Virtual Meeting Places: Video Games as Information Grounds

Allen Kwan
University of Toronto
allen.kwan@mail.utoronto.ca

Abstract

This paper seeks to understand what video game players do when they are faced with a problem in a video game that they are not able to solve by themselves. Using the Information Horizons framework, including the Information Horizon Interview technique, the researcher asked veteran video game players about their information seeking behaviours with the aim of exploring these behaviours in a social context. This paper notes the importance of social information behaviours through the context of information grounds and discovered the importance that virtual information grounds have in the information sharing processes of video game players. This paper also discovered that individual knowledge and experience is highly important to video game players and that internalized aspects of information seeking, such as relying on past experience, is as, if not more, important to these video game players than any external source of information.

INTRODUCTION

Video games represent a new type of play that brings together many aspects of reader/participant-engagement found in different activities. Players of video games rely on media literacy in order to be able to interpret the stories that are being told through a game, but they also must rely on the cognitive and physical abilities that are often associated with sport or music in order to succeed at playing a game. This combination of skills is unique to games, creating an information need that does not necessarily exist in other similar leisure pursuits. When a player of a video game is unable to progress in a game, either because of an inability to solve a puzzle or because of an inability to complete a physical challenge, these players eventually rely on secondary sources in order to help them overcome these challenges.

This paper has a primary research question: what do video game players do when they find themselves unable to complete a challenge and need help from an external source? What sources of information do they use, how do they access this information, who do they ask for information?

One sensitizing concept that is considered is the notion of the "information ground" as described by Fisher (2005), in which information is shared informally in a public space by individuals not actively participating in an information gathering process. This idea is extended to the notion of virtual information grounds, and what it means to share ideas in non-physical social settings.

LITERATURE REVIEW

In the context of LIS literature, not much work has been done specifically on the information seeking behaviours of video game players. The majority of the field overlaps with some of the sociological studies conducted on video game players in terms of trying to understand the cognitive processes that players use and develop as they play games and how educators might use these findings to help use video games in an education context. For librarians, this typically involves trying to think about how video games can be used to teach children information literacy. However, there are a few studies of the behavior of video game players that are directly related to their information behaviours. Gumulak & Weber (2001) conducted structured interviews with teenagers asking them about their information seeking behaviours when encountering problems in games. Although their ultimate question was trying to address how librarians might use games to teach information literacy, the data gathering methods and the findings about information behaviour in their paper are fairly foundational for this paper.

Lee, Clarke, & Rossi (2016) conducted semi-structured interviews when trying to discover the information sources that people used when finding games to play. Their research question was focused on how metadata about video games might be collected in order to provide reader advisory services for library users interested in video games, and while different in scope, is similar to the findings

that were discovered in the grand tour question used during the semi-structured interviews used in this paper.

Adams (2009) conducted ethnographic researched situated within the framework of dramaturgy to explore the information behaviours of players of a single game, *City of Heroes*. While her research methodology is different from the papers above and the one used in this paper, her conclusions about the information seeking behaviours of game players and the sources of information that they use in order to solve the problems they might have.

The common thread among these studies is the notion that information seeking behaviour of video game players is typically a one-way process that happens outside the confines of the game. Adams (2009) considers the social aspect of information sharing when considering message boards, but the notion of sharing information in the immediate space of the game is not directly addressed.

RESEARCH METHODS

The findings in this paper are derived from the Information Horizons framework developed by Sonnenwald (2005) in order to address information seeking behaviours that are not traditionally studied, including "when and why people access (and do not access) individuals and other information resources; relationships among information resources; the proactive nature of information resources and the impacts of contexts and situations on the information seeking process" (p. 191). Accordingly, an interview guide (see Appendix 1) was developed in order to conduct semi-structured interviews that tried to understand the information seeking processes and the nature of the sources that the informants used.

The informants were all male and in their mid-20s to their mid-30s. Of note is that all of the informants considered themselves well-versed in video games, which most likely influenced the scope of the responses to the interview questions. A broader study might try to find informants who are not as familiar with video games, or play different types of video games.

