

Commercial-off-the-shelf games in the English classroom

Adapting a COTS game as a language learning tool for English language learning in an 8th grade class.

JONAS KOLSTAD

SUPERVISOR

Lenka Garshol

University of Agder, 2023

Faculty of Humanities and Education
Department of Foreign Languages and Translation

Acknowledgment

Firstly, I would like to express my sincere gratitude to my supervisor Lenka. I am truly grateful for your fast and thorough feedback, insightful comments, and constructive criticism, which have helped me develop my research skills and produce a master's thesis that I am proud of. Furthermore, I appreciate your quick responsiveness to all my emails and the numerous hours you spent helping me both in person and over email. Working with you has made this process so much easier, and I feel incredibly lucky to have had you as my supervisor.

I would also like to thank the 8th-grade class and their teacher, who participated in my project. Their participation and willingness to share their insights and perspectives have greatly enriched my research. Without them, this thesis would not have been possible.

Lastly, I would like to thank my family for their love, encouragement, and belief in my abilities. They have been a constant source of support and motivation throughout my academic journey, and I am forever grateful for their loving support.

Thank you all for helping make this thesis possible. This thesis marks an end to an era in my life but also a new beginning. I am excited about the future and looking forward to applying my knowledge and experience in my future work life.

Jonas Kolstad Kristiansand, April 2023

Abstract

This thesis aimed to investigate using a commercial off-the-shelf (COTS) game for English vocabulary learning and acquisition in an 8th-grade class in Norway. The study centers around a classroom intervention where an 8th-grade class tried the game Scribblenauts Unlimited along with additional supplemental activities during a double lesson of English. Furthermore, the study examines the same students' attitudes toward digital games inside and outside the classroom and how COTS games can be adapted and used as a tool for ESL learning in Norway. The thesis examines the connection between language learning theories and digital games and how games connect to Norway's new English curriculum (ENG01-04). A mixed methods approach was used to gather data to address the three research questions. The data includes an online survey with 21 respondents, five semi-structured interviews with ten students, field notes from the classroom, and screen recordings from the class playing Scribblenauts Unlimited. The results from the research show that the game Scribblenauts Unlimited can contribute to vocabulary learning, that most students play video games in their spare time, and that they were also optimistic about games as a tool for English learning at school. In addition, the results also show that COTS games, which are games made for entertainment, are motivational tools and can facilitate English learning in the classroom. The goal of this thesis was to show the possibilities of using digital games in the classroom and that the teacher can adapt COTS games for English learning in the classroom. Additionally, the research will build on existing research in the field and show other teachers that gaming is a teaching method worth trying with their classes.

Table of contents

Acknowledgment	
Abstract	4
List of figures and tables	7
1.0 Introduction	8
1.1 Aims of the study	9
2.0 Theoretical background	10
2.1 Games, digital games and gaming	10
2.1.1 Different types of games	11
2.2 The new subject curriculum	12
2.2.1 The English curriculum and gaming	12
2.2.2 Different ways to use COTS games in the classroom	15
2.3 Digital games and learning	16
2.3.1 Earlier research on COTS games and English proficiency	16
2.3.2 Digital games and language learning theories	17
2.4 Digital games and motivation	20
2.4.1 Intrinsic and extrinsic motivation	20
2.4.2 Game elements and intrinsic motivation	21
2.4.3 Challenges regarding games and motivation	22
2.4.4 Scribblenauts Unlimited and motivation	23
3.0 Methodology	24
3.1 Choice of methods	24
3.2 Intervention design and data collection	25
3.2.1 The game "Scribblenauts Unlimited"	25
3.2.2 Materials	26

3.2.3 The task sheet	26
3.2.4 The participants	27
3.3 Qualitative approach - Observation and Interviews	28
3.3.1 Observation and screen-recording	28
3.3.2 Interviews	29
3.4 Quantitative approach - online survey	30
3.5 Data analysis procedure	30
3.5.1 The online survey	30
3.5.2 The interviews	31
3.5.3 Screen recordings and observations	31
3.6 Reliability and validity	32
3.7 Ethical considerations	33
4.0 Results	34
4.1 Online survey results	34
4.2 Interview results	40
4.2.1 Background Questions	41
4.2.2 Out-of-school gaming	41
4.2.3 The game session and Scribblenauts Unlimited	41
4.2.4 Games as a digital tool in school	43
4.2.5 Potential downsides of using Scribblenauts Unlimited or other	
games in the English Classroom	44
4.3 Observation results	45
4.4 Screen recordings	45
5.0 Discussion	49
5.1 Scribblenauts Unlimited and vocabulary learning	49
5.1.1 Learning through input and output	49

5.1.2 Learning through interactions	50
5.1.3 Learning through repetition	51
5.1.4 Incidental learning	52
5.2 Attitudes towards gaming inside and outside the classroom	52
5.3 Adapting COTS games as a tool for English learning in the classroom	54
5.3.1 Motivation and the right level of challenge	54
5.3.2 Didactic framing and games	55
5.3.3 Digital games as digital resources	56
5.3.5 Challenges with using COTS games in the classroom	57
5.0 Conclusion	
6.1 Limitations and further research	60
7.0 References	62

List of figures and tables

Figure 1: Where do you believe you learn English?	35
Figure 2: Where do you believe you learn the MOST English?	36
Figure 3: How many hours a week do you spend on gaming?	37
Figure 4: What are your thoughts on using digital games in English class to learn English?	39
Table 1: Tutorial puzzles	47
Table 2: Carnival games	48

1.0 Introduction

Digital technology has enormously impacted modern society, completely transforming and shaping the world we live in today. The prevalence of digital technology has increased substantially among children and teenagers in the past decade, and its impact on their lives is significant. Nearly every young person owns a smartphone and a personal computer, and some even possess a tablet. These mobile devices are used for everything from communicating with friends and family, posting about their lives on social media, and accessing information online. Moreover, these devices can be used to explore their creativity through different digital tools and software, and they can be used to access various entertainment media such as music, movies, and games. Due to digital tools' wide usage and adaptability, they are also widely used in education. In schools, digital tools aid pupils in their learning processes, improve and simplify basic learning methods, and even create opportunities for entirely new learning and teaching methods. Gaming is an example of a learning method that is slowly becoming more popular in schools in Norway.

The term "gaming" is difficult to define; however, according to Spanos (2021, p. 10), the term has "recently been related almost exclusively to digital games, in other words, console, video, online and mobile phone games." Gaming is a popular free time activity for many children and teens worldwide and in Norway. According to research by the Norwegian Media Authority (2020, p. 92), 86% of Norwegian 9-18 year-olds state that they play video games, 96% of boys and 76% of girls. In addition, the percentage of girls who play has increased since the previous survey from 2018, where the percentage was 63% for girls. This shows that gaming is becoming increasingly popular among girls as well. Furthermore, 7 out of 10 Norwegian 9-18 year-olds say that gaming helps them improve their English (Norwegian Media Authority, 2020). There are many reasons why children and teenagers play games. While the main reason is usually for entertainment purposes, gaming can also contribute to learning in several ways. For example, Skaug et al. (2017) state that playing games can not only help improve digital skills but can also help improve reading, writing, numeracy, and listening.

Furthermore, several studies have shown a correlation between playing video games and L2 acquisition and learning. In general, children and teenagers who play video games in their spare time seem to have overall better English proficiency, particularly when it comes to

vocabulary, in contrast to those who do not play (Brevik, 2016; Jensen, 2017; Sundqvist, 2019; Sylvén & Sundqvist, 2012). However, few studies have been conducted on the use of games in English as a second language (ESL) teaching in school, specifically commercial-off-the-shelf games (COTS), which are games made for commercial and entertainment purposes. The new subject curriculum- LK20, implemented in 2020, allows more varied use of digital tools and media in language learning and teaching, where gaming is among them. It is conceivable that the use of games and gaming in school could have the same positive effect on the student's English proficiency as out-of-school gaming. Therefore, this master's thesis will focus on the use of COTS games in the English classroom in Norway.

1.1 Aims of the study

This thesis investigates how a commercial-off-the-shelf game can be used in an 8th-grade English classroom in Norway for English vocabulary learning and acquisition. The thesis examines the students' attitudes toward using video games and tests the game Scribblenauts Unlimited in the classroom. This video game is made for entertainment purposes, not school use, and its use in the classroom is, therefore, didactically adapted by the author. The assumption is that video games made for entertainment purposes can be adapted and used for vocabulary learning and language acquisition in the ESL classroom. Therefore, this master's thesis attempts to answer the following three research questions:

RQ1: Can the commercial off-the-shelf game Scribblenauts Unlimited contribute to English vocabulary learning for students in 8th grade?

RQ2: What are the students' attitudes toward gaming both inside and outside the classroom?

RQ3: How can games work as a tool and be adapted for English learning in the ESL classroom?

2.0 Theoretical background

"Many students these days play digital games—some are truly avid gamers—and if we could just transfer a bit of that gaming enthusiasm, engagement, and motivation to language learning, we just know it would be easier and more effective. But how?"

Reinhardt, 2019, p. 1

2.1 Games, digital games and gaming

Even though the phenomenon of digital games is fairly recent, games have been a popular form of entertainment, a part of human culture, and at the core of everyday life for over thousands of years (Spanos, 2021, p. 3). So, what exactly is a game? The term "game" is difficult to define, and many scholars disagree on how to define it, while others even believe it cannot be defined (Spanos, 2021). Many definitions focus heavily on the formal aspect of games – that games are rule-based. However, the main purpose of playing or participating in a game, whether it is board games, card games, physical activities, sports, or digital games, is mainly for personal amusement. Furthermore, games have a goal that the player or players strive to achieve. Therefore, instead of using a definition, this thesis uses the following key points to describe games, as summarized by Reinhardt (2019, p. 78):

- 1. playful and engaging
- 2. goal-oriented
- 3. rule-governed

Even though "games" is a broad term and can refer to many different activities, this thesis uses the term exclusively for digital games. However, since this thesis focuses on using digital games for vocabulary ESL learning and acquisition, the term "digital games" needs to be addressed. There are many different ways to define and refer to digital games. However, this thesis, in agreement with Sundqvist (2019), simply refers to digital games as "all types of games played on various digital devices." Digital devices can be a computer, a game console (such as Xbox and Playstation), a phone, or a tablet. Thus, video games and computer games are both digital games, even though all three terms are often used interchangeably. In

addition, this thesis uses the term "gaming" exclusively, as mentioned earlier, as the act of playing digital games.

2.1.1 Different types of games

Games can be categorized in several ways. For example, a game can be categorized based on genre, player support, or gameplay. However, when digital games are used in a school setting, the games' purpose and content are arguably more important. The Norwegian Directorate of Education and Training has made its own definitions of different game types and differentiates between learning games, commercial games, and gamification (Skaug et al., 2017). Even though this thesis focuses on commercial games, often called Commercial-off-the-shelf games or just COTS for short, all three game types are described below.

Learning games are specifically designed to teach a particular subject, skill, or concept. Furthermore, these games can cover various topics, from math and science to language learning and history. Learning games often incorporate game mechanics such as points, levels, and rewards to encourage players to progress and achieve their learning objectives. Unfortunately, although learning games are designed to be engaging, not all students may find them interesting or enjoyable enough. According to Skaug et al. (2017, p. 8), learning games' design and game experience are often subordinate to educational content. Because of this, they are often perceived to be less engaging than commercial games.

Commercial games, or COTS, on the other hand, are games where the primary focus is to provide an enjoyable gaming experience to entertain and engage players. These are commercially available video games produced and sold for general consumer use. Commercial games are designed to be accessible to a wide range of players and typically offer a polished and tested gaming experience. Therefore, they often have bigger budgets, better graphics, and more immersive gameplay (Skaug et al., 2017, p. 9). While COTS games are typically developed for profit, they can also be used for non-commercial purposes, such as education. However, Whitton (2014, p. 26) states there are limited opportunities to link COTS games to curricular content. Therefore, these games often require supplemental associated activities if they are to be used in education.

Gamification is an approach designed to motivate and engage in non-game contexts by incorporating game-like elements such as points, levels, and rewards. In school, gamification can be used in short sections of the class, or it can be that the classroom and curriculum are set up like a game (Skaug et al., 2017, p. 9). However, Skaug et al. (2017, p. 9) mention that gamification can be too reliant on external motivation and reproducing the facts. Kahoot is one example of a digital tool used in gamification.

In summary, COTS games are designed for entertainment, learning games are designed for education, and gamification is designed to motivate and engage students in non-game contexts by incorporating game-like elements. Even though these concepts can overlap, they have differences in their intentions and design.

2.2 The new subject curriculum

Since the fall of 2020, a new English subject curriculum has been implemented in Norwegian schools all over the country. This subject renewal is due to a renewal of the former curriculum from 2006 (LK06), ensuring that Norwegian schools are more adapted to modern society and a rapidly changing working life (Ministry of Education and Research, 2019). The new curriculum is called "Fagfornyelsen 2020," which translates to "The subject renewal of 2020", or LK20 for short. The main aim of this new curriculum is to ensure better learning and understanding for the pupils. Furthermore, LK20 aims to ensure that the pupils acquire solid knowledge and a deeper understanding of the subjects and the basic skills and can apply what they learn in various contexts (Ministry of Education and Research, 2019). Therefore, several changes have been made for each subject. For example, there are fewer competence aims, a more significant focus on in depth-learning, and the implementation of the three interdisciplinary topics; health and life skills, democracy and citizenship, and sustainable development. As a result, teachers are given more freedom with their teaching methods in the classroom, especially when it comes to the use of digital tools.

2.2.1 The English curriculum and gaming

Even though the new English subject curriculum (ENG01-04) does not mention gaming or digital games specifically, the competence aims, the core elements, and the basic skills, all indicate the possible use of video games in the teaching of English (Norwegian Directorate

for Education and Training, 2019). Furthermore, starting with the competence aims, several competence aims after year ten can be indirectly linked to the use of digital tools or games in the teaching of English:

- use different digital resources and other aids in language learning, text creation and interaction
- explore and present the content of cultural forms of expression from various media in the English-speaking world that are related to one's own interests
- use sources in a critical and accountable manner

In addition, due to fewer competence aims in the new curriculum, which gives the teacher more freedom in teaching methods, digital games as a digital tool can be used to reach many of the other competence aims as well.

In the subject's core elements, gaming can be seen as a possible tool or teaching method as well. For instance, under "Communication," it is stated that: "The pupils shall employ suitable strategies to communicate, both orally and in writing, in different situations and by using different types of media and sources" (Norwegian Directorate for Education and Training, 2019). Since gaming is a type of medium, one can understand digital games to be accepted as a tool for communication in the classroom or that communication arises from the use of games. Moreover, under "Working with texts in English," it is stated that learning takes place in the meeting with English texts, and the curriculum broadly defines texts: "texts can be spoken and written, printed and digital, graphic and artistic, formal and informal, fictional and factual, contemporary and historical. The texts can contain writing, pictures, audio, drawings, graphs, numbers and other forms of expression that are combined to enhance and present a message" (Norwegian Directorate for Education and Training, 2019, p. 3). By using this broad definition of texts, digital games are a type of text, thus, applicable for classroom use.

Finally, the four basic skills in the curriculum (oral skills, writing, reading, and digital skills) can all be linked to using digital games. Oral skills in English are described as creating meaning through listening, talking, and engaging in conversation. Moreover, oral skills mean adapting the language to the purpose, receiver, and situation. This means speaking accurately and adapting the language to different topics in both formal and informal situations

(Norwegian Directorate for Education and Training, 2019). Since many games require communication, they can be excellent tools for facilitating oral communication practice.

Writing as a basic skill in English, means expressing ideas and opinions understandably and appropriately in various texts, both on paper and on screen. Furthermore, the development of writing proficiency progresses from learning single words and phrases to creating different types of coherent texts that present viewpoints and knowledge (Norwegian Directorate for Education and Training, 2019). Due to the broad definition of texts mentioned earlier, games are texts, and the students can practice their writing through games.

Reading as a basic skill is described as understanding and reflecting on the content of different texts on paper and screen and contributing to reading pleasure and language acquisition. Moreover, it means reading and finding information in multimedia text with competing messages and using reading strategies to understand both explicit and implicit information. Furthermore, reading skills in English develop and progress from using phonemes and speech sounds, spelling patterns, and syllables to reading varied and complex texts with fluency and comprehension and increasingly being able to reflect on and critically assess different texts (Norwegian Directorate for Education and Training, 2019). Being able to read is essential to most games, and the player must often read instructions, game lore, and other descriptions to progress or further understand the game.

However, the possibility to use games as a tool is more prominent under digital skills — "Digital skills in English involve being able to use digital media and resources to strengthen language learning" (Norwegian Directorate for Education and Training, 2019). Furthermore, developing digital skills in English progresses from exploring the language to interacting with others, creating texts, and acquiring knowledge by obtaining, exploring, and critically assessing information from different English sources (Norwegian Directorate for Education and Training, 2019). However, it is not specified how to teach digital skills nor which digital media or tools should be used; thus, each teacher must decide which digital tools to use in their praxis, and digital games may be one of the tools a teacher uses to achieve these goals.

In summary, since digital games are multimodal and combine various skills, they can be useful to fulfill several curricular aims simultaneously, e.g., practice reading, evaluating information, communicating, and using digital tools.

2.2.2 Different ways to use COTS games in the classroom

Using games as a teaching tool is not a singular approach. There are countless ways in which games can be utilized in the classroom. According to Skaug et al. (2017, p. 17), the critical aspect of learning through games involves a "translation process," where students connect the various components of the game to the academic content being covered. This translation process often takes place through group or class discussions, during which students can draw on the actions they take in the game, the game's plot, different themes, or a combination of these elements. In other words, the teacher must help students become aware of what they should focus on (Skaug et al., 2017, p. 17). Moreover, Skaug et al. (2017, p. 12) refer to four perspectives on using digital games in the classroom.

1. Video games as digital literature.

The concept of video games as digital literature refers to the idea that video games can be seen as a form of interactive storytelling similar to traditional literature, such as books or movies, which can be analyzed. Here, the teacher focuses on the story of the game.

