APPLYING VIDEO GAMES IN LANGUAGE LEARNING AND TEACHING

The learner perspective: a case study

Bachelor's thesis

Satu Eskelinen

University of Jyväskylä
Department of Languages
English
8 June 2012

JYVÄSKYLÄN YLIOPISTO

Tiedekunta – Faculty Humanistinen tiedekunta	Laitos – Department Kielten laitos
Tekijä – Author Satu Eskelinen	
Työn nimi – Title Applying video games in language learning and teaching The learner perspective: a case study	
Oppiaine – Subject englanti	Työn laji – Level Kandidaatintutkielma
Aika – Month and year kesäkuu 2012	Sivumäärä – Number of pages 29 sivua + 3 liitettä

Tiivistelmä – Abstract

Tutkielman tarkoituksena on selvittää oppijoiden näkemyksiä videopelien nykyisistä ja mahdollisista käyttötavoista kieltenopetuksessa ottaen huomioon koehenkilöiden koulutus- ja pelaajataustan. Pelitutkimusta ei ole vielä tehty kauaa, joten ala on hajanainen, mutta tämä tutkimus pohjautuu tietokoneavusteisen oppimisen (CALL) ja videopeleihin perustuvan oppimisen (DGBL) tutkimukseen. CALL ei keskity erikseen pelien käyttöön tai käsittelee enemmän kieltenoppimiseen tehtyjä ohjelmia, kun taas peleihin perustuvassa opetuksessa kielet eivät ole erityisasemassa. Oppimistuloksia ja oppijakokemuksia pelien käytöstä on kerätty lähinnä esikoulu- ja peruskouluikäisiltä, joten lukiolaiskokeilu täydentää tutkimusten ikäjakaumaa. Tutkimusta varten koehenkilöt pelasivat viihteellistä, suurelta osin tekstipohjaista The Kingdom of Loathing -verkkoroolipeliä ja vastasivat tutkimuskysymyksiin kyselylomakkeen ja haastattelun pohjalta. Osallistujat kokivat oppineensa pelistä lähinnä sanastoa ja tekstinymmärrystä sekä pelaamiselle ominaisia tietoja ja taitoja. Tulokset tukivat pelien käyttöä perinteisemmän kieltenopetuksen tukena mutta eivät omana itsenäisenä opetusmuotonaan ainakaan testatun pelin osalta.

Asiasanat – Keywords Videopelit, kielen oppiminen, kielet – opetus, tietokoneavusteinen oppiminen, tietokoneavusteinen opettaminen, peleihin perustuva opetus video games, language learning, language teaching, computer-assisted learning, computer-assisted teaching, digital game-based learning
Säilytyspaikka – Depository JYX
Muita tietoja – Additional information

TABLE OF CONTENTS

1 INTRODUCTION....3
2 VIDEO GAMES IN LANGUAGE LEARNING AND TEACHING....4
2.1 Computer-assisted language learning (CALL) 4
2.2 Digital game-based learning (DGBL)....6
2.2.1 Games in learning curricular content....7
2.2.2 Games in learning other knowledge and skills....9
2.2.3 Attitudes towards games in teaching and obstacles to using games....10
3 METHODOLOGY....12
3.1 The Kingdom of Loathing and the present study....12
3.2 Methods of data collection....13
3.2.1 Empirical setting....14
3.2.2 Questionnaire and interview....15
3.3 Methods of analysis....15
4 LEARNER VIEWS ON GAMES IN LANGUAGE TEACHING....16
4.1 Education, language and gaming background....16
4.2 KoL in language learning....17
4.3 KoL in language teaching....20
4.4 Attitudes and practical issues....21
4.5 Other reactions to the game....24
5 CONCLUSION....26
6 BIBLIOGRAPHY....28
APPENDICES....30

1 INTRODUCTION

Video game industry is a rapidly growing field especially in Finland. The enormous success of the mobile game Angry Birds has shown how games could be the country's new specialty, and more and more schools offer courses, studies and even degrees on designing video games. For example, Kajaani University of Applied Sciences has it's own game development lab, Kajak (http://www.kajak3d.com) which offers degree programs on game developing. Similarly the field of game studies, also called ludology, is gaining ground and widening its scope even to gamer identities and game cultures as new research is made.

Of course, people do not only play video games to study or to make money out of them. According to the most recent Finnish Player Barometer (Karvinen and Mäyrä 2011: 20), the majority of Finnish people (56%) aged from 10 to 75 played computer, video, mobile or other possible digital games at least once a month, and during the year 2011, 79% had played some digital game. For comparison, 72% of American households played computer or video games in 2010 (ESA 2012). Certainly it is not only the young and children who play, as the average age of a gamer is 37 in both countries. In Finland, all age groups now play more digital games than in the previous two years. However, the most active players in Finland (over 20 hours per week) are young men, and the gap between older and younger generations is larger than the differences between men and women (Karvinen and Mäyrä 2011: 20).

The English language has a special role in Finland as a foreign language. It is widely known and spoken, and most Finns encounter English daily in their lives and specifically through media, so English is a second language to many despite it not being an official language in Finland. This status of lingua franca has probably led to most games being brought to Finland without Finnish translation: almost all video games sold in Finland, except for children's games, are in English. Another very likely reason for this is the small size of the Finnish-speaking game market, so often only the additional game booklets or manuals with basic instructions to the game are translated. Moreover, translated subtitles, which are very common in Finnish television, are extremely rare if nonexistent in video games, and it is more common to have an option for English-language subtitles. Children's games, however, are much more consistently translated completely into other languages, but nevertheless depending on the age of the target group they might also be left untranslated.

Games as a mainly English but very popular medium provides an engaging opportunity for informal language learning outside formal education. A recent pro gradu thesis by Olli Uuskoski at the University of Helsinki showed that Finnish upper secondary school students, especially boys, have significantly better English grades if they have played computer games at least 16 hours a week (YLE Uutiset Kotimaa 2011). These nationally remarkable and statistically significant results show that computer games play a great part in informal learning of English as a foreign language in Finland. It is not uncommon to hear from English teachers in Finland that their pupils, even at the age of 8 or 9 when they begin to study English at school, may know words they have not heard before.

2 VIDEO GAMES IN LANGUAGE LEARNING AND TEACHING

There are two large fields concerning video games in language learning and teaching called Computer-assisted language learning (CALL) and Digital game-based learning (DGBL). Both are discussed separately, as the former does not focus specifically on games but language learning in general, and the latter includes learning different topics, including but not focusing on language learning. Then different studies are examined and their results on learning, attitudes and obstacles of using games are summarised.

Even though the present study focuses on the use of a specific computer game, the term *video game* is used. This is to include different computer, console and other digital games, as even though computers are common in schools, other media and even mobile games are more and more accessible and applicable in learning and teaching. Furthermore, the term video game is more recognised especially in the Finnish, non-academic context than the otherwise comprehensive and widely used term *digital games*.

2.1 Computer-assisted language learning (CALL)

Beatty (2003: 7) gives a broad definition of CALL as being "*any process in which a learner uses a computer and, as a result, improves his or her language*". This means using programs and applications for language learning, which often have been fill-in-the-gap or multiple choice exercices due to their applicability on computers. However, the definition of CALL includes all kinds of software such as dictionaries, chat clients and also computer games. As CALL is still a relatively young field of research, originating from the 1950-60's and

behaviourist and constructivist learning models (Beatty 2003: 16-36) and driven by rapid technological innovations (Beatty 2003: 11), many areas are yet to be researched.

Whereas CALL research has long been directly compared with classroom teaching as a separate method, CALL now complements traditional teaching as computers have become a firm part of schools (Beatty 2003: 13-15). There have been attempts to include computer-based writing and speaking activities in additional to traditional, easily realisable reading and listening exercises, but different speech synthesis, voice recognition and artificial intelligence technologies have not yet provided sufficient results (Beatty 2003: 12).

One more specific form of CALL, closely related to online multiplayer games where people can communicate with players from all over the world, is Computer-Mediated Communication (CMC). Beatty explains it as follows:

> [CMC] refers to a situation in which computer-based discussion may take place but without necessarily involving learning. Of course, opportunities for learning are inherently present, especially in situations in which learners need to engage in negotiation of meaning with native speakers of the target language or even with peers of non-native proficiency. (Beatty 2003: 62)

Negotiation of meaning, as presented by Beatty (2003: 78), is the act of learners ensuring they have a common understanding of what is meant. It is also related to the concept of *comprehensible input*, which simply means understandable language provided to the learners (Beatty 2003: 81-82), and which is generally considered important in language teaching so that the input follows the learners' level of comprehension. Beatty (ibid.) notes that CALL can also provide “extralinguistic cues through sound, images, animation and video” to aid comprehension. However, he says that the problem with computers as opposed to teachers is finding the suitable level of difficulty. Some ways he presents to resolve this are learner-prompted clues, learners selecting their own level or testing their language skills first.

