Examensarbete i fördjupningsämnet

Engelska och lärande

15 hp

The role-playing game Final Fantasy 7 and English vocabulary development

Rollspelet Final Fantasy 7 och utveckling av ordförrådet på engelska

VT 2017

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Preface

This thesis paper is a collaboration between the two of us, and we hereby state that we have been equally engaged in the project. The sections were divided in the following way: Sara Ullman wrote the theoretical parts about vocabulary acquisition, and English at home and in school; the method section; and the results of collocations and time words count, and frequency of academic words. Joel Jakobsson wrote the introduction; the theoretical parts about video games; and the results of keyness. The result section about academic words, and the discussion and conclusion were co-written. We have been equally responsible for proof-reading, the checking of results, and smaller parts, such as abstract and reference list. The research idea was Joel's, but the research questions and method design were done together.

Sara Ullman and Joel Jakobsson, May 2017

Abstract

In this study, the role-playing game Final Fantasy 7 was analysed in regards of its qualities for English language development. Areas concerning language, specifically vocabulary, and video games explored in this study were academic words, words that express time, collocations, frequency, and keywords. Other areas investigated in this study are video games in connection to the syllabus for English, students' outside of school interests, and implications for teaching. Data from a corpus-based vocabulary analysis showed that the players of Final Fantasy 7 will encounter a rich variety of words and linguistic features. Further, the text of Final Fantasy 7 shares a lot of the same qualities with texts from English 5 and 6, concerning academic words. Although, an analysis of keywords in the game and in the school texts also showed some differences, mainly in terms of grammatical variations, which indicate that Final Fantasy 7 can function as a complement to typical school texts.

Keywords

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Introduction

Vocabulary is crucial when learning a new language. Lightbown and Spada (2013) argue that we can communicate by using words that are not placed in the proper order, pronounced perfectly, or marked with proper grammatical morphemes, but communication often breaks down if we do not use the correct word. This means that knowing a lot of words will help one to become a more efficient speaker of the language one is trying to learn, in this case English. In this study, we want to analyse a video game and see if it can be used as a tool to develop a student's vocabulary.

One important reason why video games are interesting is because they are a big part of many upper secondary students' lives. Sylvén and Sundqvist (2012) found that the most popular extramural English activity was digital games, with an average score of 2,6 hours per week. This indicates that it makes sense for schools to try to incorporate digital games in their classrooms. This is especially true for boys; moreover, according to Findahl (2011). 90 % of boys in the ages of 16-25 years play digital games. Wernersson (2010) states that girls for a long time have outperformed boys in school both in mathematics, reading and problem solving. This indicates an acute need for an emphasis on boys' interests and motivations.

The syllabus for English 5 states that "[s]tudents choose texts and spoken language from different media and in a relevant way use the material selected in their own production and interaction" (Lgy, 2011). A digital game or video game can provide both reading and listening, as well as interaction, and is therefore promising in terms of different kinds of language acquisition, such as vocabulary.

Both of us have personal experience of how certain interests – reading and gaming – have been central to our development of English. However, one of the two interests have been extensively researched in connection to language acquisition (Lundahl, 2012), and has a high status in school. And the other one has just started to break its way into the classrooms.

According to Jakobsson (2015) many studies have been made on online games such as; Wu, Richards and Saw (2014) who looked at if a *massive multiplayer online role-playing game* (MMORPG), could serve as an alternative pedagogical tool to support communicative use of the English language, or L. Thorne, Fischer and Lu (2012) who set out to examine the game World of Warcraft (WoW), with specific attention to its qualities as a setting for second language (L2) use and development. A lot of studies on video games have focused on the benefits of online gaming, but few on the benefits of single-player games. We want to shift focus to single-player games in this study, and analyse what benefits they might have to offer.

While online games have been found to be very beneficial for interaction, language socialization, and teamwork skills in English (Wu, Richards & Saw, 2014; L. Thorne, Fischer and Lu, 2012), single-player games offer other benefits.

A single player game like Final Fantasy 7, that is completely text driven, can be looked upon like a novel. It can be used in similar ways in school like one would use a novel. The player can interact with the text of the game in a whole new way, because the game is interactive. Novels are great to expand a student's vocabulary, and we believe that a single-player game that is text based can have the same effect. According to Findahl (2011), 76% of people in the ages between 16-25 play games on their own, while 55% played with other people. This tells us that there are lot of people who play single-player games, and that research in this area is warranted.

However, more studies in this field are needed. Marklund (2013) reports that teacher's interest in digital games is on the rise, but there are few successful examples of digital games being implemented in the classroom. Squire (2011) also calls for the need for research that carefully identifies the aspects of games that make them good for learning environments. We see the need for hands-on investigations of specific games as well as single-player games. In this study, we aim to answer the research question: What are the qualities of the game Final Fantasy 7 in terms of forming a basis for English language development? With this question, we hope to be able to contribute to the field of video game studies.

Aim and research questions

The aim of this study is to investigate whether a video game like Final Fantasy 7 can be an asset for students learning English, by specifically looking at the texts of the game to establish what kind of vocabulary it offers. We examine the Final Fantasy 7 text in connection to the syllabus for English, and theories about vocabulary acquisition. Moreover, we want to see whether the FF7 text is similar to or different from typical upper secondary school texts in the English language classroom.

Main research question

What are the qualities of the game Final Fantasy 7 in terms of forming a basis for English language development?

Sub-questions

What can FF7 offer in terms of common collocations and words to express time?
How much of the text in the game consists of academic language?
In terms of academic vocabulary, what does Final Fantasy 7 look like compared to typical upper secondary school texts?
What words in general are significant for FF7 in relation to English 5 and 6?

Theoretical background

In this section, previous research as well as definitions relevant for this study are presented. The first half of this section defines video games presents and different categories of games. Further, this section covers why the study of video games is important and the connections between video games and language. The second half of the theoretical background is dedicated to vocabulary acquisition, and English in school versus at home.

What is a video game?

Gee (2007) states that a video game is a game that is played on different game platforms such as Sony PlayStation 2, 3 or 4, Nintendo GameCube or Wii, and Microsoft's Xbox or Xbox 360, and Xbox One (Now also Nintendo Switch), or various handheld devises and games played on computers. Adams (2012) describes gaming as a type of play activity, that takes place within the context of a fictional reality, in which the players try to achieve different goals by acting in accordance with different rules. Further, Gee also defines characteristics of video games such as players taking on the role of a virtual character, that can move around in an elaborate world in different forms. In these worlds, the players can do a variety of activities such as problem solving of different kinds, or building and maintaining complex entities such as armies, cities and civilizations (2007).

