GÖTEBORGS UNIVERSITET

Life is Strange 2

Digital Game-Based Language Learning in an EFL Context

Ida Sahlin

Ämneslärarprogrammet, Engelska

Abstract

This study looked at the impact of Digital Game-Based Language Learning (DGBLL) and *Life is Strange 2*: Episode One, a commercial off-the-shelf (COTS) video game, on the listening comprehension of twelve Swedish Upper Secondary English as a Foreign Language (EFL) pupils. Two studies were conducted to answer the following research questions. Firstly, how does playing the PC adventure COTs video *game Life is Strange 2*-episode one affects the participants' listening reception? Second, what are the participants' opinions regarding the usage of COTS games for educational purposes? The Swedish National Test "Ten Journeys of a Lifetime" was used as a pre- and post-listening comprehension test in the first study. In the second study, eighteen participants answered an open-ended questionnaire regarding whether they enjoyed using a COTS game in class and, if so, what they didn't like about it. The post-test findings revealed that participants received a higher grade and that the great majority of them enjoyed playing the video game. If there was one issue that participants had with playing COTS games in the classroom, it was that they wished for better equipment in order to play the game more successfully. These findings mirrored those of several other studies, which demonstrated that DGBLL and the usage of COTS games assisted participants increase their post-test scores.

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1 Introduction

Over the past few decades, the potential use of video games for educational purposes in different subject areas has been proven beneficial, especially in regards to language acquisition (Hung et al., 2018). This is attributed to immersive exposure and use of the target language (TL), lowered anxiety levels and the motivational factor which follows gaming (Hung et al., 2018). As more video games are released, popular games such as *Fortnite*, an online multiplayer video game genre that blends last-man-standing combat with survival, exploration, and scavenging components of a survival game, are becoming a more frequent way for individuals to spend their free time (Amenabar, 2022 & Fortnite, 2022). On account of video games becoming a more prevailing way in which also young people spend their leisure time, Digital Game-Based Language Learning (DGBLL) has increasingly received attention as an interesting field of study (Alyaz, & Genc, 2016). Technology and its effect on education has existed as a field of study since approximately 1950, namely Computer Assisted Language Learning (CALL) (Beatty, 2013). However, since CALL entails "...any process in which a learner uses a computer and, as a result, improves his or her language" (Beatty, 2013), DGBLL, a more focused topic of study around which the subsequent research will be centred, focuses on using digital games to aid language acquisition.

In practice, there is a plethora of genres when it comes to video games, such as Massively Multiplayer Online Role-Playing Games (MMORPG), Simulation Games, Adventure Games and Role-Playing Games (RPG) to name a few. Within these genres there is an abundance of games, especially when Commercial Off-the Shelf (COTS) games such as *World of Warcraft*, *Fortnite* or *The Sims* are taken into account (Kronenberg, 2012). COTS games, which are games made purely for entertainment and not education, could provide students with the tools to be submerged in written and spoken English whilst including a motivational factor which could create a break from traditional learning environments (Ersöz, 2000). Since the Swedish upper secondary school syllabus encourages teachers to seek ways to educate pupils via various media to better connect with authentic material which should aid pupils' development of abilities such as reception, DGBLL could provide students with the opportunity to interact with authentic speech and writing in the target language (Skolverket, 2011). Sweden's educational system is also built on democratic principles, and the Education Act mandates that schools teach empathy and the capacity to comprehend others (SKOLFS, 2011:144). The goal of school education, according to the Education Act (2010: 800), is to

assist students in acquiring and developing knowledge and values. Ideas like the inviolability of human life, individual freedom and integrity, equal worth for all persons, gender equality, and human solidarity must be developed and disseminated via education. Because certain COTS games focus on themes like these, introducing COTS games into Swedish upper secondary schools might be beneficial in teaching these ideals.

Likewise, teachers that understand and use technology as part of their instruction, according to Hubbard (2021), are in demand, especially in relation to the recent Covid19 pandemic. Computers and related technology have become ubiquitous in our lives and the lives of our students outside of the classroom, but as language educators, we must understand their role in language acquisition (Hubbard, 2021). Without such a basis, according to Hubbard (2021), it is impossible to make informed judgments on how to use technology into language programmes to make certain aspects of student learning more enjoyable, efficient, or successful. With the COVID outbreak, many classroom language teachers were forced to teach online, and as a result, computer-based instruction has recently been more widely used. As a result, including DGBLL could be argued to be the next logical step when contemplating future schooling.

Previous research within the field of DGBLL, which has focused on COTS games and language improvement in areas such as vocabulary, grammar and communicative fluency, has found that the results displayed an improvement on the above-mentioned abilities (e.g., Chen & Hsu, 2020; Baltra, 1990; Miller, 2006). Yet, even though studies have exhibited overall improvement in several areas within second language (L2) acquisition, few studies have focused specifically on the impact of COTS games on participants' receptive skills. In relation to this, even fewer studies have examined DGBLL in a Swedish School setting. On account of this gap, the following study aims to research whether playing the game *Life is Strange 2* episode one with Swedish Upper Secondary pupils would have any impact on their listening comprehension.

1.1 Aim

The present mixed-methods study has two aims. First, whether using the COTS game *Life is Strange 2*-episode one in a Swedish upper secondary ESL class might influence the pupils' listening comprehension skills. Second, it aims to identifying the twelve participants' opinions about using DGBLL in their ESL classroom.

The following research questions will be addressed:

1. How does playing the PC adventure COTs video game *Life is Strange 2*-episode one affect the participants' listening reception?
2. What are the participants' opinions regarding the usage of COTS games for educational purposes?

2 Historical Overview

In the following sections, relevant information regarding terminology and historical context regarding the terms Listening Comprehension (2.1), Digital Game-Based Language Learning (DGBLL) (2.2) and Commercial Off-the Shelf (COTS) games (22.3) will be given.

2.1 Listening Comprehension

Hearing is the primary physiological mechanism that permits sound waves to be absorbed and processed, and it is the most grounded and vital to consciousness of all our senses since it occurs in real time, in the present (Rost, 2002). There are crucial distinctions to be observed between the phrases hearing and listening, which are commonly used interchangeably in everyday English. While sound triggers both hearing and listening, the distinction is mostly one of degree of purpose (Rost, 2002). As a result, it may be deduced that hearing occurs inadvertently, but listening necessitates purposeful engagement on the side of the listener.

In the case of listening comprehension pedagogy, the emphasis of teaching in the 1970s was bottom-up linguistic processing, or the development of learners' capacity to recognise words, sentence boundaries, contractions, individual sounds, and sound combinations. However, in the 1980s, listening pedagogy changed away from a focus on language aspects of understanding and toward the activation of learners' top-down knowledge (Hinkel, 2006). Hinkel (2006) states that two different approaches are highlighted within L2 listening pedagogy. The first emphasises the necessity of integrating listening skills with other L2 abilities such as speaking, grammar, and vocabulary, while the second emphasises the learner's use of metacognitive and cognitive strategies to bolster the learning process. According to Rost (2002), learners should be given specific objectives, norms, and expectations by the settings rather than by the listening process. Language acquisition is fundamentally an abstract psycholinguistic process that occurs in concrete social conditions.

Nonetheless, even if there are suggestions for how to teach listening, assessing reception remains a tough task, because listening is largely a cognitive process that is not easily visible by objective metrics (Rost, 2002).

Within the Swedish National Agency for Education, the English listening comprehension curriculum plays an essential role, since it aims to improve "knowledge of spoken and written English, as well as the capacity to comprehend information." (Skolverket, 2011). In Swedish schools, one of the core sections emphasises reception as one of the essential elements to be taught. It also states that pupils should have access to spoken language, which includes a variety of social and linguistic aspects, as well as writings that teach, narrate, summarise, explain, discuss, report and debate, including through film and other forms of media (Skolverket, 2011).

In the topic of listening comprehension research, there are many different subjects associated to the concept of reception (e.g Rost, 2002). However, studies in other aspects of language learning, such as speaking and reading, have received far more attention than studies involving listening comprehension (Graham, 2003). This might be due to the difficulty of evaluating reception or the fact that the role of hearing comprehension in language learning has been underestimated, resulting in a lack of research and pedagogical attention (Vandergrift, 2002). Despite the fact that there are few pedagogical studies on listening comprehension, even less studies on DGBLL and listening comprehension exist. As a result, this research sheds light on an area that has received little attention.

2.2 Digital Game-Based Language Learning

Digital Game-Based Language Learning (DGBLL), which is a branching section of Game Based Learning (GBL), entails the usage of digital games to teach especially language (IGI Global. n.d.). It refers to the integration of games into a learning environment in which the game itself is digital and plays some sort of a central role in the education. The digital games may be so-called serious games, which are games constructed especially for educational purposes, or COTS games which are created solely for recreation (IGI Global. n.d.). The expeditious evolution of digital games has caused a huge increase in the interest of playing video games and thus the research within DGBLL is all relatively new and can be seen to increase from the year 2014 (Amenabar, 2022; Zou et al., 2019). Thus, found previous research within DGBLL stems earliest from 1990 according to Hung et al. (2018).

In DGBLL literature, Xu et al. (2020) looked for qualities of English Language Learning, methodological elements, gaming characteristics, and linkages between these categories. Xu et al. (2020) investigated these challenges in order to have a better understanding of how DGBLL has been used in current educational technology settings and to emphasise the need of effective game design. The research combed through eight widely used databases, uncovering around 2000 documents and producing a full report. More than half of the studies examined did not specify the participants' English proficiency level, making it difficult to evaluate the efficacy of language learning results. However, they discovered that vocabulary is the most commonly used language skill, that most approaches were quantitative and used researcher-designed tests, that commercial games had the most features of a successful game, and that all good game elements, according to Xu et al. (2020), have a stated goal.

