

## **A Snapshot on Youths' Activities on Online Gaming Forums: Internet and Informal Learning**

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**Abstract** The goal of this study is to contribute to the growing literature on youths' practices in online environments. Specifically, this paper presents preliminary results from an ongoing survey study that is collecting data on youths' practices in online gaming forums in the framework of informal learning. We surveyed 113 youths ages between 10 and 15. Wegner's (1998) model of communities of practices was chosen to examine and frame the interpretation of results. Analysis indicates that learning about games is the main reason youths revisit gaming forums; having discussions about games and helping new players are the two most popular practices in gaming forums. Our findings indicate that youth indeed engage in literacy practices in gaming forums and the structures of forums encourage the emergence of communities of practices.

## Introduction

The goal of this study is to investigate youths' practices in online gaming forums in the framework of informal learning on the Internet.

In today's world, many people are engaged in a wide range of technology-based informal learning in their daily lives (Cranmer 2006), and the Internet has evolved to be an important source of information. Expectedly, in the last decade, research about the Internet has focused on its uses and implications, such as distance learning, safety and privacy, socialization, and communication (Huffaker, 2004; Lombardo, Zakus, & Skinner, 2002; Maczewski, 2002; Mesch, 2001), Internet addiction (Chou & Hsiao, 2000) and inequalities (Stern, 2010). In this paper, we examine youths' practices and learning in gaming forums.

The Internet has emerged as a widespread informal learning environment with the advancement of networking technologies. According to a 2005 survey by the Pew Internet and American Life Project, "The number of teenagers using the internet has grown 24% in the past four years and 87% of those between the ages of 12 and 17 are online. It

is well known that anyone can find any type of information online related to their interests and passions in various multimodal forms. We also know from various reports, research studies or personal experiences that one of the passions of teenagers is video games. A more recent Pew (2008) study found that 97% of teens ages 12-17 play computer, web, portable, or console games.

Games are an integral part of today's youths' lives. The Microsoft-funded Games for Learning Institute (<http://g4li.org>) is one of several efforts dedicated to conducting in-depth studies to investigate the role of video games in youths' lives, especially for learning in the domain of Science, Technology, Engineering and Mathematics (STEM). One of the goals of the Games for Learning Institute (G4LI) is to create learning games for youth based on game design patterns. Although STEM is main domain for the G4LI, increasing youth literacy skills is an additional desirable outcome.

Literacy is critical for success in many spheres of life. Bronwyn T. Williams (2009) notes in his book *Shimmering Literacies : Popular Culture and Reading and Writing Online* that "It is important that we understand not just how online technologies have changed literacy and popular culture practices but why popular culture has dominated the online literacy practices of our students"

Therefore, our research questions were:

- What kind of general practices (educational or non-educational) are teens entailing within online gaming forums? What kind of literacy practices are teenagers entailing within online gaming forums?
- Are there any patterns in practices across gender, types of games teens play and their practices on online gaming forums?

In this paper, we will talk about preliminary findings related to the first questions as the data collection is still going on.

## Background

Today's technologically rich networked environment imposes a new culture characterizing a generation of young people (i.e., the "Net Generation") who are growing up and living with the Internet (Tapscott, 1998; Maczewski, 2002; Rohall & Cotten, 2002; Wilhelm, 2002), a characteristic clearly different from previous generations. The Net Generation is connected rather than divided by the Internet (Gross, 2004). As Sefton-Green (2005, p. 3) concluded from an extensive review of literature in the area:

*"Computers and other aspects of Information and Communication Technologies (ICTs) allows children and young people a wide variety of activities and experiences that can support learning, yet many of these transactions do not take place in traditional educational settings. In fact many of these may not be considered 'educational' according to our conventional understanding of that term."*

Online environments are more than just virtual places where youth can read and write. As Selwyn (2008) emphasized, these environments "can be characterized as environments for democratic forms of self-expression and interaction between users and, are potentially fertile sites for informal learning". According to De Vreese (2007) youth are politically active and the Internet is an important medium for political activities where they negotiate and discuss various topics.

