adolescent boys, has been traditionally marginalized in studies and programs related to literacy (Newkirk, 2006), and have become increasingly disengaged in school (Steinkuehler & King, 2009). At the start of the program the graduate and undergraduate students provided mentoring and leadership for the guild, with the transfer of the leadership of the guild occurring as the study progressed.

The goal of this program was to use the natural tendencies of online gaming communities as a way to re-engage the academic interests of local youth who love gaming but hate school. Examples of skills that were promoted in the lab include distributed expertise and collective intelligence (Levy, 1999). At the same time, the lab functioned as both a quasi-naturalistic setting for ethnographic work and as a lab for conducting comparative studies of their academic practices, performances, and attitudes in the context of school (formal learning context) versus games (informal and unintentional learning context).

Data Collection

From this study we collected a variety of multimedia data, both in person and virtually. Data types included ingame chatlogs, multimedia fieldnotes including screenshots of game play, interviews, forum discussions, photos, videos and transcription, and school versus games studies data. The data because of its many faceted nature required strict organizational rules. A naming scheme was created, as well as a folder hierarchy, while the datawas being collected for chatlogs, fieldnotes, video, photos, and study data. Proper naming conventions were essential to good data organization. Once the data were collected it was prepared for analysis. The fieldnotes, chatlogs, and photos were loaded into NVIVO, qualitative data analysis software. The videos themselves were kept separate due to their size and incompatible format with NVIVO. However, the videos and interviews were transcribed and these transcripts were included in NVIVO for analysis. The smaller school versus games studies were also kept separate from the main data set because they were intended to be analyzed individually. The data in NVIVO was analyzed through the use of a priori and emergent coding. The other studies were each analyzed with methods determined by their design.

Analytical Framework

The analytical framework developed for this data set included both a priori and emergent coding. The a priori coding set included a total of 11 themes. These themes included argument, problem solving, reading, information literacy, digital media literacy, design thinking, model-based reasoning, attitudes, sociocultural learning, cross cultural fluency, and work place literacy. With sub-themes there were a total of 48 codes that were used a priori during analysis. This framework of themes allowed us to trace the development of key practices, capacities, and dispositions longitudinally. Coding was undertaken in pairs with each code having two people coding to ensure

inter-coder reliability, with an inter-coder reliability rate of 90% or higher deemed acceptable. Actual coder agreement was 98%.

School versus games studies

There were a series of five studies conducted within the larger ethnography that were all designed to examine each phenomena in a school versus games context. The five topics were chosen to target key domain areas. The studies conducted included a study on the participants' epistemological beliefs, an ethical decision making study, a reading study, an online reading comprehension study and a model-based reasoning study. A description of a sample of these studies is presented here. The ethics study conducted supplied the participants with two hypothetical scenarios, one being set in everyday life, the other in-game. These scenarios were designed to compare ethical decision making of the participants in life versus in the game. Another of the studies was a reading study that was designed to discover if the participants read at a higher level on a text that they read for interest as opposed to a standard school text, miscue analysis was used in the analysis of this study. Also an online reading comprehension study was conducted modeled on the study by Coiro and Dobler (2007). For this study, the participants were asked to answer a set of questions from a website about Tigers and one about Murlocs (small Non-Player Characters from *World of Warcraft*). The participants were asked to think aloud and were video recorded. The data was analyzed using the coding scheme developed by Coiro and Dobler (2007).

General Results

Figure 1 illustrates the data saturation of the aforementioned themes. Interesting patterns have been seen in overlap between codes such as the overlap that occurs between collaborative problem solving (which is a sub-theme of the theme sociocultural learning) and information literacy, which illustrates that information literacy is happening as a collaborative instead of an individual process in this virtual world. Another insight from the data was that practices of civic engagement (which is a sub-theme of the theme attitudes) are used by the participants to establish good practices within their guild.

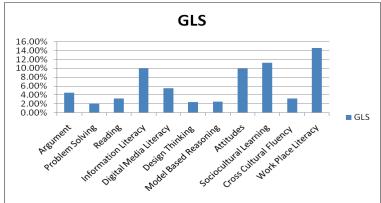


Figure 1: Coding Saturation for Themes

References

Coiro, J. & Dobler, E. (2007). Exploring the online reading comprehension used by sixth-grade skilled readers to search for and locate information on the Internet. *Reading Research Quarterly*, 42(2), 214-257.

Levy, P. (1999). *Collective intelligence: Mankind's emerging world in cyberspace* (R. Bononno, Trans.). Cambridge, MA: Perseus Books.

Newkirk, T. (2006). *Misreading masculinity: Boys, literacy and popular culture.* Protsmouth, NH: Heinemann. Steinkuehler, C. & King, B. (2009). Digital literacies for the disengaged: Creating after school contexts to support boys' game-based literacy skills. *On the Horizon, 17*(1), 47-59.