Studies within the field of DGBLL have predominantly researched digital games affect on L2 and the majority have used mixed methods. Frequently, both quantitative and qualitative methods have been used and the types of data were mostly collected from perception questionnaires and learning tests (Hung et al. 2018). Most previous research have pointed toward usage of DGBLL in a positive light and have showcased several benefits which could come from using DGBLL (e.g., Baltra, 1990; Lai & Chen, 2021; Miller 2006). Albeit these favourable effects have been noted, there are few, if any, research regarding DGBLL in an EFL Swedish setting.

2.3 The use of Commercial Off-the Shelf (COTS) Games

Commercial of the Shelf (COTS) games are commercial video games that are aimed at providing amusement. Serious games, on the other hand, are games developed particularly for learning, with the educational objective of the game being explicit and likely part of the design goals from the beginning (IGI Global. n.d.). Acceptance is often replaced with suspicion when it comes to implementing COTS games in the classroom (Kronenberg, 2012). However, according to Baltra (1990), a hostile environment in the classroom can enhance a student's anxiety, which can impede his or her learning. A way to avoid the traditional classroom and the anxiety attached to it could, according to Ersöz (2000), be by using COTS games in the classroom. In addition, various advantages of utilising COTS in the language classroom have been discussed by for instance Baltra (1990). To begin with, COTS games are

not focused on language learning through manipulation of grammar or vocabulary, but rather on finishing the game's story. Second, players must reveal the game's contents and talents, introducing significant discovery learning. This process of needing to, for example, solve a problem before learning more about the game boosts motivation. Thirdly, COTS games provide opportunity for students to work together in groups. Finally, video games combine all four linguistic skills, reading, listening, writing and speaking. Due to these reasons, utilizing COTS games in the language classroom could prove beneficial. Hubbard (2021) states that listening is one of the most promising areas for integration because multimedia computing combines all of the advantages of traditional audio and video with a variety of meaning technologies like as text assistance, hyperlinked glossaries, and translations. Presentations within games are frequently followed by listening exercises that include comprehension questions; some also include entire or partial dictations. As a result, COTS games to teach reception, namely listening comprehension, could be a promising step forward.

Despite the bulk of evidence pointing to the advantages of using COTS games in the ESL classroom, there are some disadvantages to consider. For starters, as indicated by Baltra (1990), the game's difficulty level may be too severe for some pupils, causing them to lose interest in playing the game. Second, the delivery pace of dialogue and subtitles in COTS games is rarely adjustable, which might lead to issues with game comprehension. Also, not all schools may be able to purchase video games that both inspire pupils and are acceptable for their ability levels. Even if the schools were permitted to acquire video games, there is no guarantee that they would have or be able to purchase the requisite consoles (PC for example). Furthermore, as Baltra (1990) and Chen and Yang (2013) point out, choosing a video game that is acceptable for all of the students' different levels of skill might prove to be difficult. Moreover, game measurement and recommendations for how students should play the game in order to meet the teacher's objectives may have a negative influence on the games' appeal (Ranalli, 2008). Finally, designing video games as specialised as necessary to include the desired locations may be tough. The game's source code, according to Ranalli (2008), might be changed to fulfil the teacher's requests. However, this might take a long time for the teacher, and certain game source codes are hard to alter. For these reasons, Chen and Yang (2013) suggest that it is critical to select a COTS game that is appropriate for the student's competency level, has clear pronunciation, and subtitles to facilitate language acquisition. These problematic factors may make selecting a COTS game for use in a

language classroom challenging, and even while there is a plethora of COTS games to pick from, it might prove difficult for a teacher to find one that meets these requirements.

Kronenberg (2012) also states that several characteristics must be met in order to properly incorporate COTS games into formal language learning scenarios. The game itself must be engaging, with well-defined and spaced objectives. Learners of various game abilities must be able to play the game without a detailed comprehension of the game mechanics. Educators must choose appropriate content to create rich and meaningful media-rich narratives that give consumers a feeling of autonomy and choice. Only when COTS games are integrated into an educational and pedagogical setting can they reach their full potential, which needs scaffolding, appropriate and context-sensitive activities, and mindfully-selected games (Kronenberg, 2012).

To conclude, COTS games may be utilised in ESL or EFL classes to assist students in improving their language skills in novel and intriguing ways (Ersöz, 2000). Even though there are certain drawbacks to using COTS games in the EFL classroom, such as the game's difficulty level, bringing them in might aid students with developing their language skills whilst also reducing their anxiety levels and raising their motivational levels.

3 Previous research

Previous research in the field of Digital Game-Based Language Learning (DGBLL) have exhibited a correlation between enactment with video games and improvement in areas such as grammar, vocabulary and communicative fluency (Chen & Hsu, 2020; Baltra, 1990; Miller, 2006). The following DGBLL research has primarily focused on COTS games. Alyaz and Genc (2016), on the other hand, focused on the influence of serious games would have on participants. As a result, this study will be reviewed first.

Alyaz and Genc (2016) conducted a study to investigate educational digital games in foreign language teaching, to identify the determining reasons for application failures, and to investigate the contribution of a serious game to the development of pre-service teachers' professional language skills. The study's sample group included 60 second-year pre-service teachers from a Turkish public university's German language teaching department. *Adventure German-A Mysterious Mission* which is a serious role play game (RPG) was selected to be used in the study. According to the authors, in comparison to other entertaining COTS games this game was deemed to lacked adventure and excitement. To assess the game's contribution

to the development of the participants' language abilities, pre- and post-tests were used as well as a game journal and semi-structured interviews to obtain information regarding the challenges that pre-service teachers had and their perspectives on the entire process. The study's findings indicated that there was a substantial difference in vocabulary size between the pre- and post-tests. The game *Adventure German-A Mysterious Mission* was found to have contributed to the participants' success. According to their diaries and in-class interviews, participants valued the game as a teacher and as a learner. But, because the texts and dialogues were longer, the majority of players reported that certain parts of the game were perceived as duller than others. Twelve of the participants cited technology obstacles as a source of difficulty, seventeen cited gaming challenges, and twenty-one cited language tasks as a source of difficulty. Additionally, according to the findings, the difference in test scores between female and male participants (fifty-three females and seven men) was not statistically significant.

Another study, which instead used COTS games conducted by Chen and Yang (2013), sought to investigate if DBGLL would have any affect on EFL students' learning of new vocabulary items as well as other language skills. In their procedure, the participants were divided into groups of two and required to play the COTS adventure puzzle video games *BONE 1* and *BONE 2* and it was mandatory for the participants to complete a vocabulary pre- and post-test. Individuals had 15 minutes to complete the pre-test. Then, individuals were asked to cease playing after 1.5 hours and complete a 15-minute post-test after accomplishing the temporary goal. The experiment took around 2 hours to complete. The results displayed that the participants achieved better scores on the target vocabulary on the post-test and also illustrated that they improved their general English ability, listening ability, reading ability, and vocabulary knowledge after the gaming sessions. After playing the adventure game, both groups acquired new phrases, but there was no statistically significant difference in post-gaming vocabulary improvements, indicating that the note-taking group did not outperform the other. Following this, a survey of 35 college students was conducted to assess their views about the adventure game. In the second study, participants were given complete freedom to explore the game in their leisure time. After a brief explanation on how to play, the players were given sixteen weeks to finish the two episodes. Students said the game helped them improve their language skills and motivation, according to the research. Students also stated that the game's fascinating design made it enjoyable to play.

A more recent study by Lai and Chen (2021) sought to see how virtual reality (VR) and personal computer (PC) gaming affects language learners' vocabulary learning and emotional perception. The research included thirty Grade 12 high school students who were randomly allocated to either the VR or PC groups. The VR group used the Oculus Go to play *Angels and Demigods*, a sci-fi VR visual novel game, while the PC group played the same game but without the VR aspects with the main aim for both being to complete the visual novel game without consulting any dictionaries or other sources for word meanings. For both groups, the game session lasted fifty minutes. To compare their performance, a vocabulary translation and recognition pre-test, post-test, and delayed post-test were used, as well as a questionnaire to delve into their attitudes regarding their various treatments. In both the translation and identification tasks, the findings demonstrated that both the VR and PC groups were able to develop word knowledge. In the delayed post-test on vocabulary translation, the VR group had a substantially higher mean score than the PC group. According to the survey, both groups of students enjoyed playing the visual novel game and were eager to use it to learn language.

Another study authored by Miller (2006) sought to see if gaming pared with supplemental material, supportive material and explicit vocabulary instruction prior to playing would enhance vocabulary acquisition. The study, which was five weeks long, required the participants to once a week for fifty minutes play the COTS simulation game *The SIMs*. The participants were eighteen intermediate adult ESL students who were divided into different control groups in which participants obtained mandatory supplemental materials in the first condition, voluntary access to supplemental materials in the second, and no supplemental materials in the third (Miller, 2006. p.311). Cultural comments about the game, vocabulary lists, and instructions on tasks for each gaming session made up the supplemental material. When participants used extra materials, as in the first condition, results revealed a statistically significant gain in vocabulary and the extra resources were useful in completing the task, according to student assessment. It also showed that prior to gaming, explicit vocabulary instruction had an impact on vocabulary acquisition.