2. Video games as digital excursions.

Video games as digital excursions refer to how video games can serve as virtual environments in which the students can explore and interact with different settings and scenarios. These digital environments simulate real-world experiences or offer fictional worlds players can navigate and discover. These experiences can then be discussed in the classroom after.

3. Video games as digital learning environments.

The concept of video games as digital learning environments refers to how video games can function as educational tools to facilitate learning. Video games offer a unique and engaging way to present educational content and can provide opportunities for students to apply and practice what they have learned in a fun and interactive way.

4. Video games as digital creative spaces.

The concept of video games as digital creative spaces refers to the idea that video games can offer opportunities for students to express themselves creatively and

engage in the design and creation of digital content. The rules and goals of the game are determined more by the teacher than by the game itself.

Skaug et al. 2017

2.3 Digital games and learning

Digital games can offer many possibilities for English learning and acquisition. Even though some educational games are designed to help players improve their English skills, several commercial games have helped improve many people's English proficiency. Since most games are in English, the players are forced to interact with the game in English. In addition, when playing online, English is often the only way to communicate when the players do not speak the same language. Therefore, some games allow players to practice and improve their reading, writing, speaking, listening, and vocabulary skills. Due to the potential digital games have on ESL learning, several researchers support their use in education (Reinhardt, 2019; Sundqvist & Sylvén, 2016; Whitton, 2014; Gee, 2007)

2.3.1 Earlier research on COTS games and English proficiency

Several studies have shown the correlation between playing COTS games out of school and overall English proficiency. A study from Sweden by Sylvén & Sundqvist (2012) showed that the time spent playing video games positively impacts overall English proficiency among young learners (ages 11-12), especially the learners' vocabulary skills. A later study from Sundqvist (2019) on teenagers (ages 15-16) showed similar results, i.e., that time spent playing COTS games matters for English vocabulary. Furthermore, the latter study showed that students who play COTS games have a more diverse and advanced vocabulary than students who do not play games. Moreover, the research showed that the type of game and the number of hours spent playing games impact students' vocabulary. Similar research has been done in Denmark, which also shows matching results. Research by Jensen (2017) on children ages eight and ten reveals that games with oral and written input and with only written input are notably connected to vocabulary scores. Finally, a study from Norway (Brevik, 2016) supports the earlier-mentioned findings. This study shows that students in upper secondary school who are exceptionally better readers in English than Norwegian spent much time playing online games in English. Additionally, the participants were interested in learning vocabulary to perform well in the games they were playing.

2.3.2 Digital games and language learning theories

According to Sylvén & Sundqvist (2012), certain games offer important SLA circumstances— comprehensible input, scaffolding through interaction, and motivation. While there are many perspectives on second language acquisition, this section will focus on the cognitive perspective, also called the psycho-cognitive perspective, and the sociocultural perspective. The supporters of the cognitive perspective view the learner as active, and the mind acts as a processor (Reinhardt, 2019, p. 106). From the cognitive perspective, second-language acquisition builds on perception, memory, categorization, and generalization (Lightbown & Spada, 2013, p. 108). Furthermore, according to some cognitive supporters (e.g., DeKeyser, 2001; Schmidt, 1990), language learning involves acquiring a set of mental representations or structures and developing the ability to process and produce language automatically. Repetition helps to strengthen these mental representations and automate language processing and production (Lightbown & Spada, 2013, p. 108). According to some researchers, i.e., DeKeyser (2001, 2007), learning, including language learning, starts with declarative knowledge, which is knowledge about facts and information that can be stated or declared. Procedural knowledge, on the other hand, refers to knowledge about how to do something. The premise is that procedural knowledge can become automatized through practice, and declarative knowledge may, in time, be forgotten.

The cognitive view of SLA also emphasizes the importance of input and output in language learning. There is a general agreement that input of a target language is necessary to acquire a language. However, not all input leads to acquisition. According to Krashen's theory, there is a difference between learning and acquiring a language. While language acquisition is a subconscious and natural process that occurs through exposure to a language-rich environment, language learning is a conscious and deliberate process that involves the explicit study of a language and its rules, or in other words, language learning concerns knowledge about the language (Krashen, 1982, p. 10). Language acquisition and language learning are also often referred to as implicit and explicit learning. Implicit learning is unconscious learning, while explicit learning is conscious. According to VanPatten & Smith (2022), the learner's intention decides whether the learning is implicit or explicit (VanPatten & Smith, 2022). Krashen (1982) argues that language acquisition (implicit learning) is more effective in producing native-like fluency, while language learning (explicit learning) is often focused on accuracy and error correction. In Krashen's input hypothesis, he explains that a

learner only acquires new language structures when the language input is slightly beyond their current level of comprehension. Krashen explained his hypothesis through the equation "i+1". Here, "i" concerns the learner's current level of competence, whereas "+1" is the next level of competence (Krashen, 1982, p. 21). Furthermore, Krashen (1982) explains that learners use context, former knowledge, and other extra-linguistic information to understand the input better.

However, most linguistic researchers today (e.g., Swain, 2000) emphasize the importance of language output. The importance of language output is stressed in Swains Output Hypothesis, which is a response to Krashen's input hypothesis. This hypothesis suggests that learners acquire language not only through input but also through output. In other words, learners need to engage in active language production, such as speaking or writing, to internalize new linguistic knowledge. This active language production will force the learners to notice how the language is used to express the learners' intended meaning (Swain, 2000). Swain also mentions that learners can obtain new linguistic knowledge by testing their language. Furthermore, when the learners are given feedback from external sources, the learners modify their output. Exemplifying this, according to research by Sundqvist (2009), extramural activities (linguistic activities outside the classroom) that require more active participation from the learner (e.g., gaming) lead to more language acquisition as opposed to more passive activities (e.g., movies, tv-shows, music).

According to cognitive SLA research, the 'Instructed SLA' approach to communicative language teaching, as advocated by scholars like Doughty (2012) and Chapelle (1997), emphasizes the importance of learning tasks that allow learners to immerse themselves in input and engage in negotiation of meaning, noticing, and pushed output activities (Reinhardt, 2019, p. 106). Furthermore, conforming to Reinhardt, in a psycho-cognitive view of game-based learning, the players would learn the game and its rules through experimentation and deduction. This means testing out different strategies and actively interacting with the game. Moreover, the gameplay should "facilitate cognitive processing, utilize memory storage and access systems, and build associations between concepts, actions, and the words used to do them" (Reinhardt, 2019, p. 107). Lastly, the game design would draw attention to specific language items through, e.g., visual emphasis, repetition, and form-meaning association, but also through game design, where language comprehension is essential for the game to progress; for example, through a correct response.

On the other hand, the sociocultural perspective, which is highly influenced by the Russian psychologist Lev Vygotsky, focuses mainly on how social interaction leads to language development. From the sociocultural perspective, language learning is seen as a collaborative process in which learners and more experienced language users work together to co-construct knowledge and meaning. This concept was first introduced by Vygotsky and called the zone of proximal development (ZPD). According to Vygotsky, the ZPD is the difference between what a learner can do independently and what they can do with guidance or support from a more knowledgeable other (Vygotsky, 1978). This process is often referred to as scaffolding (Lightbown & Spada, 2013, p. 118). Initially, ZPD concerned an expert and a novice; however, newer research has broadened the term to involve two equally knowledgeable learners (Lightbown & Spada, 2013, p. 119). This knowledgeable other is often referred to as an interlocutor. Thus this interlocutor can be a teacher or a more knowledgeable person, but also another peer or someone or something else that can aid the learner in their learning process. According to Reinhard (2019, p. 109), in a social-informed perspective (thus including the sociocultural perspective) view of game-based learning, the learners would build L2 knowledge through interaction with game discourses, negotiation for meaning with other players, and participating in social practices concerning the game. Moreover, in Reinhardt's (2019, p. 109) opinion, gameful L2 learning from a social-informed perspective would implement games that include meaningful gameful interactions, roleplay, interpersonal interaction, and socio-literacy practices. However, providing such conditions will not necessarily lead to language learning according to the cognitive SLA perspective. That said, most cognitive perspectives do not exclude social collaboration either (Reinhardt, 2019).

To summarize, both the cognitive perspective and the sociocultural perspective connect to the classroom intervention in this thesis in several ways. From the cognitive perspective, the intervention using Scribblenauts Unlimited facilitates learning through exposure to the game's language input, opportunities for producing output, and the idea of repetition and practice. On the other hand, from the sociocultural perspective, the game session provides the students with opportunities to work within their zone of proximal development, provided by student collaboration and feedback from the game.

2.4 Digital games and motivation

As Sylvén and Sundqvist (2012) pointed out previously, some games provide significant possibilities for second language acquisition (SLA), with motivation being one of them. This section will focus on the motivational aspect of playing games. Since the primary reason for playing video games is usually for personal amusement, one of the main arguments for using games in education is that it is a motivating way to learn.

2.4.1 Intrinsic and extrinsic motivation

Ryan and Deci (2000, p. 54) explain that to be motivated is "to be moved to do something." In other words, one can say that motivation is the reason for action. Moreover, Ryan and Deci (2000, p.55) differentiate between two types of motivation - intrinsic and extrinsic. Intrinsic motivation means that the reason for doing something comes from one's interest or enjoyment. One of the benefits of this type of motivation is high-quality learning and creativity. Additionally, intrinsic motivation has been shown to have several benefits in formal education, such as higher student engagement and higher performance in school (Ryan & Deci, 2020). Intrinsic motivation is closely related to something referred to as the "flow state." According to Nakamura & Csikszentmihalyi (2014), the flow state occurs when there is a balance between the level of challenge in an activity and a person's skill level. If the activity is too easy, a person may become bored. On the other hand, if the activity is too difficult, a person may become anxious or frustrated. When someone experiences flow, they are typically highly motivated to continue engaging in the activity that is inducing the flow state. This is because flow provides an intrinsically rewarding experience, where the individual is motivated to continue the activity for the sake of the experience itself, rather than for external rewards.

On the other hand, when the reasoning for doing something comes from something or somewhere else, it is called extrinsic motivation. With this type of motivation, e.g., achieving good grades to get a specific job, the reason for doing something relates to an instrumental value (Ryan & Deci, 2000). While extrinsic motivation is essential in life and the most typical form of motivation seen in school, when students are intrinsically motivated, they are more eager to learn. Therefore, any activity where the students inherently want to learn is more desirable. Unfortunately, intrinsic motivation declines over the school years (Ryan & Deci,

2020); therefore, using COTS games in the classroom can be one way to motivate students to learn.

2.4.2 Game elements and intrinsic motivation

There are many reasons why a game is motivating to play. Malone (1980, as cited in Whitton, 2014, p.70) investigated what elements make computer games motivating and suggested three aspects contributing to intrinsic motivation; challenge, curiosity, and fantasy. Some years later, a control aspect was added to the list (Malone & Lepper, 1987, cited in Whitton, 2014, p. 70). Even though this list was intended for computer games made several decades ago, the same aspects of motivation are relevant in games today.

Although all four aspects mentioned are relevant for intrinsic motivation in games, this section will focus on "challenge." COTS games often provide players with a sense of challenge through difficult puzzles, challenging enemies, or complex gameplay mechanics. These challenges can be highly motivating, giving players a sense of accomplishment when they overcome them. However, challenges that are too easy or seem unfeasible are not ideal for intrinsic motivation (Malone & Lepper, 1987, p. 231). Whitton (2014, p. 70) emphasizes that an appropriate challenge is the reason why a person wants to play and why they want to continue playing. Furthermore, for an activity to be challenging, it requires goals with uncertain outcomes to be attained and performance feedback on the goal attainment that will engage and enhance the individuals' self-esteem (Malone & Lepper, 1987, p. 231). Thus, goals, uncertain outcomes, performance feedback, and self-esteem impact intrinsic motivation, as discussed below.

Goals with uncertain outcomes: Every game has numerous goals the player must strive to achieve. Most of these goals are immediate minor accomplishments toward bigger but more distal goals. Bandura and Shunk (1981, cited in Malone & Lepper, 1987, p. 231) underline that proximal goals are more motivating than distal goals; however, if both proximal and distal goals are present, they may be exceptionally motivating devices. However, it is also essential that the goals have uncertain outcomes. An environment is not challenging if one is certain to reach a goal or certain the goal cannot be achieved (Malone & Lepper, 1987, p. 231).

Performance feedback that enhances self-esteem: COTS games typically provide feedback and rewards for player actions, such as points, upgrades, or new abilities. These rewards can be highly motivating, giving players a sense of progress and accomplishment. According to Malone & Lepper (1987, p. 232), both learning from the activity and continuing motivation rely on performance feedback. Moreover, if the activity provides frequent, clear, constructive, and encouraging feedback, the activities will be more intrinsically motivating. Regarding self-esteem, feedback should promote a feeling of confidence. Additionally, the activity should provide meaningful personal goals. These goals should have a relevance that is either instrumental, fantasy-related, or social (Malone & Lepper, 1987, p. 233).

For example, many COTS games allow players to interact with other players through online multiplayer or local co-op. This social interaction can be highly motivating, providing players with a sense of community and a shared sense of purpose. Moreover, multiplayer games often have clear goals for players to achieve together, such as completing a level or defeating a boss. These goals can provide a sense of direction and purpose for players. However, the outcome of the challenges is uncertain and depends on the actions of all players involved. This uncertainty can create a sense of excitement and challenge, making the game more engaging. Additionally, multiplayer games often provide players with immediate feedback on their performance. This feedback can help players measure their progress and identify areas for improvement, which can be highly motivating. Lastly, success in multiplayer games can enhance players' self-esteem by providing a sense of accomplishment and recognition from others. Conversely, failure can lead to disappointment or shame, affecting self-esteem.

2.4.3 Challenges regarding games and motivation

Although games are motivating for many reasons, there are a few challenges when it comes to using them in the classroom. One challenge when using COTS games in the classroom is to adapt the game so that the intrinsically motivating aspects are present while also ensuring that the students learn something from playing the game. Furthermore, Whitton (2014, p. 70) states that by making a game an obligatory part of the formal educational setting, extrinsic motivation is forced. While this is good for ensuring participation in the game, it can negatively impact the intrinsic motivation of others as it takes away the freedom of choice. Another challenge is what games are used in the classroom. Even though games can be fun and highly motivating for students, not all games are suited for classroom use. There are

many reasons for this; for example, the game might be too violent and contain elements unsuited for a school setting (Skaug et al., 2017, p.20), or the game does not have a clear educational value for English acquisition and learning in the classroom. Therefore, the fact that a game is fun and in English does not always make it a good game for English acquisition and learning in the classroom. The teacher must ensure that the game has educational value and that the students know why they are playing it.

2.4.4 Scribblenauts Unlimited and motivation

Regarding intrinsic motivation, Scribblenauts Unlimited offers a challenging game experience that balances the level of challenge with a player's skill level. This creates a sense of flow, which is closely associated with intrinsic motivation. The game provides players with various challenging puzzles and obstacles, requiring them to use their problem-solving skills and creativity to overcome them. These challenges are motivating, as players experience a sense of accomplishment when they solve a puzzle or complete a level. Moreover, Scribblenauts Unlimited provides immediate feedback and rewards for player actions. The game's feedback system is also frequent, clear, constructive, and encouraging, which enhances players' motivation to continue playing. Additionally, Scribblenauts Unlimited offers players goals with uncertain outcomes, which is essential to maintaining a challenging game environment. See also below, in section 3.2.1, for details of the gameplay.

To sum up, games, particularly COTS games, can be intrinsically motivating by providing players with clear goals, a sense of progress and feedback, a balance of challenge and difficulty, a sense of autonomy, and opportunities for social interaction. However, more than motivation is needed; choosing a suitable game for the classroom is crucial for English acquisition and learning to take place.

3.0 Methodology

This chapter will cover the research methods and design used to answer the research questions. In order to best answer the research questions, both qualitative and quantitative methods were adopted through a mixed methods approach. In section 3.1, the choice of methods used is described. Following, section 3.2 gives an overview of the intervention design and details concerning the data collection. Next, section 3.3 covers the study's qualitative approaches, followed by section 3.4, which covers the quantitative approach of the study. In section 3.5, the analytical procedure is described. Second to last, section 3.6 concerns the reliability and validity of the study before the final section 3.7 describes the ethical considerations of the study.

3.1 Choice of methods

This study investigates how commercial off-the-shelf games can be adapted to ESL classrooms in Norway for vocabulary acquisition and learning. To do so, the COTS game Scribblenauts Unlimited was tested in an 8th-grade English classroom in Norway. Early in the project, both qualitative and quantitative methods seemed suitable; because of this, the project uses a mixed methods approach. A mixed methods approach or design uses both qualitative and quantitative methods and draws on their strengths (Creswell & Guetterman, 2021). According to Creswell & Guetterman (2021, p. 595), combining qualitative and quantitative methods provides a better understanding of the research problem than either type alone. The main reason for using a mixed methods approach in this project was to provide more depth and breadth to the study.

Furthermore, due to the design of this study, one research method can help answer more than one research question. Therefore, through a mixed methods approach, the different methods used complement each other and give more depth and width to each research question. The data collection took place over two days within the same week. The first day consisted of an observed and recorded game session, where the pupils played the game, followed by an online survey. On the second day, three days after the game session, some students participated in semi-structured interviews. As mentioned earlier, this thesis aims to answer the following research questions:

- 1. Can the commercial off-the-shelf game Scribblenauts Unlimited contribute to English vocabulary learning for students in 8th grade?
- 2. What are the students' attitudes toward gaming both inside and outside the classroom?
- 3. How can games work as a tool and be adapted for English learning in the classroom?

3.2 Intervention design and data collection

The project intended to explore how COTS games can function as a tool in the classroom for English vocabulary acquisition and learning. To do so, the lesson plan centered around the COTS game, "Scribblenauts Unlimited." The lesson plan was created for two 45-minute school lessons, with the intention of the students getting around 40-45 minutes of gameplay. The reason for this was that the game was new to the students, so they needed some time to get fully immersed in the game. However, the lesson plan can be adapted to last shorter or longer, depending on the lesson's focus. In addition to the lesson plan used in this project, there are many other ways to use the game for English learning. The data collection took place within two days in January 2023. The observations, screen recordings, and answers from the online survey were collected on day one, while the interviews took place three days later during the same week.