Different types of video games

According to Adams, the game industry categorizes games into genres based on the type of gameplay the game offers. Some of these genres are *action*, *strategy*, *role-playing*, *sports*, *adventure*, *puzzle*, and *social games*. Adams states that there are five game mechanics that are vital for deciding what genre a game belongs to and these are *physics*, *internal economy*, *progression mechanisms*, *tactical manoeuvring*, *social interaction*. Adams defines them as follows:

- *Physics* refers to how the game is played; how the character or vehicle moves within the game. For example, whether a character can jump or not, or if the game is set in a 2D or 3D environment.

- *Internal economy* refers to game elements in the game that are collected, consumed, and traded. The internal economy of a game typically includes items that can be identified as resources such as money, energy, ammunition, and so on.
- *Progression mechanisms* refers to the level design in the game which dictates how a player can move through the game world. Traditionally, the player's avatar needs to get to a certain place within the game, rescue someone or to defeat the main villain and complete the level.
- *Tactical manoeuvring* refers to games that can have mechanics that deal with the placement of game units on a map for offensive or defensive advantages. This is a critical aspect in most strategy games, but also features in some role-playing and simulation games.
- *Social interaction* is a common aspect of many online games, which includes mechanics that reward the players when giving gifts to other players, inviting new friends to join the game, and other forms of social interactions, such as forming and breaking alliances with other players (2012).

Final Fantasy 7, the game analysed in this study, is a single player role-playing game. Adams (2012) describes a role-playing game using the mechanics mentioned above. Physics: Relative simple physics to resolve movement, often turn-based fighting system. Economy: equipment and experience to customize a character or party. Progression: story line and quests are given to players to give them a purpose and goals. Tactical manoeuvring: party tactics, often in battles. Social interaction: play-acting. However, since Final Fantasy 7 is a single-player game, which means that you play it alone and have no integration with other players, the social aspect of the game is non-existent.

Why study video games?

Squire (2011) states that video games are maturing, expanding, diversifying, and exerting influence across entertainment, business, and, increasingly, education. Squire (2011) claims that games are deeply engaging for anyone who plays them. He provides a number of possibilities of how to study games, such as orchestration time, providing overlapping goals, constructing open-ended problems, and maintaining open social horizons. All of which are important aspects of school. Gee (2007) also sees the benefits that video games can bring and he argues that when people learn to play video games, they are learning a new literacy. Gee

(2007) states that we must see literacy in broader terms than reading and writing. According to Gee (2007), language is not the only important communicational system. Images, symbols, graphs, diagrams, artefacts, and many other visual symbols are also significant. However, Squire (2011) calls for the need for research that carefully identifies the aspects of games that make them good learning environments. Further, Squire (2011) argues that video games already enable people to build civilizations, run virtual businesses, or lead organizations of real people, and he stresses the importance of understanding the impact of these different experiences, and the pressures they put back on institutions like schools.

The connection between video games and language

Gee (2007) states that people are generally poor at dealing with many words out of context. Games usually give verbal information to players when it is needed and not before the player can use the new information. Moreover, Gee (2007) claims that research shows that people really know what words mean only when they can connect them to different experiences that the words refer to, and this could be in forms of images, dialogue and this gives the word situated meaning, not just verbal ones. According to Gee (2007), games always situate the meanings of words, and show how they vary across different actions, images and dialogues, and not only words for words definitions.

L. Thorne, Fischer and Lu (2012) argue that the lexical and syntactic complexity of World of Warcraft related texts was shown to be sophisticated, complex, and with direct and event-driven use-value to players. L. Thorne, Fischer and Lu (2012) further found that the texts presented to players are highly relevant to the actions, decisions, and problem-solving the player encounters in the game. World of Warcraft presents a diverse and linguistically complex social-semiotic environment for L2 learners of English, according to L. Thorne, Fischer and Lu (2012).

Leão (2011) states that RPG video games provide extensive reading to learners, and that is essential for lexical acquisition, which is an important part of language acquisition. Leão (2011) further states that the reading RPG video games provide takes place in a context full of multimodality, which helps not only in comprehension, but also in intake and recall. Finally, Leão (2011) argues that with all the advantages to lexical acquisition that RPG video games bring they can and should be used by learners as an effective tool to foreign language acquisition.

Vocabulary acquisition

Expanding your vocabulary is a very complex part of learning a language. Lightbown and Spada present research showing that in order to learn a new word the learner has to encounter it many times in *meaningful contexts*, preferably 16 times, or even more. They also highlight the fact that the learner must understand at least 95 % of the text to be able to guess the meaning of a new word. Important to note are words that are more or less easy to guess. For example, *remarkable* and *activity* - so-called *cognates* – are words that occur in many languages, and are therefore easier to understand. What it means to know a word can be discussed, but Lightbown and Spada clearly state, that to be able to use a language for *academic purposes* one must be familiar with a word in depth, and know its grammatical variations, different meanings and connotations (2006).

The input hypothesis suggests that a learner develops language through input that is understandable and meaningful, but also offers a challenge for the learner. Furthermore, the learners need to have a low *affective filter*, i.e. they are able to remain open to the task before them. *The reading hypothesis* emphasizes how reading in particular supports language acquisition, and is therefore very important input (Krashen, 1991). When highlighting the importance of reading in language acquisition, Krashen stresses *free voluntary reading* (FVR), which is reading for pleasure. Some schools offer timetabled FVR, and, according to Krashen, studies show that students who participate in these FVR programs develop both writing and speaking skills, and do well in terms of grammar and vocabulary acquisition (2004).

Lundahl agrees that extensive reading of various text types is crucial for vocabulary expansion, but argues that the reading must be combined with explicit vocabulary training. Students learn new words from listening, reading, speaking and writing, when the focus is on the content, but this is mostly true for words with a high frequency. It is also necessary to specifically study words and phrases – *deliberate vocabulary learning* (2012).

Lundahl (2012) insists on the importance of connecting words to pictures, processing a few words at the time, learning phrases and chunks, encountering each word many times, and paying attention to new words as important factors for the promotion of vocabulary learning. All of this fits with the language input a gamer will be subjected to. However, other factors pointed out by Lundahl, such as retrieving a word and using it creatively, integrating it to prior knowledge and connecting it to previously acquired words, using it in new contexts, and writing it down and saying it out loud, are a basis for pedagogical tools a teacher can provide.

