Academic Libraries' Mutations: The Introduction of Video Games

Stephanie Cadieux
École de Bibliothéconomie et des Sciences de l'information
Université de Montréal, Montréal, Canada
stephanie.cadieux@umontreal.ca

Abstract. The development of video games collections in academic libraries is a recent phenomenon and very little research has been done so far. This paper aims to review the available literature addresses four main subjects: video games in academia, or how the games are influential supports for both students and professors; video games in academic libraries, or the current practice; selection criteria, which are an important aspect of collection's development; and consoles, which are the supports to read video games. With the interest from institutions and individuals, the need for academic libraries to adapt and to offer adequate resources to their users is stressed and modifications of collection policies and adaptation of different platforms are also called for.

Keywords: Library Collections, Video Games, Academic Libraries

1. Introduction

Academic libraries need to be in constant mutation in order to adapt to their users' needs. Over time, we have assisted to the creation of many information supports, which forced both academic and public libraries to acquire books, but also video tapes (Lavigueur 1984), CD-ROMs (Dyer 1990; Batterbee and Nicholas 1995), DVD (Carr 2005), compact discs (Haddad 1996, Lai and Chan 2010) and, more recently, e-books (Rao 2005; Parkes 2007; Berger-Barrera 2008) and video games (Bubak 2008; Smith 2008; Tappeiner and Lyons; Laskowski and Ward 2009).

The important presence of video games in today's society raises the need to define and study them. Since the launch of Nintendo's first console, the growth of the video game industry has led to different perceptions on this medium, ranging from the negative, such as video games causing health issues, to the positive, i.e. their contribution to developing intelligence. To prove or refute these theories, researchers need to study video games. To be able to do so, university libraries must expand their collections and start to acquire video games.

The goal of this paper is not to discuss whether or not libraries should introduce video games to their collections, but rather to expose what has been written on the development of video games' collections in academic libraries. Since this is a rather recent trend, the literature is not yet abundant; nevertheless, these works are interesting to create a portrait of the current practice and to give ideas for future developments. We will address four main subjects: video games in academia, or how the games are influential supports for both students and professors; video games in academic libraries, or the current practice; selection criteria, which are an important aspect of collection's development; and consoles, which are the supports to read video games.

2. Video Games in Academia

Video games' popularity among college and university students is well established: 70% of American college students mentioned them as being the medium which has the most influence on them (Squire 2008). This has caused many students in diverse disciplines such as anthropology, sociology and cinematographic studies to be interested in this medium (Copier 2003). Some argue that video games cannot be studied in actual disciplines because there are too many differences between games and other audiovisual media. For instance, the story and the visual may not be identical each time the game is played (Laskowski and Ward 2009) and multiplayer games combine aesthetics with

social relationships to an unseen level (Copier 2003). Furthermore, as Aarseth (2001) points out "[g]*ames are both object and process; they can't be read as texts or listened to as music, they must be played. Playing is integral, not coincidental like the appreciative reader or listener*" (p.3). This means that the student's physical involvement is mandatory to study every aspect. As a result, some academic institutions felt the need to develop a new discipline: Game Studies (Aarseth 2001; Copier 2003; Smith 2008).

The creation of this discipline sparks two fears: first, that diplomas related to video games would not be taken seriously by other academics, as for some, games are for children (Smith 2008). This tendency seems to diminish with the blooming of specialized grants, notably from the Library of Congress (National Digital Information Infrastructure and Preservation Program) as well as from the MacArthur Foundation (Laskowski and Ward 2009). The second fear is that degrees related to video games would not be taken seriously by the industry because it would not meet its expectations (Smith 2008). Partnerships between the video game industry and universities, such as Nintendo and DigiPen, and Entertainment Arts and the University of Southern California and Carnegie Mellon, address this issue by providing industry's insight; this kind of partnership shows that the industry wants qualified and educated employees (Smith 2008).