3.2.1 The game "Scribblenauts Unlimited"

Scribblenauts Unlimited is a puzzle sandbox video game developed by 5th Cell and published at the end of 2012 by Warner Brothers Studios. In the game, the player plays as Maxwell, a young kid with two magical items. The first item is a magic globe that instantly lets the player travel anywhere in the game world. The second item is a magical notebook where every word written (with a few exceptions) gets summoned as an object within the game. The game's goal is to solve puzzles by helping characters within the game with the help of the player's English vocabulary. The player can do this in two different ways. The first way is to type nouns in the notebook, which then summons the written nouns as objects into the game. Secondly, the player can solve puzzles by adding adjectives to the objects or even describing characters or objects already part of the game. Additionally, the player can add several adjectives to the nouns written, e.g., a giant blue pig, a giant handsome blue pig, etc. With every puzzle solved, the character gets a Starite. Starites are magical stars needed to help lift the curse turning Maxwell's sister into stone. The game encourages creativity, and there are several different ways to solve the same puzzles. Scribblenauts Unlimited is easy to learn

with few controls to be familiar with. Since the game's main aim is to write words to solve puzzles, there is no limit to how many people can play together. That said, it is arguably best to play either alone or in pairs in order to maximize the direct participation of each player. However, playing on one device would also be possible, with the teacher controlling the character while the students help choose which words to try to solve the puzzles. The game also gives immediate feedback on the written words. The game will highlight misspelled words in red and has an inbuilt dictionary that suggests words closely related to the misspelled words.

3.2.2 Materials

This project required a few materials for it to work. First and foremost, a class set of digital devices with the game installed was needed. The University of Agder owns a set of iPads with different digital tools and games suitable for classroom use, which was made available for this intervention. The game does not require an internet connection to run, nor does it store any personal user data, so additional permissions were not needed to use the game in the classroom. In addition to the iPads, each player pair received copies of a task sheet concerning the game lesson (see Appendix 1).

3.2.3 The task sheet

Because COTS games are not explicitly designed for learning, there is no guarantee that these games will overlap with the curriculum. Whitton (2014, p. 26) emphasizes that COTS games require additional associated activities to help learners engage with the learning in a meaningful, collaborative, and reflective way. According to Reinhardt (2019, p. 153), many frameworks can be applied to game-enhanced wraparound materials or, in other words, as complementary activities to playing a COTS game. Reinhardt (2019) mentions Kolb's (1984) experimental learning theory framework as one framework that can be applied to the design of game-based learning activities. This theory argues that "learning entails dialectic processes involving concrete experience, reflective observation, abstract conceptualization, and active experimentation, and instruction should be designed to facilitate these processes" (Reinhardt, 2019, p. 159, emphasis in the original). Moreover, Reinhardt (2019) further explains what these processes would look like in complementary activities to playing a COTS game. He summarizes the processes in 4 steps:

- 1. Play the game and try to use language.
- 2. Reflect on play and language use.
- 3. Synthesize reflections into hypotheses and conceptualizations about play and language.
- 4. Test out hypotheses by playing and using language critically.

Reinhardt, 2019, p. 160

This framework aligns well with the supplemental activities used in the game lesson in this project. At the start of the lesson, each pair was handed out a task sheet with instructions and some rules. Additionally, the task sheet included a table where the students had to write down what words they used to solve each puzzle. Furthermore, the table was divided into "nouns" and "adjectives," obliging them to categorize the word(s) they used. Therefore, the students had to practice writing the words they used while also reflecting on which word class the word belonged to. Starting with the first step in the framework, the students got to play and experiment with different English words. Moving on to the second step, the students reflected on their language by writing down the words they used to solve each puzzle. Furthermore, the third step directed the players to use their knowledge of different word classes to categorize the words used as either nouns or adjectives. Additionally, they had to follow the rules written on the task sheet. Finally, in the fourth step, they constantly had to test their own hypotheses of which words would solve the puzzles as they were playing, and therefore using language critically. After playing, there was a discussion in the classroom where the students were asked several questions about their experience, how they solved different puzzles, what challenges they faced, and so on. The oral questions aimed to help them reflect on the experience and what words they used.

3.2.4 The participants

The game session was mandatory since it took part in a regular English lesson that week. As is argued above in section 2.2.1, using digital games in the classroom is in compliance with the English subject curriculum in Norway and the selected game can contribute to achieving several of the learning aims in the subject. Twenty-two students participated in the game session; 12 were boys, and 10 were girls. However, before the class finished, one of the boys had to leave; therefore, there were only 21 respondents to the online survey.

The week before the data collection started, the researcher visited the school to inform the students about the project. The students were given a consent form concerning the semi-structured interview, which they had to bring home for their parents to sign. The semi-structured interviews were voluntary; 10 students participated in the interviews, six boys and four girls.

3.3 Qualitative approach - Observation and Interviews

3.3.1 Observation and screen-recording

In order to assess the suitability of the game Scribblenauts Unlimited as a tool for vocabulary learning in the English classroom, it was necessary to observe a session of gameplay. Observation is often used as a data collection method in qualitative research in school settings (Creswell & Guetterman, 2021). Creswell and Guetterman (2021) state that observation is "the process of gathering open-ended, firsthand information by observing people and places at a research site" (p.248). When using observation as a data collection method, the researcher must adopt a particular role based on the researcher's involvement in the situation (Creswell & Guetterman, 2021, pp. 248–249). In this study, the researcher had a changing observational role. At first, the researcher gave instructions and acted as a teacher. Later, the students played together for roughly 45 minutes while the researcher's role was mainly that of a nonparticipant observer. However, if the students had any difficulties, the researcher would still help. The data collected were field notes, focusing mainly on student engagement, communication strategies, and classroom atmosphere. At the end of the lesson, the researcher reassumed the role of participant observer as the lesson ended. Since the researcher participated in parts of the research experiment, collecting enough data from field notes alone would be challenging, especially data on what the students did in the game. Therefore, as a supplement to the field notes, each pair was instructed to screen-record the gameplay on their iPad. By doing this, the researcher could review and analyze each iPad's gameplay later. The screen recordings made it possible to analyze the words they used, how they interacted with the game, and what difficulties or challenges they faced while playing. However, it is worth noting that the screen recordings only recorded the gameplay and not the students' voices or faces. This was to protect the students' anonymity in the project.

3.3.2 Interviews

In addition to observations, the researcher conducted five semi-structured interviews with some students to delve deeper into their experience playing Scribblenauts Unlimited, their relationship to games, and their thoughts on using games as a digital tool in the classroom. A semi-structured interview is usually based on predetermined open-ended questions, with further questions arising from the conversation between the interviewer and the interviewees (DiCicco-Bloom & Crabtree, 2006). Furthermore, in contrast to structured interviews, in semi-constructed interviews, the interviewer can better exploit the knowledge-producing potential of dialogs as they offer more freedom to follow up on aspects the interviewee finds important (Brinkmann, 2014). In order to allow for comparison of the student answers, the interviews were conducted using an interview guide with mostly predetermined opened-ended questions as a base. In addition, some questions had supplementary questions to ensure a better flow in the dialog. However, the interview was also open for clarification and follow-up questions when needed, as well as other student input (see the interview guide in Appendix 4).

The participants were informed about the purpose of the interview both orally and in writing in good time before they took place. Additionally, the participants knew the interviews would be voice recorded, transcribed, and later deleted to ensure their anonymity, and the participation in the interviews was voluntary. All the interviews were conducted in pairs. Four of the pairs were the same who played together in the game session. The reasoning was to make the pupils more comfortable during the interview and allow them to reflect upon the experience with the same person they played with. However, two students wanted to be interviewed, but their partners did not; therefore, one group contained two students who did not play together in the game session.

The interviews were face-to-face in Norwegian to ensure no confusion and make it easier for the pupils to answer. In addition to the interviews being voice recorded, notes were taken by pen and paper as a backup. Since the interviewed students were under the legal age for informed consent, their legal guardians were asked to sign the consent forms. The data collection was approved by the Norwegian Agency for Shared Services in Education and Research.

3.4 Quantitative approach - online survey

The quantitative data in this study consists of an anonymous online survey conducted in the class assigned for this project. An online survey or questionnaire is a survey instrument for data collection that is available through the internet through a digital device such as a computer, tablet, or smartphone (Creswell & Guetterman, 2021, p. 436). Online surveys are widespread in educational research and can quickly gather a large amount of data. Furthermore, several software programs are available for designing, gathering, and analyzing the data with sample questions and forms (Creswell & Guetterman, 2021, p. 436). The digital survey in this study was created with the survey tool "SurveyXact." The survey was shared through a link the English teacher posted on the learning platform, Itslearning, before the lesson. The participants were orally informed about the purpose of the survey, how long it would take to complete, and their anonymity. All 21 students in the class that were present that day completed the survey. However, it is worth noting that the findings cannot be generalized because of the small sample size of only one 8th-grade class. Most of the questions in the survey concerned the students' attitudes toward gaming. In addition, some of the questions concerned the game session that occurred just before.

3.5 Data analysis procedure

The data from this project include the online survey, observations, screen recordings, and interviews.

3.5.1 The online survey

The online survey consisted of 15 questions; however, it was slightly shorter for the students who answered that they do not play digital games (see Appendix 2 for all survey questions). The survey was carried out straight after the gaming session and was made in Norwegian to ensure everything was clear. The survey consisted of both multiple-choice and free-text questions, and thus different methods were used to analyze the results. With the multiple-choice questions, most results are summarized in different charts. On the other hand, with the free-text answers, the most commonly used words and phrases were found with word searches and then translated into English for the results section. Since the number of participants was relatively small, it was easy to get an overview of all the answers. The

quantitative data were analyzed in SurveyXact, and the charts were produced by SurveyXact and then transferred to Word.

3.5.2 The interviews

The semi-structured interviews followed an interview guide to ensure comparable results (see appendix 4 for the interview guide). All interviews were audio recorded, and notes were taken as a backup during the interview. The interviews were in groups of two (same students who played together) and in Norwegian to ensure the students were as comfortable as possible. In addition, having the interviews in Norwegian ensured a better conversation flow and the best possible answers. Each audio file was carefully listened to before transcription. The transcription of the interviews was done manually by the researcher. After transcription, the interviews were then analyzed in detail and the questions and answers were grouped according to recurring patterns. Additionally, the researcher translated the quotations used in the results section into English.

All the participants were given code names to ensure anonymity. Even though the classroom seating arrangement more or less decided the groups, all groups happened to be either only boys or only girls. Therefore, to take advantage of this coincidence, it is stated that the interview group consists of boys or girls to reflect on any possible differences.

3.5.3 Screen recordings and observations

Data were collected during the game session through field notes and screen recordings of the gameplay. The field notes were used to gather data on classroom atmosphere, student engagement, communication strategies, and how the lesson went in general. However, since the researcher also participated in the class, it was challenging to gather enough information, especially on the groups' interaction with the game. Therefore, screen recordings were used to collect data on how each group interacted with the game. Before the students opened the game and started playing, they were instructed to start screen recording on their iPad. The screen recording lasted the entire game session until the researcher told the students to stop recording. Since the screen recordings did not record any personal data, the researcher transferred the files from each iPad to the researcher's external drive. The researcher analyzed all 10 video clips in detail later, each lasting around 42 minutes. The researcher analyzed the groups' challenges, how many puzzles they solved, and how they interacted with the game.

However, since the game allows the players to choose their puzzles, not all the groups solved the same puzzles. Yet, there are a few puzzles that every group solved, mainly the ones at the beginning of the game.

It is worth mentioning that there were 11 groups in total, but one of them never started recording, resulting in no data from this group. Due to the anonymous screen recordings, the researcher did not know which students were in which group. That said, the iPads were collected with each group's task sheet, and thus the researcher knows which task sheet is connected to which video clip. When analyzing the data, the researcher focused mainly on how each group solved each puzzle and, thus, what words they used.

3.6 Reliability and validity

The main reason for using a mixed methods approach in this project was to give more depth and width to the study, mainly because the sample size is relatively small. As mentioned in section 3.1, a mixed methods approach combines the strength of both quantitative and qualitative methods. Therefore, combining qualitative and quantitative methods in this study can strengthen the overall reliability and validity of the research. Furthermore, in this project, all the different methods used can help answer more than one research question and thus increase the validity and reliability of the research. For example, all the methods can help answer research question one. That said, it is hard to say how much the use of Scribblenauts Unlimited can contribute to vocabulary learning— especially since there is no pre-test/post-test setup to measure if the students learned any new words from playing the game. However, the results from the online survey and the interview answers can give some indication of this.

With research question two, the results from the online survey are the primary data to answer this question. Since the research question only focuses on this one 8th-grade class, the survey results are not meant to be generalized to all 8th-graders in Norway. However, one threat to the reliability of this research question concerns the possibility that the students misinterpret some questions. However, since the survey was in Norwegian and the questions were formulated simply, the probability of this is relatively low. Another threat to the reliability of the thesis concerns response bias. The students might have answered what they think the researcher wants to hear. That said, before the survey and the interviews, the researcher emphasized that the students must answer honestly.

Moving on to answer research question three, the data from several methods can help strengthen the validity of this research. On the other hand, since only one COTS game is used in this research, it is hard to tell how well another COTS game would work in the classroom. All games are different, and how well a COTS game will work in ESL classes depends on factors such as the game, how it is used, the students, and supplementary tasks used together with the game, to mention a few. Even though other COTS games have been tested in the classroom, this might be the only intervention testing Scribblenauts Unlimited. Therefore, more research is needed to conclude how well the game supports English vocabulary learning in ESL classrooms.

Lastly, the biggest threat to the thesis' validity is the project's sample size, especially regarding research questions one and two. External validity refers to the validity of the cause-effect relationship being generalizable to other persons and settings (Creswell & Guetterman, 2021, p. 345). Unfortunately, the sample size is only one 8th-grade class with 22 students in Agder, and therefore too small to generalize the findings to all 8th-grade students in Norway. Therefore, this thesis cannot conclude that Scribblenauts Unlimited would work in any class, nor how much the students will learn from playing the game. However, since the results from the quantitative and qualitative methods showed similar results, the study offers evidence of potentially high reliability and validity. It can be considered a case study that warrants further investigation.

3.7 Ethical considerations

The interviews followed the ethical guidelines from Norwegian Agency for Shared Services in Education and Research. The week before the interviews, all students in the class were given a consent form to take home to sign. Since all participants in the interviews were under 15, one of their parents had to sign the form. In addition, all interview participants were informed about their rights to withdraw at any time and their anonymity in the project. After the interviews, the audio recordings were transcribed and later deleted. The researcher gave code names to each student to ensure total anonymity. Furthermore, even though neither the survey nor the observation collected any personal information, the students were several times reminded about their anonymity in the project.

4.0 Results

This section presents the results of the study. The data was, as previously mentioned, collected using observations—both field notes and screen recordings, an online survey, and interviews with some of the students. The results aim to answer the three research questions in this thesis:

☐ Can the commercial off-the-shelf game Scribblenauts Unlimited contribute to English	1
vocabulary learning for students in 8 th grade?	
☐ What are the students' attitudes toward gaming both inside and outside the classroom	?
☐ How can games work as a tool and be adapted for vocabulary learning in the English	
classroom?	

4.1 Online survey results

The online survey consisted of 15 questions and was answered by 21 respondents, all students in one 8th-grade class in Agder. The first questions are general background questions before moving on to their attitudes and thoughts on gaming. At the end of the questionnaire, the participants were asked about their thoughts on the gaming session where they played Scribblenauts Unlimited. The data collected from the online survey can help answer several research questions; however, the primary intent of the survey was to answer research question two, regarding their attitudes to gaming.

Question 1 - Gender

The first question asked about their gender. Of the 21 respondents, 11 were boys, and 10 were girls. Thus, the balance of boys and girls was almost equal.

Questions 2 and 3:

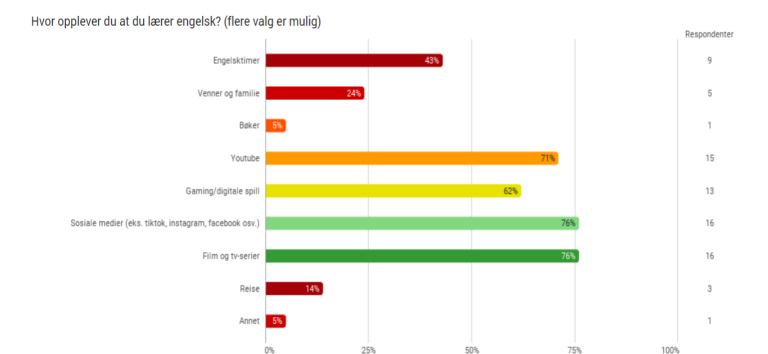
The following questions asked whether they liked the English subject and how they would assess their competence in the English subject. Most of the students were neutral about English as a subject– 57%, 33% answered that they liked the subject, and only 10% stated that they disliked the subject. Moreover, 43% rated their competence high, 48% medium, and 10% low. Lastly, it is worth mentioning that out of the nine who rated their competence as

high, six were girls, and only three were boys. However, in general, the answers to these questions suggest that most students either like or are neutral to the subject and have relatively high competence in the English subject.

Question 4 - Where do you believe you learn English?

With this question, the students were able to choose several options. The most recurring answers were social media, movies/tv-shows, Youtube, and gaming. Furthermore, out of the 11 boys in the class, 9 of them chose gaming as one of the options. In contrast, only 4 of the ten girls did.

Figure 1: Where do you believe you learn English? Options from top to bottom: English lessons, Friends and family, Books, Youtube, Gaming, Social media, Movies and TV shows, Travel, Other



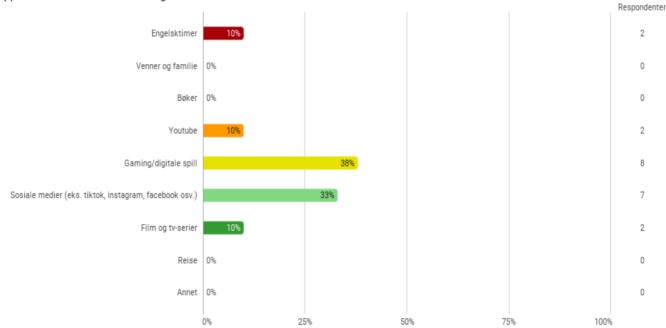
Question 5 - Where do you believe you learn the MOST English?