Additionality, a separate study which also was based on the game *The SIMs* reported comparable results about vocabulary enhancement following gaming sessions in a study about vocabulary learning and the utility of COTS games in the language classroom (Ranalli, 2008). The major goal of Ranalli's (2008) research was to see if simulation video games could be effectively integrated into the language classroom. Nine L2 students were divided into two

groups, one playing the game and the other using extra resources such as gameplay instructions and goals for each day's play, vocabulary items, online dictionaries, and cultural comments. The participants were also required to do a pre-test and post-test after the gaming session to assess their vocabulary understanding of the study's target vocabulary. The participants were also asked to rate their experiences with the game in terms of language acquisition after the gaming sessions throughout the course of the study's four weeks. They were also questioned about their opinions regarding enjoyment of playing the game. The findings showed that *The SIMs* was popular among the participants and many were open to the concept of incorporating it into the ESL classroom. The results also showed that COTS games may be included into ESL classrooms with theoretical direction. However, there are issues in this context that should be examined. For starters, *The SIMs* simulation computer game is unexpected since there are several paths to achieving the teacher's objectives. As a result, the target language that the pupils are supposed to learn may be overlooked since the player might choose a different path to attain the stated objectives. Bestowing the pupils further explicit instructions might fix the problem, but it might also reduce the game's appeal. Thus, teaching vocabulary with *the SIMs* may prove problematic unless the instructor could modify the game's source code to make it more appropriate for an ESL classroom, which might not be possible for all teachers and might prove time consuming.

Horowitz (2019) proposed that there could be a link between MMORPG players' propensity to speak in the second language in the ESL course. These games provide L2 learners with consistent genuine contexts in which they are encouraged to utilise English. Horowitz's (2019) study's major goal was to see if there was a link between MMORPG gamers and their desire to converse in the L2 in the ESL classroom. Many students in a formal language school have communication anxiety even before joining the classroom, especially when it comes to oral communication. Horowitz's (2019) study included seventy-six Spanish-speaking college-level ESL students who volunteered to participate. Participants had to be over the age of eighteen and used to playing video games to be eligible. Participants were asked to fill out questionnaires about their level of anxiety in the language classroom, their willingness to communicate in the classroom if given the opportunity, and their experiences playing online multiplayer video games, as well as their English usage preferences while playing said games. The findings revealed a link between MMORPGs and communicative anxiety and readiness to communicate in the language classroom. By providing a low-anxiety informal atmosphere, playing MMORPGs reduced students'

communicative anxiety and enhanced their readiness to interact in English. Students' motivation to play MMORPGs was boosted by delivering compelling content, resulting in permanent and genuine environments for students to learn their second language.

Dungeon Master, which is a Problem-solving game, need meticulous preparation, thought, and note-taking. This type of interactive video game might be used to push students to master communication skills in an ESL classroom. Baltra (1990), who evaluated Malone's (1981) research on what makes video games interesting and what traits motivate players to keep playing goes on to explain how the findings of these research might be analysed from an educational standpoint. Malone (1981) conducted a systematic study of around 100 people while they were playing video games to understand what would inspire them to keep playing and what made the game enjoyable. Several things were discovered to boost motivation. The most important features discovered were clear goals, frequent feedback, concealed knowledge, and unpredictability. These many aspects all provide various opportunities, which, according to Baltra (1990), are already present in the ESL classroom. As a result, video games might be simply integrated into an ESL classroom.

Finally, Rama et al. (2012) investigated six L2 learning university students with varying degrees of competency in the MMOG World of Warcraft. The students were taught the fundamentals of the game and encouraged to play for roughly five hours each week for seven weeks. The students' video game conversations were videotaped for future study purposes, and they were also asked to write brief diary entries after each gaming session. Throughout these weeks, the students were quizzed on their interactions with other players, hurdles, and linguistic abilities while playing the game. After investigating these elements, Rama et al. (2012) discovered that MMOG WoW supports safe language learning environments, the ability to acquire and comprehend communicative contexts, and goal-directed teamwork among people with varying levels of English language competence. These findings show that MMOG games might be used in the ESL classroom to increase sociability among L2 and native speakers while also improving conversational skills in a safe language setting. However, a more systematic approach to using MMOG in the ESL classroom is essential for the most effective progression of language acquisition with MMOG.

According to the reviewed sources, DGBLL appeared to aid language cognition in a variety of ways, including decreasing anxiety (Horowitz, 2019), giving authentic safe spaces to speak English (Rama et al. 2012), offering explicit vocabulary instruction (Miller, 2006), and enhancing language usage in certain settings (Rama et al. 2012). Nevertheless, as

previously stated, few studies have been conducted on the influence of COTS games on pupils' listening comprehension, and, even fewer in the Swedish ESL classroom in relation to COTS games and listening reception.

4 Method

In this intervention study, both qualitative and quantitative data were collected using a mixed-method experimental design (Vaus, 2001). The quantitative data was gathered via a pre- and post-intervention listening comprehension test. The qualitative data was gathered through an open-ended questionnaire in which the participants were questioned about their opinions regarding DGBLL and COTS games usage in their ESL class. The following sections will further explain the methodology used in this study.

4.1 Participants

The participants in this study were twelve pupils from an upper secondary school in western Sweden. The participants were members of the same EFL class, and were all aged sixteen. All of the pupils were performing arts majors. The pupils were scheduled for a total of three lessons of English each week, and each lesson was approximately one hour long (see Appendix A). All the pupils were required to actively consent to their participation in the study by signing a consent form. Before the study began, all of the pupils were also given information via a PowerPoint presentation regarding what the study would entail and what it would require from them as well as what it would mean for them (see Appendix B). Out of twenty-three pupils, nineteen gave their consent to be a part of the study. However, when processing the data gathered in the study, seven pupils were excluded from the study due to insufficient data and because of high absence from class. This resulted in the final twelve participants which this study is based on. Out of the twelve participants, a total of nine identified as male whilst three identified as female which can be seen in the following figure 1 which depicts the gender of the participants, with blue denoting a girl and green denoting a boy.
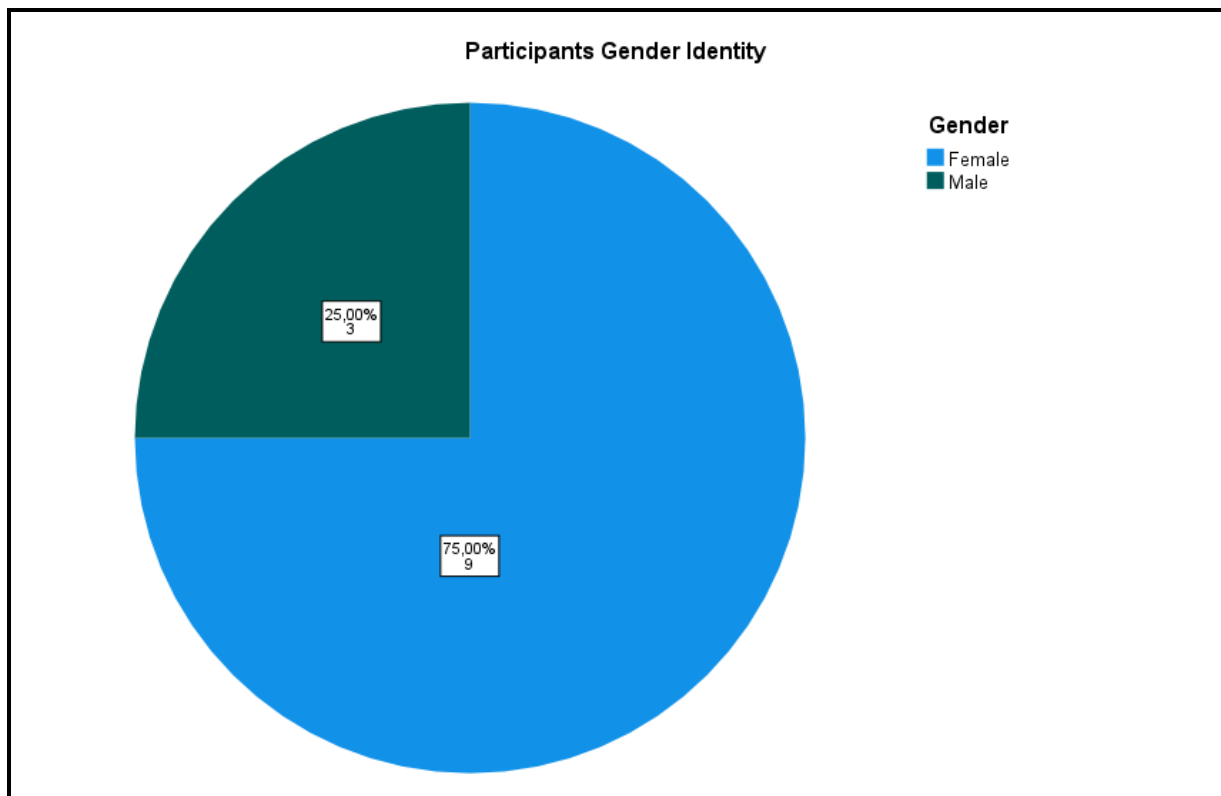
Figure 1.

Participants Gender Identity

4.2 Material

The material used in this study was the COTS game *Life is Strange 2*- episode one.
Participants accessed the game through the website *Steam*, and the game was free to play. The
game consists of five different episodes, but for the following study only episode one, which
is approximately three to four hours long, was used since it was free to play and deemed time
efficient. Sean and Daniel, two Hispanic American brothers, are the key characters of the
game. After the younger brother learns his telekinetic abilities, the two siblings flee the police
throughout the US West Coast. In the third-person view game, Sean, the player, must make
crucial decisions as a surrogate parent for Daniel, which will lead to many branchings in the
story. Throughout the game, the player must make options that lead to alternative stories at
key points in the game, although the story's essential events remain the same regardless of the
player's choice, despite the game's multiple endings. While the game has supernatural
elements, the tale is primarily based on reality, and the developers used the chance to
highlight current societal concerns such as racism, gun violence, and prejudice (Life is
Strange 2, 2022). The game is a red-thread narrative, Adventure, Point and Click, Role

Playing Game (RPG) in which the player must collect and acquire clues dispersed around the environment using a computer mouse or other pointing device to control their character using a point-and-click interface. The player can converse with other characters in the games, and the player can also hear the main character's inner thoughts. Continuous subtitles accompany the game, illustrating both what the characters are saying and what they can accomplish.