Several researchers have studied discussion practices in online forums (Christopher et al., 2004; Steinkuhler & Duncan, 2008). Steinkuhler and Duncan (2008) analyzed 1,984 forum posts made by 1,087 unique World of Warcraft (WoW) characters on WoW's official forums to investigate scientific habits of mind. They found that 86% of discussions were engaged in social knowledge construction. Half of the posts evidenced systems based on reasoning, and 65% displayed an evaluative epistemology in which knowledge is treated as an open-ended process of evaluation and argument. Although these findings are quite helpful to understanding users' scientific habits of mind, the authors did not collect real life demographics, so one cannot assume these posters are teens, especially considering the average age of MMORPG players is around 26. (Yee,2006).

On the other hand, Thomas (2005)'s study of an online, role-playing game community consisted of in-depth interviews with 60 teens, average age 13. Her data analysis revealed that youth often searched for answers to problems together and were motivated to be successful and to gain status in their online community. Therefore, the learning was a result of collaboration to achieve a common goal (Thomas, 2005). Her findings support the existence of communities based on Wegner's (1998) communities of practices model.

Learning in gaming environments has been discussed in the framework of Wegner (1998)'s model of communities of practices (Gee, 2003; Galarneau,2005; Gratch,2007). In *Cultivating Communities of Practice* Wenger et al. (2002, p. 4) state, "communities of practice are groups of people who share a concern, a set of

problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis." These practices are very common in gaming communities and gaming forums as extensions of gaming communities. Furthermore, membership in a community of practice is based on participation, and less so on official status. People must take part in the shared practice of their community; membership is not conferred by passive association. Consequently, membership in such communities is empowering because as members engage in the activities of the community, they individually and collectively build, sustain and transform knowledge, and create new knowledge, all of which means that the community itself becomes the repository of knowledge.

Although gaming forums don't necessarily have experts, there are varying levels of expertise among forum members. This provides opportunities for youth to mentor and be mentored. This type of learning aligns with Vygotsky's (1978) social learning theory. According to social learning theory, learning is not just a cognitive exercise carried out by individuals in isolation of their social environment. It often relies on the interaction with expert others. Interaction is also central to acquisition of literacy, and studies with "new literacies" (refers here e.g., Lankshear and Knobel, 2003; (New London Group, 1996) imply that participation within game-related forums should result in visible literacy practices. Therefore, we hope to shed more light on the extent to which youth are participating in literacy practices in their online gaming community. We will seek evidence for the notion of the emergence of communities of practices, learning , and literacy practices in online game-forum environments.

## Gaming Forums

Game forums can be placed into 2 broad categories. The first type of forums are those that are exclusively about a certain game. These types of forums act as an extension of game worlds and make the gaming more fluent, connecting in-game practices and status with out-of-the-game writing and knowledge dissemination. The second type of forums can include several topics related to different genres of games or different games in the same genre.

With the development of Web 2.0 technologies, online forums have blossomed from being only text based bulletin boards to a collection of multimodal presentations (see Figure 1). Today's gaming forums are not only text-based forums that participants read and write, but also a place where one can build a certain status as well as connections (both friendship and professional). The majority of forums require account creation, so users choose an account name and an avatar to represent them on the forum space. Many have blogs, or personal home pages which encourages identity formation in the online community. Forum members can visit each others' home page to learn more about each others' gaming practices and interests. Wenger (1998) puts forth that issues of identity are inseparable from learning, knowing and community, and that, in fact, "the concept of identity serves as a pivot between the social and the individual" (Wenger, 1998, p. 145). In this sense, forums are encouraging construction of communities through the structure of forums. Forums may also have mini games either developed by the community members or posted officially by forum owners. For example, Kongregate is an online community for flash programmers to post games, and for gamers to play them. It includes discussion boards, and even has a collectible card game (virtual) where players can get actual cards by playing virtual games on the site.



Figure 1.A snapshot from a popular MMORPG forum.

## Methodology and Participants

We use survey methods to gather data on online gaming forums that are particularly popular among young people. Some of these online forums are Kongregate.com(<http://www.kongregate.com/>), Dragonica Online Forums (<http://dragonica.iahgames.com/>), and RuneScape Forums (<http://www.runescape.com/>).. Participation was voluntary and the announcement included that participants should be between the ages of 10 and 15; participants

who stated their ages as older than 15 were eliminated from data analysis. As we write this paper, we are still collecting data. The analysis in this paper includes data from 36 teens. In addition to online forums, we had a chance to gather data in an urban middle school in New York City (n=76), this data is currently being analyzed. The combination of on-forum participants and actual middle school children provides a cross-section of teens who visit gaming forums. There was eight times the number of male respondents (32) than females respondents (4) in the online sample. Including actual middle schoolers in analysis provided a more balanced sample in terms of gender.