They could only choose one of the previous options when asked where they learn English most. Gaming was the most frequently chosen option, with 38%, followed by social media at 33%. Out of the participants who chose gaming, 7 out of 8 were boys. On the other hand, all

seven who chose social media were girls. In addition, out of those who rated their competence in English as high, 5 out of 9 said that they learn the most English through social media. These five were also all girls. The remaining four who rated their competence as high were scattered between Youtube, movies/tv-shows, gaming, and English lessons, each with one answer.

Figure 2: Where do you believe you learn the MOST English? Options: English lessons, Friends and family, Books, Youtube, Gaming, Social media, Movies and TV shows, Travel, Other



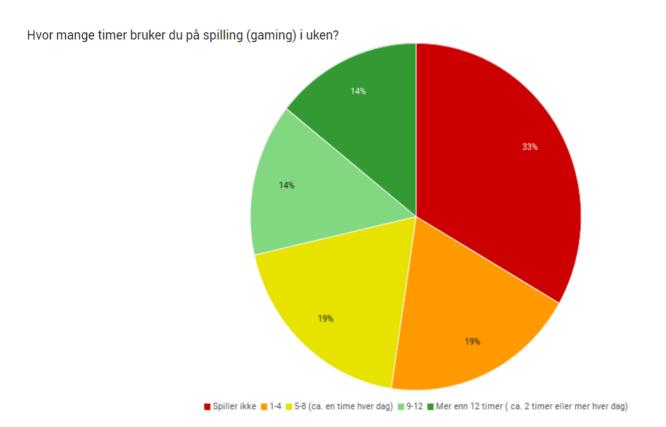


Question 6 - How many hours a week do you spend on gaming?

To this question, the answers were relatively evenly spread out. Most students in the class play digital games— with a total of 67%. It is also worth mentioning that all the boys in the class play video games, while only 30 % of the girls play. Of those who stated that they play, 19% play for 1-4 hours, and another 19% play for 5-8 hours. The more frequent gamers that

play between 9-12 hours were 14%, and another 14% stated that they play 12 hours or more. Additionally, out of the most frequent gamers who played between 9-12 or 12 hours or more, all except for one were boys.

Figure 3: How many hours a week do you spend on gaming? Options from left to right: Does not play, 1-4, 5-8 (around one hour a day), 9-12, More than 12 hours (around 2 hours or more a day)



Question 7 - What type of game do you play the most?

The participants who said they played for one or more hours a week were asked what games they played the most. 50% stated that they play multiplayer games, and 43% played MMO (massively multiplayer online games). Only one participant played single-player games the most.

Question 8 - Are the games you play made for entertainment or learning?

Here as well, only the participants who stated that they play for one hour or more a week were asked this question. Ten participants said that the games were made for entertainment

(COTS games), while four answered that the games they played were made for both entertainment and learning. None of the participants said that the games they play are made for learning alone.

Question 9 - Can you mention one or more games you play in your spare time?

The participants who play one or more hours a week were asked to name some games they play in their spare time. Fortnite, Minecraft, Fifa, and Rocket League were the most frequently mentioned games. However, each answer given is listed below:

- -Rocket Leauge, Overwatch, GTA V, God of War, Project Playtime, Minecraft, Fortnite, Fifa 22
- -Call of Duty, Valorant, CarX, Forza 5, BeamNG, GTA V, Dirt Rally 2.0
- -Monkey Mart
- -Fortnite, Minecraft, Goat simulator 1-3
- -Rocket Leauge, Valorant, Devour, Minecraft, Fortnite
- -Minecraft, Monkey Mart, Hay Day, Mario Cart, Mario Nintendo
- -Fifa
- -Fortnite, Apex Legends, Valorant, Minecraft
- -Fortnite, Fifa 23, Fall guys
- -Fifa, Minecraft, Rocket Leauge, Valorant
- -BeamNG.drive, Forza Horizon 5-4-3, Asseto Corza, GTA V, Dirt Rally 2.0, Wreckfest
- -Fortnite, Sims, Monkey Mart
- -Fortnite, Rocket League
- -Fortnite, GTA, Call of Duty, The Crew

Questions 10, 11, and 12:

All these questions concern English learning through games; thus, only the participants who said they played one hour or more a week got these questions. Firstly, in question 10, the gamers in the class were asked if the games they play are in English. A total of 86% answered yes to this question, while the remaining 14% said some were in English. Question 11 asked what English skills they use while playing. Here the options were reading, writing, speaking, and listening. This question was multiple choice, so the participants could choose all the options if desired. While many used all the skills, reading, speaking, and listening were the most selected options. Finally, question 12, asked if they feel gaming contributes to

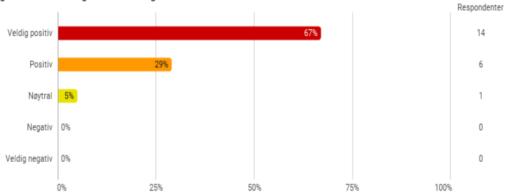
them learning new English words. All 14 of the gamers in the class answered yes. Thus, the participants agree that gaming improves their English proficiency. All the answers to these questions can be found in Appendix 3.

Question 13 - What are your thoughts on using digital games in English class to learn English?

The entire class answered this question, meaning both the "gamers" and non-gamers. A majority of the class was very positive- 67% and 29% were positive about the idea of using digital games in the subject of English. Nobody in class was negative about the idea, and only one student was neutral.

Figure 4: What are your thoughts on using digital games in English class to learn English? Options from top to bottom: Very positive, Positive, Neutral, Negative, Very negative





Question 14 - Do you think any of the games you play yourself can be adapted to be used in English lessons in the classroom?

This question was a free-text question, and all the answers can be found in Appendix 3. However, most of the class agreed that their games could be used, while three disagreed. The most frequent games mentioned were Minecraft and Fortnite. Two other games mentioned more than once were 10 Fast Fingers and Monkey Mart. However, whether any of the mentioned games are suitable for learning in the English classroom is debatable.

Question 15 - How did you experience the lesson where you played Scribblenauts Unlimited?

The last question in the survey asked their opinions on the game lesson where they played Scribblenauts Unlimited. This question was also free-text; all the answers can be found in Appendix 3. However, for a start, most of the class mentioned that they enjoyed the gaming lesson or described it as "fun." In addition, several students responded that they found the lesson instructive and learned something new. For example, one student said: "It was more fun than a normal English lesson because I learned new words." Another student wrote: "It was very fun because we can cooperate, write English and learn more English." Furthermore, some students mentioned that they enjoyed that they could cooperate. For instance, one student said, "It was very fun to finally do something with others since in English lessons here, we never cooperate in groups with friends to improve in English."

On the other hand, some of the respondents mentioned that they did not learn much or anything from the lesson. For example, one respondent said, "It was very fun, but I did not exactly learn anything new or new words." Moreover, another student said, "More fun than a normal English lesson, learned almost as much as in a normal English lesson." However, the general feedback was positive, especially regarding enjoying the game and lesson.

4.2 Interview results

Ten students participated in five semi-structured interviews with the researcher three days after the game session. It was decided early in the project that the interview would be conducted in the original pairs from the game session. Four of the interviews were conducted with the same pairs who played together during the game session. The last interview included one participant who played the game and one student who was absent that day and therefore did not play the game. Of the five pairs, three pairs were all boys, and the two other pairs were all girls. The interview followed an interview guide and concerned the students' experience playing Scribblenauts Unlimited, their relation to games, and their thoughts on using games in the classroom. The primary intention of the interviews was to supplement the data from the observations and help answer the first research question. However, the data can also help answer the two other research questions. All interviews were held in Norwegian; therefore, the researcher translated all the data and the quotations used into English. The transcription of all interviews can be found in Appendix 5-9.

4.2.1 Background Questions

At the start of each interview, the pairs were asked general questions about English and school. Question one asked what their favorite subject was at school. Here, most of the participants said that their favorite subject was physical education. English, on the other hand, was only mentioned once. Question two asked whether they liked the English subject. Most of them said they liked English as a subject, and the rest said they neither liked nor disliked it. The next question regarded their time spent on English homework per week. The majority of students mentioned that they use around 15-30 minutes on their English homework. However, many of them also said they usually do not get much homework from their teacher and that they sometimes get to do the homework at school.

4.2.2 Out-of-school gaming

When asked if they play any video games in their spare time, all of the boys said they did. However, none of the girls did. That said, a few of the girls mentioned that they used to play video games when they were younger. Additionally, all of the interviewees that played digital games in their spare time said that the games were predominantly in English. When the students were asked to mention some of the games they played in their spare time, the most frequently mentioned games were: Fortnite, Minecraft, and Fifa. Other than that, first-person shooters and car racing games were mentioned. Additionally, one student even said that he had started to play Scribblenauts Unlimited after the game session. All the students who played games in their spare time were also asked if they believed they could learn any new English words from playing these games. All of them said that they believed they could. However, they struggled to recall specific words they learned from gaming.

4.2.3 The game session and Scribblenauts Unlimited

When asked how it was to play Scribblenauts Unlimited in the lesson, they either said they enjoyed the lesson or found it fun to play the game. One student even mentioned that "it was better than a normal English lesson." Additionally, some mentioned that it was nice to do something different and that it could be nice to do something else in English lessons occasionally. The students were then asked if they talked together in English when they played. However, as also noticed during the observations, not many did. All participants mainly communicated in Norwegian and only switched to English when saying what words they should use to solve a puzzle. Furthermore, the answers were more or less similar when

asked why they mostly spoke in Norwegian. Some said they did not know why, and others because it felt unnatural to do so. For example, one student said: "When you have to say something, it sort of just comes out in Norwegian and not English." Thus, most of them spoke Norwegian simply because it was easier than English. However, none mentioned it was because it was unclear that they had to. That said, it is possible it could be emphasized even more by the researcher. It is also worth mentioning that some pairs predominantly spoke English during the game session. Unfortunately, these groups were not interviewed.

When asked if they learned any new words by playing Scribblenauts Unlimited, most said they did, but few could recall any specific words. However, there were a few words that were mentioned. For example, one student learned the word "ladder." Another student said that he learned the word "priest" and "author." The latter student mentioned that he learned new words from the suggestions in the game: "if there were any words I tried to write in English that didn't work, many words that I didn't know came up." On the other hand, one group said they did not learn any new words at all, and another group mentioned that even though they did not learn any new words, they learned how to spell them correctly.

The next question asked if they think the game can be used to learn new words. Here, all of the students agreed that the game could be used to learn new English words.

Then, as a follow-up question, the students were asked how they usually learn new English words. The most frequently mentioned answers were: games, English lessons at school, social media such as TikTok and YouTube, tv-shows and movies. Thus the most popular answers were the same as in the online survey. The next question concerned the use of the spell checker in the game. All the participants said they used it and found it helpful, but some pairs used it more than others. Then, as a follow-up question, the interviewees were asked if they usually used dictionaries or online dictionaries in English classes or as a tool when doing homework. Most said they sometimes did and used a website called "dinordbok.no."

The next question concerned how they solved the various puzzles in the game and how they cooperated. To this question, most pairs would experiment, and both would come up with word suggestions. Furthermore, one pair said: "if both said something at the same time and they were different words, we either tried both or the one that sounded the best." Moreover, each pair decided how they would like to cooperate when playing. For example, one pair mentioned they would solve one puzzle each, and others had other arrangements. In addition,

one pair was asked a follow-up question regarding the game's difficulty. One of them answered that "it was the most fun when they solved the puzzle in the end despite it being difficult". Unfortunately, in the pair that did not play together, one student had to do everything alone as his partner in the game session did not care for the game. In addition to how they cooperated, they were also asked whether they went for the most straightforward solution or tried to be creative. While many said they were creative, others would always choose the easiest solution. Additionally, some said that they were "a little creative." Overall, most of them tried to be creative; however, creativity can be difficult to define as they all have different opinions on what is considered creative or not.

Lastly, the next question asked whether they knew before what nouns and adjectives were and if they became more aware of what they were after the game lesson. To this question, they all said that they already knew what it was. However, most of them also mentioned that they became more certain or slightly more certain of what they were and the difference between them after the game lesson. For example, one pair mentioned that they became more aware of how to use nouns and adjectives because of the lesson. Additionally, another student initially said he knew what nouns and adjectives were but could not precisely remember them. He then tried to explain what they were and realized that he did know the difference between them. Ultimately, he concluded that he learned the difference between them after the lesson.

4.2.4 Games as a digital tool in school

When asked about their thoughts on using digital games in English classes in general, all of them were positive about the idea. Many agreed that learning English through games would be more fun and could lead to learning, even the girls who do not play games. For example, one of the girls said: "If there is more engagement, you can learn more." Another girl said that games were: "a more fun way to learn, and the more fun something is, the more you want to learn."

When asked whether any games they play in their spare time could be useful in English lessons at school, most were initially unsure. Since none of the girls said they played, only the boys got this question. The boys had different opinions on this question, but most of them were initially negative about the idea – they believed that the games they played would be

unsuited for classroom use either because of bad language, violence, or the fact that the games were not made for learning. However, when the researcher mentioned whether the Minecraft Education edition could be used, they all agreed it could. Furthermore, when a game called Among Us was mentioned to one group, they agreed it could be used. Other than that, one student mentioned Fortnite. His reasoning was that you could cooperate and talk together in English, and additionally, you could learn new English words. Finally, another student mentioned Roblox, a game where almost anyone can create their own game through the Roblox game engine. This student specifically mentioned a game made through Roblox called "shortest answer wins" – a game where the players are given a question, and the first person to come up with the shortest answer to the question, wins.

When the students were asked whether they had previously used games in English classes, no one said they had in lower secondary school, but some mentioned they had used them earlier in primary school. However, no one could recall using a game in an English class, and Minecraft was the only game that was specifically mentioned as being used previously in primary school.

4.2.5 Potential downsides of using Scribblenauts Unlimited or other games in the English Classroom

When asked if they could think of any challenges or disadvantages of using Scribblenauts Unlimited in the English subject, the interviewees mentioned a few different things:

- -That the students fool around instead of doing what they should, both in class and the game.
- -That you learn less than you would in a typical English lesson.
- -Too much of the game, so they do not have time for other things.
- -The students can become unfocused.
- -If your English skills are weak, you cannot advance in the game.

Furthermore, the last question concerned any challenges or disadvantages of using games in general in the English subject. Some of the students could not think of anything, and one participant said it depended on the game. However, the mentioned challenges or disadvantages were:

- -The students fooling around, being unfocused, and not doing what they are told.
- -That the students can become addicted to games.

-Using games too much is not good.

4.3 Observation results

The researcher took field notes during the game session. Since the researcher had a changing observational role, the researcher had to narrow down the focus of the on-site observations. Thus, the data from the classroom observation in this research was primarily for analyzing student engagement in the classroom and the general classroom atmosphere. In addition, it focused on how the students cooperated with their language. The data of the field notes can help answer research questions one and three.

Firstly, in terms of student engagement and the general atmosphere in the classroom, the students seemed to really enjoy the game and the lesson. Most students seemed motivated to play and engaged in the gameplay. Nevertheless, this also meant the general sound level was high in the classroom. Furthermore, in the last ten minutes of their playing, some of the students started to move around in the classroom to discuss with other pairs playing. However, the general classroom atmosphere was good, without any behavioral conflicts between the pairs and the teacher.

Secondly, regarding cooperation with their language, many students forgot they were supposed to only communicate in English. Even though the students were instructed to only communicate in English, both on the task sheet and orally, many students more or less only used Norwegian to communicate. However, they all used English when they mentioned the words they would use to solve each puzzle. On the other hand, a few other student pairs predominantly used English. In general, more than half almost only communicated in Norwegian, while the rest mostly spoke English.

Lastly, it is worth mentioning that most of the students managed to differentiate between the nouns and the adjectives used. That said, the majority forgot time and time again to write down the words they used if not reminded by the researcher. Therefore, the words written on the task sheet do not always correspond with the order of the words used in the game.

4.4 Screen recordings

The classroom observations alone could not give enough information about how the students interacted with the game. Therefore, in addition to the field notes, each pair was instructed to

screen record during the game session. Ten iPads, each with around 40 minutes of gameplay, were reviewed and analyzed to see how the students interacted with the game, what words they used, and potential learning outcomes or challenges they faced while playing. The researcher would take notes reviewing and looking for recurring trends in the gameplay.

As a start, all students would play the game as intended and try to solve the puzzles given by the game. However, some would also test out what words worked and which did not. This meant that some groups spent time writing words that would not progress the game. For example, one pair wrote "mega shotgun" and used this to shoot other characters in the game. However, since the game punishes bad behavior in the game, they had to start the puzzle over from the beginning. In contrast, another group wrote "pink lipgloss" and spent some time painting everything pink within the game. Fortunately, both groups would soon continue solving puzzles again.

In terms of writing words in the game, all students used the spell checker at least once to help them spell the words correctly. The groups sometimes had one minor spelling mistake; other times, they were further away. However, the spell checker would work in almost all cases and show them the word they intended to write. Sometimes, the students would even learn how to spell a word correctly with the spell checker's help. For example, one pair had to repeat a challenge after failing the second puzzle within a series of puzzles. The word used to solve the first puzzle was "vaccine"; however, the student initially wrote "waksine", before choosing the correct spelling with the spell checker. On the pair's second go at the first puzzle, the students immediately spelled "vaccine" correctly on their first go and thus learned how to spell this word correctly. That said, many student pairs had little trouble spelling the words and would more often than not spell them correctly on their first try.

When the students did something wrong in the game or failed to solve a puzzle, they would learn from their mistakes or try another option. Some of the challenges in the game included more than one puzzle to complete. Many times, the students would fail one of the puzzles, meaning they had to repeat the same puzzles to solve the challenge as a whole. Even though this might have been annoying, it also meant that the students had to practice writing the exact words several times or try another word and thus explore their vocabulary more. However, the game lets the player leave a puzzle and start a new one if desired. Thus, the students often left and started a new puzzle if they got stuck.