The game *Life is Strange 2* was also chosen due to its perceived relatability to the students since as it raised currently topical issues, for example police brutality. This was deemed to be of importance since the Swedish school curriculum states that ESL classes should give pupils "the opportunity to develop knowledge of living conditions, social issues and cultural features in different contexts and parts of the world where English is used" (Skolverket, 2011). The educational system in Sweden is also based on democratic values. As a result, according to the Education Act (2010: 800), Swedish schools must develop empathy and the ability to comprehend others (SKOLFS, 2011:144). To overcome xenophobia and intolerance, knowledge, open dialogue, and active efforts must be employed. School education, according to the Education Act (2010: 800), is to assist students in learning and developing knowledge and values. The inviolability of human life, individual independence and integrity, equal worth for all human beings, gender equality, and human solidarity are principles that education must develop and convey. As a result, the game *Life is Strange 2* appeared timely because it raises issues related to these concerns. The game was also chosen in relation to its motivational factor and in relation to its many accolades it has been nominated for, one example being the UZETA award for best original screenplay (IMDb.com, *Life is Strange 2,* 2018). Other than the game itself, the students also received a walkthrough of the game which was written in the target language (see appendix C). This walkthrough was provided to them to make sure that they would be able to advance in the game even if they were not accustomed to playing video games.

For the listening comprehension test an example of a National Test, which was found on the University of Gothenburg's website called 'Ten Journeys of a Lifetime', was used on both the pre-test and the post-test (Göteborgs Universitet, n.d.). The test was a total of fourteen minutes and twenty-eight second and consisted of thirteen questions (see appendix D).

4.3 Procedure

The study proceeded as follows: initially, the participants gave their consent to participate in the study and were informed about the study and what they would be expected to do. Second, data on the gender identification of the subjects was acquired. Third, the participants took the pre-listening comprehension test. Thereafter, the game sessions began, lasting a total of ten lessons. Following the completion of these ten lessons, the participants completed the post-listening comprehension test and a survey regarding their opinions about using DGBLL. Finally, the results of the listening comprehension exam were compiled and compared, as well as the responses to the questionnaire. Throughout the study, the participants were also required to answer a Google Form after each lesson to review how far they had proceeded in the game.

4.3.1 Listening Comprehension

Over the course of the month-long study, the participants were required to play the game *Life is Strange 2* episode one during their English class. The pupils had three English lessons a week, and during two of these the students would play the game *Life is Strange 2* individually on their school computers[1]. The students filled in a form/exit-ticket each lesson regarding their opinions about the game so far and how far they had gotten in the game. A pre-test post-test design was used in this study where pupils took the same listening comprehension test before and after the treatment, playing *Life is Strange 2* across a total of ten lessons. During the first lesson of the study, the pupils were given information in the form of a PowerPoint regarding what the study would be about, and what it would mean to consent to be a part of the study (see appendix B). The remainder of the first lesson revolved around aiding the pupils with downloading and installing the game, therefore, the first lesson did not involve any gaming. Furthermore, two lessons were spent on performing the pre- and post-test listening comprehension. Thus, the remaining seven lessons revolved around gaming.

The results gathered were then inserted into SPSS where the different participants were given an ID number ranging from one to twelve to ensure their confidentiality. Following that, SPSS was used to record information such as the players' gender, how many sessions they had attended, and how far they had progressed in the game.

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[1] Pupils are provided with PCs by the municipality/school for the purpose of aiding education. Therefore, pupils do not pay for these computers.

4.3.2 Pupils' Opinions about COTS Games in Education

The pupils who consented to participate in the study were also asked about their opinions on video games in the classroom. As previously stated, this study only had twelve participants due to absenteeism. However, when the questionnaire for this component of the study was handed to the participants, more than twelve of those who had consented to participate were present, enabling for extra comments to be collected for this section of the study. Google Form gathered all of the pupils' emails, which were then divided such that only those who provided consent replies were used.

Several Google Forms surveys were gathered during the study to examine areas such as how far the participants had progressed in the game. The following questions were posed on one of these surveys: What are your thoughts about playing video games during class? And, is there something you do not like about playing games during class? If yes, what? For both questions, a total of eighteen responses were gathered, and the responses were subsequently categorised into groups to offer a clearer perspective of the responses (see appendix F and G). For the first question, two categories were identified based on the responses of the pupils. The following categories were: enjoyable and the need for better equipment. Due to the pupils' uniform expression of these two groups, they became the sole ones. Thereafter, the pupils' answers were imported into SPSS where charts were constructed to aid in the presentation of the categorization and findings.

In response to the second question, a total of five distinct categories were identified, each based on the areas in which the pupils explicitly expressed. The following categories were as followed; need for better equipment, need to socialize, no issues, preference for other games and having too little time. Following the identification of these categories, they were imported into SPSS and charts were created.

5 Results

In the following sections, the results accumulated from this study will be presented in two subsections: Listening Comprehension Tests (5.1) and Pupils' Opinions (5.2). In 5.1, the gathered material from SPSS and the gaming sessions will be reviewed, and the following aspects will be reported on: results of the pre-test and the post-test, followed by a comparison;

the number of sessions attended; and gender distribution. Secondly, 5.2, pupils' opinions regarding gaming in a classroom environment will be presented.

5.1 Listening Comprehension Tests

The results will be presented in the next section in the following format: First, the Pre-Test results will be shown in 5.1.1, followed by the Post-Test findings in 5.1.2, and then, a comparison of the pre- and post-test results in 5.1.3. In 5.1.4, the number of game sessions attended by players will be shown. Finally, in 5.1.5, the gender identification of the participants and its impact on the results will be showcased.

5.1.1 Pre- Test Results

In Figure 2, the pre-test results are displayed in blue bars. On the listening comprehension test, the potential scores ranged from 0 to a maximum of 13. On the pre-test the vast majority of the participants, eleven out of twelve, scored higher than 6/13 on their results (see appendix E). Thus, the plurality of participants scored over 50% on the pre-test. Only one student out of twelve scored under 50%, with a result of 5/13. However, only five students received a higher score between 10-12/13.

5.1.2 Post – Test Results

The post-test results are shown in Figure 2's orange bars. When viewing the results from the post-test, all of the participants scored over 50%, with a total of ten participants scoring between 10-13/13. The gathered results from the listening comprehension tests showcased that out of twelve participants, eight of them had a higher score on the second test.

5.1.3 Listening Comprehension Test Results Comparison

Approximately 67% of the participants had a higher score on the post-test. Nevertheless, the degree of how much they had improved varied with the greatest improvement being 5 points and the biggest deterioration being -2 points. Figure 2 showcases a chart with the Interview ID of the participant and their results on the listening comprehension tests. On this chart, the different results are viewed side by side to better be able to see the difference between the listening comprehension pre-test (LC1R) and the listening comprehension post-test (LC2R).
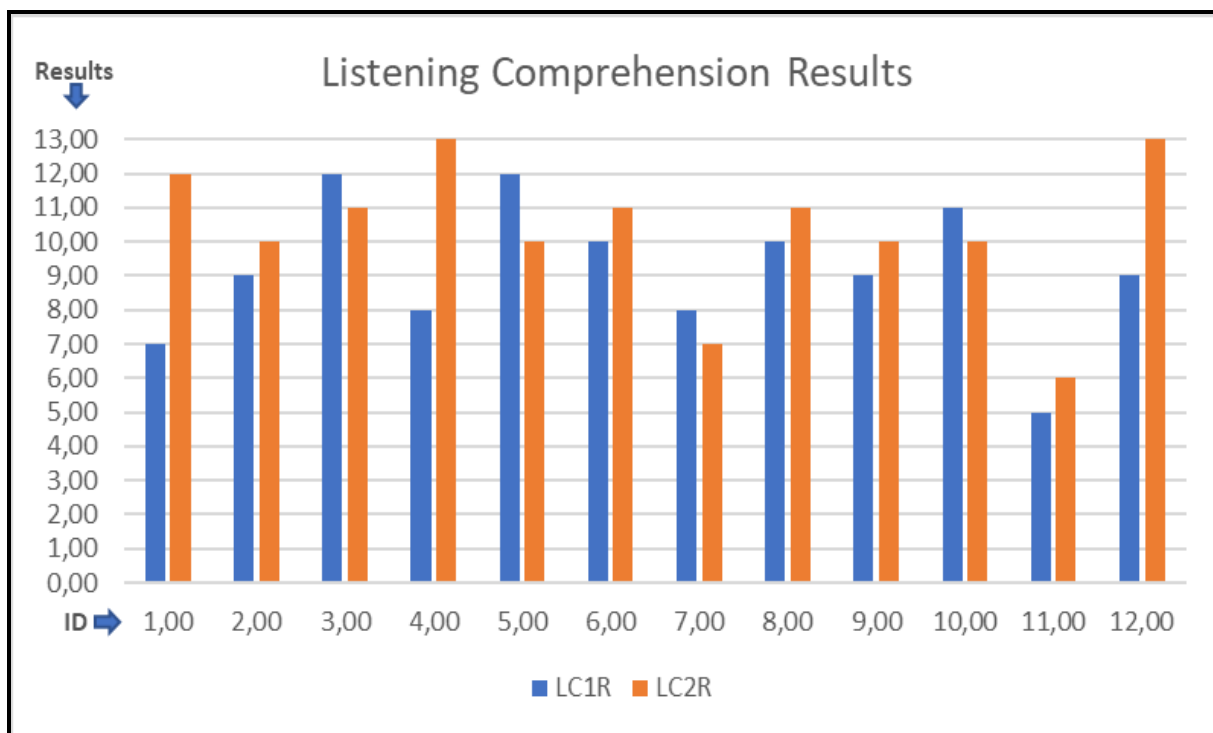
Figure 2.