When we asked our middle-school teens whether or not they visit online gaming forums 40 of them said "no" and 36 said "yes" (of these, 12 were females, 24 were males). Thus, we have data regarding online forum practices from 72 teens (36 from the school group, with 12 females and 24 males; 36 from online forums, with 4 females and 32 males).

Our survey collected data about basic demographic information, gaming habits such as type of games they play and time they spend playing games, and online forum practices in the form of multiple choice questions as well as open ended questions. There were also open-ended question asking how teens see expertise on online forums and how they decide a game is worth playing, or not, based on a given screenshot.

## Findings

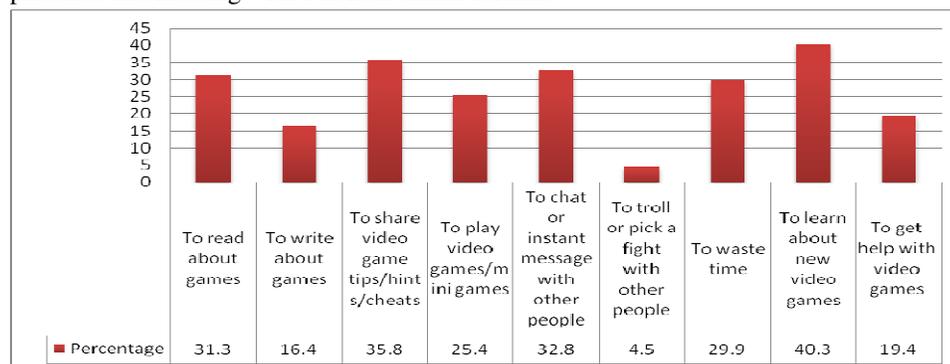
In 2005, the Kaiser Family Foundation published data from a nationally representative survey of 8- to 18-year-olds showing that most American youth lived in households where media technologies were varied and numerous. On average, the youth in its sample lived in households with 2 or more video-game consoles on average, and at least one computer (Rideout, Roberts, and Foehr 2005). This backs our finding of participants having 3.9 consoles on average. Although our sample is relatively small at the moment, we hypothesize that about the half of teens visit online gaming forums for one reason or another.

We wanted to know teens' general opinions about gaming forums, and we gave them five-point Likert scale questions in four areas. More specifically, questions, and their response breakdowns were: Forums (a) make me smarter (32.8%); (b) make me feel good about myself (32.8); (c) teach me things that I may not learn at school (50.8%); (d) help me learn to be a team player (56.4%). We found significant correlations between question a and b and questions c and d (Significant at  $p < 0.01$  level, 2-tailed). We found no significant differences between the school group and online forum group.

In general, teens believe that games are good for learning. Collaboration, optimism, morality and history are among the topics they mentioned while talking about learning and games. As one of the Gaia Online player says:

*"I think some games give hope to some people, like believing in what they think is right will always lead to something good. Or that no matter what happens; you should never lose your dreams, because there's always something. Well, that's just a point."*

We also presented teens with nine different reasons that may influence their decisions to revisit gaming forums. They were asked to pick the three reasons most applicable to them (see Figure 2 for options and response percentages). As seen in Figure 2, sharing video game tips, learning about video games and reading about games are very high priorities for teens. This can be interpreted as increasing one's game knowledge base and is a common goal among members of online gaming forums. In this paper, we will only briefly talk about reading writing practices and meeting with others in online forums.



**Figure 2. Reasons for teens to come back to online gaming forums. Percentage of total responses.**

## Reading-Writings on online gaming forums

Adolescents' out-of-school literacy related activities, such as keeping diaries and writing plays (Camitta, 1993), take a new form in today's technology rich world. Young people write on their blogs, become a member of a forum group where many activities like starting forum threads, replying to them and strategizing in game play take place.

World of Warcraft (WoW), the most popular massively multiplayer online role playing game (MMORPG), has the 2<sup>nd</sup> largest wiki on the internet after Wikipedia. There are about 8,000 articles written by the WoW gaming community and about 5 million people visit WoWiki, (<http://wowwiki.com>) every week.