Although this was not intended at the outset of the study, a cutting point of focusing on multiplayer games led to a more fruitful discussion of information behaviours, particularly in the context of understanding video games as shared spaces that can be seen as information grounds for information sharing.

There were no immediate ethical concerns raised by the interview process. Given that informants did not mind being referred to by their online names, issues of privacy were implicitly addressed since it would be nearly impossible to identify them without actual knowledge of the person involved.

FINDINGS

The findings have been synthesized using inductive thematic analysis, drawing patterns and discovering commonalities between the results of the interviews with the informants. This strategy was chosen because there are clear patterns discovered in the information seeking behaviours of the informants that did not necessarily fit perfectly with the metatheories that were explained by Bates (2005) or with models explored in Hartel's (2017) lecture notes. There are behaviours that are predicted by Fisher's exploration of the information ground, as well as Hektor's (2001) proposed model of information behaviour, that will be explored further in the Discussion section below.

Institutional Knowledge and Personal Experience

One shared commonality between all of the informants is that they all expressed a form of institutional knowledge developed from their own personal experience with video games. In practical terms, this institutional knowledge is one of the primary sources of information that they consulted but none of the participants illustrated this idea on their Information Horizon maps. In terms of the grand tour questions, trying to understand how the informants chose the games that they played, they all noted that they know which future games that they would play based on their past experience. For example, Evil Mario knew that he would like *Overwatch* because it is similar to *Team Fortress 2*, a game that he has spent over two thousand hours playing.

When considering how to address specific challenges or problems that they are unable to solve, all of the informants suggested that they would first exhaust all of the possible solutions to the challenge before accessing exploring external sources of information The intangibility of personal memory and experience, of being able to inherently know the answer to a question due to the personal institutional knowledge developed over a decade or more of experience, is an aspect of information that is difficult to address with the Information Horizon Interview technique.

Authority and Trust

Another commonality between the informants is the importance of trusting a source of information, both in terms of finding games to play, but also in terms of soliciting advice in order to solve a challenge in a game.
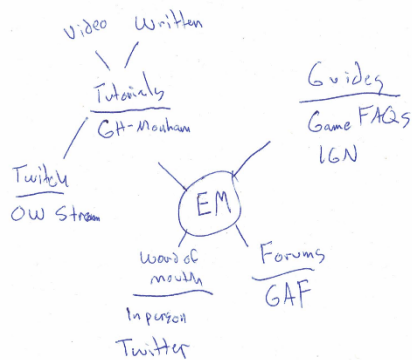
Figure 1. Trusted and Familiar Sources

This trust in a source is tied to an informant's personal experience, with users not only developing a trust in a particular source of information, but also being able to use their experience to quickly decide if a new, untested, source of information can be trusted.

Information is Social and Shared

Most of the informants acknowledged that the information that they found exists in a social context, with two of them drawing a direct line from the information sharing practices that they experienced as children in a school playground to the role that social media platforms and communication tools like Discord play in their lives today. The informants acknowledged that information can be shared asynchronously through social media, creating a type of time-delayed information ground, but did not actively map out or consider the real-time information grounds created when they would enter voice chat with their friends or peers when playing a game together online.
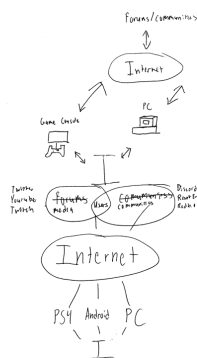

Figure 2. Information sharing is bi-directional

As seen in this map, Kopyasu considers the relationship between himself and certain sources to be bi-drectional, as it is possible that he might contribute to these sources as much

as he gets information from them. Given that some of these sources serve as social media platforms, it's also likely that the informants are not necessarily going to these sources for information, but to socialize with other players, creating the conditions required for information grounds as described by Fisher (2005).

The more directly comparable information ground that these informants participated in are the voice chat sessions that occur when they played a multiplayer game. These transient, temporary, and informal social gatherings can be seen as virtual information grounds that have all the same qualities as an information ground found in the real world, such as a clinic (Fisher, 2005, p185) in that the primary purpose of the virtual gathering is not to share information, but to allow players to communicate with each other while playing a game. This use of this sensitizing concept will be explored further in the next section.