Listening Comprehension Results

5.1.4 Attended Sessions

When reviewing how many gaming sessions the participants attended the number varied between a total of three to seven sessions (see Figure 3). Out of thirteen, four participants attended 7/7 sessions, five attended 5/7, two attended 6/7 and one attended 3/7 sessions. The participants 1, 6, 8 and 10 had the highest rate of attended sessions with a total of 7/7. However, only one of these participants, number 1, had an improvement of five points. Participants 6 and 8 both had an improvement on one point, whilst participant 10 had a lower result of minus one point. Participant 2 and 3 both attended 6/7 times and number two increased their result with one point whilst number two decreased their result with minus one. Participants 5, 7, 9, 11 and 12 were all present at 5/7 lessons. Pupil 5 had a minus two-point difference, pupil 7 minus one point, attendee 9 and 11 both had plus one point and number 12 had an increase of four points. Lastly, participant number 4 attended 3/7 sessions and had an increase of five points. Thus, no correlation could be found between high attendance and highly increased results. Figure 3 displays how many gaming sessions the participants been attending. On the bottom, the interview ID can be seen, ranging from one to twelve. The

stacks show the number of sessions the participant has attended, which could range from zero to a total of seven.
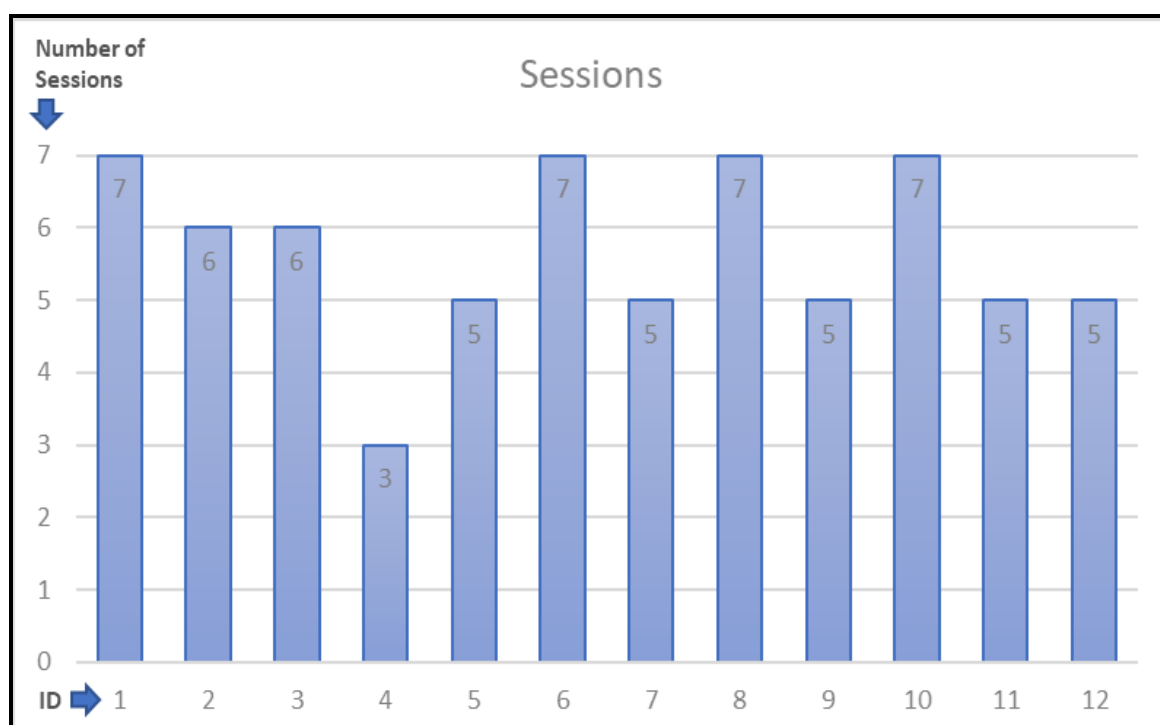

Figure 3.

Gaming Sessions Attended by the Participants.

5.1.5 Participants' Gender Identity

In regards to the participants' gender identity, a total of nine out of twelve identified as girls (75%) whilst the remaining three identified as boys (25%). Amongst the participants who identified as boys, one of them (participant 12) had a high increase of four points, whilst the other two (participant 8 and 9) both had a total increase of one point. Hence, no evident pattern could be found in regards of participants gender and difference in results.

5.2 Pupils Opinions about COTS Games in Education

The outcomes of the two questions presented in the qualitative questionnaire will be described in two following subsections. The first one will delve deeper into the results found from question one, whilst the other section will focus on results found regarding question two.

5.2.1 What are your Thoughts About Playing Video Games During Class?

The results gathered displayed that the majority of participants reported a good attitude on utilising games in the classroom in response to the first question, " what are your thoughts about playing video games during class?". A total of 83,33 percent said they perceived using COTS games as enjoyable, and several of those who deemed it as such also stated they thought gaming made studying more enjoyable. Five of the fifteen pupils who said gaming was pleasurable said it was because it allowed them to study in a new and more interesting way. One individual stated that playing COTS games during class made them more excited to attend class, whilst another stated that it was a fantastic method to improve concentration (see appendix F for all the participants answers). Other pupils stated that incorporating COTS games in their schooling proved calming for them. Some pupils also conveyed their enthusiasm for the gaming activities by saying they "loved" using COTS games during class which is shown in Figure 4. Figure 4 depicts the categories created in relation to question one, "What are your thoughts about playing video games during class?". Two categories, enjoyable and need for better equipment, are presented and the number of participants in each category is shown inside the chart.
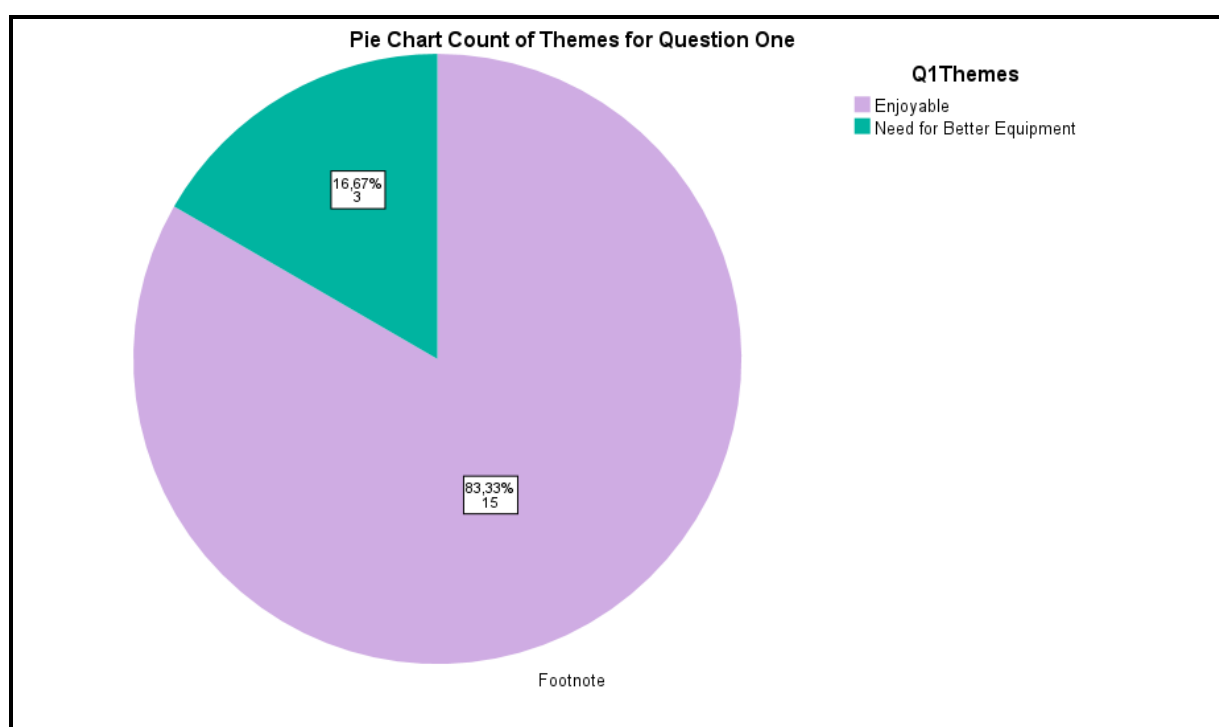

Figure 4.

Pie Chart Count of Themes for Question one.

Despite the fact that all of the pupils expressed some sort of enjoyment in relation to COTS games in education, three of the participants mentioned a need for improved equipment to better be able to take part of the games. Such equipment as better headphones or need for a computer mouse. One pupil additionally stated that their computer was having technical issues which resulted with the video game continually closing. To summarise, the vast majority indicated enthusiasm for using DGBLL in their language classroom, and while some stated a desire for improved equipment, the overall sentiment remained favourable.