According to Beatty (2003: 8), CALL has been marketed and used for different learning purposes, such as a "complete method of learning a language", or at school as an aid for weaker or as a reward for faster learners. One of the strenghts of CALL is that it provides opportunities for learner autonomy, as they can use learning software not only at school, or it helps learners direct their own learning and learn critical skills. (Beatty 2003: 10, 46).

2.2 Digital game-based learning (DGBL)

DGBL is a growing field of using digital games in education and training of different knowledge and skills, and some authors such as Prensky (2001) and Gee (2003) are seen as leaders of the digital game revolution in learning. As opposed to CALL, where the computer *assists* learning, in Digital game-*based* learning the games are central and where possible, even the main form of teaching. These games should, however, be separated from traditional, non-digital games that are used in teaching. In most language classrooms, different simulations, role-playing and board games are used extensively, often as oral exercices, so simulations and gaming in foreign language teaching often refer to these non-digital games.

Prensky (2001: 146) defines DGBL as "*any learning game on a computer or online*", which broadly covers many different types of games used in teaching simply as learning games. Some more specific terms that are commonly used of learning games are serious games, edutainment, edugames, educational games and games for entertainment used in educational purposes, but there are varying ways to define and distinguish these (for some divisions, see Meyer and Sørensen 2009: 70-71, Ermi, Heliö and Mäyrä 2004: 62). Non-educational video games are often called commercial, consumer or off-the-shelf games (e.g. Prensky 2001), but many, especially indie games made by individuals are free or not sold on shelves at all. *Serious games* is often used as an umbrella term for different games used in educational purposes. However, in the present study, games are described generally as educational games or as games for entertainment, because the use of more specific terms is not yet consistent.

Games are in many ways similar to other forms of entertainment such as books or movies. They are often described through different genres based either on their content (sports, puzzle), structure and game mechanics (strategy, action) or purpose (learning, casual, party games). Genre divisions can differ greatly: for example, Prensky's (2001: 130) somewhat traditional eight genres and Pelitieto.net's (2009) perhaps more contemporary, gamer community's perception of seven game types have something in common but also differ substantially. There is much overlap and many games cannot be designated into a single or any genre. Games also have their target audience, which can be based for instance on players' age, sex, interests and country. There certainly are games not only for *core gamers* (who see playing as part of their life, as opposed to *casual gaming*) or boys, and about countless topics.

Prensky (2001) and Gee (2003) both state that video games can be immensely engaging, captivating players' attention for hours and days. Learning in general does not happen instantly, but often requires repetition, practice and simply time. Thus, if something can be learned from games, it might be likely to happen because people easily spend more time playing than doing many other things. Good, well-designed games are engaging and can aid learning because of numerous features they have (Prensky 2001: 106): they have rules and clear goals, they are interactive and adaptive, they give feedback, they are fun and they tell us a story.

The goals motivate the player to achieve and to be creative with problem-solving, as often games can be won in more ways than one. Interactivity means that the player is not passive, but an active part of the gaming and possibly learning experience, and adaptivity means that the player will have enough challenge to enjoy beating the game, but will not be frustrated with too much difficulty. Feedback is one of the major benefits of computers and games in learning. Feedback in games is instant and memorable, and it can be provided though different senses: visually, audially or motionally (e.g. tremble effect of the game controller). Even dying in a game is not discouraging, as the player will know what he or she did wrong and then try again. Because the games are so enjoyable, the player will not mind playing the same spot again for hours until having learned the correct action, and the stories that games tell make the players become emotionally attached to them, and they want to learn new skills to know how the game ends.

2.2.1 Games in learning curricular content

Non-educational games are not directed at learning a certain skill, so their content is often very interdisciplinary. However, as using games in school teaching is experimented, the content has to be directly related to the curriculum and the games chosen accordingly, rather than choosing a good game in itself and learning whatever it has to offer. In a survey sent to Finnish comprehensive school teachers (Klemetti, Taimisto and Karppinen 2009: 100-101), mathematics was the top subject for the use of games (31%), followed by Finnish (27%), natural sciences (20%), and on the fourth place were foreign languages (19%). Surprisingly, despite the role of English in Finland especially in video games, they are not used much in foreign language teaching. Even first and foreign language teaching together do not surpass maths and natural sciences together. However, in a study (Wastiau, Kearney, and Van den

Berghe 2009: 40-42) of 8 European countries (Finland not included), the use of games in teaching was most common in first and foreign language teaching with a portion of 25%. After languages, games were used often in geography, maths and history lessons, then followed by science and business studies. The role of games in first language teaching might be more prominent in primary school than later on because of the availabily of games that enhance literacy skills, but these studies did not compare the use of games between first and foreign languages.

EUN, European Schoolnet (Wastiau, Kearney, and Van den Berghe 2009) conducted case studies in 8 European countries, where the use of games was examined and experiences of the case studies were surveyed. Different games were used with different aims such as inspiring written production, metacognitive skills like self-assessment and concentration, social and teamwork skills. One of the case studies (Wastiau, Kearney and Van den Berghe 2009: 33-34) used games specifically in language teaching: the game Zoo Tycoon 2 was used in Austria to teach language skills to 12-year-olds. First the game was played in German, in which the pupils could have debates or write diaries, blog entries and letters of the game's content, and then the game was played in English during English lessons. The pupils gained new vocabulary, knowledge of the animals and planning economical choices in advance. The teachers concluded that the game combined fun and learning perfectly and that it could be used in connection with the curriculum in many different subjects.

In the United Kingdom, case studies were similarly conducted by Futurelab (Sandford, Ulicsak, Facer and Rudd 2006). Three games were used for teaching different subjects and skills at four different schools in the UK, and whereas learning assessment was not done, the primary and secondary teachers and students aged 11-16 were surveyed and the case studies carefully analysed for different applications of the games. Out of the two English teachers and two French teachers (total of teachers being 14), the use of games in the other French class was described in detail: the learning goal was to learn vocabulary and its use within context (Sandford et al. 2006: 42). Despite technical problems that led to only one learner playing at a time and others only writing a story based on the playing, experience of the lesson was positive and the vocabulary was more memorable than through word lists.

There are many other examples of video games used in teaching different subjects in addition to the case studies mentioned above, one known example being Aaron Whelchel (Whelchel

2007), who used three civilization strategy games (Civilization III, Age of Empires II and Rise of Nations) in teaching world history by designing a specific course based on the content offered by the games. Of course, there exist educational games for all subjects, Mingoville (Meyer and Sørensen 2009) being one made for teaching English as a foreign language, but out of them only some, mainly word games (e.g. Word Shark), are popular despite their clear educational purpose. In addition, some games for entertainment could easily be integrated in teaching of certain topics or skills as many games are based on such skills, for example puzzle games with detailed physics modeling such as in Angry Birds.

Studies on informal learning of curricular content, meaning learning outside school or formal education, show the great role of English in Finland prominently. The aforementioned pro gradu thesis of Olli Uusikoski (YLE Uutiset Kotimaa 2011) showed a correlation between informal gaming and English grades in Finnish upper secondary schools. Ermi, Heliö and Mäyrä's (2004: 66-69) study on 10-12-year-old children as agents in game cultures also showed how English is visible in gaming: English was the most central topic learned informally through games. Children learned vocabulary often through the translation help of their parents or older siblings, but they also could cope on their own. Saarenkunnas (2006) focused on informal language learning of a 10-year-old boy. In her case study, collaboration and communication of many players was a great resource for learning, mainly through negotiation of vocabulary. The boy, who had studied English formally only for one year and a half, could read long stretches of text and communicate creatively in English. Overall, the informal learning of English is possibly greater than of any other subject in Finland, and through games, schools could thrive to build bridges between formal education and the pupils' everyday life.