The class generally had a broad vocabulary regarding the different words used in the game. However, two pairs repeated the same puzzles several times and thus showed little of their vocabulary. The reason why they repeated the same puzzles is uncertain. Most likely, they were unsure how to advance and start new puzzles. Since the game was open for exploring, all pairs solved many different puzzles while playing. However, all except one pair had to solve the same five puzzles during the tutorial. One pair somehow managed to skip the tutorial. In the following overview, there is a description of the five puzzles in the tutorial and what words the groups used to solve them. The words are presented in a table and show how often the exact words were used.

Table 1: Tutorial puzzles

Puzzle 1: clean the pig	Puzzle 2: make the pig bigger	Puzzle 3: make wings big enough to carry the pig	Puzzle 4: help the sprout grow	Puzzle 5: get the cat down from the tree
Brush - 5	Big - 4	Big wings - 4	Water - 5	Ladder - 5
Soap - 3	Fat - 3	Huge wings - 3	Rain - 4	Gun - 2
Sponge - 1	Huge - 2	Large wings - 1		Jetpack - 1
		Mega wings - 1		Flying - 1

There was also one other challenge in the game with three puzzles that eight of the pairs completed. The words used are presented in the table below:

Table 2: Carnival games

Carnival games, knock the bottles over	Carnival games, pop the balloons	Carnival games, throw something on the dunk tank
Balls - 2	dart - 4	football - 2
Small ball - 1	rifle - 1	ball - 4
Ball - 1	arrow - 1	balls - 1
Big ball - 1	pin - 1	orange - 1
Massive ball - 1	mega flamethrower - 1	
Stone - 1		
Mega ball - 1		

5.0 Discussion

5.1 Scribblenauts Unlimited and vocabulary learning

Several studies have shown a positive correlation between vocabulary knowledge and playing games (Jensen, 2017; Sundqvist, 2019; Sundqvist & Sylvén, 2016; Sylvén & Sundqvist, 2012). With support from language learning theories, the data results show that Scribblenauts Unlimited offers many possibilities for learning and acquiring English vocabulary. For a start, the game offers authentic English input through the instructions within the game. Additionally, it prompts communication when played in pairs and forces the player to spell words correctly.

5.1.1 Learning through input and output

Krashen's input hypothesis stresses the importance of meaningful comprehensible input. According to this theory, learners acquire language most effectively when they are exposed to language that is both comprehensible and meaningful to them (Krashen, 1982). In Scribblenauts Unlimited, players must use their imagination and creativity to create objects and solve puzzles. This process can be seen as a form of meaningful input, where the player is actively engaged in the task and motivated to use the language to achieve their goals. Furthermore, the players must understand the written instructions to solve the puzzles, forcing them to read and utilize all the instructions to complete tasks within the game. Krashen (1982) also explains how extra-linguistic cues can make the input more understandable. In addition to the linguistic information the game provides, the input becomes more comprehensible through the game design, the visuals, and the context of the puzzles.

The game also corresponds well with Swain's output hypothesis (2000), which stresses the importance of producing output. The players must directly interact with the game using their English vocabulary to solve different puzzles and progress in the game. The game provides a context-rich environment for language output, allowing learners to experiment with vocabulary and syntax creatively and meaningfully. Since every puzzle is different, the players are constantly challenged to be creative and write different words for the tasks given. The results from the screen recordings show that even though many had to solve the same

puzzles, they used different words to solve them. Thus, the players will explore their vocabulary, think creatively, practice writing the words, and understand the object's relevance and utilization.

5.1.2 Learning through interactions

Another language learning theory that relates to Scribblenauts Unlimited is the concept of scaffolding, which Lev Vygotsky proposed. According to this theory, learners can improve their language skills by working with a more knowledgeable partner who provides guidance and support—a process called scaffolding (Vygotsky, 1978). Playing Scribblenauts Unlimited together can allow students to work in their Zone of Proximal Development (ZPD) as they collaborate, work as interlocutors for each other, and learn from each other. Nevertheless, even though the students were instructed to speak English, not many did. When asked why they did not speak English, one student said: "When you have to say something, it sort of just comes out in Norwegian and not English." Others said that it felt unnatural to do so. Thus, even though the concept of the class having to speak English while playing works in theory, it did not fully work in praxis in this instance. The reason why they felt it was unnatural, however, is unknown. There is a possibility that the class did not have an "only speak English classroom policy" or that the teacher is not that strict on the matter. Another reason might be that the game session was too short, and if the lesson was longer or if they tried the game another time, more students would speak English. That said, some students did speak in English and practiced their English oral skills as well.

Moreover, the game also works as an interlocutor, providing the player with the feedback, support, and guidance they need to achieve the goals within the game. The feedback can be positive when the players succeed or constructive when the players need help or guidance. The positive feedback concerns in-game rewards and praise when puzzles are solved. On the other hand, the players get constructive feedback through the spell-checker, as seen with the student pair that managed to spell vaccine correctly on their second go at a puzzle, or through suggestions with lists of words, as seen with the one student who learned the words "author" and "priest."

5.1.3 Learning through repetition

In the interviews, many of the students mentioned that they learned new words from the lesson. Furthermore, others mentioned that they learned how to spell the words correctly due to practice writing the words and from feedback from the game. The idea of practice and repetition is emphasized within the cognitive perspective (Lightbown & Spada, 2013, p. 117). Repetition can take many forms in SLA, such as repeated exposure to language input, practicing language forms and structures through drills and exercises, and using language in communicative tasks. When the students played Scribblenauts Unlimited, they were constantly exposed to varied language input and often the same input if they had to repeat puzzles. The results from the screen recordings show that many students had to repeat the same puzzles several times and, thus, often had to practice writing the same words. They, therefore, practiced writing the words several times, strengthening their knowledge of the words through producing output. Sometimes they even learned how to spell the words correctly due to repetition of writing, as seen with the student pair who managed to spell "vaccine" correctly on their second go. That said, many student pairs had little trouble spelling the words and would more often than not spell them correctly on their first try. Therefore, one can argue that the game was too easy for many of the students, and perhaps the game would be more suitable for younger students. One disadvantage of using the game with younger students is that it requires high amounts of autonomy from the players. Younger students may not have the necessary vocabulary to type in the correct words to solve the puzzles. The game can also be more distracting for younger students if they become too focused on the game and lose sight of their learning goals. In other words, they might not be able to self-regulate their use of the game and need more guidance from the teacher to stay on task.

Another language feature the students got to practice was the two word classes: nouns and adjectives. One student mentioned in the interview that he learned the difference between nouns and adjectives after playing the game. This person had practiced the different word classes repeatedly when playing, and this repeated exposure and practice led him to understand the difference between nouns and adjectives. These two incidents mentioned show how repetition and practice, as seen through the cognitive perspective, contribute to language proficiency development by consolidating and automating language knowledge, as supported by DeKeyser (2001, 2007).

5.1.4 Incidental learning

Many students mentioned that they learned something from playing the game. In the online survey, one pupil wrote: "It was more fun than a normal English lesson because I learned new words." However, this was not the case for everyone. For example, another student in the online survey wrote: "It was very fun, but I did not exactly learn anything new or new words." Additionally, in the interviews, some students mentioned that they did not learn as much as they did in a normal English lesson. Even though this might be the case, it is also possible that the students were unaware that they had acquired new linguistic knowledge. According to Krashen (1982) and VanPatten & Smith (2022), learning can happen implicitly, without the learner's awareness. Several of these students seemed to believe learning can only occur through explicit instruction or formal schooling and did not recognize that learning can also occur through informal or implicit means. It is likely that many of the students focused solely on the game mechanics and solving puzzles without realizing they were encountering new words, grammar structures, and other language elements.

To sum up, even though Scribblenauts Unlimited is not a language-learning tool in itself, it can function as one. The game allows learners to practice their English skills and help them explore their vocabulary through scaffolding, meaningful input, and producing output while also receiving feedback on their performances. By engaging in creative problem-solving tasks, learners can develop their English skills, especially vocabulary knowledge, in a fun and engaging way.

5.2 Attitudes towards gaming inside and outside the classroom

According to the online survey results, most students in this class play games in their spare time, predominantly using English. How many hours they played a week varied, but around half of those who play can be seen as avid gamers, whereas the other half are occasional or moderate gamers. As mentioned in section (2.3.1), time spent on gaming matters for vocabulary acquisition (Sundqvist, 2019; Sylvén & Sundqvist, 2012). The avid gamers in the class likely have a more advanced and varied vocabulary than the non-gamers or moderate gamers. However, this study did not measure differences in vocabulary knowledge based on gaming time, so if avid gamers in this class have a better vocabulary than the non-gamers or moderate gamers is not certain. Nevertheless, the online survey results showed that gaming

was the activity where the students felt they learned the most English. This indicates the potential games have for vocabulary acquisition. The findings from the interviews suggest similar findings – that many pupils believe they expand their vocabulary by playing games.

Even though gaming is becoming more popular among girls, this class only has three girls who play games. Therefore, the findings concerning girls' gaming habits differ slightly from the report by the Norwegian Media Authority (2020), where most girls also play games. In contrast, all 11 boys in the class play games in their spare time, which corresponds well with the general assumption that video games are more popular among boys. However, the answers could be different if asked in another 8th-grade class. Multiplayer and MMO games were clearly the most popular types of games. Both are online games where players often have to communicate in English and work together. Therefore, the players must understand the English input and produce English output (written or oral) to progress or win.

Regarding the students' attitudes toward implementing games in the English classroom, the class seemed to agree; all except one were either very positive or positive about using games in English lessons, while only one student was neutral. Thus, this class had very positive attitudes toward using games in the classroom, indicating that it is a teaching method and that games are digital tools the students would enjoy and like to see more of in English lessons. Furthermore, one student mentioned in the interviews that it was nice to do something different than usual, referring to the game session. Additionally, most of the students seemed to really enjoy the game session, supported by the online survey results, the interviews as well as the classroom observations. Another interesting find from the survey shows that while most games they play in their spare time are made for entertainment, some students answered that the games they play are made for entertainment and learning. Certain games combine learning and entertainment, making the gaming experience more educational. The students were also asked in the online survey and the interview whether they think any games they play in their spare time could be used in English at school. Many games were mentioned, but Minecraft and Fortnite were the most frequently mentioned games. Both these games have possibilities for acquiring English and could be adapted to the ESL classroom. However, whether Fortnite can be implemented in the classroom is debatable due to the game's complexity, violence, and seemingly few connections with the curriculum. Minecraft, on the other hand, is a game that is already becoming increasingly popular in Norwegian

schools due to the game getting an educational version. Thus, many teachers must agree that the game has educational value and can facilitate learning.

Even though the students would like to see more games in school, they were also aware of potential challenges or downsides with using games. While most of the class believed that some of the games they played in their spare time could be adapted to classroom use, others disagreed. For example, during the interviews, some avid gamers initially disagreed due to the games they play being too violent, containing bad language, or simply because they believed that they did not have enough educational value. Nevertheless, they seemed more optimistic about using COTS games without the mentioned negative aspects. In other words, it all depends on the game. The game must connect to the English curriculum in some way and facilitate some type of English learning. Furthermore, many agreed that games should be used in moderation or, in other words, not too often. Others said that they could become addicted to games or that they could become unfocused. However, these mentioned arguments are arguably more relevant if games were to replace "normal" English lessons. The aim of using games is not to replace other teaching methods but rather to occasionally engage and activate the students to learn or acquire English differently.

5.3 Adapting COTS games as a tool for English learning in the classroom

The new subject curriculum opens for increased use of digital tools in language learning (Norwegian Directorate for Education and Training, 2019). The digital tools are not specified, but gaming aligns well with the curriculum in many ways and is therefore among the digital tools that can be used. As stated in section 2.2.1, the new English curriculum indicates the possibility of using games through the competence aims, the core elements, and the basic skills. Furthermore, fewer and more open competence aims give the teacher more freedom to try new teaching methods and tools. Through adapting COTS games, the teacher can create a fun and engaging learning environment were the students can learn and acquire English and practise several English skills simultaneously.

5.3.1 Motivation and the right level of challenge

The use of commercial off-the-shelf (COTS) games in the ESL classroom can effectively engage students in English learning. There are many reasons why COTS should be

implemented as a tool for vocabulary learning. The primary reason, however, is often connected to the aspect of motivation. The results from the online survey and the interviews show that the students found the game session fun and were positive and eager to use games for English learning in school. Even the students who did not play games in their spare time were positive about the idea. Thus, it seems like motivation to learn is an important reason to implement games as a language tool for English learning in school. COTS games are designed to be fun and engaging and contain several elements that can be intrinsically motivating, such as goals with uncertain outcomes and performance feedback that can enhance self-esteem (Malone & Lepper, 1987). Furthermore, there is a general agreement that students are more likely to be motivated to learn when having fun and engaging in an activity, an argument also mentioned by the students in this class. When playing a video game, one is often faced with challenging tasks that require a certain skill level to complete. According to Whitton (2014, p. 70), an appropriate challenge is why someone plays games and continues playing. Games often provide immediate feedback on performance, and there is a clear sense of progress and achievement as the player advances through levels or achieves goals. This combination of challenge and feedback can create an immersive experience that draws players in and allows them to become fully absorbed in the game. Regarding the game session, most students were motivated to play the game simply because it was fun. Thus the game was intrinsically motivating for many, and some even entered the flow state. For example, in the interviews, one of the students said: "it was the most fun when we solved the puzzle in the end despite it being difficult." This student experienced a sense of enjoyment and fulfillment in solving the puzzle despite the difficulty, which is characteristic of the flow state, according to Nakamura & Csikszentmihalyi (2014). In other words, it was the most motivating when this person faced challenges that corresponded with her skill level. Many other students were likely in the flow state as well, but it might not be the case for everyone. Regardless, COTS games can be highly motivating if adopted appropriately.

5.3.2 Didactic framing and games

Even though certain games can be motivating, which is an important circumstance for SLA to occur (Sylvén & Sundqvist, 2012), games also need to have an educational value. While educational games have educational value in themselves, it is not always the case with COTS games. Therefore, as suggested by Whitton (2014), additional associated activities can help adapt these games to classroom use. Additional associated activities can be tailored to

individual students' or groups' needs and interests. Here, the teacher needs to be creative and figure out how to utilize the game in the best possible way. Teachers can use these activities to address specific language learning goals, for example, building vocabulary or practicing speaking. Moreover, additional associated activities can be designed to reinforce and expand upon the language skills practiced in the games, as seen in the classroom intervention in this study.

In agreement with Whitton (2014), the game session included additional associated activities, where, in this case, it was the task sheet. Using the task sheet, the students became more aware of the intention of playing the game and gave them rules to follow as guidance while playing. For example, the task sheet instructed them to speak English, told them what words would work and not, and instructed them to categorize and write down the words they used in the game. In addition, the task sheet added the focus on nouns and adjectives, which was not part of the game. Therefore, the task sheet helped the game align better with the English curriculum. Thus, the game could facilitate learning, but the teacher had to ensure it did. However, not all the rules were followed at all times. The results from the field notes and the interviews show that few students used English while playing. Additionally, several students forgot to write down the words they used in the game. Nevertheless, the task sheet still functioned as guidance in an activity with relatively few rules. This is an example of how a COTS game, joined with supplemental activities, can be adapted to classroom use. Which supplemental activities are used will all depend on the game and the learning aims of the lesson.

5.3.3 Digital games as digital resources

One competence aim after year ten states that the pupil is expected to "use different digital resources and other aids in language learning, text creation, and interaction" (Norwegian Directorate for Education and Training, 2019). COTS games can function as a digital resource in several ways. For example, in addition to the spell checker, Scribblenauts Unlimited contains a dictionary with thousands of words to aid the students while playing. In the interviews, one student said: "if there were any words I tried to write in English that didn't work, many words that I didn't know came up." This person took advantage of the digital dictionary and even learned new words from it. Even though most games do not have an inbuilt dictionary, different games can function as digital resources in different ways. While

this intervention in particular, focused on vocabulary learning, other games might help students learn or acquire English in other ways. In section 2.2.2, Skaug et al. (2017, p. 12) refer to four perspectives on using games in the classroom, indicating how games can work as digital resources in different ways: digital literature, digital excursions, digital learning environments, and digital creative spaces. For instance, Scribblenauts Unlimited can function as a digital learning environment and as a digital creative space. Firstly, as a digital learning environment, Scribblenauts Unlimited helps students develop and practice their vocabulary and language skills as they create and use different objects in the game. In addition, the players get help from in-game mechanics such as the spell checker or word suggestions lists. Secondly, as a digital creative space, Scribblenauts Unlimited allows students to engage in creative problem-solving and express their ideas in a digital environment. This can help students develop their creativity and self-expression skills and provide a platform for collaborative learning and teamwork as students work together to solve challenges. Other COTS games might function as a digital resource in other ways. For example, games such as "Life is Strange" or "Her Story" can function as digital literature, as they tell a story through interactive gameplay. These games can help students develop their reading and comprehension skills in English and explore different themes and perspectives, which can later be the foundation for classroom discussions or post-tasks. In addition, the online survey results show that most students combine all the basic skills; reading, writing, listening, and speaking while playing. These findings suggest that the multimodality of games can facilitate learning within all the basic skills simultaneously. In this class, writing was the least selected out of the skills, indicating that these students might need more writing practice. Scrriblenauts Unlimited can be an alternative way for students to practice their writing skills.

5.3.5 Challenges with using COTS games in the classroom

There are several factors that can make the use of games challenging in the classroom. For example, since COTS games are made for commercial use, they will often cost money, something many schools do not have a budget for. Furthermore, not all COTS have enough educational value to be implemented as a tool in the ESL classroom. Many COTS games are unsuitable for children and teenagers, especially in school, due to, e.g., violence, drugs, or bad language. Several gamers even mentioned the latter argument in the interviews. Another issue using COTS games concerns student autonomy. Many COTS games give the players

the freedom to explore, and the player can spend time, if desired, on activities that do not progress the game. The results from the screen recordings show how some groups spent time on other things that did not align with the intended learning objectives of the lesson. This is seen in the example of the pair writing "mega shotgun" and spending time shooting other characters within the game. Another pair did something more harmless and painted everything pink in the game. There were only a few instances where this happened, and all groups would continue solving puzzles after. In more traditional lessons, on the other hand, the teacher has more control over the learning processes, and the lessons often have a clearer structure. Nevertheless, with proper guidance and monitoring from the teacher while gaming, students can still benefit from the language learning opportunities certain games provide.