5.2.2 Is There Something you do not Like About Playing Games During Class? If yes, What?

In relation to the second question posted to the participants, "is there something you do not like about playing games during class? If yes, what?" five categories were found. The categories were need for better equipment, need to socialize, no issues, preference for other games and having too little time (view appendix G for all of the participants answers). Figure 5 displays a pie chart which depicts the categories created in relation to question two, "Is there something you do not like about playing games during class? If yes, what?". Five categories, need for better equipment, need to socialize, no issues, preference for other game genres and too little time were found. are presented, and the number of participants in each category is shown inside the chart.
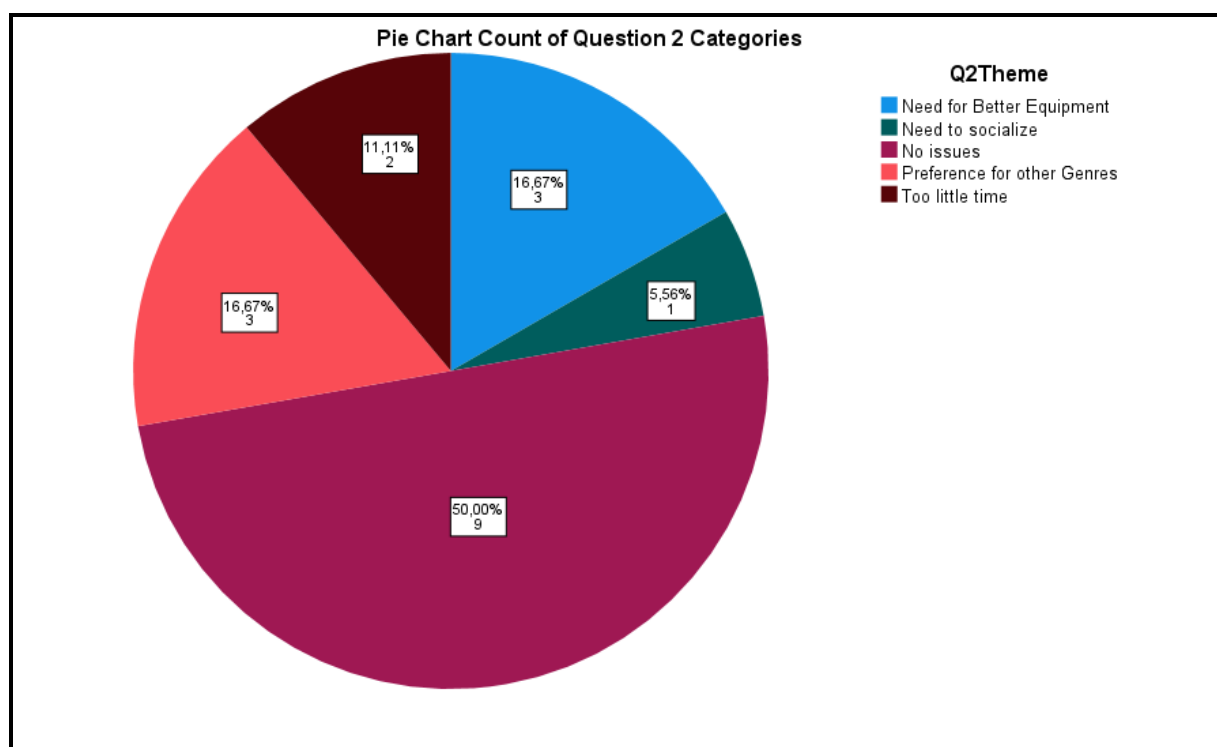
Figure 5.

Pie Chart Count of Question 2 Categories.

A total of five pupils expressed that they could not find any issues regarding using DGBLL whilst the remainder of participants expressed certain areas which could create a better usage of video games in the classroom. Three participants said they required better equipment, such as a controller, and that their PCs weren't up to speed for playing the game. Three additional pupils responded that they had no difficulties with gaming in class but preferred different game genres. Two pupils also claimed that the allotted time for playing the game was insufficient, and that they would need extra time. Despite their opinions, the vast majority of the participants in the survey were able to finish the first episode of *Life is Strange 2*. Finally, one participant stated that they would like to be able to include more socialising into their gaming experience because video gaming culture encourages silence. Nonetheless, the participants indicated that they appreciated DGBLL in general, even though some parts of how to utilise it in the classroom could be improved.

6 Discussion

The following study attempted to answer two separate research questions: How does Playing the PC Adventure COTS Video Game *Life is Strange 2*-Episode One affect the Participants' Listening Reception? And, What are the Participants' Opinions Regarding the Usage of COTS Games for Educational Purposes? The study employed the COTS game Life is Strange- episode one to examine these topics in a Swedish EFL upper secondary school. The following section is divided into four different subsections. The subsections are firstly, How does Playing the PC Adventure COTS Video Game *Life is Strange 2*-Episode One Affect the Participants' Listening Reception? Secondly, What are the Participants' Opinions Regarding the Usage of COTS Games for Educational Purposes? Thirdly, Limitations. And finally, Using COTS Games in the ESL or EFL Classroom.

6.1 How does Playing the PC Adventure COTS Video Game *Life is Strange 2*-Episode One Affect the Participants' Listening Reception?

In relation to the research question How does Playing the PC Adventure COTS Video Game *Life is Strange 2*-Episode One Affect the Participants' Listening Reception?, results demonstrated that the majority of the pupils did indeed perform better on the post-listening comprehension exam. Correlating with previous studies' results, such as Lai and Chen (2021) and Chen and Yang (2013), which have shown that there has been a transition in the direction of improved outcomes when using DGBLL. The findings of this study also revealed that there was no clear link between greater outcomes and a certain gender identification, as also demonstrated by Alyaz and Genc's (2016) research. The vast majority of people in this study identified as female, similar to Alyaz and Genc's (2016) findings, yet there was no statistically significant difference in outcomes depending on gender identification. However, it is debatable if the findings in this area are reliable since the research may not have been able to precisely measure what it was supposed to be testing. Instead, if the individuals were more evenly distributed between those who identified as female and male, the results might have been more trustworthy, and the same may be said of Alyaz and Genc's (2016) findings on gender identity and variations in outcomes.

Interestingly, this study looked into an area that others had not: how the quantity of gaming sessions affected the outcomes. Nonetheless, there was no apparent link between the number of sessions and better outcomes. But the above-mentioned sources have not included this region, which might be because the players were expected to be present throughout their gaming sessions to a higher extent. Because this study was conducted over a short period of time and with a small group, it would be interesting to see if the number of sessions influenced the outcomes with a larger group over a longer period of time. The number of sessions each pupil attended was examined in this study to see if those who attended more sessions obtained a better post-test score. But, as previously noted, the data showed that the number of sessions had no discernible effect on the outcomes. This might be related to the fact that participants progressed through the game at varied rates, meaning that some players were able to move further in the game in fewer sessions than others who required more. Thus, numbers of sessions might not rightfully be able to predict whether or not a pupil might receive a higher score or not. Hence, it might be of interest to investigate why pupils

advanced at various rates. This might have been determined by whether or not the participants were video game players; if they were, they may have been more familiar with the game's layout and thus progressed more quickly. As a consequence, when planning future research, assessing sessions as well as how far participants advanced in the game in contrast to their past gaming experience would be a more interesting method to examine how each session affected the final results.

Several prior research, including Rama et al. (2012) and Ranalli (2008), have concluded that a more systematic approach is required to better integrate COTS games into the classroom. However, no such findings could be obtained in this study when the COTS game *Life is Strange 2* - episode one was used in the classroom. This might be because the game in use was more structured around a red-thread plot, requiring less explanation of how the students should play in order to accomplish the teachers' objectives.

Nonetheless, the findings of this study were comparable to those of other studies in that the great majority were linked to improved performance after gaming sessions (e.g., Chen & Hsu, 2020; Baltra, 1990; Miller, 2006).

6.2   What are the Participants' Opinions Regarding the Usage of COTS Games for Educational Purposes?

Participants appeared to enjoy playing video games, according to the research evaluated, which looked to be a regular occurrence (Chen & Yang, 2013; Lai & Chen, 2021; Ranalli, 2008; Horowitz., 2019). Correspondingly with Ranalli's (2008), Chen and Yang's (2013) and Lai and Chen's (2021) results, when asked what they thought of DGBLL, the great majority of participants in this study said that they appreciated utilising it in the EFL classroom. Many participants, however, voiced a need for improved equipment, echoing Baltra's (1990) comment on the importance of being able to provide pupils with adequate equipment that can handle the video games. One participant also enquired as to why their game was continually malfunctioning, which is something that also Alyaz and Gencs' (2016) participants mentioned as a concern. Twelve of Alyaz and Gencs' (2016) participants stated that the technological issues which could come up when gaming was deemed as problematic.

According to one of the categories revealed in responses to this survey question, other game genres than the one used in this study would be preferred by some of the pupils. As stated by the participants in Alyaz and Gencs' (2016) study, as the game's texts and

conversations became lengthier, the majority of players thought that certain aspects of the game were duller than others. Because the participants in Alyaz and Gencs' (2016) study played a serious game, one designed solely for educational reasons, it is possible that certain components of the game might be seen as duller because it was not designed for amusement. This might be connected to the fact that the participants in this research found the game to be dull because it was not in their favourite gaming genre. Contrary, it's worth noting that the participants in Alyaz and Gencs' (2016) study were second-year pre-service teachers, so they could be more likely than upper secondary pupils to appreciate an educationally focused game.