DISCUSSION

A cognitive approach to studying the information behaviours of video game players might be worth pursuing further, given the importance that each informant placed on the information that they already have. Both the sensitizing concept considered and the Information Horizon Interview technique precluded an in-depth study of the internal cognitive processes used by the informants, but it may be similar to the information seeking processes that athletes and musicians use when they are trying to improve a specific skill. That is, practicing a skill can be considered a form of information seeking behaviour where one learns through experimentation and experience.

In a socio-cognitive context, video games offer an opportunity to extend the notion of information grounds into virtual spaces. When players engage in multiplayer activities, they typically use voice chat communicate with other players. These temporary virtual meetings become a form of information ground, since are certainly gathering for a "purpose other than information sharing" and that "information flow is a by-product" of playing the game together (Fisher, 2005, p. 187). Although the informants questioned did not at first consider these temporary social spaces, and therefore did not think to include these exchanges on their Information Horizon maps, when questioned further, they acknowledged that at least some form of information is gained or exchanged during these encounters. Although not explicitly addressed in the interviews, it is implied that often information not related to the game or the act of playing games is exchanged as well, serving as examples of informal information exchange that comes from "small talk" or "chit-chat" (Fisher, 2005, p. 186).

Although Adams (2009) conducted ethnographic research in a specific video game, she did not record the information exchanges between players that occurred in game itself. An ethnographic study of video game players, where the research is allowed to observe and transcribe the conversations that people have while playing a game, would be the next logical step in extending Adams' research into the specific realm of the information ground.

The relationship between information gathering and information communicating found in these virtual information grounds are microcosms of Hektor's (2001) model of the relationship between information behaviour and information activity (p. 81). The informants generally began by retrieving information from the various sources, ultimately moving to the more the information activity of informal exchanges. Certainly, there are other video game players who go through the rest of the information activity cycle by dressing their information for the purposes of publishing it online – typically in the form of written or video guides – but for the informants in this study, they stopped at the level of communicating, exchanging information typically in the informal information grounds described above. If one considers the embodied, physical experience of gameplay, then the full cycle of the model might be expressed with "publishing" being seen as the players physically performing what they've learned by going through the entire information behaviour/activity cycle in the game itself.

The theory of social worlds developed by Unruh (1980) also applies to these informants, as there is an assumed body of knowledge and practices of video game players that all the informants assumed was second nature.

METHODOLOGICAL REFLECTIONS

The Information Horizon Interview technique is effective at allowing informants to both address and reflect on the sources of information that they use through the interview questions and through the process of mapping. The participants discovered something about their information seeking behaviours that they had not considered before, which made the process helpful for not only the researcher but for the informants themselves.

As mentioned in the previous sections, one limitation of the IHI technique is that it does not explicitly offer the chance for informants to describe their cognitive problem-solving processes or to consider their experience or memory. This may have been a misapplication of the technique by the researcher, and may have required the researcher to ask informants to consider both internal sources of information along with the external sources of information that appeared on the maps.

No immediate ethical concerns were raised by the project and all informants were comfortable with the ethical guidelines provided beforehand.

CONCLUSION

The main research question of asking video game players what they do when they encounter a problem in a game that they cannot overcome yielded some interesting and unexpected results.

The virtual information grounds that are constantly created by the millions of video game players who connect with each other through voice chat or even text chat create an infinite number of opportunities for the informal information sharing that has been studied in more conventional, real world information grounds. The fact that all the informants who played multiplayer games did not consider these virtual information grounds as places where information is exchanged shows that even the participants are not aware of the information behaviours that occur in these online meeting places.

Cognitive research on the internal information seeking behaviours of video game players could lead to interesting possibilities as well, as informants tended to privilege their personal, subjective experiences over any external sources. This might echo the experience-based problem-solving techniques that athletes and musicians employ when faced with a physical problem that they cannot overcome. That is, while these types of information seekers may seek out sources of information to help them solve a physical challenge they are not able to overcome themselves, they will ultimately improve their skills through practice and repetition.