2.2.2 Games in learning other knowledge and skills

Even though games for entertainment are not designed to teach certain subjects, some skills are essential for playing and learning things in general. Well-designed games teach the necessary skills to the player when the player needs them, and these teaching principles can possibly be applied to formal learning. Gee (2003) introduced the concept of *game literacy*, a skill charactecteristic to new gaming generations and a skill that hopefully would transfer to the learning of other skills. Game literacy is explained by Sandford et al. (2006: 44-47) as understanding "the underlying narrative of the game and its elements" and transferring

knowledge between different games, such as symbols used in games (door means exit) and common actions needed (clicking and dragging with mouse) and more complex meanings of game design (floating red numbers mean loss of money).

Playing games can also teach different metacognitive skills that are needed in school and digital environments. Studies have shown that especially weaker students have had better concentration, gained self-confidence and learned self-assessment from playing, and games had the most positive learning impact on weaker rather than better students. Rather than leading to anti-social behaviour, most studies report learning social and cooperation skills through playing, and often schools have implemented games as exercises that require teamwork. However, critical thinking is not always seen so clearly as a result of playing games. Some other skills not tied to any school subject that are learned from games are problem-solving skills, spatial and motor skills (hand-eye-coordination), technical and IT skills. (Wastiau, Kearney, and Van den Berghe 2009: 45-46; Ermi, Heliö and Mäyrä 2004: 66-69; Sandford et al. 2006: 17-18).

2.2.3 Attitudes towards games in teaching and obstacles to using games

Based on teacher surveys, many teachers are positive or eager to use video games in teaching. However, surveys on teacher attitudes have seldom made a distinction between educational games or games for entertainment. In the survey conducted by EUN (Wastiau, Kearney, and Van den Berghe 2009: 36-40), 70% of the teachers were already using video games in their teaching, and a majority (80%) were interested in knowing more. In another survey on teacher attitudes (Klemetti, Taimisto and Karppinen 2009), 65% of the Finnish comprehensive school teachers who participated told they use digital learning games. However, in Futurelab's survey in the UK (Sandford et al. 2006: 18), the generational gap is clear, as 72% of the surveyed primary and secondary school teachers said they never play video games, whereas 82% of the children played regularly. Majority of them was positive, but a third of the teachers and a fifth of the students thought that computer games should not be used in the classroom.

There are many teacher expectations to video games. For the games used, they should be versatile and sufficient for several lessons, but they should suit the limits of a single lesson at a time. Moreover, they should be challenging but easy to learn and use (Klemetti, Taimisto and Karppinen 2009: 101-102). Motivation is the most expected outcome of using games in a

classroom (99% of Finnish teachers in Klemetti, Taimisto and Karppinen 2009: 100-101), possibly because children are seen as being so excited about games outside school. Next comes learning different content knowledge, but teachers are not as sure of whether the content relates to the subjects being taught or whether critical skills are learned (Wastiau, Kearney and Van den Berghe 2009: 45-46). Teachers might also often overestimate the initial game literacy skills of the students and then have problems with helping learners with unexpected difficulties (Sandford et al. 2006: 38-47).

In teacher surveys, the main barriers for using games in schools based either on expectations or experience are numerous. One of the main concerns is having a clear relation between the curriculum and the game content. As previously mentioned, games are very interdisciplinary and are not designed to correspond to a certain course, so teachers have difficulty in planning the teaching. Related to the curriculum, also assessment of game-based teaching cannot be always done conventionally. In addition, as games teach many skills and different knowledge and the learner has great freedom in playing, teachers can seldom be sure of what is learned, but it can be argued that this is the case of all teaching methods and materials: the learning process cannot be perfectly controlled, and all kinds of knowledge other than subject content is always learned at school. Validity and reliability of the game content are nevertheless important concerns, and games might teach knowledge not useful elsewhere, but finally, it is the teacher's rather than the game's responsibility to ensure learning. (Wastiau, Kearney, and Van den Berghe 2009: 40-43; Klemetti, Taimisto and Karppinen 2009: 98-102; Sandford et al. 2006: 17-18).

Another great obstacle is the lack of time and resources. Teachers feel that planning lessons with games takes more time, often because they have to know the game themselves first. Also the length of a normal lesson, 45-90 minutes in Finland, does not suit the time required for a single game session well. Some learners are very quick in learning how the game works and then completing all the needed tasks in the game, but there learners differ greatly in their speed. Technical problems, which may come as a surprise, can also reduce the time available for teaching. The lack of resources includes the lack of computers and money, but also the lack of training and support for teachers and other school personnel. Even though computers are wide-spread in schools, there are not yet even nearly enough computers for every student and they are not always available. Not only the infrastructure costs much, but the games

themselves and the licences required for schools to use them can cost too much to be bought for every student. Funding is not easily acquired, as schools themselves change slowly and non-traditional methods are easily looked upon. (Wastiau, Kearney, and Van den Berghe 2009: 40-43; Klemetti, Taimisto and Karppinen 2009: 98-102; Sandford et al. 2006: 18-25).

3 METHODOLOGY

The present study is mainly exploratory and experimental in nature, as a new kind of a method is tested and studied (Kalaja, Alanen and Dufva 2011: 147). Thus, it is a qualitative case study and so it does not attempt to generalize the results to all Finnish upper secondary school students (Kalaja et al. 2011: 148). Moreover, there were no control groups opposed with the test group or initial and final tests of their skills, since the learning results of the new method were not tested, but rather experiences of the experiment were asked from the learners (Kalaja et al. 2011: 18). Based on Beatty's (2003: 199) view of different methods in researching CALL, the present study can be considered a pilot study as the data will not be sufficient for drawing conclusions. However, it can also be described very fittingly as a case study, which according to Beatty (2003: 208) aims to “uncover the unexpected” and is a very common research method in CALL research.

3.1 The Kingdom of Loathing and the present study

The game used in the present study, The Kingdom of Loathing (**KoL**), is a free, parodic online role-playing game. It is mostly text-based with illustrations, and the game interface is used mainly through mouse-clicking and in some occasions through writing in English, so it includes a relatively great amount of text content (see appendix 1 for screenshots of the game).

KoL's language is English, but players can communicate with each other in other languages. The main language in the game's discussion forums and chats is nevertheless English. Many in-game quests, puzzles and jokes are based on popular culture references or puns that are unique to each language and thus could be difficult even to advanced learners. At least more entertainment can be gained from the game if the player can understand these references. The game forums provide spoiler-free help often in the form of haiku poems, meaning that the hints do not give the solution too easily, or by accident to those who want to find the answers

on their own. The game was mainly chosen based on the extent of the linguistic content, the diversity and the difficulty of the language, its approachability and availability, and finally familiarity to the researcher but not to the participants.

The present study does not measure learning results gained through one method compared to another, but explores the different applications of video games in language teaching. The study aims to do this by showing the learner perspective to using entertaining video games in language learning and teaching. The game is implemented through a mainly informal, but partly formal learning situation, and so aspires to find a bridge between these two learning environments. As many previous studies have surveyed learner views from 7-16-year-olds, the present study focuses on 16-19-year-old upper secondary school students. Also, no distinct teaching is given, but the participants can rather freely express their ideas of different ways to use games.

The present study aims to answer the following questions:

1. How can video games for entertainment be used in learning and teaching English as a foreign language (EFL)?
2. How suitable is the game for entertainment in learning and teaching EFL?
3. What do upper secondary school students think they have learned from playing the game?
4. What are their views on using games for language learning and teaching?

3.2 Methods of data collection

The target group for the study was Finnish upper secondary school students who have formally studied English as a foreign language. The participants were gathered by sending email announcements of the study on hobby or association mailing lists, inviting those who were part of the target group and were willing or interested to volunteer. Those who do not generally play video games were encouraged to join the experiment, and it was supposed and ensured that none of the participants had played the game before. Finally, there were two volunteers who participated in the study. The data collection was then conducted in two parts: an empirical setting, during and after which the participants could fill out a questionnaire, and an interview.

3.2.1 Empirical setting

The empirical setting was arranged in a computer class both the participants to be instructed on the study and the game. They were first led to the game website and to the link for creating their own accounts. Then they could play freely, rest and do something else at will, but they were given the goal of playing the 80 adventures (game turns) available on the first day of gameplay, or for two full hours if they could not finish the adventures in that time.