English in school versus at home

Swedish students hear, read, or even use a lot of English in their everyday life, and outside of school, which gives them many opportunities to familiarize themselves with the English language. A recent study shows that Swedish 11-year-olds come across English for around 10 hours per week in their spare time. The three main activities, in decreasing order, are gaming, TV, and music listening (Sundqvist & Sylvén, 2014). Lundahl, however, highlights the fact that there are some important differences between everyday English and school English. For example, school English is abstract and technical, whereas everyday English is more concrete. Moreover, everyday English is typically spoken, and school English is mainly used and presented in written form. Even though the authentic and so-called natural manner of learning a language in everyday life has been promoted historically, Lundahl discusses the importance of school English. The explicit focus on form that a teacher can offer is essential for the acquisition of formal and academic language (2012).

Cummins has introduced the concept of *BICS* – basic interpersonal communicative skills – and *CALP* – cognitive academic language proficiency -, which separates the language we learn for every day communication and the specialist subject-related language academic language used in school. Cummins points out this distinction mainly because it takes much more time to acquire CALP than BICS. He emphasizes the need for language teachers, especially second language teachers, to be aware that a learner who has acquired BICS is not automatically proficient in academic language. Therefore, CALP must have an explicit focus in school (1999; 2003).

Furthermore, Lundahl argues that the education in school should function as a counterweight to the language and culture the students meet at home. Teaching is supposed to provide cognitive challenges, and encourage students to think in new ways (2012). Teachers will meet many students who spend hours playing video games and computer games at home, but in most cases, there is probably no need to worry – the gaming might be beneficial for their English language development, and the games could even be a useful tool in the English classroom.

Method

This study consists mainly of a vocabulary analysis of a text-based role playing game (RPG). We have looked at all of the texts in the game and counted specific word groups. Additionally, we have made a comparison with typical school texts for the upper secondary school courses English 5 and 6.

In this section, we present our material and method. First, the object of study – the game Final Fantasy 7 - is introduced. The choice of this material is also motivated. Second, the analysis of Final Fantasy 7 is explained. Third, the software used for analysis is introduced. Finally, the limitations and ethical considerations are brought to light.

The object of study

We chose the game *Final Fantasy 7*, because it is text based, is easily accessed for young players, and has been available and widely used since 1997, with a steady popularity. It is also the type of game commonly played among young boys; the same group who is reported to have decreased school results. Studies conducted on single-player games are more difficult to find (Jakobsson, 2015), which is an additional reason for our choice. Final Fantasy 7 will be called FF7 throughout this text.

FF7 was released by the company *Square* (now Squaresoft) in 1997 to critical acclaim. The game grew in popularity and was released on PC in 1998. 13 years after its arrival it was re-released in 2009, on PlayStation 3. In 2013, FF7 was released to Steam, a digital distribution platform, and again in 2015 to the PlayStation 4 and IOS (Smartphones). 11 million copies of the game, both physical and digital versions, have been sold worldwide, and the popularity of FF7 shows no signs of decreasing. A remake of FF7 for PlayStation 4 will be released in the next couple of years.

The player of the game encounters various characters who give information about the plot of the game and instructions for the avatar. All the information is provided in speech bubbles - only written language - although some information is more important than other. The text in the speech bubbles is quite short, and is written in informal language, with grammatical variations such as *ain't* and *gotta*. The picture below illustrates typical language in FF7 and how it is usually presented. Many words are quite advanced, and idioms are common. In conclusion, anyone who does not understand the texts in the speech bubbles, will have

difficulties following the story and knowing how to go through with the game.

It takes approximately around 25-30 hours to play the whole game, and up to 50 hours if you attend every possible activity in the game. Even though this is just an estimation, our calculation indicates that a gamer probably encounters at least half of the text, or even all of it.

Figure 1. An example of a speech bubble in Final Fantasy 7.

Vocabulary analysis of FF7

A text analysis or a discourse analysis of a text is the study of meaning, and the analysis of the content in terms of i.e. purpose. A textual analysis looks at the text as a whole, and how the different parts fit together (Nyby, 2017). A multimodal analysis examines visuals in context, for example the choice of a certain picture on a book cover (Machin, 2007). Our analysis of FF7 does not include the visuals of the game, or the content and meaning of the text. Nyby describes a *quantitative content analysis* as a quantification of certain themes or word units in a text. The quantity of those themes and word units is allegedly supposed to illustrate the strength of the content (2017). This study strictly consists of a vocabulary analysis, which in this case purports a *quantification of certain word units*. We have analysed the quantity of these words units in regards of the possible strength of FF7 as a pedagogical tool.

The examination of the vocabulary of FF7 has been executed through a corpus-based analysis. Corpus research is done using a concordance that allows for fast searches through large collections of text. In a corpus-based tool, we can look for certain words in large text

bodies, investigate the frequency of words, and find out in what contexts they appear. Corpus analysis shows how language is actually used, in different text types (Biber, Conrad & Reppen, 1998).

In order to analyse whether the texts in FF7 can be a suitable tool for vocabulary acquisition we have looked for three specific word groups in the game texts; general academic words, collocations, and words showing time aspect, and counted their frequency. We have also examined the extent of general academic vocabulary in the texts. The main focus is on academic vocabulary, because teaching in school should aim at knowledge of formal language (Lundahl, 2012; Cummins, 1999; 2003).

The choice of these three word categories is not coincidental. General academic words and common collocations belong in this investigation because of their importance in vocabulary acquisition (Lightbown & Spada, 2006; Lundahl, 2012). The significance of words to express time aspect is highlighted in the syllabus for English, and are therefore added (Lgy, 2011).

The general academic words that will be counted are taken from *The Academic Word List* in the *Oxford Learner's Dictionaries*, which was created by sorting out the most frequent words in a variety of academic text in a corpus. The Academic Word List is divided into ten different lists of decreasing frequencies; list 1 presents the most common academic words and list 10 has the least common academic words. We have divided the ten lists into two, for practical reasons. The collocations are chosen from an online teaching and learning resource webpage, called *The English Club*. This selection is allegedly some of the most common collocations in the English language. Lastly, the list of time words is picked from the blog *A Writer's Guide to Words*.