Overall, digital COTS games can be a fun and effective tool for English learning and acquisition in the ESL classroom. Teachers can use their creativity to adapt them to their specific teaching needs and student interests. Like any other teaching method, some challenges can arise with using COTS games. However, COTS games can be an effective tool in the ESL classroom with a suitable game and additional associated activities.

6.0 Conclusion

This thesis investigated how the COTS game Scribblenauts Unlimited can lead to English vocabulary learning and acquisition in an 8th-grade classroom in Norway. It also examined these same students' attitudes toward digital games inside and outside the classroom and how COTS games can be adapted and function as a tool for ESL learning in school. Many studies have shown that playing games can be a beneficial way to improve vocabulary knowledge (Jensen, 2017; Sundqvist, 2019; Sundqvist & Sylvén, 2016; Sylvén & Sundqvist, 2012), and the game Scribblenauts Unlimited offers many opportunities for English language learners to learn and acquire new vocabulary. The game aligns well with Krashen's input hypothesis (1982), which states that learners acquire language most effectively when exposed to meaningful and comprehensible input. Furthermore, the game provides opportunities to practice written and oral output, as supported by Swain's Output hypothesis (2000). The game session and the task sheet provided the players with authentic English input through its instructions and prompts, created opportunities to practice English output through writing, and forced the students to communicate and work together. The results show that many students believed they learned something from playing the game, whether it was new words, how to spell them correctly, or becoming more aware of the difference between nouns and adjectives. In addition, the results also show that most students found the game session fun and engaging, highlighting the motivational aspects of using games. While some students did not feel like they learned anything new from playing the game, they were likely unaware that they had acquired new linguistic knowledge. According to Krashen (1982) and VanPatten & Smith (2022), learning can occur without the learner's awareness.

The results of the online survey and interviews show that most students in the class play games in their spare time, predominantly in English. While the number of hours played per week varied, approximately half of the students who play can be considered avid gamers. Gaming was also the most chosen option when asked where they believed they learned the most English, indicating the learning potential of using games. Furthermore, the students surveyed had positive attitudes toward using games in the English classroom, regardless of whether they played games in their spare time. Their positive attitudes were connected to motivation for learning, peer cooperation, and games that created variety in the subject. However, the students were also aware of the challenges of implementing games in the

classroom. These challenges included concerns about violence, language, time spent on video games, and educational value. However, overall, most viewed digital games as a valuable tool for English learning in the classroom and that it was a teaching method they wanted to experience more often.

The new subject curriculum encourages using digital tools in language learning, and gaming is well aligned with the curriculum in several ways. Adapting commercial off-the-shelf (COTS) games to the classroom can create a fun and engaging learning environment where students can learn and acquire English while practicing several English skills simultaneously. The primary reason to implement COTS games is often connected to motivation, and these games can be highly motivating when adopted appropriately. That said, COTS games should include associated supplemental activities to enhance learning possibilities, as suggested by Whitton (2014). These additional activities can help address specific language learning goals and reinforce language skills, as seen with the task sheet used with Scribblenauts Unlimited. While the game session had some challenges, such as the students forgetting to communicate in English, this study highlights the potential of games as a tool for learning English. This study shows that incorporating COTS games into the English classroom is possible and can enhance student engagement and facilitate English learning if appropriately adapted. Digital games are not meant to replace traditional teaching methods but rather be a tool the teacher can occasionally use to create variety and engage the students to learn and acquire English skills differently. This requires the teacher to be willing to experiment and be creative with their teaching. While this game focused on vocabulary learning, other COTS games might be suitable for other types of English learning.

6.1 Limitations and further research

This study has several limitations. Firstly, as also mentioned in section 3.6, concerning the reliability and validity of the study, the sample size of the study is relatively small. The research focused on only one 8th-grade class in Norway; therefore, it is difficult to generalize any findings. The study would preferably have a bigger sample size and look at several schools in Norway, especially regarding RQ2 concerning student attitudes to games inside and outside the classroom. With a bigger sample size, the study could impact the research on using COTS games in the classroom to a greater degree. The second limitation of this study concerns the limited time of the study. The 8th-grade class played the game for the first time

and only played for roughly 45 minutes during a double lesson in English. This may not be enough time to fully explore the game and its potential for language learning. The students may need additional time to familiarize themselves with the game mechanics and learn how to use the game to practice their language skills. If they got to try the game another time, they would likely have benefited more from the game as they could focus more on learning and less on getting familiar with the game. Suggestions for further research would be to test Scribblenauts Unlimited in several classes to see if the findings are similar. Additionally, it would be interesting to test the game in different school grades in Norway to compare the results to this study. The third limitation concerns how much vocabulary the students learned or acquired when playing. While the interviews, the online survey, and the screen recordings mostly indicate perceived learning outcomes, the study cannot objectively conclude how much the students learned from playing. The study did not have a pre-test or post-test to measure actual learning outcomes, and the perceived learning outcomes may differ from the actual learning outcomes. In the future, it would be interesting to see more quantitative studies on using COTS games in the classroom that can objectively measure learning outcomes.

Another limitation worth mentioning is that this study only focused on one COTS game in an ESL classroom in Norway. Several COTS games could be adapted to classroom use in English, and as of now, only a few games have been tested in the ESL classroom in Norway. Therefore, further research in this area would benefit more teacher students and English teachers in Norway to explore different commercial off-the-shelf games in the ESL classroom and document their experiences. By sharing their findings and insights with other English teachers and future educators, they can contribute to a growing body of knowledge on effective game-based learning strategies for ESL language acquisition and learning. This would expand English teachers' understanding of how COTS games can be adapted for language learning and encourage more innovative and engaging teaching practices in ESL classrooms nationwide. The last limitation concerns researcher bias. Even though the researcher aimed to be as objective as possible, it is difficult to be entirely objective. In addition, since the researcher enjoys and often plays video games, it could have influenced the class and the respondents positively, infecting them with enthusiasm toward gaming in the classroom.

7.0 References

- 5th Cell Media. (2015). Scribblenauts Unlimited [Mobile application software]. Retrieved from App Store.
- Brevik, L. M. (2016). The Gaming Outliers. In E. Elstad (Ed.), *Educational Technology and Polycontextual Bridging* (pp. 39–61). SensePublishers. https://link.springer.com/content/pdf/10.1007/978-94-6300-645-3.pdf?pdf=button
- Brinkmann, S. (2014). Unstructured and Semi-Structured Interviewing. In P. Leavy (Ed.), *The Oxford Handbook of Qualitative Research* (pp. 277–299). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199811755.013.030
- Creswell, J. W., & Guetterman, T. C. (2021). EDUCATIONAL RESEARCH: planning, conducting, and evaluating quantitative and qualitative... research, global edition. (6th ed.). Pearson Education Limited.
- DeKeyser, R. M. (2001). Automaticity and automatization. In P. Robinson (Ed.), *Cognition and Second Language Instruction* (pp. 125–151). Cambridge University Press. https://www.cambridge.org/core/books/cognition-and-second-language-instruction/aut omaticity-and-automatization/883D468967CE5B8C549E35509F441EE5
- DeKeyser, R. M. (2007). Introduction: Situating the concept of practice. In R. DeKeyser (Ed.), *Cambridge University Press* (pp. 1–18). Cambridge University Press. https://www.cambridge.org/core/services/aop-cambridge-core/content/view/B547613 053A6A50F8D25A619BF0C868F/9780511667275int_p1-18_CBO.pdf/introduction-s ituating-the-concept-of-practice.pdf
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education*, 40(4), 314–321.

- Gee, J. P. (2007). What video games have to teach us about learning and literacy. Palgrave Macmillan.
- Jensen, S. H. (2017). Gaming as an English Language Learning Resource among Young Children in Denmark. *CALICO Journal*, *34*(1), 1–19. https://eric.ed.gov/?id=EJ1143385
- Krashen, S. D. (1982). Principles and Practice in Second Language Acquisition. *The Modern Language Journal*, 67(2). https://doi.org/10.2307/328293
- Lightbown, P. M., & Spada, N. (2013). *How languages are learned* (4th ed.). Oxford University Press.
- Malone, T., & Lepper, M. R. (1987). Making Learning Fun: A Taxonomy of Intrinsic

 Motivations for Learning. In R. E. Snow & M. J. Farr (Eds.), *Aptitude, Learning, and Instruction: Volume 3: Cognitive and Affective Process Analyses* (pp. 223–253). New Jersey: Hillsdale.
- Ministry of Education. (2019, July 15). *Strategi for fagfornyelsen*. Regjeringen.no. https://www.regjeringen.no/no/dokumenter/strategi-for-fagfornyelsen/id2537794/
- Nakamura, J., & Csikszentmihalyi, M. (2014). The Concept of Flow. In *Flow and the Foundations of Positive Psychology* (pp. 239–263). Springer, Dordrecht. https://doi.org/10.1007/978-94-017-9088-8 16
- Norwegian Directorate for Education and Training. (2019). Curriculum in English (ENG01-04). Downloaded from:
- Norwegian Media Authority. (2020). Barn og medier 2020: En kartlegging av 9–18-åringers digitale medievaner. Norwegian Media Authority.

https://data.udir.no/kl06/v201906/laereplaner-lk20/ENG01-04.pdf?lang=eng

https://www.medietilsynet.no/globalassets/publikasjoner/barn-og-medier-undersokels er/2020/201015-barn-og-medier-2020-hovedrapport-med-engelsk-summary.pdf

- Reinhardt, J. (2019). Gameful second and foreign language teaching and learning: theory, research, and practice. Palgrave Macmillan.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54–67.
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and Extrinsic Motivation from a self-determination Theory perspective: Definitions, theory, practices, and Future Directions. *Contemporary Educational Psychology*, *61*(1), 1–11. https://doi.org/10.1016/j.cedpsych.2020.101860
- Schmidt, R. W. (1990). The Role of Consciousness in Second Language Learning. *Applied Linguistics*, 11(2), 129–158.

 https://nflrc.hawaii.edu/PDFs/SCHMIDT%20The%20role%20of%20consciousness% 20in%20second%20language%20learning.pdf
- Skaug, J.H., Staaby, T., Husøy, A. (2017). Notat fra Senter for IKT i utdanningen: Dataspill i skolen. Downloaded from:

 https://www.udir.no/globalassets/filer/spill i skolen notat revidert 2018.pdf
- Spanos, A. (2021). *Games of History*. Routledge.

 https://library.oapen.org/bitstream/handle/20.500.12657/58966/9781000397390.pdf;js
 essionid=7235895B03429DE8697596D806A6E0F1?sequence=1
- Sundqvist, P. (2009). Extramural English matters: Out-of-school English and its impact on Swedish ninth graders' oral proficiency and vocabulary. [Pdf].

 http://kau.diva-portal.org/smash/record.jsf?pid=diva2%3A275141&dswid=-4582
- Sundqvist, P. (2019). Commercial-off-the-shelf games in the digital wild and L2 learner vocabulary. *Language Learning & Technology*, 23(1), 87–113. https://doi.org/10125/44674

- Sundqvist, P., & SylvénL. K. (2016). Extramural English in teaching and learning: from theory and research to practice. Springer Nature.
- Swain, M. (2000). FRENCH IMMERSION RESEARCH IN CANADA: RECENT CONTRIBUTIONS TO SLA AND APPLIED LINGUISTICS. *Annual Review of Applied Linguistics*, 20, 199–212. https://doi.org/10.1017/s0267190500200123
- Sylvén, L. K., & Sundqvist, P. (2012). Gaming as extramural English L2 learning and L2 proficiency among young learners. *ReCALL*, *24*(3), 302–321. https://doi.org/10.1017/s095834401200016x
- VanPatten, B., & Smith, M. (2022). Explicit and Implicit Learning in Second Language

 Acquisition. Cambridge University Press.

 https://www.cambridge.org/core/elements/explicit-and-implicit-learning-in-second-la
 nguage-acquisition/EBABCB9129343210EB91B9198F17C4EB
- Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes*.

 Harvard University Press.
- Whitton, N. (2014). Digital games and learning: research and theory. Routledge.

List of appendices

The online survey and the interview transcriptions are in Norwegian.

Appendix 1 - Task sheet

Appendix 2 - Online survey questions

Appendix 3 - Online survey answers

Appendix 4 - Interview guide

Appendix 5 - Interview transcription group 1

Appendix 6 - Interview transcription group 2

Appendix 7 - Interview transcription group 3

Appendix 8 - Interview transcription group 4

Appendix 9 - Interview transcription group 5

Appendix 1 - The task sheet

Scribblenauts Unlimited – How many can you help with your creativity?



In this game, the goal is to help as many characters as possible while you travel through the world. With your magic notebook, you can write (almost) any word and it will come to life within the game. You can then use the object/person/creature you named, to solve the puzzle/problem. If you succeed, you will be rewarded with a star.

The goal of this lesson is to collect as many stars as possible by solving as many puzzles as possible.

The words you can write are nouns (substantiv), adjectives, or both.

Example: pig, red pig, big red flying pig etc.

This game is all about using your vocabulary to the fullest, while also being creative. Before you start playing, there are a few rules you must be aware of.

Rule 1: You must work together as a team of two and speak English.

Rule 2: Do not use the same word more than once to solve a puzzle.

Rule 3: Words that do not work are: copyrighted material, for example, a brand name such as iPhone, sexual words, and swear words.

After you have successfully solved a puzzle (by helping a character) and collected a star, you must write down the word(s) you used in the table on the other page. If things get difficult, remember that two brains work better than one....GOOD LUCK!

Puzzles	ADJECTIVES	NOUNS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

If all 15 rows are filled in, you don't have to write more words down 😊

Appendix 2 - Online survey questions

Kj	jønn
(1)	O Gutt
(2)	O Jente
Li	ker du engelskfaget?
(1)	O Ja
(2)	O Nøytral
(3)	O Nei
	vis du skulle vurdere deg selv i engelsk, hvor mener du at du ligger glig?
(1)	O Høyt
(2)	O Middels
(3)	O Lavt
Н	vor opplever du at du lærer engelsk? (flere valg er mulig)
	☐ Engelsktimer
	☐ Venner og familie
	□ Bøker
(4)	☐ Youtube
(5)	☐ Gaming/digitale spill
(6)	☐ Sosiale medier (eks. tiktok, instagram, facebook osv.)
(9)	☐ Film og tv-serier
(8)	□ Reise
(7)	☐ Annet
Н	vor opplever du at du lærer MEST engelsk?
(1)	O Engelsktimer
(2)	O Venner og familie

Ka	an du nevne ett eller flere spill du spiller på fritiden?
(3)	O Begge
(2)	O Læring
(1)	O Underholdning
Er	spillene du spiller lagd for underholdning eller for læring?
(3)	O Massively multiplayer online games (veldig mange spillere)
(2)	O Multiplayer (flerspiller - to eller flere)
(1)	O Singleplayer (enkeltspiller)
Н	vilke type spill spiller du mest?
(6)	O Mer enn 12 timer (ca. 2 timer eller mer hver dag)
(5)	O 9-12
(4)	O 5-8 (ca. en time hver dag)
(2)	O 1-4
(1)	O Spiller ikke
Н	vor mange timer bruker du på spilling (gaming) i uken?
(7)	O Annet
(8)	O Reise
(9)	O Film og tv-serier
(6)	O Sosiale medier (eks. tiktok, instagram, facebook osv.)
(5)	O Gaming/digitale spill
(4)	O Youtube
(3)	O Bøker

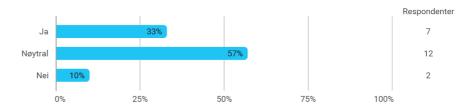
Er spille	ne du spill	er på engel	sk?			
(1) O Ja						
(3) O Nei						
(4) O Noer	1					
Hvilke fe	erdigheter	bruker du	på engelsk?			
(1) Lesin	ng					
(2) Skriv	ving					
(3) \square Snak	king					
(4) Lyttin	ng					
Oppleve	r du at spi	lling (gami	ng) bidrar t	il at du lær	er flere engelske	ord'
(1) O Ja						
(2) O Nei						
Hva tenk	ker du om	bruk av spi	ill i engelski	undervisnir	ig for å lære eng	elsk?
	(1) O Veldig positiv	(2) O Positiv		(4) O Negativ	(5) O Veldig negativ	
	_		elv spiller ka ommet? Hv	_	til bruk i u nevne noen?	
Herondon	. ommlovida	d., 4:,,, ,,, d	d	Caribblana		
	i oppievae n svaret di		ier au spiite	Scribbiena	nuts Unlimited?	
(-8- 		•				

Appendix 3 - Online survey answers

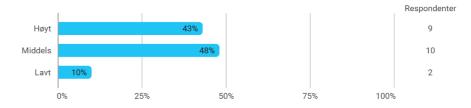
Kjønn



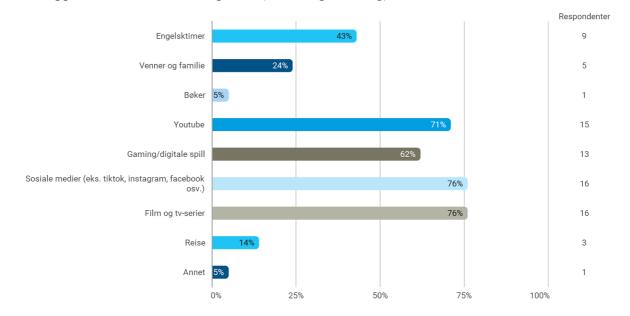
Liker du engelskfaget?



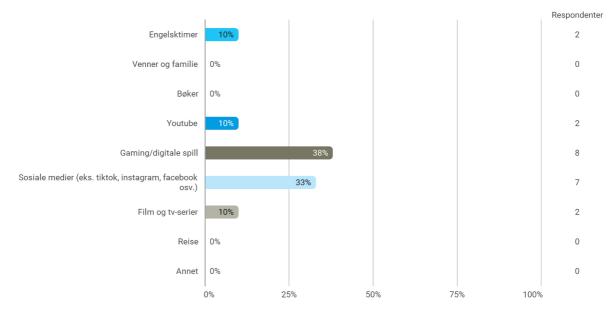
Hvis du skulle vurdere deg selv i engelsk, hvor mener du at du ligger faglig?