3. Video Games as Academic Resources

Be it to support existing programs or newly created ones, some academic libraries are developing video games collections. As Smith (2008) and Laskowski and Ward (2009) point out, developing such a collection at the beginning of a discipline may help position the library favourably inside academic institutions. Also, video games can support teaching in other disciplines than those explicitly related to video games (Bubak 2008; Burek Pierce 2009). For example, the collection of the University of Illinois at Urbana-Champaign supports many departments, such as psychology, informatics, information science and literature (Tappeiner and Lyons 2008). Video games can be effective in natural and medical sciences: a medical center in Phoenix, Arizona, proved that students playing *Kororinpa: Marble Mania* an hour before a virtual gall bladder surgery had better results than those who had not, because their hand-eye coordination had been exercised during the game (Tappeiner and Lyons 2008). Furthermore, in a survey conducted in 2010, it was found that video games supported mainly programs related of the creation of video games and informatics, but also in education, sociology and psychology (Cadieux and Beaupré-Lavallée 2011). Finally, Simon Fraser University (Vancouver) offers courses on new media critical analysis, and video games are one of the media studied (Gick In Harris and Rice 2008).

Video games are also used in research in many academic disciplines: in education, the impact of games on teaching and the students' receptivity are studied (Annetta et al. 2009; Annetta 2008; Annetta et al. 2006; Dodge et al. 2008; Powell 2005; Simms 2001; McFarlane 1997). Video games are also used for research in sociology to study immersion and flow (Lee 2009), perceptions carried with them (Williams 2006, 2003), and the effects of violence (Farrar, Krcmar and Nowak 2006; Jantzen and Jensen 1993). Information scientists are also using them for the studies of informational behaviours (Adams 2009). Finally, game studies are doing research on the playability (Fabricatore, Nussbaum, and Rosas 2002) and on the human-computer interactions (Barr, Noble, and Biddle 2007). This means that with this collection, libraries may support a large array of disciplines studying video games directly or indirectly, whether they study physical or societal effects (Bubak 2008).

4. Selection Criteria

The selection criteria for video games in academic libraries are not often mentioned in the literature, as some authors have noted (Kane, Soehner and Wei 2007; Tappeiner and Lyons 2008). Tappeiner and Lyons (2008) offer some basis to help any professional who wishes to create a new collection; they identified four categories for the criteria: 1) physical characteristics and needed equipment 2) disciplines in which the games could be used, 3) the game itself, and 4) the cultural and historical values of the game. Kane, Soehner and Wei (2007) also offer criteria based on their experience at the University of California Santa Cruz (UCSC). The two criteria they considered to be the most

important were the quality of the content (graphics, sounds, playability, game's value and added value) and the usefulness for the Computer Game Designer program. USCS' library is not the only one developing the collection with a specific program in mind: the library of the Pennsylvania College of Technology is considering its use for the Game Design program (Amey 2008) and the situation is similar at Brown College (Mastel and Huston 2009). Laskowski and Ward (2009) remind that the development of video games collection begins by identifying the needs for the courses [and the research done at the institution], the students' recreational needs and other potential uses. In our research conducted in 2010, librarians have identified the suggestions of professors and students as main selection criteria, along with the usefulness in related courses (Cadieux and Beaupré-Lavallée 2011). This finding stresses the need to develop and maintain good relationships with the library's users. Moreover, there are online sources that are used by librarians for developing their collection such as Metacritic, Game Developers Choice Awards, Game Developer Magazine and the games' critiques in the School Library Journal (Amey 2008; Gick c2008).

One important criterion that is easy to forget is the storage and the cataloguing costs; when Kane, Soehner and Wei (2007) received an offer from Sony for 1600 to 2400 games, they had to calculate the available physical space in the library to be sure to be able to handle such a collection. As video games have not been in libraries for a long time, the need for cataloguing may be higher and the associated cost in personnel time must be taken into account (Kane, Soehner, and Wei 2007; Laskowski and Ward 2009). However, recent and popular games' notices can be found in OCLC; for example, the notice for Halo 3 was available as soon as the day after the release (Gick c2008).