A researcher was present during the entire session so that the participants could pose questions and the researcher could occasionally observe the playing and participate in it to minor extent. Focus of observation was on the need of supervision or scaffolding with computers, the game and English. If anything of interest would happen during gameplay, it would be noted. The participants were also encouraged to ask questions from the researcher at any time. Some guidelines for instruction were decided beforehand: firstly, if the participants got stuck with in-game problems, they would be primarily guided to the game community's own help forum. Secondly, if they did not know a word or an expression in English, they could use an online dictionary or ask the supervisor, and finally the researcher was to help with technical problems. Regardless of the actual need, the help forum would be briefly presented at the end of the first session to all the participants so that they could find help with the game while playing independently.

As there are alcohol and drugs in the game, they were separately mentioned. As a precaution, the two players were told that they could not use their adventures properly or advance in the game if their game character's drunkenness reached a certain point. However, this was told only after a while of playing, when both of them had used some alcohol in the game as part of its tutorial, so that they would have their first impression of the theme on their own. They were then also told of a specific in-game drug that first boosts the player's abilities, but then renders them nearly useless for 100 adventures, and unlike with alcohol, the effect would follow the first trial. Therefore, the participants were advised to avoid these situations at least during the first game session for the sake of the shortness of the study, whereas usually players learn to avoid these disadvantages after trying them first.

3.2.2 Questionnaire and interview

A questionnaire (see appendix 2) was given to the participants directly after the preliminary instructions so that they could orient themselves to the main aspects of the study and take note of relevant observations already while playing. They were encouraged to tell their own opinions freely, as anything they would say would be important especially with the small number of participants. The questionnaire was structured to proceed from straightforward to more open and abstract questions, beginning from background information and ending with general opinions on the game. The main questions were open-ended, as open-ended questions are recommended when experimenting with new methods or new kinds of phenomena (Kalaja et al. 2011: 148). The participants could begin answering right away, but also first play the game more and fill the questionnaire on their free time.

The second session was for individual interviews a week after beginning to play. Due to the small number of participants, both of them could be interviewed elaborately. The interviews were tape recorded and then transcribed for later analysis. They were themed interviews, as most of the questions were planned in advance (see appendix 3), but the plan was open to changes and new themes that would arise during the interviews. The interview also included a few basic questions that were not in the questionnaire to keep it shorter, such as the players' gaming background and previous experience of games in language learning or teaching. Some major themes for the interviews were the possible applications of the game in schools and its suitability for teaching, further reflection of learning from the game, and perhaps finding differing experiences and social interaction.

3.3 Methods of analysis

The data was analysed qualitatively through content analysis (explained in Kalaja et al. 2011: 139). The aim of the analysis was to find recurring themes from the answers, to compare the differences between the participants' reactions and whether these differences might be connected to their education or gaming background. All the data from each participant was analysed as a whole instead of discussing the questionnaire and the interview separately, as the interviews elaborated greatly on the written answers. The participants are called with pseudonyms to protect their anonymity, but to distinguish the answerers clearly (Kalaja et al. 2011: 23).

4 LEARNER VIEWS ON GAMES IN LANGUAGE TEACHING

In this chapter, the results will be presented based on the playing session, the questionnaire and the interview as organised in themes. Firstly, the participants' background will be explained, secondly the possible applications of KoL in language learning and teaching, thirdly some attitudes and practical issues towards games in schools and fourthly some other relevant reactions to the game.

4.1 Education, language and gaming background

The participants were part of a similar target group, both being male upper secondary school students with a gaming hobby. At the time of the study they were both 18 years old, Matti being in the third and final year and Otto in the second. Matti had done seven English courses in upper secondary school and studied English as a foreign language for ten years in total, whereas Otto had done four courses and formally studied English for eight and a half years. Their level of English was presumably above average, as their most recent grades from English courses, on a scale from 4 to 10, were 9 for Matti and 10 for Otto.

Both participants reported that they play some videogames, and nearly if not all the games they have played have been in English. Moreover, Otto thought that playing games in English feels more natural because he is so used to it, which can be assumed from the fact that most games are not translated. As for the game types, Matti has played some online games that are in some respect similar to KoL, but have a greater emphasis on strategy aspects (for example Travian). These kinds of online games that are not installed on the player's computer often rely on simplicity rather than detailed graphics, and Matti thought that they were similar to KoL in regard to *just clicking all kinds of stuff and stats rising* (gaining more power). He has also played some first-person shooter (FPS) games, so he has enjoyed both slow-paced and fast-paced games. His playing has not been very socially tying, as he has communicated with other players mainly about game events and game-related rather than personal topics. Otto, on the other hand, has played more traditional computer games that can be played also offline. Some of them are role-playing games (RPGs) and some, for example Civilization IV, are strategy games. The examples he gave are very visual with detailed graphics, so he has had less experience of a text-based user interface similar to KoL. Otto used to participate in a gamer community outside of the game Civilization IV itself for a couple of years.

It is possible that the boys' gaming hobby has improved their English skills, as is the case with many Finnish boys in upper secondary schools (YLE Uutiset Kotimaa 2011). Otto himself estimated that games and the Internet have had a great role in his English learning, as games often offer new vocabulary and online there are even more opportunities such as forums to use the language in practice. In fact, Otto said that games provide mainly material for reading comprehension, whereas Matti noted that the game cutscenes or story sequences often can also provide spoken language in addition to general linguistic knowledge.

4.2 KoL in language learning

Both participants found that the language of the game was challenging but suitable for their level. Neither of them had noticeable trouble understanding the game's texts, as they did not ask the supervisor for help with them or use any dictionary during the first session. Matti explains his opinion of the language level in example 1:

I = Interviewer
M = "Matti"
O = "Otto"

Example 1:

I: mitenkäs tota peliä sitten voisi käyttää oppimisessa tai opettamisessa, miten se semmoseen sopii ja
M: jaa-a
I: onks sulla siitä ajatusta että, voisiko tätä käyttää semmosessa. vai vaikuttaisko se jotenkin että ei ehkä
M: no ei ainakaa iha alu- alun opiskelussa niinku että enemmi- enempi sillai että jos, pitää vaan tämmöstä, oppia just synonyymejä ja, että ymmärtää tekstin vaikka ei ymmärrä kaikkia sanoja ja muuta. et semmoselta sitte laajemmin jos opiskelee ni
I: eli vähän edistyneemmille ((M: nii)) jotka tuntee jo niiku englantia aika hyvi ja
M: nii /tavallaa/
I: /sitte voi/ syventää entä jos oisko sitte lukiolaiset vai voisko olla jo yläastelaisilleki vai [...]
M: lukiolaisille varmaa

I: how could that game then be used in learning or teaching, how would it suit there and
M: well
I: do you have any of that that, could this be used in them, or would it affect somehow that not maybe
M: well not at least at the very beg- beginning like that more- more like that if, you have to, learn just synonyms and, that you understand the text even if you don't understand all the words and else. like that then if you study further then
I: so for a little more advanced ((M: yeah)) who know English quite well and
M: yeah /kinda/
I: /then you can/ elaborate what if then would it be upper secondary school students

or could it be already for secondary pupils or […]
M: upper secondary school students probably

Matti stated that the language would be most suitable at a more advanced level such as upper secondary school rather than secondary school or at lower levels, as one would need a basic knowledge of the language. These more advanced students could then use the game in learning synonyms and understand the text from an overview. Otto explains his view of the skill level in example 2:

Example 2:

I: englannin kieli siinä et minkätasoista se on
O: no tota englannin kieli oli mun mielestä aika niinkun haastavaa, lukioikäselle, aam tota. sitten ite-
I: olikse sulle haastavaa vai arvelitko et sä et, yleensä ottaen lukiolaisille
O: no. khyl se mullekin oli aika haastavaa et piti niinkun, välillä, sillai pohtia et mitähän tässä niinkun, yritetään sanoa. et tota. ja kuitenkii. mä koen et mä oon niinku kohtalaisen hyvä englannissa

I: the English language in it that of what level is it
O: well English was in my opinion quite challenging, for a student, um well. then-
I: was it challenging to you or did you think that, to students in general
O: well. yyeah it was quite challenging to even me so I had to like, sometimes, think that what like, they're trying to say. so. and still. I feel like I'm like fairly good in English

Otto had realised that sometimes he puzzled over some meanings despite being quite skilled in English, so he also thought the game would provide a challenge to most upper secondary school students. However, he did not consult a dictionary later either and could deduce the word meanings when needed, so his playing was not hindered by the complex language. Both the boys showed skills in deducing meanings despite not knowing all the new words or stuctures. Matti explains some of the strategies he used in deducing word meanings in example 3:

Example 3:

I: auttoiko ne kuvat sitte tajuamaan
M: no kyllä osa niistä on sillai että, kuvaki auttaa mutta lähinnä sillai, itelle oli. että. siitä sitte muista sanoista ja, onkse ny sitte positiivista vai negatiivista ja tämmöstä että
I: yleiskuvan kautta
M: nii […] sitten niitä oli että samankaltasia sanoja jos tietää niiku, ulkonäöltään samankaltasia sanoja ni niistä voi päätellä sitte jotaki
I: et mistä se sana tulee tai vastaavaa, joo

I: did the images help in understanding then
M: well some of them are like, the image helps too but mostly like to me. that. then from

other words and, is it then positive or negative and like this so
I: through an overview
M: yeah […] *then there were similar words if you know like, similar appearing words so you can deduce something of them then*
I: where the word comes from or similar, yeah

Matti thought that the images could sometimes help in understanding new words, but he explained how he often deduced the words based on their context and a general image of the sentence. This was quite in contrast to Saarenkunnas's (2006: 217) results, where visual aids were of great importance for an advanced English learner in understanding game language. Moreover, Matti often had noticed similarities to familiar vocabulary, so he utilized his knowledge of word formation and compound words to deduce the words. Matti told he had used a dictionary a few times, but often he did not find the foreign word there. Nevertheless, he could deduct its meaning eventually or just ignore the difficult word and continue playing.

Thus, based on Matti's and Otto's own experience, the boys thought that the game would be most suitable in teaching new vocabulary, but they also considered learning grammar from it. In example 4, Otto discusses the structures and the vocabulary in the game:

Example 4:

O: no tota, ainakin mulle, itselleni siinä oli. aa. ne oli jotenkin niinkun, aina välillä ne. aa lauseet oli tavallaan niinkun. ne ei ollu ihan semmosta peruskauraa mitä oli jauhettu niinku. kolmannelta luokalta lähtien suurin piirtein, et tota, sillai se tois varmaan niiku vähän vaihtelua siihen englannin kieleen tavallaan mitä kuulee
I: eli oliks siinä erilaisia rakenteita. ((O: nii)) oliks sitte jotain muuta niinku kieliin-kielijuttuja mitkä oli uusia tai /erilaisia/
O: /äm tota/ ehkä sit lähinnä just tulee tämmöstä uutta sanastoo mikä nyt niinkun, niinku päällimmäisenä jäi mieleen, toi. toi toi toi. **asparagus** ((suomalaisittain)) ((I: joo)) et tota kyl sieltä tarttuu niinkun tämmösiä uusia sanoja

O: well, at least for me, myself there was. um. they were like, at times they. um phrases were like. they weren't that basic stuff what has been done like. from third grade about, so, in that way it could probably bring some variety to the English what you hear
I: so were there different structures. ((O: yeah)) then was there something else like language- language things that were new or /different/
O: /um well/ maybe then mainly just this new vocabulary what now like, like on top of my head I remember, the. the the the. asparagus ((Finnish pronunciation)) ((I: yeah)) so um you do get like these new words

Otto mentioned finding more complex sentence structures than those familiar from school. He also could give an example of a word he had encountered in the game for the first time, *asparagus*. Matti for his part remembered learning many synonyms, especially for *drunkenness*. However, Matti admitted that there is such a great amount of vocabulary used

only in the game and not in other contexts that learning it might not be very useful. He also thought that the language in the game was mostly informal and would not be sufficient to students as such. In contrast to Otto mentioning the complex sentence structures, Matti had not noticed any new structures. Both of them suspected that learning grammar independently from the game would not be likely, and both liked having distinct grammar teaching and a teacher giving lists of grammar points and rule exceptions. To Matti it was useful for checking correct forms more easily than *always remembering an example* [sentence], and Otto said it is more efficient to have *someone else come and say it is like this* than through extensive repetition in use, although he considered the latter to be possible also.

4.3 KoL in language teaching

As for applying the game in teaching, Otto considered that the game could support studying languages, but that it could never fully replace teaching. He compared abandoning traditional teaching to abandoning a newborn child, explaining that a basis for language learning must be established before applying the skills to other uses. Neither did Matti think that using a game as the only teaching method would work, as for example there would not be enough listening practice. Otto also thought that games should not be used too often or their novelty value would be lost, and that change and variety is always welcome.

When given the suggestion of using the game on a supplementary, voluntary course with teacher guidance, both Otto and Matti were compliant. Teaching methods could then include for example first playing the game and then analysing the language in it together. Otto admitted that this might turn into a traditional lesson where *the teacher writes a sentence on the blackboard and then it is analysed*, and nothing would really change. This kind of tradition was noted also in the Futurelab study (Sandford et al. 2006: 25-26), where games did not remarkably change the teaching habits, and lessons were structured according to other factors than the game itself. Also playing the game as homework would be difficult to supervise, and he thought that most is gained out of games when playing is voluntary. Thus the teacher should not force the playing or give too restrictive guidelines. Matti agreed on this, and in his opinion everything gets boring with too strict supervision, and there should be much freedom in playing. He was not very enthusiastic of the thought of having to discuss with peers what they have learned from the game, instead, the reverse situation where the teacher would give some learning goals to look for while playing sounded more interesting.

4.4 Attitudes and practical issues

Apparently because Matti's and Otto's previous experiences of games in learning were solely of learning games for children, both the boys had difficulties in imagining new ways for older learners to learn effectively while still having fun. Possibly they have only not encountered successful attempts of games for older learners, and therefore they could not suggest any ways to improve KoL for language teaching without losing its idea of having fun. Both of them noted that using the game in learning might also take too much time from more efficient methods even if the game itself is learned relatively quickly, but the time might be even misspent if no thoughts are evoked of playing. Both Matti and Otto thought that those who could best benefit from the game already use the Internet and games in their learning, and for those not interested in playing, learning through the game is too easy to dismiss as it can be played by only clicking and not thinking once one has learned how to play. In addition, neither of them found it likely that their entire class would play or enjoy the game, as those who like games already play them and whether one likes games or not is very individual. Matti also found that having better knowledge of English before playing could enhance the gaming experience, so those with less competence might not enjoy it as much.

The boys' current or previous schools had not specifically used games in learning, but one of Matti's English teachers had reminded students on a refresher course that they can learn from movies and games, so games are somewhat recognised as one hobby and a medium among others. Matti's or Otto's teachers had not brought games to school or encouraged them to play games, but only acknowledged that some learners play in their free time. When asked whether they would recommend KoL to their teachers or friends, Otto said he might tell his teacher that such a game exists and let the teacher then recommend it to others. He thought that his gamer friends like different types of games, so he would not recommend KoL to them. Moreover, he saw that those who do not play games still might view gamers as *sweaty nerds* so the general attitude towards gaming would have to change for everyone to try it. Matti thought that his teachers might not like the game because of some adult themes in it and schools' general anti-drug policy, regardless of many upper secondary school students being of age. He could nevertheless recommend it to some friends because it has a funny story and it is nice to play, and if he recommended it to his teacher he would emphasise the amount of text and the new vocabulary in the game.

As for the adult themes such as alcohol and drugs in the game, Otto discusses their suitability to students in example 5:

Example 5:

I: haittasko sua- haittaisiko sinua se että siinä on just jotain päihteitä ja, seksiin viittaavia juttuja ja
O: […] sanotaan niin et ei se ainakaan niinkun plussaa oo sille pelille, aa et. lukiolaiset, jos aatellaan niin, aa. eikös ne oo kun ne tulee ensimmäiselle luokalle niinkun. kuustoista. osa ehkä jopa viistoista jos on syksyllä, niin. en mä tiiä onko se kauheen hyvä juttu että. pelissä niinkun. toki, niinkun sä sanoit silloin että, kun juo liikaa alkoholia, niin sitte ei voi enää pelata, ja jos käyttää niitä huumeita, niin. siitäkin oli jotain. niinkun
((I: selitys vieroitusoireista pelissä))
O: mm nii en mää tiiä onks se kauheen hyvä juttu et pelissä joka on kuitenki sitten. jos ny jottain aatellaan lukiolaisia, et se on kuitenkin niin nuorille, vielä, niin
I: nuorimmat lukiolaiset on sen verran nuoria, joo