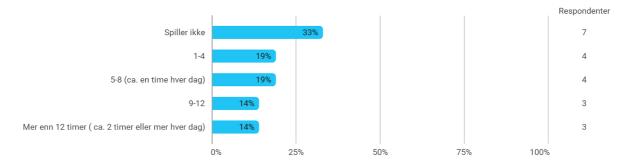
Hvor opplever du at du lærer engelsk? (flere valg er mulig)



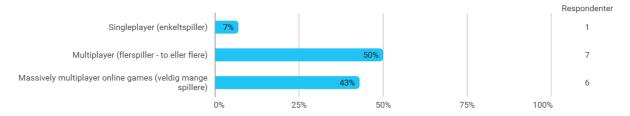
Hvor opplever du at du lærer MEST engelsk?



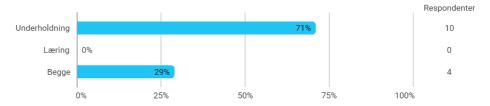
Hvor mange timer bruker du på spilling (gaming) i uken?



Hvilke type spill spiller du mest?



Er spillene du spiller lagd for underholdning eller for læring?



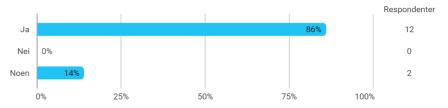
Kan du nevne ett eller flere spill du spiller på fritiden?

- Rocket League, Overwatch, gta v, god of war, project playtime, minecraft, fortnite, fifa 22,
- Cod, Valorant, Carx, Forza5, Beamng, Gta5, Dirt rally 2.0
- Monkey mart
- fortnite minecraft goat sim 1-3
- rocket leage, valorant, devour, minecraft, fortnite
- minecraft
 monkey mart
 hay day
 mario cart
 mario

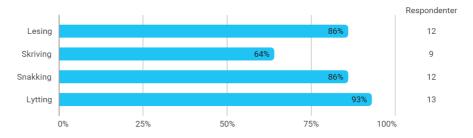
NINTENDO

- fifa
- fortnite, apex legends, valorant og minecraft
- fortnite, fifa 23, noen ganger fall guys
- fifa,minecraft,rocket leauge,valorant
- beam ng.drive forza horizon 5-4-3 asseto corza gta 5/fivem dirt rally 2.0 wracfest
- fortnite, sims og monkey mart
- fortnite og rocket league

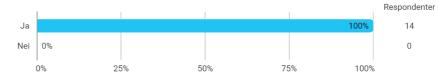
Er spillene du spiller på engelsk?



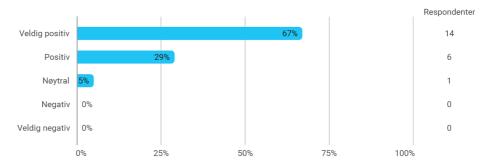
Hvilke ferdigheter bruker du på engelsk?



Opplever du at spilling (gaming) bidrar til at du lærer flere engelske ord?



Hva tenker du om bruk av spill i engelskundervisning for å lære engelsk?



Tror du noen av spillene du selv spiller kan tilpasses til bruk i engelskundervisning i klasserommet? Hvis ja, kan du nevne noen?

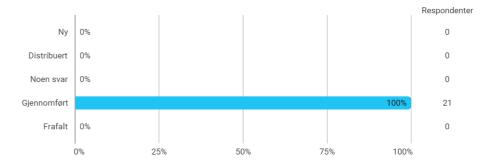
- ja du kan snakke med folk på engelsk i voice chats
- ja gta5
- Ja, et spill som vi lærer veldig mye engelsk i er 10fast fingers. Det er et veldig bra spill, som lærer deg å skrive rett og fort i engelsk på pc-en.
- Ja, monkey mart og minecraft
- ja, roblox, minecraft, scribblenauts
- Jeg spiller ikke så mye. Men lærer mye av tiktok
- ja fortinte
- nei egt ikke spiller mest skyte spill
- Roblox, minecraft, scribblenauts
- JA, minecraft
- Ja for eksempel 10 fast fingers. det er et et spill der vi skriver engelske ord.
- monkey mart
- Jeg spiller ikke noe nå, men sikkert noe som man kan bruke i engelsktimen.
- ja, minecraft
- ja, fortnite
- Nei
- dirt rally 2.0
- monkey mart

- nei
- fortnitee the crew

Hvordan opplevde du timen der du spilte Scribblenauts Unlimited? (Begrunn svaret ditt)

- · veldig gøy og lærerikt
- lit gøy
- Det var veldig gøy og endelig få gjøre noe med andre, i engelsktimene her, så er vi aldri i grupper å samarbeider med venner om å klare å bli bedre i engelsk
- Gøy. Spillet var ganske gøy og man kunne arbeide to og to.
- gøyere en en vanlig engelsk time, lærte nesten like mye som jeg lærer i en vanelig engelsk time
- gøy, men lærte ikke så mye nytt\ nye ord.
- bra
- Ganske gøy fordi man lærer på en ny måte og kunne bruke kreativiteten
- Jeg synes det var gøyere enn en vanlig engelsktime, fordi jeg lærte nye ord. Og det var mer underholdning
- gøy
- Veldig gøy fordi vi kan samarbeide, skrive engelsk og lære mer engelsk.
- det var greit. Det var ikke så gøy men det var bedre enn vanlig engelsk time.
- veldig gøy og kan gjøre det igjen
- Det var gøy, men lærte ikke akkurat noe nytt eller noen nye ord.
- Det var mye gøyere en vanlig time. Lærer også lettere engelsk ord, en i vanlig timer
- det var gøy
- fint
- gøy fordi derfor
- fin, gøy å lærte mye nytt
- gøy men vanskelig, jeg drepte masse folk. det var en gammel mann som stjal ballen til noen unger og jeg drepte han for å hjelpe barnene.
- gåy

Samlet status



Appendix 4 - Interview guide

Intervju guide - "Scribblenauts Unlimited"

Semi-strukturert intervju med elever i par

Spørsmål til elevene:

- 1. Hva tenker dere om bruk av spill i Engelsk undervisning generelt?
- 2. Spiller dere video/data spill på fritiden?
 - -Er spillene på engelsk?
 - -Kan du nevne noen av spillene du spiller på fritiden?
 - -Tror du selv at du lærer nye engelske ord av å spille spill på engelsk?
- 3. Tror dere selv at noen av spillene dere selv spiller kan tilpasses og brukes i engelsk undervisning på skolen? Hvilke spill?
- 4. Hvordan var det å spille Scribblenauts Unlimited i Engelsk timen? Likte dere timen?
- 5. Snakket dere sammen på engelsk når dere spillte?
- 6. Tror dere at dere lærte noen nye ord ved å spille?
- 7. Tror dere at spillet kan brukes til å lære nye engelske ord?
- 8. Brukte dere rettskrivingskontrollen i spillet, og var det hjelpsomt?
- 9. Hvordan gikk dere fram når dere skulle løse de ulike utfordringene dere fikk i spillet?
- 10. Hvordan samarbeidet dere for å løse utfordringene?
- 11. Gikk dere for de letteste løsningene eller prøvde dere å være kreative?
- 12. Har læreren deres brukt spill i Engelsk undervisning før?
- 13. Ble dere mer bevisste på hva substantiv og adjektiv er, og hva som er forskjellen mellom dem?
- 14. Kan dere tenke dere noen utfordringer eller ulemper med å bruke dette spillet (Scribblenauts Unlimited) i undervisning?
- 15. Kan dere tenke dere noen utfordringer eller ulemper ved å bruke spill generelt i Engelsk undervisning?

Appendix 5 - Interview transcription group 1

F: Forsker /researcher E1: Elev 1 / student 1 E2: Elev 2 / student 2 Intervju - Gruppe 1 (Gutter): F: Hva er deres favorittfag på skolen? E1: Ehm, kanskje gym. E2: Ja gym, jeg også. F: Liker dere Engelsk faget? E1: Nei, ikke så veldig. E2: Sånn passe. F: Hvor mye tid bruker dere vanligvis på engelsklekser i uken? Hvis dere er helt ærlige. E1: ehmm, kanskje sånn 20 minutt. F: 20 minutt i uka? E1: Ja E2: Ja, 20 minutt. F: Det er ikke så mye det da.. Begge: Nei F: Bruker dere mer tid i andre fag? Begge: Ja F: Dere har kanskje ikke så mye lekser i Engelsk da? Begge: Nei F: Spiller dere video/data spill på fritiden? E1: Ja E2: Ja

F: Er spillene på engelsk?

E1: Mhmm hovedsakelig. E2: Ja F: Kan dere nevne noen av spillene dere spiller på fritiden? E1: Minecraft, Fortnite og Fifa E2: Fortnite og Fifa F: Fortnite er fortsatt det mest populære spillet eller? Begge: Ja F: Tror dere selv at dere lærer nye engelske ord av å spille spill på engelsk? E1: Ja E2: Ja F: Har dere noen eksempler på ord dere har lært igjennom spill? Som dere kommer E1: Nei, kommer ikke på noe. E2: Jeg vet ikke. F: Kanskje noen spesifikke ord som bare brukes i spill kanskje? Begge: Ja F: Hvordan var det å spille Scribblenauts Unlimited i Engelsk timen? Likte dere timen? Hvordan var det? E1: Det var gøy, det var bedre enn vanlig time. E2: Gøy. F: Har dere noe annet å si enn at det var gøy? Tror dere at dere lærte noe? Eller at man kan lære noe av å spille det? E1: Jeg tror man kan lære mere ord liksom. E2: Ja, enig. F: Snakket dere sammen på engelsk da dere spilte?

E1: Litt, men ikke så mye.

E2: Bitte litt.

E1: Ja er lettere på norsk.
F: Eller at dere glemte det?
E2: Ja
F: Tror dere at dere lærte noen nye ord ved å spille?
E1: Ja
E2: Ja
F: Har dere noen eksempler på det? Hvis dere husker noen.
E1: Husker ikke helt.
F: Tror dere at spillet kan brukes til å lære nye engelske ord?
E1: Ja
E2: Ja
F: Hvordan lærer dere nye ord ellers?
E1: Engelsk timer.
E2: mhmm vet ikkeengelsk timer.
F: Brukte dere rettskrivingskontrollen i spillet, og var det hjelpsomt?
Begge: Ja
F: Hvordan gikk dere fram når dere skulle løse de ulike utfordringene dere fikk i spillet? Hvordan dere samarbeidet eller noe sånn?
E1:
E2: Jeg tror vi tok sånn en lørsning hver.
E1: Ja
F: Det funka bra?
Begge: Ja
F: Gikk dere for de letteste løsningene eller prøvde dere å være kreative?
E1: Jeg tror vi var litt kreative på en måte.
F: Dere var litt kreative?
E2: Ja

F: Kommer dere på en spesiell "puzzle", der dere var litt kreative?
E1: Ja, ehh sånn pistol på ballongene.
F: Ja dere skøyt på ballongene?
Begge nikker.
F: Kommer du på noen du eller?
E2: Nei.
F: Samme kanskje?
E2: Ja
F: Hva tenker dere om bruk av spill i Engelsk undervisning generelt?
E1: Ja det kan være lettere å lære da.
E2: Jeg tenker det samme.
F: Tror dere selv at noen av spillene dere selv spiller kan være nyttig i engelsk undervisning på skolen? Og isåfall, hvilke spill?
Begge:
F: Hvis vi tar noen av de spillene dere nevnte istad Minecraft, kan det brukes?
E1: Ja, du kan jo lære navn på ting og sånnpå engelsk.
F: Tenker du på noen spill eller?
E2: Jaa, eller jeg vet ikke helt, men jeg tror du kan bruke litt Fortnite også.
F: Ja hvordan da?
E2: Ordene liksom.
E1: Ja hvis man prater med andre folk som prater engelsk. Så kan man bli bedre til å prate engelsk.
F: Når dere snakker med folk med andre land?
Begge: Ja
F: Har dere brukt spill i Engelsk undervisning før? Som dere kan huske?
E1: Nei
E2: Nei
F: Visste dere fra før hva adjektiv og substantiv er?

E1:Ja
E2: Ja
F: Ble dere mer bevisste på hva substantiv og adjektiv er, og hva som er forskjellen mellom dem etter timen?
E1: Litt
E2: Ja
F: Hvordan da? Litt hvordan de kan brukes kanskje?
E1: Ja
E2: mhmm, ja
F: Kan dere tenke dere noen utfordringer eller ulemper med å bruke dette spillet (Scribblenauts Unlimited) i undervisning?
E1: Kanskje at folk blir litt ufokuserte, og kanskje at de tuller litt.
E2: Ja.
F: Og kanskje at man glemmer å snakke engelsk også?
E1: Ja.
E2: Ja
F: Kan dere tenke dere noen utfordringer eller ulemper ved å bruke spill generelt i Engelsk undervisning?
E2: Vet ikke.
E1: Litt av det samme, at litt tull og sånt.
F: At det kan bli litt tull?
E1: Ja
F: Vet dere hvordan man kan unngå at de blir tull?
E1: Hvis du tjja vet ikke helt.
F: Det er lov det.
F: Yes, har dere noen andre ting dere ønsker å kommentere? Om timen, eller spill generelt?
E1: Nei
E2: Nei

Appendix 6 - Interview transcription group 2

Intervju - Gruppe 2 (Jenter):

F: Hva er deres favorittfag på skolen?

E1: Gym.

E2: Gym.

F: Liker dere Engelsk faget?

E1: Helt okei...jeg gleder meg ikke men jeg gruer meg ikke.

E2: Jeg er litt enig, det er ikke så veldig gøy, men det er helt greit.

E1: Det er ikke noe bedre eller værre enn de andre fagene.

F: Nei men det er jo bra, så det er ikke helt forferdelig heller da.

Begge: Nei.

F: Hvor mye tid bruker dere vanligvis på engelsklekser i uken?

E1: Kommer litt ann på hva vi har, av og til gjør vi litt på skolen..leksene liksom.

F: Vet du sånn ca. hvor mye tid du bruker på det?

E2: Hva pleier vi å ha i lekse? (til medelev)

E1: Vi pleier ikke å få så mye lekser av læreren vår.

E2: Vi pleier liksom å gjøre leksene i skoletimene.

F: Hva vil dere si? En halvtime eller mere?

E1: 20 minutter kanskje

E2: Ja, sånn 15 til 20 minutter.

F: Ja det er jo ikke så mye.

E1: Vi får ikke så mye lekser av ho (engelsklæreren).

F: Det er vell kanskje dere glade for?

Begge: Haha, ja

F: Spiller dere video/data spill på fritiden?

E1: Nei

E2: Nei

(Hopper over spørsmål som ikke er relevante)

F: Hvordan var det å spille Scribblenauts Unlimited i Engelsk timen? Likte dere timen?

E1: Gøy

E2: Gøy

F: Har dere lyst til å si noe mere?

E1: Bedre enn liksom...eller man kan bytte på, syntes jeg. At man kan ha en engelsktime, og så kan man...

F: Det var deilig å gjøre noe annet eller?

E1: Ja

E2: Ja, enig.

E1: Men at man også kan ha en vanlig engelsktime. Sånn, vi har jo dobbelltime på tirsdag, så kunne vi tatt en av hver liksom.

F: En med spilling og en med vanlig?

Begge: Ja

F: Ja det kunne jo ha vært en fin ordning det.

F: Snakket dere sammen på engelsk da dere spilte?

E2: Nei...

E1: Ikke så mye

E2: Men vi sa liksom noen ord.

E1: Ja noen ord sa vi.

F: Var der fordi det ikke var naturlig å gjøre det, eller fordi dere glemte å snakke engelsk?

E2: Begge deler.

F: Syntes dere at det er litt rart å snakke engelsk sammen siden begge kan norsk?

E1: Ja litt rart, det er mer normalt hvis en er engelsk.

E2: Ja.

E1: Hvis ikke den ene kunne norsk. Men siden jeg vet at begge kan norsk.

F: Ja jeg skjønner hva du mener.
F: Tror dere at dere lærte noen nye ord ved å spille?
E1: Mhmm nei.
E2: Mhmm nei.
F: Tror dere at spillet kan brukes til å lære nye engelske ord?
E2: Ja det kan det sikkert.
E1: Mhmm ja
F: Hvordan lærer dere nye ord ellers da, på engelsk?
E1: off, det er vell
E2: Sosiale medier.
E1: Tiktok.
E2: Også litt tv-serier og sånt.
E1: Mhmm
E2: Og ja, film.
F: Det er nok en god kombinasjon av mye egentlig.
F: Hvis dere husker når dere spilte det spillet, når du skrev et ord, og skrev det littegrann feil, så kom det opp sånn "did you mean", altså mente du dette
Begge: Ja
F: Brukte dere denne (rettskrivingskontrollen), når dere spilte, og var det hjelpsomt?
Begge: Ja
E1: Vi gjorde det noen ganger.
F: Det er ikke alltid like lett å stave ordet, selvom man vet hvordan man sier det.
F: Pleier dere å bruke ordbøker eller google translate i engelsk timene?
E1: Ja
F: Eller når dere gjør lekser?
E1 Ja hvis det er ord, men ikke sånn, hvis det er en setningbare enkelte ord.
E2: Ja

E2: Sånn som når vi skriver tekst og sånt

F: Ja da bruker du kanskje en del.

E2: Mhmm.

F: Google translate eller?

E1: Ja

F: Husker dere hvordan gikk dere fram når dere skulle løse de ulike utfordringene dere fikk i spillet? Eller hvordan dere samarbeidet?

E1: Vi prøvde jo bare å finne på liksom...eller tenke på det første vi kom på, og så prøve det.

E2: Mhmm

E1: Og så hvis begge sa noe på likt og så var det forskjellige ord, prøvde vi enten begge eller det som hørtes best ut liksom. Med de ballongene tok det jo litt tid før vi fant ut hva det betydde men..

F: Dere gikk forbi den barrieren?

E2: Ja, og så kunne man ikke kaste.