Comparison

We looked at the variation and frequency of common collocations, words to show time, and, mainly, academic vocabulary in FF7 to find out if the game could provide a suitable environment for vocabulary acquisition. In addition, we wanted to know whether the texts of the game match typical school texts, in particular concerning academic vocabulary. Therefore, the texts used in upper secondary English have been run through the same program as the FF7 texts, in order for us to find the variation and frequency of general academic vocabulary.

Furthermore, the corpus analysis tool has also helped us examine *keyness* in FF7, compared to the English 5 and 6 texts. Keyness stands for words that are distinguished in one of two compared texts. *Positive keyness* refers to words that feature more prominently in the

main text, in this case FF7, in relation to the compared texts: the English 5 and 6 texts. *Negative keyness* refers to words that appear in FF7, but feature more prominently in the English 5 and 6 texts (Anthony, 2014). The word *newspeak*, for example, would have a positive keyness in an analysis of Orwell's novel *1984*, because newspeak is specific for that novel. If then, *1984* is compared to, for example, Tolkien's *Lord of the ring*, the word *ring* would probably stand out as negative keyness, since it appears more in *Lord of the ring* than in *1984*.

However, in this keyness analysis names and invented words specific for the fictional texts were omitted. After the screening, we looked at the top 50 words; 25 positive keywords and 25 negative keywords. Mainly, we examined whether the was a difference in the occurrence of specific words groups, such as nouns and verbs.

For comparison, we used two corpora, one for English level 5 and one for English level 6. The three corpora - FF7, Eng 5, and Eng 6, are approximately the same size (see table 1 below). The English 5 and 6 corpora consist of texts from old national tests (Skolverket) and one fictional novel for each corpus; *Paper Towns* for English 5 and *To Kill a Mockingbird* for English 6. The specific novels were chosen because we have seen them being used in upper secondary school.

Texts	Word tokens*	Word types*
Final Fantasy 7	127.833	6832
English 5	81.580	7172
English 6	104.420	8288

table 1. Word count in the analysed texts.

 *A word *type* is a unique word, while the word *tokens* are each word counted; the word "the", for example, is one word type, but appears as a token xx times.

Tool for analysis

For the vocabulary analysis - the word count and the comparison - we used the software *AntConc*, which is a program designed for corpus analysis and concordancing (Anthony, 2016). This program allows us to upload the texts we want to examine and tell the tool to

count specific words, or measure keyness. To examine the quantity of academic words in FF7, for example, we uploaded the text file of FF7 as the corpus file. Next, the academic words were uploaded as a word list, and a request was made to count the words in the uploaded list. Seconds later, the results appeared. This process is simple and straightforward; AntConc is comprehensible with a plain design.

AntConc is free of charge, frequently updated, and offers numerous tutorials online, which were important factors in our choice of a program for our analysis. Instruction videos were accessed on the website Youtube.com (Anthony, 2014).

Limitations

Since we specifically investigate the vocabulary of FF7, the results of this study cannot be applied to other games, not even text-based RPG games. However, our study could give teachers, or other researchers, clues on what to look for in games that seem beneficial in terms of language development.

Even though we have chosen to investigate gaming, and specifically FF7, because of particularly boys' interests and school results, this study does not have a gender focus. Gender studies are much too complex, and need to focus other genders as well as the binary genders boys and girls. Furthermore, a study with a gender focus must be intersectional (Ullman, 2017). The results in this study should therefore be seen as applicable to all genders.

Ethical considerations

Considering the limited amount of data, and the fact that one of us has a personal positive experience of the analysed game, there is a risk of bias in this study. This risk is hopefully limited by the fact that one of us is a gamer, with personal experience of FF7, and has a very limited experience of gaming, and none of us specifically FF7. A combination of a subjective and an objective perspective of the game, along with an awareness of the risk of bias will hopefully be satisfactory.

Results

In this section, the results from the text analysis tool AntConc for each research question are recounted. The numbers are first presented in a table or figure, and then explained further below. The main overall research question is "what are the qualities of the game Final Fantasy 7 in terms of forming a basis for English language development?", which will be answered at the end of the result section. The four sub-questions are 1. What can FF7 offer in terms of common collocations and words to express time?, 2. How much of the text in the game consists of academic language?, 3. In terms of academic vocabulary what does Final Fantasy 7 look like compared to typical upper secondary school texts?, and 4. What words are typical for FF7 in relation to English 5 and 6 texts? The results of these four questions will be analysed in the same order in which they are presented here. The results for question 2 and 3 will be dealt with together.

Collocations and words to express time in FF7

Lundahl discusses the importance of learning words in chunks, and recommends the acquisition of collocations in order to sound more native-like (2012), which is the reason for collocations being included in this study. Because of its emphasis in the syllabus for English in upper secondary (Lgy, 2011), we looked for words to show time aspect.

Collocations that appear 16 times or more
Take care (29 hits)
Don't care (26 hits)
Long time (27 hits)
Take care of (24 hits)
Right now (19 hits)

Table 2. Common collocations.

The list of common collocations consists of 941 phrases, such as *more or less* and *safe and sound*. 92 – 1 % of the whole list – of the collocations occur in FF7. 5 of the 92 collocations in FF7 occurs 16 times or more, namely: *take care* – 29 hits, *don't care* – 26 hits, *long time* – 27 hits, *take care of* – 24 hits, and *right now* – 19 hits. Some of these appear almost twice as

often than what is needed for words to be remembered. However, the small number of collocations with more than 16 hits, and the small number of collocations overall, indicate that FF7 is not a strong tool for learning collocations.

Words to express time that appear 16 times or more
First (38 hits)
Before (30 hits)
Right now (29 hits)
Take care (29 hits)
Long time (27 hits)
Once (25 hits)
Take care of (24 hits)
While (23 hits)
Begin (21 hits)
After (21 hits)
Past (21 hits)
Second (21 hits)
Right now (19 hits)

Table 3. Words to express time

The list of words to show time consists of 258 words, or phrases, such as *take care of*. 49 of the words – 19 % of the whole list – were found in FF7. 13 of those occurred 16 times or more. Additionally, *as long as* appears 15 times, *soon* 14 times, *quickly* 13 times, and *long ago* 10 times. Lundahl stresses the importance of noticing new words, and considering the fact that it takes approximately 50 hours to play the whole game, 10 times might be enough to at least *notice* a word or expression.

These results do not manifest FF7 as a tool specifically suitable for learning words to express time. However, gamers will probably pick up many of these expressions, and the results do indicate that FF7 offers a diversified language.