One important point to make is that the demographics of the informants most likely skewed the results of this study. It's possible that younger or less experienced video game players might not privilege their own experience and knowledge over others. Similarly, more experiences or professional video game players might not seek any external sources of information at all and focus primarily on learning and gaining knowledge through repetition and practice. Players that are focused on content creation, might be more focused on developing skills that focuses on the "Giving" aspect of information behaviour in Hektor's (2001) model.

There are many potential avenues for further study, and each would enrichen our knowledge of information practices as a whole.

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AUTHOR'S BIO

Allen Kwan is a graduate student at the University of Toronto's Faculty of Information. He has studied video games as a storytelling medium in the past, and is now considering the affective nature of video games on the people that play them.

APPENDIX 1

Grand Tour:

- What games do you like to play and why?

Mini Tour

- Tell me about a recent game you played extensively. (Tell me about the last game you played.) Did you finish the game? Did you enjoy playing the game – any frustrations/getting stuck? Did you feel like an expert at the game at the end?

Information Practice

- Tell me about what information you used to pick that game to play.
  - How do you access that information? What do you do when you're on the website/forum/reddit?

- Tell me about the information you used to finish the game. How did you develop the expertise in the game?
  - How do you access that information? What do you do when you're at the website/forum/edit?
- Did you share your experience with the game with anyone? Do you help other players?
  - How do you share your experience? What do you do?

Information Resources

- Try to draw an information horizon map to explain the above. Place yourself somewhere on the map, and then draw in the resources you use and the connections you might have to each resource or how the resources might be connected with each other.
- Now, tell me about the resources you used to:
  - Pick a game to play
  - Help you finish the game
  - Share your experience
- Is there anything that occurred to you as you were drawing this map?
  - Did you omit something, or added something you didn't think of before?
  - Do you prefer certain resources over the other?
  - How does the social dimension affect how you access and share information?

APPENDIX 2

Question: Can you tell me about a time you looked up information about what to do in a game?

Answer: After playing for 60 hours, I managed to get the worst ending, so I a basically played through the game a second time in new game plus. While I had to look up what I needed to do in order to get the better ending, I was able to play the game itself fairly quickly the second time around.

Question: Were you ever frustrated with a game?

Answer: You remember *Final Fantasy Tactics*? I played that game for a while until I just got frustrated with the game and stopped. I was so mad I sold the game – totally got rid of it – and got *Final Fantasy 7* instead. A year or two later, I bought *Tactics* again and this time when I played it, something just clicked and I found it much easier.

Question: You didn't look up anything in the time when you stopped playing it?

Answer: No, I just understood how to play the game the second time around. It's now one of my favourite games ever.

Question: When you're playing *Divinity* with other people, do you share information with each other?

Answer: Sometimes, but it depends on your party composition – not in terms of the characters in the game, but the chemistry between you and the other players. You have to manage these relationships and be careful about how you communicate with others. With my *Divinity* group, we each try to play our own game in a way… there isn't an authoritarian voice.

Question: Does it become a negotiation at that point?

Answer: A little bit, although at some point you have to compromise and just go along with the rest of the group or just stop playing with them altogether.

Question: I noticed that you didn't think to put in-game moments in multiplayer games on the map. Is that because you think of those moments as temporary?

Answer: Right, yeah… that's interesting. I guess so? It doesn't feel like when you're in a moment like that you're searching for information… it seems out of context for me compared to the rest of my sources – it doesn't seem quite like the same mold to me.

Question: So if you got that information from a source like Twitch or Youtube as opposed to in game, it would be different?