I: did it bother you- would it bother you that there are some intoxicants and, suggestions to sex and
O: […] let's say that it is not at least an extra to the game, um that. upper secondary school student, if you think that, um. aren't they when they begin first year like. sixteen. some maybe even fifteen if in the autumn, then. I'm not sure if it's a good thing that. in the game. sure, like you said then that, when you drink too much alcohol, then you can't play enymore, and if you use those drugs, then. there was sometthing too. like
((I: explanation of the withdrawal symptons in the game))
O: mh then I'm not sure if it's a good thing that in a game that is nevertheless then. if you think of upper secondary school students, that it is for so young, then, so
I: the youngest students are so young, yeah

Otto noted that students starting upper secondary school are merely 15 or 16 years old, and so an adult-themed game might not be suitable to them. In example 6, he expresses his personal view on the themes:

Example 6:

O: […] en mä ollu suoraan heti niinku tyrmäämässä sitä sillai et ei tämmöistä, saa niinkun koskaan, olla missään peleissä, mutta tota. kyl se must silti vähän niinkun, arveluttavalta vaikutti, et. en mä tiiä
I: […] tuliko sulle semmonen olo että, ehkä tää ei oo hirveen hyvä, haittaako se sitte sitä peliä itseään. tykkäätsää ite pelata pelejä riippumatta siitä et oliks siinä semmosia, päihteitä tai, muita teemoja vai, ol- onko sillä väliä,
O: jaa tota. no ei, ei sillä varmaan tota mulle itelleni, kauheesti merkitystä oo että, onko siellä huumeita vai - tai päihteitä, vai ei. no tota. ehkä niitä ei kuitenkaan passaa sillai, heilutella siinä naaman edessä
I: […] onko toi **kingdom of loathing** kuitenkin semmonen et siinä on vähän valinnanvaraa sen suhteen
O: no siis siinähän ite saa valita että, käyttääkö niitä vai ei ja sitte niistä päätöksistä on, omat seurauksensa, joista, pitää sitte, kärsiä

O:I wasn't going to like shoot it down right away like no not like this, cannot be ever, in

any game, but um. it still seemed a bit like, dubious to me, that. I dunno
I: […] did you feel like, maybe this isn't good, does it then bother the game itself, do you like to play games regardless of whether there were like, intoxicants or, other themes, or, wa- does it matter
O: um well, well no, it probably doesn't to me myself, matter much that, are there drugs or – or intoxicants, or not. well. maybe they still shouldn't be like forced through one's throat
I: […] is that ***kingdom of loathing*** *nevertheless like that that you have a choice over that*
O: well there you can choose that, do you use them or not and then the choices have, their consequences, that, you have to then, suffer

In his opinion, games in general should not force alcohol and drugs onto players. Personally he was not bothered too much by the intoxicants in KoL as the game gave the player a choice whether to use them or not and the game did make the player suffer some negative consequences of the usage. Matti expresses his opinion of intoxicants in the game in example 7:

Example 7:

I: onks se niinku huono juttu hyvä juttu
M: no mun mielestä se on tommosissa nyt ne on niin pienessä osassa sillai, tai en mää tiiä ne on jotenki sillai että ei ne haittaa ollenkaan siinä, ainakaa, itestä tuntu että ne vaa on niinku osa peliä. että, ei ne niiku, siitä, ei ne oo sen enempää ku
I: onks ne semmone osa peliä johon, aina niinkun väistämättä tullee vai onks se mahollista niinku välttää myös kokonaan
M: no ei oo ite ainakaa törmänny että niitä ois pakko käyttää
((keskustelua opettajien asenteista))
I: millasen kuvan toi. peli anto sitte lopulta päihteistä. että, olikse sitte huono juttu että siinä on päihteitä vai voi- oliks siinä sitte mitään niinku toisenlaista näkökulmaa
M: no mun mielestä se oli vaan semmonen aika hauska yksityiskohta että tommoseen peliin niinku, laitetaan päihteitä, että, niitä voi, ne on sitte osa sitä peliä [...]
I: joo. mitä sää ite siinä pelatessa että välitiksää niistä kummemmin vai, oliks ne, miten, sun pelissä mukana
M: no, en mää kauheesti välittäny niistä että. joskus niistähän sai seikkailuja ni. kyllä mää niitä muutaman kerran naksuttelin siinä sitten mutta, ei nyt sen kummempaa mitään, ihmeellistä siinä vaikuta

I: is it then a bad thing a good thing
M: well in my opinion it is in those they are in such a small role, or I dunno they are somehow that they do not bother at all, at least, I felt that they are just a part of the game. like, they aren't like, there, they aren't more than
I: are they a part of the game that, you like always encounter or is it possible to avoid completely
M: well at least I didn't meet them that you would have to use them
((discussion of teacher attitudes))
I: what kind of an image did the. game then give of intoxicants finally. that, was it then a bad thing that there are drugs or cou- was there any other perspective
M: well I think that it was just a funny detail that a game like that like, has drugs that, you can, they are then part of the game […]

I: yeah. what did you then while playing that did you care about them much or, were they, how, in your playing
M: well, I didn't care much about them so. sometimes you got adventures out of them so. I did a few times click there but, not much anything, special affect then

Matti saw the alcohol and drugs as one curious part of the game that he did not feel obliged to use but he could if he wanted to get game adventures out of them. His attitude was indifferent and he did not think that intoxicants had a great role in the game.

As Otto had not often used a text-based game interface, he took note of its differences compared with other RPGs and said that it needed some getting used to. He thought that the appearance of the game might be unappealing to some, but concluded that enjoying the game would depend more on liking or disliking the genre. Matti was more used to the interface style, but was sometimes exhausted by the amount of text in the game. He also visited the game's help forum in search of hints for a game quest, and he had found the help section's haiku poems confusing, but very inventive and somewhat helpful. He believed that by playing the game more he would also gain more out of the jokes and the game as a whole.

The boys were asked whether they think there are practical issues hindering the use of games in schools. Otto stated that schools might not have money for many new computers, but also that most schools nowadays already have a computer class so the financial issue might be surpassable. Matti also thought that teachers can assume that students have computers at home, and the only restriction for the use of technology might be the parents who do not want their children to play games. As for time efficiency, Otto could not estimate how much he had achieved in the game in relation to the time spent, but Matti said that playing the daily adventures required surprisingly little time. However, as noted before, Matti also admitted that traditional forms of teaching are more efficient than games despite the latter being more entertaining.

4.5 Other reactions to the game

The participants' reactions to the game were slightly different. Starting from their initial reactions asked at the end of the first session, Matti seemed more interested and humored, saying the game *seemed fun*, whereas Otto was not yet convinced. During the first playing session Otto did not ask for any help but rather played on his own, but Matti asked a game-specific question of how to do something in the game. Overall they played very

independently. As for their next reactions after having played the game at home, they agreed that the game has some nice humor, including *funny characters and things*. In total, Matti had played around 485 game adventures, which is nearly the maximum in the time given, compared with Otto, who played around 250 adventures on only one day after the initial session. Thus there were individual differences in liking the game between two players of a similar target group of gamers.

There were no examples of social playing during the experiment, which again differed greatly from Saarenkunnas's (2006: 217) results in collaboration and social gaming being an important part of language use in gaming. Otto did not use the game chat or forum at all and did not report any other sociality in the game either. Matti had visited the forum only to find game help, and he said that he usually reads online forums without participating to the discussion. He had noticed that the game has a clan system and player versus player fighting, but he decided that he would first play on his own for a while and then see if he wanted to join the player community, as playing the game does not require any cooperation. Thus their playing was nearly independent of all social collaboration.

When asked whether the participants would rather play KoL to learn English or only for fun, both chose the latter, and they seemed to appreciate the entertainment value of the game more than the learning aspect introduced in the experiment. Possibly because of the experiment's emphasis on languages, they could not say having learned anything new of other topics or subjects. However, they did mention in the questionnaire what they had learned about the game itself and playing it, for example Otto wrote in the questionnaire that one *should not enter the haunted billiards room if you are a level 2 pastamancer.* This kind of knowledge is an example of Gee's (2003) game literacy: learning things characteristic and specific to games such as victorious battle strategies, and another example being the aforementioned game-specific vocabulary that the boys had learned but that might not be encountered anywhere else. As for playing the game in the future, Otto thought the game was interesting, but was not sure whether he would play it later. Matti said it *wasn't any worse than others [online games] at least*, and he thought that he would probably continue playing for a while also.