Academic words

Teachers should provide knowledge about academic language to prepare students for higher education, and because students usually do not encounter that type of language in their

everyday life (Lundahl, 2012; Cummins, 1999; 2003). Therefore, an examination of the academic language in FF7 was our main focus in this study. The academic vocabulary word lists from Oxford Dictionary are divided into two lists, one with common academic words and the other with less common academic words.
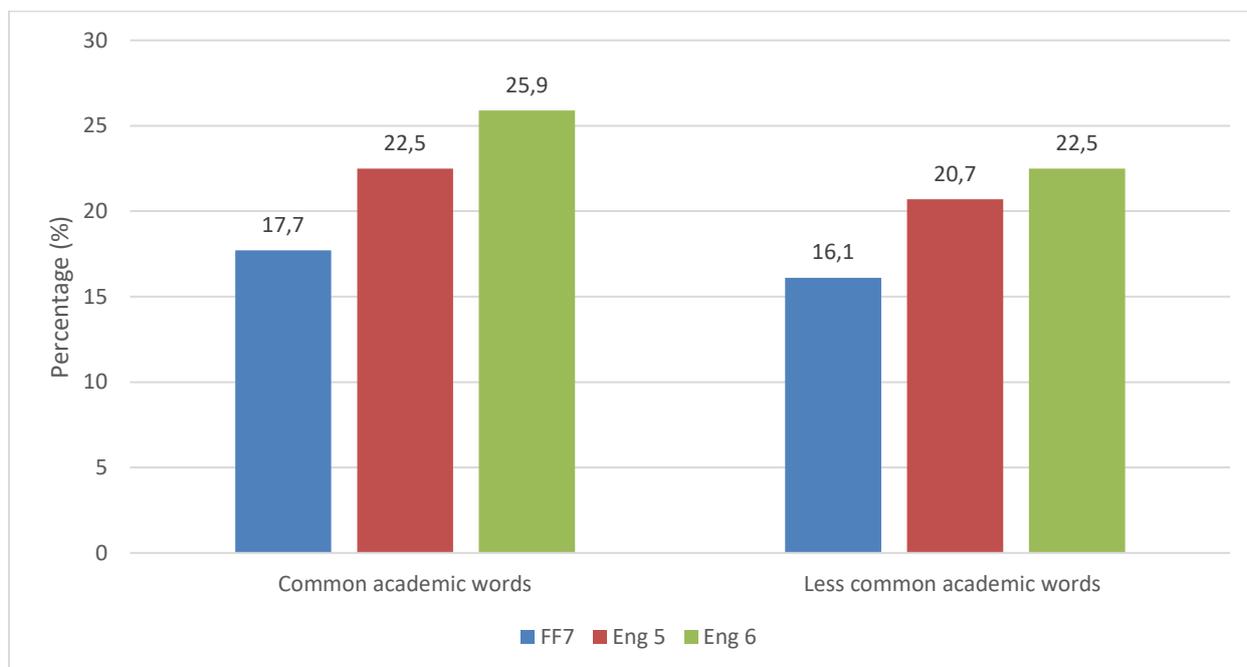
Figure 1. Proportion use of academic words from two academic wordlists in three corpora.

The first contains 895 common academic words. Of those 895 words, FF7 used 158, the English 5 texts used 201, and the English 6 texts used 232. In other words, 17,7 % of the words from the advanced wordlist occurred in FF7, 22,5 % in the English 5 texts and 25,9 % in the English 6 texts (Figure 1).

The second wordlist contains 622 less common academic words. FF7 used 100 of those words, the English 5 texts used 129 and the English 6 texts used 140. These represent 16,1 % of all the words in the list for FF7, 20,7% for the English 5 texts and 22,5% for the English 6 texts (Figure 1).
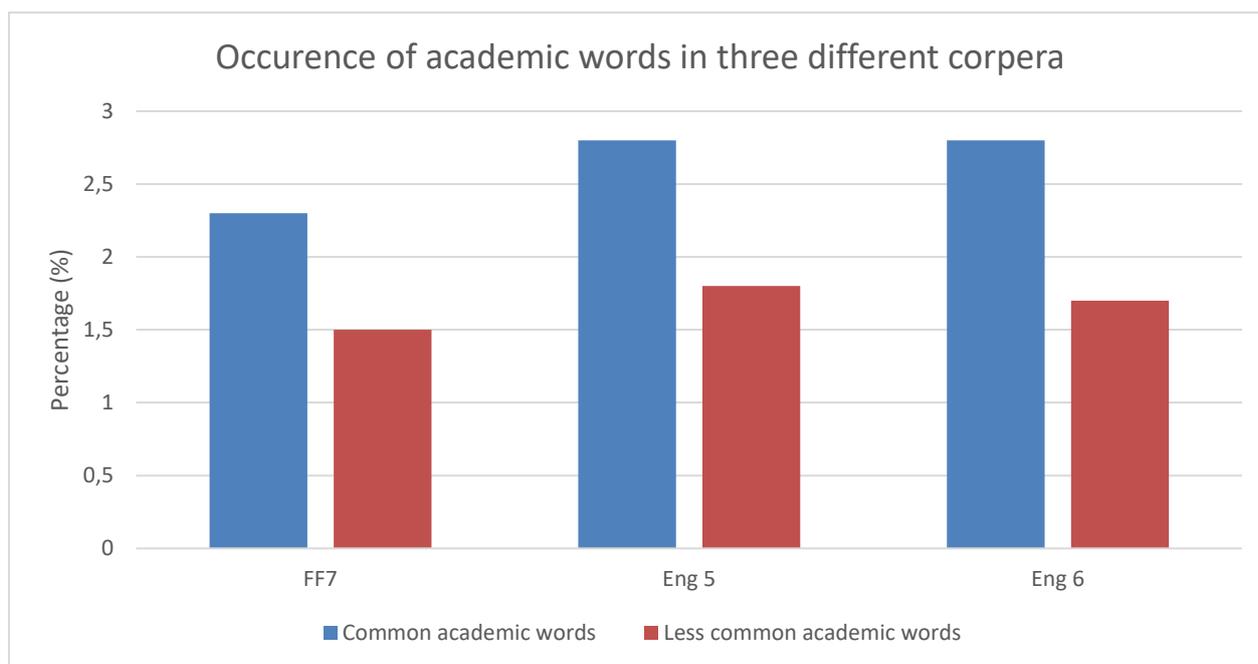
Figure 2. Occurrence of academic words in three different corpora.