6.3 Limitations

Despite the fact that this study yielded positive results, there are a few limitations to consider. To begin with, even though other researchers have used the pre-test post-test approach before, such as Ranalli (2008) and Lai and Chen (2021), there are several areas that may be considered problematic. First, since the identical listening comprehension exam was utilised twice, the reliability of the pupils' replies is in issue. When pupils take the test for the first time, they do it in the manner in which they are required. However, the pupils have previously been exposed to the exam on the post-test, which might cause a problem in relation to reliability (Vaus, 2001). According to Vaus (2001), testing participants multiple times might taint findings because participants may recall past responses and answer questions in a consistent manner. Similarly, being familiar with an exam might help you do better. Nonetheless, the same listening comprehension test needed to be utilised twice to ensure being able to compare results.

Another issue that might be considered problematic is the absence of a control group. Considering previous research, both Ranalli (2008) and Miller (2006) facilitated the use of control groups to confirm the accuracy of their findings. Henceforth, using a control group to confirm that the students genuinely acquired their new better outcome from playing the game *Life is Strange 2*- episode one might be advantageous. According to Vaus (2001), it is deemed of great importance to facilitate a control group since experimental design tackles validity difficulties in educational research by utilising control groups that are similarly exposed to uncontrolled external events, with the experimental intervention remaining the sole difference between the groups. Thus, it would prove easier to see if the group that played the game

received greater scores than the control group if a control group did not play the game. However, due to a limited number of pupils, this was not possible. A control group would have been formed if another class had been able to participate. But, given the small classes, this was not considered feasible.

Moreover, as previously stated, the outcomes of this study indicated improved post-test results, implying that the participants' listening comprehension had improved. However, the cause for this occurrence is debatable in the case of this study since expecting the gaming sessions to be the only basis for their improved outcomes, would be misleading. Since the pupils were only exposed to the game twice a week, they may have experienced other aspects than the game that may have benefited their listening comprehension. Yet, prior research, such as Miller (2006), have also been conducted within a short period of time and have shown improved outcomes. As a result, even if the current study was conducted over a short period of time, the results should still be considered. It is crucial to note, however, that Miller (2006) employed control groups to examine the difference between using additional material and not using it, whereas this study did not use any form of control groups. As a consequence of the use of control groups, Miller (2006)'s findings may be considered more trustworthy. Even though precautions were taken to guarantee that other EFL classes attended by the participants outside of the research did not include any components of listening comprehension, the pupils' leisure could not be accounted for. As a result, the participants may have improved their listening comprehension outside of the gamified classroom. Unfortunately, the areas that specifically improved the pupils' outcomes cannot be seen in the data since retracing every aspect of the children' leisure would be time intensive and perhaps unrelated to the study.

Another factor to explore in future study is whether or not to include people with various educational majors. It's possible that the results of this study were influenced by the fact that all of the participants studied performing arts. As a result, it would be interesting to observe if the findings of a different set of pupils majoring in anything else would be provide other results. Also, because the majority of the participants identified as female, it would be interesting to see if a more evenly distributed class would have different results. However, previous research performed by Alyaz and Genc (2016) have highlighted that they found no evident correlation between gender and results. However, because the participants were primarily female (53 women and 7 males), it would be beneficial to have a more evenly divided group to get more realistic findings. This may also be claimed for this study, as there

were more female participants than male individuals. Nonetheless, the findings of this study and Alyaz and Genc (2016) agree that gender had no discernible impact on the outcomes.

Yet another area to consider is the time period during which this study took place. This study, which lasted four weeks, may be deemed short. Nevertheless, previous studies, such as Chen and Yang (2013), which only lasted two hours, were able to acquire data that demonstrated that DGBLL and the usage of COTS had positive effects. As a result, the results of this research should be regarded seriously.

An equally important aspect to consider is the participants' modest size. The number of competitors was decreased to twelve due to absenteeism. A larger sample of participants would be required for increased reliability, therefore having a group of more than twelve persons would be advantageous in future study.

6.4 Pedagogical Implications of Using COTS Games in the ESL or EFL Classroom

As previously stated, due to factors such as the game's difficulty level, the delivery pace of dialogue and subtitles in COTS games, and the fact that not all schools can afford video games that both inspire pupils and are appropriate for their ability levels, incorporating COTS games into the language classroom may be difficult (Baltra, 1990). So, because pupils have varying degrees of competence, selecting a game that caters to the entire class might be difficult. Several aspects that games offer that promote motivation, such as clear goals, regular feedback, concealed information, and unpredictability, are already present in the ESL classroom, according to Baltra (1990). And, as a result, incorporating COTS games into the language classroom should not be difficult (Baltra, 1990).

In this study, a point-and-click adventure game called *Life is Strange 2*-episode one was employed. The narrative in this game was linear, which allowed the instructor to readily predict what would happen in the game. Even while the subtitles of certain games cannot be changed to help all pupils learn, which according to Chen and Yang (2013) is crucial, utilising a streamlined game may help teachers include DGBLL in their classroom. As previously noted by Ranalli (2008), utilising the game *The SIMs* generated some complications since the game provided the players too much freedom to explore the virtual world, causing them to overlook the target language. Horowitz (2019) further claims that using MMORPGs in the classroom creates a low-anxiety environment in which pupils may practise their second

language in a motivating manner. However, because MMORPGs like *World of Warcraft* provide a large space for people to interact with, it may be difficult for a teacher to verify that the pupils obtain what the instructor desires (Rama et al. 2012; Horowitz, 2019). As stated by Ranalli (2008), teacher could choose to give pupils clearer direction of what they are supposed to achieve each gaming session, but unfortunately this might result in decreased motivation from the pupils. Conversely, teachers would be able to arrange their instruction more quickly if games like *Life is Strange 2* were used instead in the language classroom since the game has a streamlined plot. So, even if the players are given some options, none of them affect the game in such a way that the player is fully diverted from the desired target language. Players must also explore the virtual environment by clicking and pointing in the game, and they must continually acquire information about regions, so pupils may re-click them to confirm that they have heard the description and language correctly. This type of red thread narrative might make it easier for teachers to organise their lessons from the game because there will be no unexpected and unplanned events as in *The SIMs* (Ranalli, 2008) or in *World of Warcraft* (Rama et al. 2012). Games like *The Wolf Among Us*, *Deponia*, and *The Book of Unwritten Tales* are examples of games with a more red-thread storyline. These games may also be more in line with the Swedish Education Act (2010: 800), as red-thread narratives usually revolve around some sort of storyline, which may correspond to topics that Swedish schools should address. These games, as opposed to popular battle royale games like *Fortnite*, may better align with democratic values that should be taught in Swedish schools, making them easier to apply in the classroom (Fortnite, 2022).

7   Conclusion

This study sought to answer the two following questions: How does Playing the PC Adventure COTS Video Game *Life is Strange 2*-Episode One Affect the Participants' Listening Reception? And, What are the Participants' Opinions Regarding the Usage of COTS Games for Educational Purposes? Twelve and eighteen students from a Swedish Upper Secondary School took part in this four-week research to obtain answers to these issues. The participants were expected to play the COTS game *Life is Strange 2*- episode one twice a week during their EFL classes. A pre- and post- listening comprehension test, which was a previous national exam examination in Sweden, were used to determine if the participants' results would alter after gaming sessions. The findings revealed that participants did indeed

perform better on the post-listening comprehension test, but there was no correlation found with the number of sessions completed. As a consequence, this study emphasises the need of determining whether the improved results were indeed due to gaming or due to something else. However, the findings of this study are consistent with those of previous studies such as Chen and Yang, (2013), Lai and Chen, (2021), Ranalli, 2008, and Horowitz, (2019) in that they all present results that mirror the findings of this study, namely, that post-gaming participants performed better when tested.

This study also examined the opinions of eighteen pupils from the same class regarding the usage of COTS games in the EFL classroom. Participants were asked two questions in relation to this. Firstly, What are your thoughts about playing video games during class? Secondly, Is there something you do not like about playing games during class? If yes, what? The majority of the eighteen participants who responded to the survey expressed that the COTS game *Life is Strange 2*- episode one to be engaging and stated a specific incentive aspect that was present while playing the game. This outcome was also consistent with past studies, which revealed that participants valued and expressed enjoyment when utilising COTS games in an educational setting (Chen & Yang, 2013; Lai & Chen, 2021; Ranalli, 2008; Horowitz., 2019). Further, the answers found that if there was something that the participants did dislike about using games in the EFL classroom, it was that they would prefer better equipment to better be able to play the game or that other gaming genres than the one used in this study would be preferred to be used.

The discussion of this study raises a significant issue concerning some of the study's flaws, which should be addressed when future research is planned. A lack of a control group, a study conducted over a short period of time, a small number of participants, and whether or not to include people with different educational majors are all things to consider. Aside from that, the study suggests that if COTS games should be used in the EFL or ESL classroom, using red-thread narrative games such as *The Wolf Among Us* could aid teachers implement COTS games in the classroom because these games are based on a linear story, which, unlike *The SIMs* (Ranalli, 2008) or *World of Warcraft* (Rama et al. 2012), makes it easier to know what to expect next in the game and thus be able to better plan lessons around video games. Moreover, according to this study, using COTS games in the Swedish classroom would be beneficial because COTS games, as opposed to serious games, bring up certain topics that are required to be taught under the Swedish Education Act (SKOLFS, 2011:144), such as the

inviolability of human life, individual freedom and integrity, equal worth for all people, and gender equality.

To summarise, the findings of this study were positive, and it is possible to argue that video games may be used in the EFL classroom to aid students' learning of listening comprehension. Even though there are certain drawbacks to using video games in the EFL classroom, such as the game's difficulty level, including them in might help students improve their listening comprehension while also providing a different and enjoyable approach to teaching the TL. Yet, further research on how to employ video games in the EFL classroom is needed before a firm judgement can be formed on their usefulness in the EFL classroom in terms of improving pupils' listening reception. Furthermore, additional research into the use of DGBLL and COTS games in Swedish EFL classrooms is essential.