Answer: Yes, even though it's the same information, the way I obtained it would feel different. That's interesting… I know in my brain that it's the same, but it doesn't align in my brain as the same. I guess one feels more organic, so I don't think of it the same way.
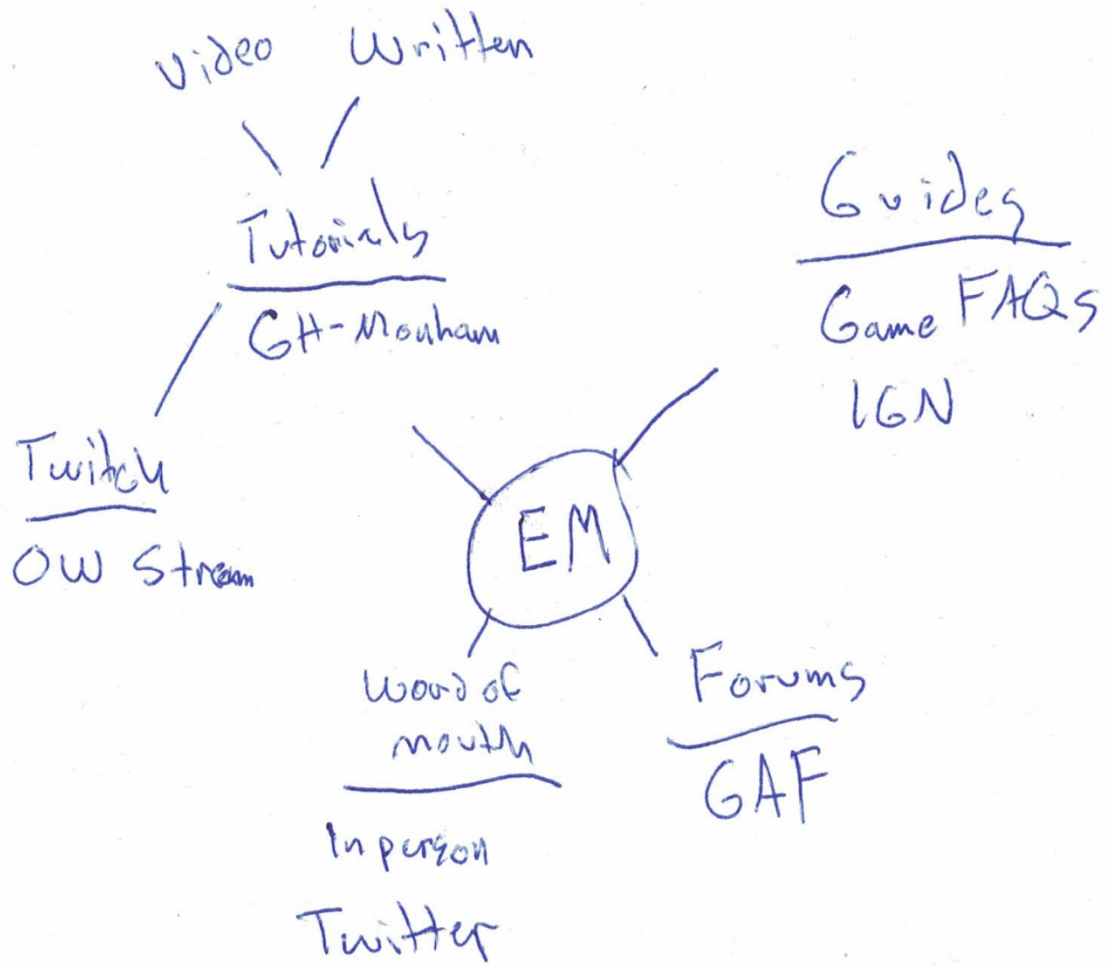
APPENDIX 3