When analysing the three corpora, we observed a smaller difference when comparing the occurrence of academic words to the texts as a whole, rather than when comparing to the number of words in the wordlists. Indeed, 2,3 % of the whole text in FF7 consists of common academic words, while 2,8 % of both the English 5 texts and the English 6 texts consist of common academic words (Figure 2). As for the second wordlist, 1,5 % of the text in FF7 consists of less common academic words, 1,8 % of the English 5 texts consists of less common academic words, and 1,7 % of the English 6 texts consist of less common academic words (Figure 2). In other words, while FF7 have a lower percentage of academic words from the lists, the differences in overall percentages of academic words between the corpora are rather small.

Frequency of academic words

Several studies have shown that a learner must encounter a new word 16 times or more to remember it (Lightbown & Spada, 2006). Table 4 shows all the words from both lists of academic words that appear 16 times or more in FF7 and the school texts.

Texts	Common academic words	Hits	Less common academic words	Hits
FF7	*Reactor*	159	*Panel*	20
	Energy	103		
	Sequence	100		
	Sector	58		
	Finally	39		
	Job	36		
	Area	27		
	Final	21		
	Normal	21		
	Optional	21		
	Section	18		
	Item	17		
	Select	16		
English 5 texts	*Finally*	64	*Abandoned*	22
	Under	23	*Couple*	22
	Job	19		
	Area	17		
	Computer	16		
English 6 texts	*Chapter*	35	*Grade*	24
	Link	26		
	Finally	21		
	Item	19		
	Job	18		
	Evidence	18		
	Text	16		

Table 4. Academic words with more than 16 hits.

Many of these words are *cognates*, that is words that are international, and therefore easier to understand, for example *energy* and *sequence*. Also, some of the words are seemingly not

advanced, even though they, according to Oxford Dictionaries, are typical for academic texts, such as *job* and *normal*.

The words *document*, *security*, and *structure* from list 1 appear 12 times in FF7, and the words *code*, *involved*, and *structure* from list 1 appear 10 times. From list 2 *adult* appear 12 times, *eventually* 11 times, and *ultimate* 10 times. Even if this is not enough for the word to stick, it might be enough to notice these words, which, according to Lundahl is important to learn new words.

Keywords of FF7 in relation to the English 5 and 6 texts

Positive keywords are referring to words that features more prominently in FF7 than in the English 5 or 6 texts. Negative keywords are referring to words that are in the game, but features more prominently in the English 5 and 6 texts (Anthony, 2014). Certain limitations and omissions had to be made when analysing the keywords of FF7 and English 5 and 6. First, all names of characters and places from the game FF7 has been omitted since they were not going to appear in the English 5 or 6 texts. Second, a limitation of words had to be made and so the first 25 words in the lists of both positive and negative keywords were chosen. The numbers next to each word is the frequency in which it appears in FF7. Table 6 displays the results from when comparing FF7 with texts from English 5 and table 7 displays the results from when comparing FF7 to text from English 6. The words in the lists below are sorted in order of keyness and not after frequency.

FF7 positive keywords	FF7 negative keywords
You (2809)	Said (41)
Materia (251)	I (2655)
Turns (374)	And (1889)
Choice (220)	Had (68)
Ha (201)	She (586)
Runs (223)	Was (450)
Planet (203)	My (366)
Looks (281)	Her (430)
Reactor (159)	Says (20)
The (7164)	Could (70)
Right (473)	Asked (6)
He (1320)	But (540)
What (784)	Looked (8)
Soldier (118)	Walked (3)
Let (286)	Answered (1)
Weapon (108)	Felt (9)
Hey (244)	Parents (7)
President (120)	Maybe (39)
This (860)	Because (81)
Here (456)	Pulled (1)
They (636)	Grass (3)
Heh (85)	Turned (9)
Meteor (76)	Or (136)
Oh (253)	Drive (2)
Hmm (95)	Park (3)

Table 5. FF7 text keywords compared to the English 5 text keywords

FF7 positive keywords	FF7 negative keywords
The (7164)	Said (41)
Is (1201)	Was/were (586)
Turns (374)	Had (68)
Materia (251)	Mr (42)
Runs (223)	Miss (14)
Planet (203)	Asked (6)
Choice (220)	Looked (8)
Looks (281)	He (1320)
Hey (244)	When (200)
Here (456)	Judge (1)
Reactor (159)	His (692)
Camera (154)	Would (89)
Stands (147)	Went (29)
Walks (149)	And (1889)
You (2809)	Yard (5)
Yeah (208)	Sat (1)
Oh (253)	Folks (9)
This (860)	Could (70)
Soldier (118)	Him (388)
Huge (122)	Us (168)
Nods (105)	Children (17)
Energy (103)	Turned (9)
President (120)	Walked (3)
Battle (124)	Ran (5)
Weapon (108)	Men (12)

Table 6. FF7 text keywords compared to the English 6 text keywords

There are some noticeable differences between the keywords in FF7 and English 5 and 6. Verbs were particularly more present in the texts from English 5 and 6 than in FF7. We listed them in the form they occurred in the texts and not in the base form (e.g. was/were instead of be) since this was a notable difference between the texts. The keyword verbs in FF7 are most in the present tense such as *runs* and *looks* while the verbs in the English 5 and 6 are mostly in

the past tense with words such as *answered* and *looked*. The pronouns that feature in the texts are different as well. in English 5 and 6 the pronouns *she* and *her* features a lot more than in FF7 while the pronouns *you* and *he* features a lot more in FF7 than in the English 5 and 6 texts. The English 5 and 6 texts also seems to focus more on different kinds of people than FF7, words like *children*, *folks* and *parents* can be found in these texts a lot more frequent than in FF7. FF7 also contain some interjections that does not occur in the English 5 and 6 texts. Interjections can be described as a short, usually excited and loud single utterance or shout such as *wow*. In FF7 these kinds of interjections occur frequently such as *ha*, *hmm* and *heh* are very common throughout the game. One could say that the text in FF7 is more speech like with events and dialogue happening in present tense in from of the player, while the texts of English 5 and 6 can be described as more narrative describing events in past tense to students. We can also see some words that are exclusive to FF7 such as the word *Materia* which are items in the game that allow a character to cast spells.