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Appendix

Appendix A

Schedule of English lessons during a week.

Appendix B

The PowerPoint presented to the pupils regarding what the empirical study would entail. The original version of the PowerPoint included more colour, but this version has been edited to better concord with an academic text.

Why this theme?

Empirical Study

- A research about Digital Game-Based Language learning (Learning English by playing Video Games)
- Collecting Material which I will review
- You all will be *anonymous*

Material

- A Listening Comprehension test which will be taken before and after the game is played.
- You do not have to prepare
- The test will NOT be graded

- A Listening Comprehension before and after all the gaming lessons

- A survey on Google docs regarding your opinions on playing video games in class

- You will be anonymous

- A list on where you can write your name if you wish to be in the study

A view of the walkthrough the pupils were provided with. The original PDF walkthrough is six pages long and include information regarding what to do in the first episode of *Life is Strange 2*.

Life is Strange 2 Episode 1 Walkthrough

Life is Strange 2 Guide and Walkthrough

Life is Strange 2 - Episode 1: Roads starts with a long cut-scene, which provides an introduction to the story. The game is full of choices and things you can explore, but few of them have any influence on the plot. After the first dialogues (with Lyla and deciding who in the house will get the chocolate bar) you have a free hand to visit the house, but above all to collect the things needed for the party. These are:
1. **Money;**
2. **Blankets;**
3. **Food and drinks.**

Go downstairs to the basement: in front you will find **blankets** - an item from the list. Now go to the side room (garage), where your father will ask you to give him a wrench: give him the second one, lying next to the engine of the vehicle. Then a longer dialogue will develop: Sean needs money - when your father asks you what do you need the money for you can choose the following options:
1. "Yeah, probably..." - you will receive **40$,**
2. "Just Halloween stuff..." - you will receive **20$.**

This choice will become important later in the game, because the money can be used in shops, vending machines and influence your relation with your brother.

Return upstairs. From the hanging cabinet in the kitchen you can collect **cakes, sweets** or **chips.** And from the fridge: **beer** or **carbonated drinks. It doesn't matter what you choose.** These items will only appear in cutscenes but will not affect the interaction.

That's all for the items needed for the party. **It's also worth going into Sean's room next to the bathroom before storing items in your backpack.** You'll find some extra items that may be useful:

1. Desk drawer - **weed pipe;**
2. Yellow night cabinet - **condoms (you'll find them after you move the books).**

Don't forget to sit on the red pouffe in the corner of the room to make a **sketch** - these are also the images you acquire to your collection, and for making a sketch you will unlock the **Sketchy** trophy (there are also other places to make drawings if you miss this place). First hold down the action key to focus on the surroundings and memorize the sketch, then look at the sheet of paper, hold down the action key again and quickly move the stick/mouse to complete the picture.

Finally, pack all the gathered items into your **backpack** at the front door.
Proceed by returning to your room and powering up your laptop - now you have the option "Call Lyla". During the conversation with Lyla you can make several side interactions, like making a drawing on a sheet of paper. The conversation will stop when Lyla tells you to check Jenn's profile on your computer - click on your laptop.

The rest of the game will start when you look out of the window, where you see Daniel in trouble... At this point you will face a more important story choice - these are unavoidable and you always have to make a decision, but you do not have to rush with it. There are two options:

1. Question Daniel;
2. Confront Brett.

In this next part, you will encounter many interactive items and many exchanges between the brothers. The choices you make will influence the character of young Daniel. We mean the promises and theft opportunities.

- The Park
- Petrol Station
- Fleeing the office

The second chapter begins on the road behind the city. You play as Sean, accompanied by his brother, Daniel. After a short exchange, you will reach an abandoned car, where Daniel will find **a Choc-o-Crisp.**

The choice is:

The Swedish National listening comprehension test with a total of thirteen questions. The included version has been altered to better align with an academic test since the original included more creative elements.

Ten Journeys of a Lifetime

Listen to the following speakers talking about journeys of a lifetime. After each speaker there will be a pause to give you time to answer the questions by mar the best alternative – A, B, C or D – in the boxes.

You will hear the information only ONCE, so listen carefully.

1 What does the speaker recommend in Belize?

A hitch-hiking
B jungle treks
C water sports
D rock climbing

2 The Milford Track…

A is known for its wet climate
B is best avoided in the autumn
C has attracted boating people
D has many dangerous waterfalls

3 On the last part of the Milford Track, you go…

A by train
B on foot
C on horseback
D by boat

4 According to the speaker, Timbuktu, in Mali, is…

A popular with tourists
B gradually vanishing
C built on a cliffside
D hard to reach by car

5 We learn that in Mali there are…

A river sightseeing trips
B different ethnic groups
C spectacular mountain ranges
D modern housing projects

6 According to the speaker …

A the Base Camp can be reached by anyone
B the Sherpas are brave adventurers
C Tibet is a centre for religious activities
D the Himalayan landscape is attractive

7 The Amundsen Route in the Arctic…

A offers a variety of wildlife
B is best viewed from the air
C is controlled by Inuit groups
D was built ninety years ago

8 The Ghan link in Australia…

A is a centre for business
B offers new travel options
C passes reptile colonies
D is affected by climate change

9 About the Coral Islands, you learn that…

A One way to get there no longer exists
B Accommodation is usually expensive
C The islands attract famous painters
D Exotic fruits are sold on the beaches

10 It seems that canoeing the whole Zambezi river…

A could take up to a week
B is enjoyed by athletes
C disturbs local wildlife
D would prove expensive

11 According to the speaker, Route 66…

A attracts studio musicians
B is a long cross-state road
C is the subject of a new film
D experiences bad weather

12 Route 66 …

A has long been forgotten
B has a lot of roadside clubs
C takes you back in time
D is now being repaired

13 What is said about the migration of animals in Africa?

A The animals have to cross water
B It can be a very noisy experience
C The animals avoid the rain
D It takes place despite the wet weather

A chart with the Interview ID of the participant, as well as their results from the first listening comprehension test (LC1R), and their results from the second listening comprehension test (LC2R).

InterviewID	LC1R	LC2R
1,00	7,00	12,00
2,00	9,00	10,00
3,00	12,00	11,00
4,00	8,00	13,00
5,00	12,00	10,00
6,00	10,00	11,00
7,00	8,00	7,00
8,00	10,00	11,00
9,00	9,00	10,00
10,00	11,00	10,00
11,00	5,00	6,00
12,00	9,00	13,00

The first question in the survey, " What are your thoughts about playing video games during class?" is depicted in this graph. The participants have been numbered on the left side to make it easier to distinguish between them. These numbers are not the same as their identifying numbers and should not be confused. The replies of the participants may be seen in the middle column whilst the right column shows the themes the answers were divided into.

Q1 - What are your thoughts about playing video games during class?	Participant Answer	Themes
P1	I think playing on the lesson is something we need more. It's fun because we learn things and have fun at the same time.	Enjoyable
P2	I really enjoy it. Gaming is an intrest of mine, so being able to do it during school is a lot of fun.	Enjoyable
P3	i think its a nice twist since most teacher are against it but its a fun way to learn better english	Enjoyable
P4	I think its pretty funny but it was a little bit harder today because I forgot my mouse	Need for B.E.
P5	I don't mind it, as long as we have headphones which i'll also bring next time	Need for B.E.
P6	Love the idea, I think it's really nice to play a game individually.	Enjoyable
P7	Love it, you learn much too when you do something you think is fun!	Enjoyable
P8	I think it's awesome. It makes people more excited to go to class.	Enjoyable
P9	Its very fun, you can discuss and joke while you're playing	Enjoyable
P10	It's fun to do somethign else than just assignments.	Enjoyable
P11	It's nice since you can talk with your classmates	Enjoyable
P12	I think its fun, its very relaxing	Enjoyable
P13	It's nice a good way to concentrate	Enjoyable
P14	Why does the game crash so much.	Need for B.E.
P15	Is fun and a great way to learn	Enjoyable
P16	Super chill and nice	Enjoyable
P17	YES oMG wE LOVE IT	Enjoyable
P18	It's very fun	Enjoyable

Appendix G

This graph depicts the second item in the poll, " Is there something you don't like about playing games during class? If yes, what?" To make it simpler to identify amongst the players, the left side has been numbered. These are not the same as their identification numbers and should not be mixed up. In the middle column, the responses of the participants can be viewed whilst in the right column the themes are showed.

Q2 - Is there something you don't like about playing games during class? If yes, what?	Participant Answer	Themes
P1	no	No issues
P2	No	No issues
P3	No	No issues
P4	No	No issues
P5	I like to socialize and you can't really do that because the classroom is so quiet and you don't want to ruin someone's gaming experience	Need to socialise
P6	No I don't think there is much I don't like except that I don't really like clicking games. I like more actions but it's still a great game!	Preference for other genres
P7	It's got nothing to do with the class itself it's just me being in desperate need of a controller	Need for Better Equipment
P8	I don't like Shaun, he is too mean to Daniel, like come on, he is a child	Preference for other genres
P9	sometimes you wanna keep playing but you dont have time	To little time
P10	Sometimes the dialouge is a bit too corny or teenage-y	Preference for other genres
P11	No, I love playing during class.	No issues
P12	The computer isn't doing great.	Need for Better Equipment
P13	That we have way to little time	To little time
P14	No i really like this game.	BetterEquipment
P15	Nope i like playing games	No issues
P16	Nope, I love it.	No issues
P17	Nothing, love it	No issues
P18	Not really	No issues