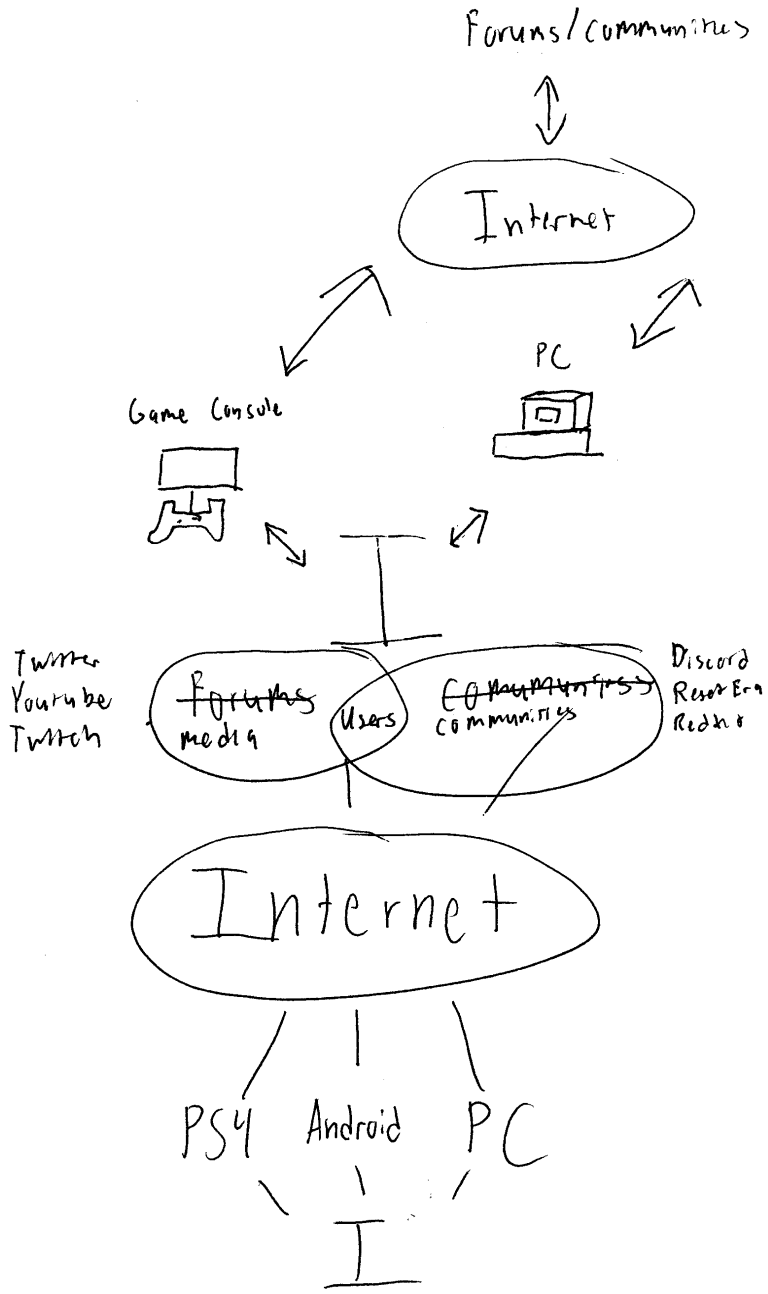**Figure 1 enlarged. Evil Mario's Information Horizon Map**