Vocabulary qualities of FF7

In sum, FF7 does not seem to be a useful tool to learn specifically collocations. However, in terms of both words to express time and general academic vocabulary, FF7 has a lot to offer. The differences between the FF7 text and the English 5 and 6 texts are very small regarding academic language, and in many ways, they are quite similar. When looking at the keywords of FF7 and English 5 and 6 we found that the text of FF7 is more speech like while the English 5 and 6 text is more of a narrative. This indicates that FF7 can be a good complement to typical school texts.

Discussion

In this section, the results are discussed and put into different contexts. First, we attend the general impression of the vocabulary in FF7. Second, the academic language of the game is treated, and compared to the English 5 and 6 texts. Third, we consider how video games can find support in the curriculum for English. Finally, vocabulary learning, and implications for the teaching of English is discussed.

General impression of FF7

The vocabulary in FF7 consists of both academic words and words to express time. The text is not grammatically standard, but uses variations such as *ain't*, and other types of slang. Interjections (*wow*, *ha* etc.) are also very common in FF7. Only 49 of the collocations from our list appeared, but as a side note we have seen idioms like *jack of all trades* and expressions like *be my guest*, *butt out* and *come waltzin' in here*. The sample vocabulary of FF7 that we have seen indicates that the FF7 gamer will encounter a rich variety of words and linguistic features.

   The language in FF7 appears to be typically native-like English in use, but, as our examination has shown, also contains a lot of academic words. It seems that FF7 offers both BICS and CALP, the two linguistic distinctions highlighted by Cummins (1999; 2003). It can be argued that these findings indicate that FF7 provides a good environment for learning advanced words, because the language that surrounds the academic vocabulary is communicative, and, more importantly, meaningful, which is a crucial factor for language development (Krashen, 1991; Lightbown & Spada, 2006). Moreover, the words in FF7 are presented in small parts at the time, they are always connected to context, and provide information necessary for the player. According to Gee (2007), learners understand new words when they are connected to, for example, images and dialogue, in context and are presented a few at the time, all of which fits with FF7.

Academic language

There seems to be a trend showing an increase in difficulty between FF7 and English 5, and again between English 6, as each corpus includes more and more advanced and very advanced academic words. However, when we take into account that the total number of words differs between the corpora, the difference fades. In each corpus, around 3 to 4, 5 % of all different

words were academic. This could mean that all three corpora help to develop vocabulary to the same extent. It is also important to notice that while all three corpora have the same percentage of unique words that were academic, there could still be a difference in the actual frequency of academic words in the corpora as a text might reuse non-academic words more often than another.

Further, one must take in consideration that the FF7 consists of one coherent text, while the text files for English 5 and 6, that we used for the comparison, were a mix of various text samples. An FF7 gamer will probably see all of the text in the game, but an upper secondary school student might not encounter exactly those text files that we compared FF7 to. Therefore, we cannot argue that FF7 offers more or less academic vocabulary than any project or assignment in upper secondary school.

According to Lightbown and Spada (2006), research shows that to be able to guess the meaning of a new word the learner must understand at least 95 % of the surrounding text. 3,8 % of the FF7 text consists of academic language. That indicates that FF7 offers a good variety of academic words. Moreover, these only stand for a small part of the text, which means that a learner might be able to guess the meaning of these advanced words. This suggests that FF7 can provide a good basis for language development, which is further manifested by the fact that the school texts that we examined showed almost the exact same amount of academic words.

Some words in the academic words lists from the Oxford Learner's Dictionaries, such as *job*, *normal*, and *energy*, are probably words that most upper secondary students understand. Lundahl (2012) and Cummins (1999; 2003) promote the explicit teaching of CALP, meaning that language learners should have opportunities to learn specialist subject-related language that is used in academic contexts. The fact that the word *job*, for example, fits in an academic context is important for students to learn. Yet, one must keep in mind that *academic* language is not necessarily the same as *advanced* language.

Video games and the syllabus for English

One aspect that is important to discuss is if the text in FF7 can be supported by the curriculum for English as a useful text for learning. In the Lgy (2011) it is stated that one of the aims of teaching of English is to develop students desire, in other words motivation, to develop their English skills in different situations and for different purposes.

Video games, according to Findahl (2011), are a popular leisure activity for a lot of people

and for our students. If teachers use video games in their teaching it can be a high motivator for students to work well in school and to make learning a more enjoyable experience. deHaan (2011) conducted two educational projects using digital games as a context for language learning. He found that all the students involved were very motivated and that they often spent more hours than planned on the project. Other researchers further stress the importance of motivation. Motivation is a major aspect of Krashen's (1981) affective filter theory for language acquisition, where motivation plays a role to increase language input in learners of a second language. FF7, like many other video games, also have this capability to motivate students to spend more time learning the English language, especially when it comes to reading.

If teachers dare to incorporate students' out of school interests into their classrooms, it is more likely that the students will continue to learn outside of the classroom. It is clear to us that the use of games in school can be supported by the curriculum for English when it comes to motivate students to develop their English skills.

The syllabus for English 5 states that "[s]tudents choose texts and spoken language from different media and in a relevant way use the material selected in their own production and interaction" (Lgy, 2011). Video games can provide both reading and listening, as well as interaction opportunities, all of which are included in the curriculum for English. FF7 offer both reading and interaction, and the text of the game is of similar quality of texts found in both English 5 and 6. If teachers were to use FF7 in their classroom it would be a great compliment to the existing material used for English 5 and 6.

The syllabus for English states in regards of vocabulary that students should learn "[h]ow words and phrases in oral and written communications create structure and context by clarifying introduction, causal connection, time aspects, and conclusions". In this analysis, we looked at words to show time aspect, and found that FF7 provides quite a rich variation of words to express time.

Berger and McDougall (2013) comprised a study to challenge the English curriculum of literature studies by including video games as literature. The goals with the study were to raise questions about whether video games could be studied as literature and whether it was considered legitimate literature. Their study showed that both students and teachers found similarities between the game's texts and other literature and texts such as books or films. FF7 also fits this model and can be played, or rather *read*, as a novel. If teachers use their imagination and creativity, there is a lot of support to be found in the curriculum. There are multiple ways to include video games in school and FF7 is a good example of a game that can

be used to further student's English language development.