5 CONCLUSION

To summarise the learning results, the participants firstly reported learning new vocabulary, some of which was general and some of which was specific to the game. Secondly, one of them had noticed different sentence structures, and thirdly, both of them had practiced their reading skills through skimming through the text without having to know every word. Fourthly, in addition to game vocabulary, they had learned some game literacy in getting to know a different type of a game. These main results did not differ greatly from other case studies discussed, and other metacognitive skills were not visible in the present study.

Based on what the boys said about their experiences while playing and the lack of problems in understanding the language, either they both were high-level English users or the game's language would be understandable to most Finnish upper secondary school students. It is, however, difficult to know which one is the case, as both the participants had similar gaming and language background. Based on their English grades they have high skills in English and it can be presumed that many upper secondary students would have more difficulties with the language. More specific data on the difficulty of the game language might have been achieved with more participants of different gaming and language background or simply of another sex.

Both the participants were sceptical about applying the game centrally in language teaching as such. Some areas of language such as listening comprehension might be underrated if the game content was emphasised, and teaching would lack clear, explicit teaching of grammar. However, adding new learning features to the game could hinder its entertainment aspect. A subtler use of games as support to learning seemed more likely, and the present study did attempt to illustrate two possible situations of supportive game use: setting an external goal for playing beforehand with the questionnaire, and also discussing the playing and the learning results afterwards in the interview. One of the participants preferred the former example and the other one did not make this distinction, as long as the use of games would be occasional rather than continuous. Both of them emphasised the importance of voluntariness of playing regardless of the method, and that playing games and even liking different genres is highly individual, as seen with just two participants in the present study.

The participants' attitudes towards the game were controversial to some extent, as they were not bothered by the game's adult themes or text-based interface, but they thought that the

game would not be suitable for other students or for recommending it to teachers. Moreover, they could name specific things they had learned and they liked playing the game, but they nevertheless prefer more traditional methods for efficiency and for ensured learning. The results were somewhat unexpected, as the boys were not very enthusiastic about using games in schools and increasing variety in teaching methods. It is highly possible that in upper secondary the students want to focus their learning more as the matriculation exam approaches, and so they would not be so eager to try out new methods towards the end of their studies. Because of time constraints, the questionnaire and the interview were not piloted, so more specific questions with better orientating instructions, such as a separate question in the questionnaire about the applications of games in schools, might have evoked more thoughts of the topic. However, the questions used might have produced differing answers simply with more participants.

As game-based learning is a new field in the study of language learning and teaching, more research should be done on many possible topics. Some suggestions could be testing learning with different game-based study programs of different lengths or traditional teaching supported with games, with more or less teacher guidance and involvement. In general, more studies testing learning goals and their results through game-based teaching could be done. All these study topics have nearly endless variations, as the age and number of the participants, the emphasis on independent or social gaming and the game itself, with or without modifications, can always be varied.

6 BIBLIOGRAPHY

Primary data

The Kingdom of Loathing [online]. http://www.kingdomofloathing.com. (16 February 2012).

Secondary data

Beatty, K. (2003). *Teaching and researching computer-assisted language learning.* London: Pearson Education Limited.

Ermi, L., Heliö, S. and Mäyrä, F. (2004). *Pelien voima ja pelaamisen hallinta. Lapset ja nuoret pelikulttuurien toimijoina* [online]. Hypermedia Laboratory Net Series 6. Tampere: University of Tampere. http://urn.fi/urn:isbn:951-44-5939-3. (29 May 2012).

ESA Entertainment Software Association (2012). http://www.theesa.com. (29 May 2012).

Gee, J. P. (2003). *What video games have to teach us about learning and literacy.* Gordonsville, VA, USA: Palgrave Macmillan.

Kalaja, P., Alanen, R. and Dufva, H. (2011). *Kieltä tutkimassa. Tutkielman laatijan opas*. Helsinki: Finn Lectura.

Karvinen, J. and Mäyrä, F. (2011). *Pelaajabarometri 2011: Pelaamisen muutos* [online]. Tampere: University of Tampere. http://urn.fi/urn:isbn:978-951-44-8567-1. (29 May 2012).

Klemetti, M., Taimisto, O. and Karppinen, P. (2009). The attitudes of Finnish school teachers towards commercial educational games. In M. Kankaanranta and P. Neittaanmäki (eds.), *Design and use of serious games*. New York: Springer, cop, 97-105.

Meyer, B. and Sørensen, B. H. (2009). Designing serious games for computer assisted language learning – a framework for development and analysis. In M. Kankaanranta and P. Neittaanmäki (eds.), *Design and use of serious games*. New York: Springer, cop, 69-82.

Pelitieto.net (2009). http://www.pelitieto.net. (22 October, 2011).

Prensky, M. (2001). *Digital game-based learning*. New York: McGraw-Hill, cop.

Saarenkunnas, M. (2006). Language learning through networked computer games – the case of an efficient novice. In P. Pietilä, P. Lintunen and H.-M. Järvinen (eds.). *Kielenoppija tänään – Language learners of today. AFinLAn vuosikirja 2006*. Suomen soveltavan kielitieteen yhdistyksen julkaisuja no. 64. Jyväskylä. 199-220.

Sandford, R., Ulicsak, M., Facer, K. and Rudd, T. (2006). *Teaching with Games* [online]. Bristol: Futurelab. http://archive.futurelab.org.uk/resources/documents/project_reports/teaching_with_games/TWG_report.pdf. (24 March 2012).

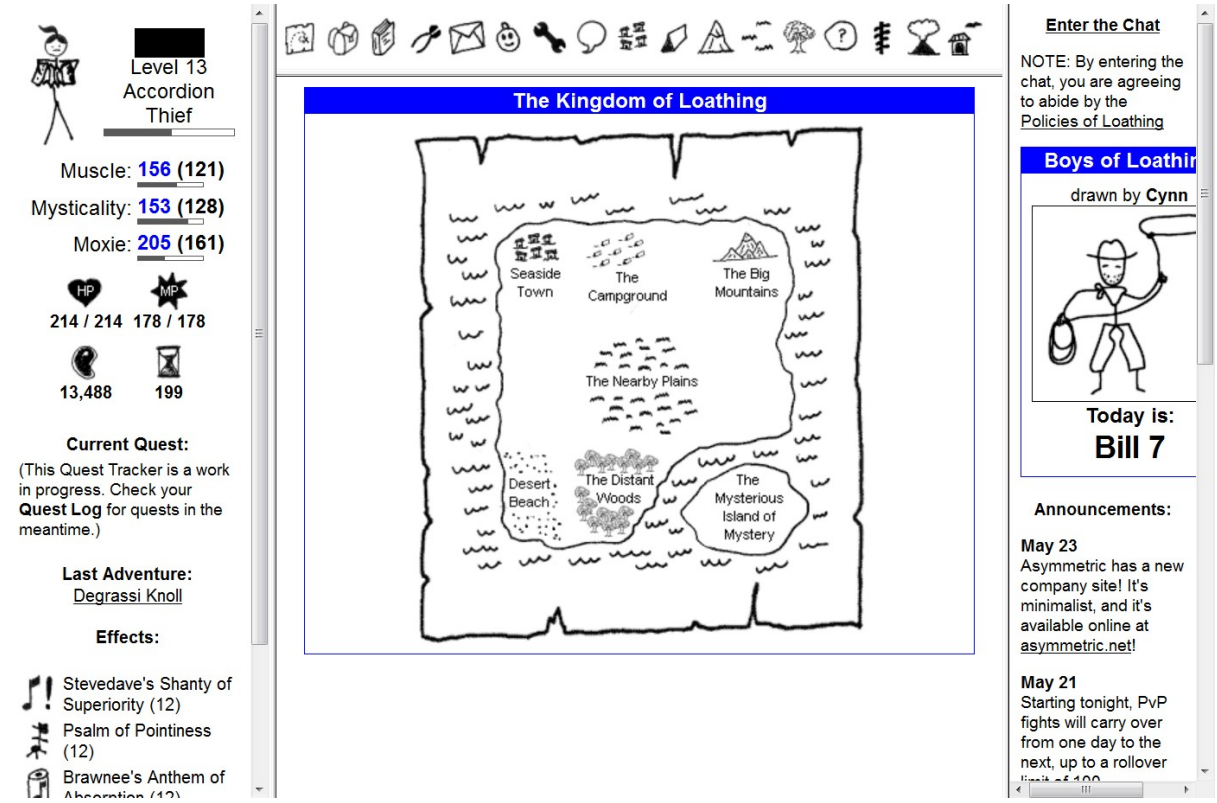
Wastiau, P., Kearney, C. and Van den Berghe, W. (2009). *Synthesis report, How are digital games used in schools?* [online]. Brussels: European Schoolnet. http://games.eun.org/upload/gis-synthesis_report_en.pdf. (11 January 2012).