We wanted to know what teens prefer in terms of reading or writing on forums. We found that 48% of them said they have no preference, they both read and write, while 31.3% preferred reading and about 15% said they preferred writing. This was almost identically represented in another question, which asked teens their main reasons for continuing to come back to gaming forums (see Figure 2). Thomas (2005) notes "What is most striking about the community is the respect and support the children give to each other's writing." This respect and support for their writing about their passion brings them back continually to online forum communities.

## Meeting with others

While from one point of view the Internet can be considered something that facilitates and promotes communication (Huffaker, 2004; Lombardo, Zakus, & Skinner, 2002; Maczewski, 2002; Mesch, 2001), from another it could be characterized as a social barrier (Weber et al., 2005; Wilhelm, 2002; Wolak et al., 2003). One way or another, online environments enable users to connect with others in new ways. Ito et al. (2008) found that most youth use online networks to extend friendships through social networking sites such as MySpace or Facebook as well as instant messaging or mobile phones. They further elaborate that "With these "friendship-driven" practices, youth are almost always associating with people they already know in their offline lives. The majority of youth use new media to "hang out" and extend existing friendships in these ways." (Ito et al., 2008).

Although we did not capture data on extensions of real life friendships into online forums, it is expected that teens inform each other about their favorite gaming forums and therefore influence their peers to become part of the gaming forum they belong to. We found that 42.7% of the participants think that online gaming forums help them to make friends with people they don't know.

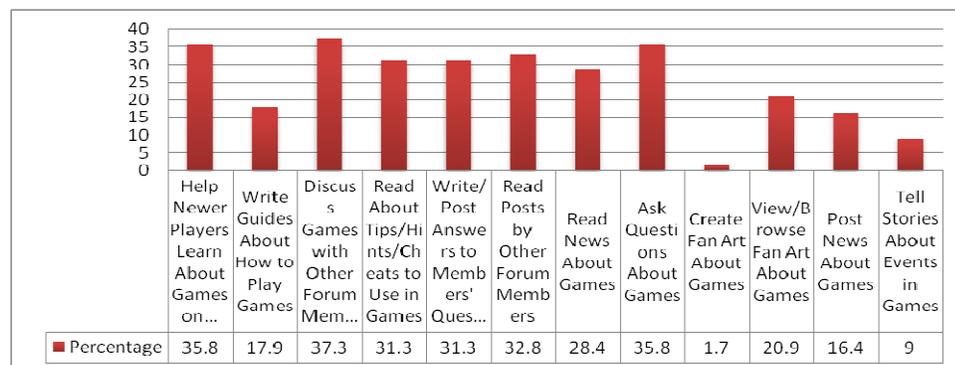


Figure 3. What teens do usually when they are in gaming forums. Percentage of total responses.

When participants were asked what kinds of activities they usually do when they are in gaming forums, discussing games with other forum members was the most popular choice, followed by helping newer players learn about games (See Figure 3). Here, we again see here that mentorship appears to act through peer scaffolding in gaming forums.

It is also interesting to notice that reading and writing have almost the same percentages as practices. On the other hand, telling stories about events in games and creating fan art about games are practices that have the least percentage as these may require special interest in creative writing or drawing. We may not expect every teen to be a perfect story teller or artist, but those they are, they have support and encouragement in the online community.

## Discussions and Conclusion

The data presented in this paper is only preliminary results of an ongoing study. By the time of the conference, we are expecting to have much larger sample so that we should be able to examine patterns among different types of

games and practices as well as possible gender differences among practices. We believe that not only working with teens in forums but also working with teens in regular schools strengthens our results as our sample is closer to be a representative of youth.

The Mediapro project reported “wide evidence of self-regulation by young people” (Mediapro, 2006), suggesting that young people are more considered and empowered users of online contexts than is sometimes assumed. Games are considered to be motivational and engaging, and they are an integral part of youths’ everyday lives. If 97% of teen are playing games and more than half of these visit online gaming forums, the question is how we as educators use these environment to empower youth to be better thinkers and more literate citizens.

Our preliminary results support this view and the interaction within forums— verbal, reading, and writing— indicate literacy practices are facilitated online, as are friendship relations and problem solving and strategizing within what might readily be considered communities of practice.

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