5. Reading devices

Before thinking about buying games, it is essential to decide if the library is going to accommodate its users by allocating space within its walls for people to use the games. To do that, the library has to provide games, reading devices, televisions, seats and a support for players to save their game. When UCSC (which has 15,000 students) implanted their pilot project, the team determined that five televisions, nine different consoles and two controllers for each of these were needed (Kane, Soehner and Wei, 2007). A gaming area can include computers because they are also a very popular gaming platform.

Even if the library decides not to create a gaming area, a choice has to be made whether to buy gaming reading devices. At the moment, providing both consoles and games can seem like a big investment, but not buying the consoles does not necessarily translate into saving. For instance, if a game comes out on every actual platform, even if they offer the same playability, librarians may have to buy each version to accommodate users, who may have only one platform at home. Aside from the games available on the reading device, one must also consider the backward compatibility, as a console offering it may be interesting for developing both a collection of actual games and a retrospective collection (Cadieux, 2010).

This brings us to the fact that some professors or researchers will ask for retrospective collections, maybe on platforms that are not on the market anymore. The decision to buy theses reading devices or not will depend on their availability in specialised used shop or on websites like eBay (Kane, Soehner and Wei, 2007). It is also important to be sure that the console will be able to read games bought in the country in which it is to be used; both games and consoles have "*regions*" and they have to be compatible for the game to be read. It is also possible to download emulators on the Internet which allow the user to play old games on the computer, but they mostly are illegal and do not respect copyrights, thus they cannot be a solution for academic libraries (Chaplin, 2007).

Many games being on computers, it is important to ensure that the computer supplied has the necessary components in order to read the games. If a retrospective collection is considered, the acquisition of an old computer may be necessary to be able to read older games. It is to be kept in mind that libraries do not have to acquire reading devices to offer a good service. Some libraries will prefer to acquire only games and to develop a larger games collection. What matters is to offer a consequential service: if the library's aim is to offer current games, consoles are not necessary, but if a retrospective collection is to be built, consoles for older games must be acquired since most of the

users will not have access to them at home and will not be able to easily buy them.

6. Conclusion

Universities offer more and more academic courses focusing on video games ranging from their creation to their study, even going as far as to create the new discipline of Game Studies. The industry responded well to the focus given to video games by universities by establishing partnerships with some libraries. Video games have proven to be useful resources to teaching in various disciplines, be it in social sciences or natural and medical sciences. Furthermore, researchers are interested in the impact of this medium popular among children and adults and study them in psychology, sociology, education and library sciences, to name but a few. This interest from both institutions and individuals stresses the need for academic libraries to adapt and to offer adequate resources to their users. One important aspect of developing a collection of a new medium is the selection criteria; from the literature, we can see that the physical characteristics, the usefulness, the game in itself, and the cultural value are the main aspects considered by librarians. The collection development is closely linked to the addition of a gaming area and the acquisition of consoles. Backward compatibility and the choice of games have to be taken into consideration for the choice of reading devices. For retrospective collections, the acquisition of platforms is highly recommended, since most users will not have them at home and thus will not be able to read the games in the collection.

Since the development of video games collections in academic libraries is a recent phenomenon, very little literature can be found. Many documents exist about video games in public libraries, but since their mission is drastically different from that of academic institutions, the data cannot be transposed; this lack of knowledge prompts us to call for more study of video games in academic libraries. One interesting area that could be studied is how the existing collections have been created and how professors and students use them. To study the creation of the collection would give guidelines to academic librarians; to study how they are being used would also be of interest to understand the users as well as to give political leverage to the librarians who wish to create such a collection. The acquisition of a new medium is never an easy task in academic libraries because the number of documents available for purchase has risen exponentially over the past years. Nevertheless, the study of video games in academic libraries would offer a new point of view on a medium which is too often perceived simply as pure leisure; it could prove that games can be useful to comply with the academic libraries' mission: to support teaching and research.

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