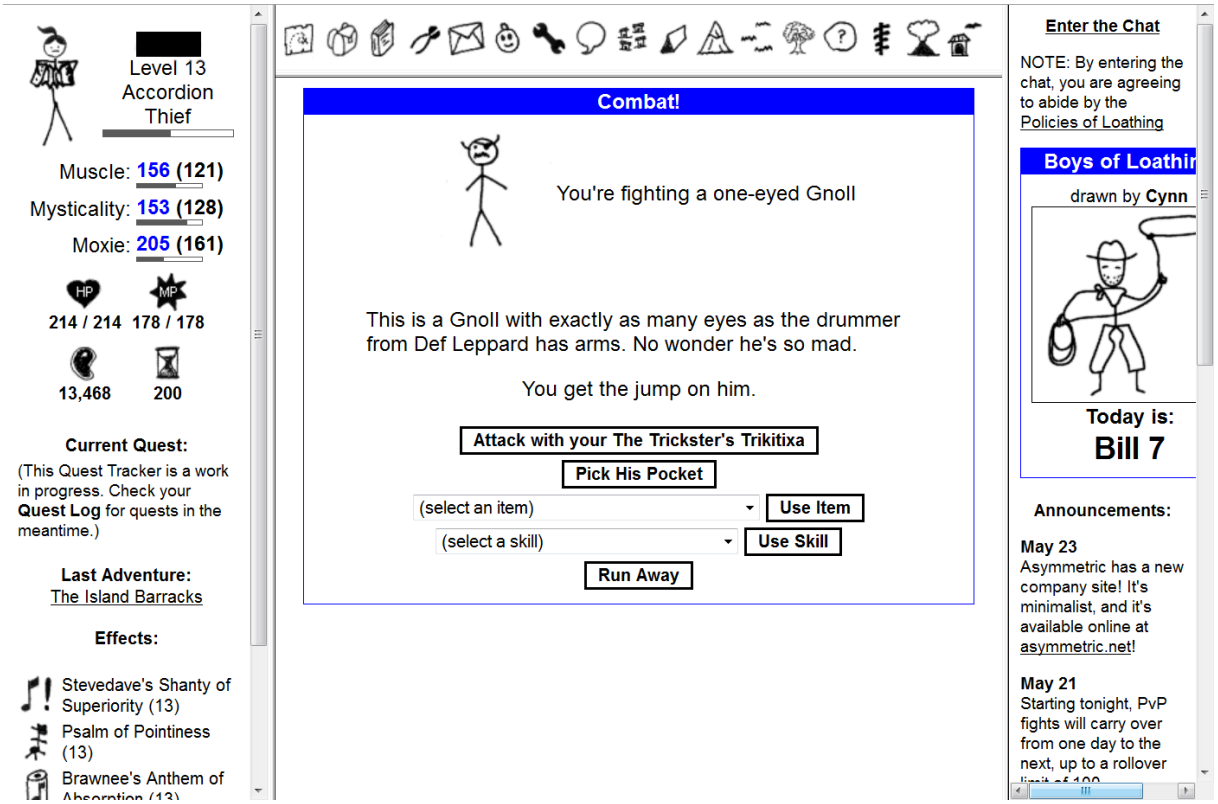
Whelchel, A. (2007). Using civilization simulation video games in the world history classroom. *World History Connected* [online] 4 (2), n. pag. http://worldhistoryconnected.press.illinois.edu/4.2/whelchel.html. (20 October, 2011).

YLE Uutiset Kotimaa (2011). Pojat kiilaavat tyttöjen ohi englannin kielessä tietokonepelien ansiosta [online]. http://yle.fi/uutiset/kotimaa/2011/11/pojat_kiilaavat_tyttojen_ohi_englannin_kielessa_tietokonepelien_ansiosta_3012279.html. (9 November, 2011).

APPENDICES

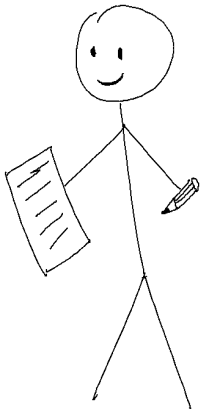
Appendix 1: Screenshots of the game Kingdom of Loathing.





Appendix 2: Questionnaire

The Kingdom of Questions – An Answerer is You!



Taustatiedot

Nimi: _____ Ikä: _____ vuotta

Sukupuoli: nainen / mies / muu

Montako vuotta olet opiskellut englantia? _____ vuotta

Montako lukion englannin kielen kurssia olet suorittanut? _____ kurssia

Mikä oli viimeisin todistusarvosanasi englannista? _____

Kysymyksiä pelistä The Kingdom of Loathing

Arvioi, montako seikkailua (adventures) pelasit yhteensä: _____

Arvioi, kauanko pelasit peliä yhteensä: _____ tuntia

1. Mitä koet oppineesi <u>englannin kielestä</u> peliä pelatessa?

_____

_____

_____

_____

_____

_____

_____

_____

2. Mitä muuta koet oppineesi peliä pelatessa?

_____

_____

_____

_____

_____

_____

_____

_____

Käännä!

3. Miten peli voi mielestäsi <u>auttaa</u> kielen oppimista?

4. Miten peli voi mielestäsi <u>haitata</u> kielen oppimista?

5. Miten peli sopii mielestäsi suomalaisille lukiolaisillle?

6. Mitä mieltä olet pelistä muuten?

Kiitos vastauksistasi!

Appendix 3: Interview plan

Haastattelukysymyksiä

Pelaajatausta:

- Harrastatko videopelien pelaamista?
  - Kuinka usein, kuinka paljon?
  - Millaisia pelejä yleensä pelaat?
- Oletko pelannut tämän tyyppisiä pelejä (RPG) ennen?
- Minkäkielisiä pelejä yleensä pelaat?

Pelit oppimisessa ja opetuksessa

- Oletko oppinut peleistä (englantia tai muuta)?
- Onko koulussa käytetty pelejä?
  - Onko syitä käyttää / olla käyttämättä pelejä? Millaisia?
    - Viekö aikaa? Onko kaikilla mahdollisuutta pelata kotona/koulussa? Tekniset ongelmat? Erilaiset oppilaat?
    - Motivaatio, vaihtelu, tehokas, innostava, monipuolinen?
  - Millainen asenne (englannin) opettajilla on pelaamiseen?

KoL oppimisessa

- Kysely: mitkä olivat tärkeimpiä asioita, haluatko selittää vastauksiasi?
  - Mitä mieltä olet?
- Mitä asioita pelistä voi oppia? Mitä ei voi oppia? Mitä pelistä puuttuu?
- Tarvitsitko apua pelin tai englannin kielen kanssa?
  - Mistä etsit apua? Oliko siitä hyötyä?
- Miten peliä voisi parantaa niin, että se auttaisi oppimista enemmän?

Peli opetuksessa

- Miten sopii lukiolaisille, miksi?
  - Päihteet, seksivihjailu, kiroilu?
  - Miten vaikeaa kieltä?
  - Paljonko aikaa vaatii?
- Mitä mieltä olit pelitilanteesta: luokassa ja kotona?
- Olisiko hyvä, jos opettaja olisi mukana?
  - Antaisi ohjeita, oppimistavoitteita?
  - Pelaisi mukana?
  - Pelaisitko peliä läksynä opettajan käskystä?
- Riittäisikö peli yksinään vai tarvitsisiko se jotain muuta lisäksi? Mitä?
- Miten peliä voisi parantaa niin, että se sopisi paremmin kielten opettamiseen?

Sosiaalisuus

- Pelasitko yksin vai muiden, tuttujen tai tuntemattomien kanssa?
- Tutustuitko pelin kautta kehenkään? Luuletko tutustuvasi (olisiko helppoa)?

Peli muuten

- Mitä mieltä olet pelistä?
  - Helppo/vaikea, hauska/tylsä...
- Miten kuvailisit peliä muille? Entä englanninopettajallesi?
- Pelaisitko peliä muulloinkin?
  - Miksi: viihteen, oppimisen, kavereiden tai jonkin muun takia?
  - Käyttäisitkö sitä englannin oppimiseen?
- Suosittelisitko sitä jollekin?