Forums/communities

Internet

PC

Game Console

Twitter
Youtube
Twitch

Forums
media

Users

Communities
communities

Discord
ResetEra
Reddit

Internet

PS4   Android   PC

I

Figure 2 enlarged. Kopyasu's Information Horizon Map
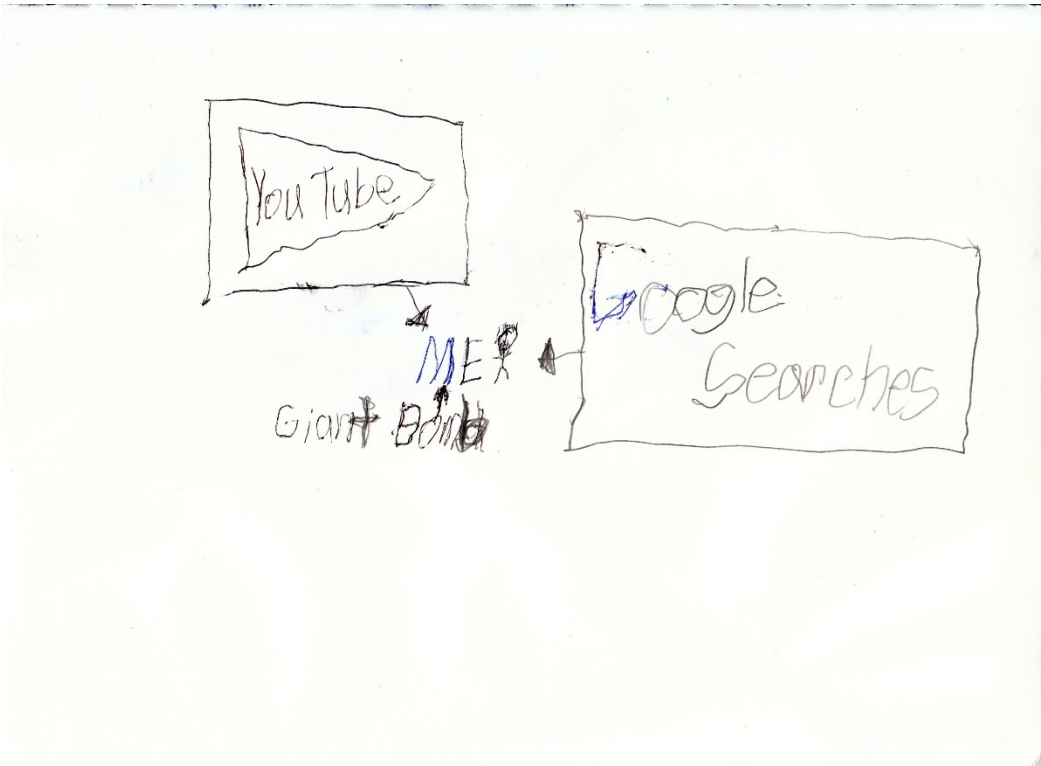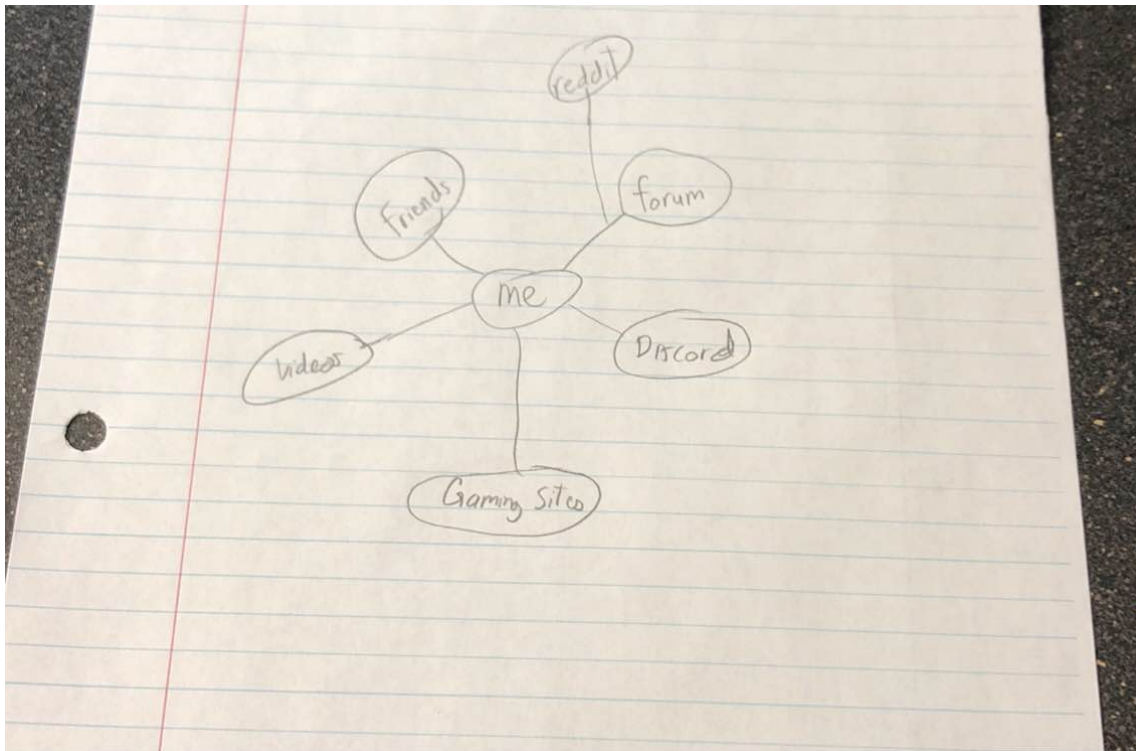
Figure 3. Crazy Canuck's Information Horizon Map

Figure 4. Irawrsaurus' Information Horizon Map