Vocabulary learning

When comparing FF7 to Lundahl's (2012) list of important factors to promote vocabulary learning which are; notice a word, retrieve the word, use it creatively, integrate the new word to a student's prior knowledge, connect new words to words already acquired, encounter a new word many times, use them in new contexts, connect words to pictures, write the new words down and say them out loud, process only a few words at the time, learn phrases and chunks. It is apparent that some factors the player will be able to achieve alone when playing the game and other factors will need the help of a teacher to be obtained.

Gamers of FF7 will notice new words as the game unfolds. Since FF7 is a complete text-based game the player will have to read to know what is going on and what to do in the game. This forces the player to notice new words in order to advance in the game. The new words that are noticed will depend on the players' previous knowledge of either the English language or other games he or she have played in the past. The new words will then be integrated with the previous knowledge. The text in FF7 has 919 different words that occurs 16 times or more and this is in accordance with what Lightbown and Spada (2006) stated that that in order to learn a new word the learner has to encounter it many times in, preferably 16 times, or more. This mean that the player has the potential of learning a great number of new words when playing FF7. Because of the high frequency of many words the player will have the opportunity to connect the new words to already acquired words the further in the game the player gets. Words that the player did not know in the beginning now can now thanks to the frequency of the word be understood in new contexts and with other words. Because it is a video game connecting words with pictures is something that happens naturally in a game. The player receives information from the game, this can be either directions where to go next or what to do next, the player must then analyse their surroundings in the game to make sense of this information to find the correct action, or path to take.

Some factors can best be achieved with the help of a teacher or in the classroom. The teacher can help the students to use the language creatively such as writing fanfiction, create vocabulary games, role plays and more. By doing this the teacher make it more manageable for the students to learn new words. The teacher can, and should, of course be involved with the other factors as well.

Implications for the teaching of English

Our stance when starting this project was that video games can be a useful tool in the English language classroom, and that teachers should utilize the language competence of gamers. Even though much more research in this area is needed, the results of this study have not been disappointing. In our profession as English teachers we will use video and computer games in our classrooms. More importantly, we will try to raise teachers' awareness of the advantages of having students who are gamers, and inspire colleagues to work with video games – and discuss ways of boosting gamers in school.

Teaching activities should function as a counterweight to the language and culture the students meet at home (Lundahl, 2012). That does not mean, however, that teachers should dismiss their students' hobbies in favour of, for example a literary canon, but rather that they use these hobbies in the classroom. The opportunities with this approach are endless. Most importantly, it will engage students and give them a sense of belonging, showing them that their experiences are valuable. Moreover, it provides an opening for raising students' awareness of what they actually encounter, both in terms of language variations ("why is it possible to use *ain't* in a video game, and on what occasions would that not be appropriate?") and in regards of values and norms.

It is necessary that students learn formal English, but it is also important that they have a lot of input of English in use, which is often informal or semi-informal. Additionally, it is crucial that students are made aware of the differences between formal and informal language and contexts. One way to work with this is to have students re-write an informal text and make it more formal, in which exercise the FF7 text can provide useful material. This exercise also offers opportunities to examine the fact that informal and formal language is not always a dichotomy, and have students play with a text chunk re-writing it for different purposes (job interview, political speech, or academic article, for example).

Students, like many of us, may rely on their interests such as music, movies, TV shows, internet and video games as a way to develop their English skills. Gee and Hayes (2012) claim that people rarely attain deep knowledge by force, but rather through passion and persistence. Gee and Hayes (2012) argue that what most people learn in school is short lived. Instead, Gee and Hayes (2012) claim that it is outside of school that people learn the more important things. Sylvén and Sundqvist (2012) also state that video games are played by choice and at the individual's own initiative. This is very different from school where the teacher generally has the initiative when deciding what the students are to learn. Teachers

need to come to terms with students getting a lot of their knowledge from other sources apart from school or the teacher. Students encounter information from many different sources in their daily lives and they have learned how to harness this information for different purposes and situations. Teachers need to start bringing some of these different sources into the classrooms, such as video games, to help the students use their interests to further develop their language development.

Conclusion

Research (Sylvén & Sundqvist, 2012; Wu et. al., 2014; L. Thorne et. al., 2012) indicates that video gaming can develop a learner's English, which was the main reason for this study. However, our investigation had a focus specifically on the *text* in FF7, and not on the outcome of actually playing the game. Our conclusion only applies to the language in FF7 and whether the game – as a text – can or should be used in the classroom. Also, if we had investigated other video games we might have had indications on whether FF7 has a particularly rich language, compared to games in the same genre, or even if specifically RPG:s offer texts that are suitable for English development.

We set out to examine what qualities there are of FF7 in terms of English vocabulary development. The corpus-based tool AntConc showed that FF7 has the potential to teach academic words and words to express time. Moreover, FF7 has a rich language which makes it a suitable for school use. Additionally, we have seen that FF7 has grammatical variations that somewhat differ from typical English school texts, and this indicates that FF7 is a good complement in class.

Furthermore, we found support in the syllabus for the use of video games in the classroom. First, words to express time are highlighted in the syllabus for English, and FF7 offers a variety of words to express time. Second, which is more important, video games can serve as a motivator for students both inside and outside of the classroom. Third, FF7 is text-based, and video games can be taught in similar ways as novels, which also are emphasized in the syllabus.

In regards of theories about vocabulary acquisition, FF7 offers a good basis for vocabulary teaching. However, according to vocabulary acquisition theories a text alone is not enough for vocabulary development; explicit teaching is crucial. FF7 gamers encounter academic words in a meaningful context, many words have a high frequency, and appear directly in connection to tasks in the game. Still, explicit vocabulary training is a necessary complement to meaningful input.

The vocabulary of FF7 seems as good as any typical school text for use in the English language classroom, although the non-standard grammatical variations need to be pointed out. However, whether the actual gaming contributes to language development is not possible to confirm, because only the language of FF7 was examined, and not the outcome of the actual play.

This study has shown how a single-player game can be useful for student's language

development. However, this study was limited by the set guidelines, and areas that might have been explored, such as gender, was left out. Further studies need to be made when it comes to single-player games and there are of course endless possibilities for future research. In the future, we would like to see more studies of video games that has a clear gender perspective both when it comes to single-player and multi-player games. Other aspects that this study did not include are methods such as interviews or observations. Future studies can benefit from including these methods as a way of deepening the research. We would also like to see more comparative studies being made between gamers and non-gamers to see more definite results of the benefits of gaming. Another reason, finally, why we would like to see more research being developed is that it would help teachers who want to work with video games in the classroom.

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