F: Hva var det dere prøvde da? (ord)

E2: Vi prøvde en kniv men det gikk ikke ann å kaste..

E1: Den bare angrep den.

F: Men dere prøvde å være litt kreative eller?

E2: Ja litt.

E1: Ja litt.

F: Ja neste spørsmål var jo egentlig om dere gikk for de letteste løsningene eller om dere prøvde å være kreative, men da har dere jo svart på det.

E2: Ja de letteste løsningene.

F: Hva tenker dere om bruk av spill i Engelsk undervisning generelt?

E2: Jeg tenker det er bra, for det er på en måte gøyere enn vanlig.

E1: Ja hvis du er mer engasjert kan du lære mer.

E2: Ja

F: Ja neste spørsmål er egentlig ikke relevant for dere, for dere spiller ingen spill på fritiden?

Begge rister på hodet.

F: Har dere brukt spill i Engelsk undervisning før?

E1: Ikke som jeg kan huske.

E2: Ikke på ungdomsskolen.

F: Men dere brukte spill på barneskolen da?

E1: Mer sannsynlig enn på ungdomsskolen ihvertfall. Kanskje av og til.

E2: Jeg kommer ikke på noe.

F: Visste dere fra før hva adjektiv og substantiv er?

E1: Ja

E2: Ja

F: Ble dere mer bevisste på hva substantiv og adjektiv er, og hva som er forskjellen mellom dem etter timen?

Begge: Nei...

F: Nei dere visste hva det var.

Begge: Ja.

F: Kan dere tenke dere noen utfordringer eller ulemper med å bruke dette spillet (Scribblenauts Unlimited) i undervisning?

E1: Man lærer kanskje litt mindre enn hvis læreren står å snakker, eller om du skal liksom skrive en tekst.

E2: Ja, jeg er enig.

F: Pleier dere å skrive mye tekster i engelsk undervisning?

E2: Litt

E1: Ja litt, sånn små oppgaver med tekst liksom.

E2: Vi leser ofte en liten tekst på engelsk, og så skal vi skrive noe.

F: Fra engelsk textbook?

E2: Ja

E1: Også sammendrag etterpå.

E2: Ja

F: Det er greit?

E1: Ja

F: Kan dere tenke dere noen utfordringer eller ulemper ved å bruke spill generelt i Engelsk undervisning? Kanskje litt det samme?

E2: Ja, vet ikke.

F: Kommer du på noe?

E1: Nei.

F: Er det noe annet dere har lyst til å kommentere? Om engelsk undervisningen eller om spill?

Begge: nei

F: Men tror dere at dere kunne syntes det var greit at det av og til var noe annet i engelsktimene?

Begge: JAAA

F: Det er kanskje litt kjedelig å ha det samme hele tiden?

Begge: Ja.

F: Da er intervjuet ferdig, takk for at dere ville bli med.

Appendix 7 - Interview transcription group 3

Intervju - Gruppe 3 (Jenter): F: Hva er deres favorittfag på skolen? E1: Gym E2: Gym ja F: Ja det har alle sagt til nå faktisk. F: Liker dere Engelsk faget? E1: Helt greit E2: Ja F: Hvor mye tid bruker dere vanligvis på engelsklekser i uken? E1:Det kommer jo litt an på hva det er da. E2: Mhmm E1: Men sånn...20 minutt, en halvtime kanskje. E2: Ja samme egentlig. F: Det har alle de andre sagt til nå også så da tror jeg alle bruker like lang tid. F: Men spiller dere video/data spill på fritiden? E1: Nei E2: Nei F: Eller telefon spill eller... E1: Nei, egentlig ikke. F: Hvordan var det å spille Scribblenauts Unlimited i Engelsk timen? E2: Det var gøy. E1: Det var gøy ja.

F: Dere likte timen?

E2: Gøyere enn en vanlig engelsktime.

Begge: Mhmmm.

F: Snakket dere sammen på engelsk da dere spilte?
E1: Jeg prøvde men
E2: Litt
F: Litt men mest norsk?
E1: Ja.
F: Vet dere grunnen til det? Var det bare litt merkelig å snakke engelsk eller?
E2: Liksom hvis man skal si noe så kommer det liksom bare ut på norsk og ikke på engelsk.
E1: Ja
F: Det er bare mer naturlig på en måte. Ja jeg skjønner det.
F: Tror dere at dere lærte noen nye ord ved å spille?
E1: Ja
E2: Ja
F: Har dere noen eksempler på noen ord dere husker eller?
E2: Stige
F: Stige?
E2: Hva var det nå igjen?
E1: Ladder.
F: Bra!
F: Tror dere at spillet kan brukes til å lære nye engelske ord?
E1: Ja
E2: Ja
F: Hvordan lærer dere nye ord på engelsk sånn ellers da?
E1: Mest sånn film og serie og sånn.
E2: Ja, film, serie og tiktok og sånn.
F: Ja det er gøy med tiktok. Jeg ser på det litt selv jeg også.
F: Husker dere når dere spilte, og hvis du skrev feil så kom det opp sånn "did you

mean"...

E1: Ja

F: Så kom det opp sånn forslag da.

F: Husker dere om dere brukte det i spillet? Og var det hjelpsomt?

E2: Ja

E1: Ja det var det.

F: Pleier dere å bruke ordbøker eller google translate i engelsktimene eller når dere gjør lekser?

E1: Litt, ikke så spesielt mye.

E2: Vi får lov å bruke lexin.

E1: Nei, dinordbok.

F: Dinordbok.no kanskje?

Begge: Ja

F: Hvordan gikk dere fram når dere skulle løse de ulike utfordringene dere fikk i spillet? Husker dere det? Hvordan dere samarbeidet?

E2: Kom med ulike forslag, på en måte..ja.

F: Ja dere kom med ulike forslag?

E1: Ja.

E2: Prøvde oss litt fram.

F: Syntes dere det var vanskelig sånn generelt eller hvordan var det?

E2: Det var mest gøy, men hvis det var vanskelig var det mest gøy, for da fikk man det til til slutt.

F: Ja så bra.

F: Gikk dere for de letteste løsningene eller prøvde dere å være kreative?

E2: Kreative

E1: Ja

E2: Det vil jeg si.

F: Ja så bra.

F: Har dere noen eksempler på noen kreative løsninger dere hadde?

E2: Ehmm...vi tok fans, jeg vet ikke om det var så kreativt.

E1: Det var sånn, liksom hvordan få en sånn scene eller noe sånt.

E2: Ja, også var det en annen en...kan man si det?

F: Bare si det det går fint.

E1: Ja bare si det.

E2: Ehmm.

E1: Men det var ikke kreativt.

E2: Nei det var ikke kreativt kanskje.

E1: Det var meninga.

F: Hvis dere kunne skrive det i spillet så var det nok ikke så ille.

E1: Nei, det var sånn restaurante, også var det en sånn kannibal.

E2: Og en vampyr.

E1: Også skulle vi gi de mat.

F: Også ga dere de et menneske eller en hjerne og sånn?

E1: Ja

E2: Ja

F: Haha ja det var jo kreativt det.

F: Det var nok det spillet ville at dere skulle gjøre uansett går jeg utifra.

E1: Ja jeg tror det

E2: Mhmm

F: Bra, men hva tenker dere om bruk av spill i Engelsk undervisning generelt?

E2: Bra, underholdende, liksom mer sånn gøyere måte å lære på og jo gøyere der er jo mer har man lyst til å lære.

F: Hva tenker du?

E1: Samme egentlig.

F: Kanskje deilig å gjøre noe litt annet.

Begge: Mhmmm.

F: Men dere spillte ikke noe på fritiden?

E2: Nei, men jeg gjorde det før.

E1: Jeg gjorde også det før.

F: Hva var det dere spillte da?

E2: Roblox.

E1: Ja Roblox og Minecraft egentlig.

E2: Ja og Minecraft også.

F: Hva var det dere spilte på da? Var det PC eller...

E1: PC og iPad

E2: Ja samme.

F: Tror dere at noen av de spillene dere nevnte nå kan brukes i undervisning?

E1: Som vi nevnte?

F: Ja, Minecraft og Roblox.

E2: Minecraft brukte vi før.

E1: Ja Minecraft kan jo, fordi hvis man har det på engelsk.

E2: Ja det er lettere, altså lillesøstra mi spiller Roblox, hun er ganske god i engelsk, i forhold til det jeg var når jeg var på hennes alder.

F: Ja så bra.

F: Har dere brukt spill i engelskundervisning før?

E1: Vi gjorde jo litt på barneskolen.

E2: Ja.

E1: Men ikke nå tror jeg.

E2: Det var liksom bare sånn spill som var lagt inn i iPaden.

F: Og dere husker hvilket fag det var?

E2: Det var engelsk.

E1: Ja

F: Visste dere fra før hva adjektiv og substantiv er?

E1: Ja
F: På engelsk også?
E2: Ja
F: Ble dere mer bevisste på hva substantiv og adjektiv er, og hva som er forskjellen mellom dem etter timen?
E1: Ja
E2: Ja
F: Var det vanskelig å dele inn i de to ulike kategoriene (subtstantiv og adjektiv)?
E1: Litt, ikke spesielt.
E2: Helt okei.
F: Kan tenke dere noen utfordringer eller ulemper med å bruke dette spillet (Scribblenauts Unlimited) i undervisning?
E2: For mye av det, sånn at det ikke blir noe annet.
F: Så ikke for mye spilling altså, sånn at det bare er spilling?
E2: Ja
E1: Ja
F: Kan dere tenke dere noen utfordringer eller ulemper ved å bruke spill generelt i Engelsk undervisning?
E2: Man kan bli avhengig.
F: Haha ja man kan bli avhengig ja, ja det kan man.
E2: Hvis man spiller på skolen og så spiller man hjemme også
F: Da blir det litt for mye spilling kanskje?
E2: Ja
E1: Mhmm.
F: Er det noe annet dere har lyst til å kommentere?hva som helst
E2: Nei
E1: Nei
F: Har dere lyst på friminutt?

E1: Ja

E2: Ja

F: Da kan dere ta friminutt, takk for at dere ville bli med.

Appendix 8 - Interview transcription group 4

Intervju - Gruppe 4 (gutter) F: Hva er deres favorittfag på skolen? E1: Friminutt. F: Men hvis du må ta et fag? E1: Sikkert kunst og håndverk eller noe sånt. E2: Det er mellom gym, naturfag og kunst og håndtverk. F: Men hvis du må velge en? E2: Vet ikke. F: Nei, du klarer ikke bestemme deg? E2: Nei F: Liker dere Engelsk faget? E1: Ja E2: Ja F: Hvor mye tid bruker dere vanligvis på engelsklekser i uken? E2: Vi har så vidt engelsk lekser så... E1: Maks en halvtime. F: Og du da? E2: 10-20 minutt. F: De fleste så langt har sagt 20 minutt ca. F: Spiller dere video/data spill på fritiden? E1: Ja E2: Ja F: Er spillene dere spiller hovesakelig på engelsk? E1: Ja

E2: Ja

F: Kan dere nevne noen av spillene dere spiller på fritiden?
E1: BeamNG drive
F: Er det sånn bilspill?
E1: Ja
F: Er det noen flere?
E1: Forza, Assetto Corsa, det er mange.
F: Bilspill hovedsakelig da?
E1: Ja
F: Du er glad i bil!
E1: Ja
F: Kult, og du da?
E2: Jeg spiller mest sånn skytespill.
F: Som hva da?
E2: Som COD og Valorant og såntGTA og så noen bilspill, sånn Forza og sånt.
F: Spiller dere mye sammen da eller?
E2: Nei
F: Tror dere selv at dere lærer nye engelske ord av å spille spill på engelsk?
Begge: Ja
F: Er det noen spesielle ord som dere husker at dere har lært fra spill?
E1: Nei, ikke som jeg kommer på.
F: Tror du at det bare skjer litt automatisk at du bare lærer ord når du spiller?
E1: Ja
F: Hvordan var det å spille Scribblenauts Unlimited i Engelsk timen?
E1: Det var gøy.
E2: Ja det var gøy.
F: Så dere likte timen da?
Begge: Mhmmm

F: Det er bra.
F: Snakket dere sammen på engelsk da dere spilte?
E1: Nei
E2: Nei
F: Ingenting?
E2: Nei
F: Det er bra dere er ærlige ihvertfall.
E1: Bare ordene da, som vi skulle skrive.
F: Vet dere hvorfor dere ikke gjorde det?
E2: Jeg vet ikke.
E1: Vi er norske, nei jeg vet ikke.
F: Så det var ikke fordi jeg ikke var tydelig nok på at dere skulle snakke engelsk? Eller dere bare glemte det?
E1: Vet ikke.
F: Hvis jeg hadde være kjempe streng og sagt: DERE MÅ SNAKKE ENGELSK, hadde dere gjort det da?
E2: Nei
F: haha ikke?
E2: Nei.
F: Okei.
E2: Jeg kunne ha snakket engelsk.
F: Så dere kan hvis dere vill?
E2: Ja
F: Tror dere at dere lærte noen nye ord ved å spille?
E1: Jeg tror det, eller liksom hvordan man skriver de.
F: Så du blir bedre til å skrive ordene tror du?
E1: Ja
F: Og du da?

E2: Jeg lærte ikke noe nytt, men kanskje hvordan man skriver de.

F: Tror dere at spillet kan brukes til å lære nye engelske ord?

E1: Ja

E2: Ja

F: Hvordan lærer dere nye ord sånn ellers...på engelsk?

E1: Sånn videoer og filmer og sånn.

F: Ja filmer og...

E1: Ja og YouTube videoer...og spill da.

E2: Film, spill, og YouTube videoer.

F: Brukte dere rettskrivingskontrollen i spillet, og var det hjelpsomt?

E1: Ja, jeg tror vi brukte det sånn 2-3 ganger.

F: Ja så dere skrev mye rett da egentlig.

E1: Ja

F: Pleier dere å bruke ordbøker eller google translate i engelsk timene eller når dere gjør lekser?

E1: Jeg bruker det ikke med lekser, men vi har lov til å bruke ordbok.

F: Er det den "dinordbok.no" eller?

E1: Ja, det er den vi har lov til å bruke.

F: Det er ikke så mye vi bruker den da.

F: Og du da?

E2: Nei.

F: Du bruker ingenting?

E2: Nei faktisk ingenting.

F: Er det fordi du vet hvordan ordene staves eller?

E2: Ja, jeg vet. Men jeg bruker det til sånn andre fag da, sånn som spansk og sånt.

F: Husker dere hvordan gikk dere fram når dere skulle løse de ulike utfordringene dere fikk i spillet? Altså hvordan dere samarbeidet?

E1: Det var noen ting vi prøvde et parr ganger på. Men det meste fikk vi til på første forsøk.

F: Ja så bra.

F: Og du da, husker du noe? Hvordan dere samarbeida?

E2: Ja eller, vi gjorde jo ganske mye rett da...vet ikke.

F: Hvem bestemte hvilke ord dere skulle teste?

E1: Begge.

E2: Ja begge.

F: Var det sånn at en spillte og en sa ord eller?

E1: Vi bytta mye på.

F: Gikk dere for de letteste løsningene eller prøvde dere å være kreative?

E1: Kreative.

F: Ja?

E1: Det vil jeg si.

F: Du da?

E2: Ja, eller vi tok jo de letteste på noen, men vi tenkte jo litt på de andre da…ikke de letteste på alle.

F: Var det sånn at dere brukte samme ord på flere oppgaver eller prøvde dere å variere litt?

E1: Jeg tror vi brukte samme ord på noen oppgaver men vi varierte for det meste.

F: Bra.

F:Hva tenker dere om bruk av spill i Engelsk undervisning generelt?

E1: Jeg synes det er gøy, læringsrikt.

F: Hva tenker du da?

E2: Ja det er gøy også lærer man jo ganske mye da. Man lærer også hvordan man staver ting.

F: Ja tenker du nå det spillet dere spilte på tirsdag eller sånn generelt.

E2: Ja nå tenkte jeg det spillet.

F: Ja så hva tenker dere om bruk av spill i engelsk undervisning da?

E2: Jeg syntes det er bra.

E1: Jeg tror de fleste hadde likt det. De fleste hadde syntes det hadde vært gøy.

F: Tror dere selv at noen av spillene dere selv spiller kan være nyttig i engelsk undervisning på skolen?

E1: Nei

E2: Nei

F: Hvorfor ikke?

E1: Det passer ikke inn. Det er ikke lagd for å lære.

E2: Ja, jeg tror ikke skytespill hadde passa akkurat.

F: Nei

F: Tror du hvis du hadde spilt noen spill som, ikke handla om skyting, men om samarbeid eller løse ulike problemer ellernoe?

E2: Som Minecraft?

F: Ja foreksempel.

E2: Ja jeg spiller litt av det men ja jeg tror det passer.

F: Hva tror du?

E1: Ja det tror jeg, liksom sånn puzzle spill og sånn der.

F: Ja det kommer vell litt an på hva dere skal gjøre i spillet.

E1: Jaja.

F: Har dere brukt spill i Engelsk undervisning før?

E1: Ikke i Engelsk.

E2: Nei, ikke som jeg kommer på.

F: Ikke en gang sånn læringsspill?

E2: Jo jeg tror vi gjorde noe sånt på barneskolen.

E1: Ja på barneskolen gjorde vi noen sånne spill.

F: Tror dere det passer bedre med spill på barneskolen enn på ungdomsskolen?

E2: Det kommer veldig an på hvilke spill det er.

E1: Ja hvis der er sånn barnslige spill så...så tror jeg det passer bedre der.

F: Syntes dere det var barnslig spill det dere spilte på tirsdag?

E1: Nei.

E2: Njaa litt.
E1: Ja litt men
F: Men ikke sånn veldig?
E2: Nei.
E1: Nei.
E2: Det er ikke noe jeg hadde spilt på fritiden kanskje.
F: Nei det er lov å si det.
F: Visste dere fra før hva adjektiv og substantiv er?
E1: Ja
E2: Ja
F: Ble dere mer bevisste på hva substantiv og adjektiv er, og hva som er forskjellen mellom dem etter timen?
E1: Ikke så veldig mye, men ja litt.
E2: Ja litt.
F: Var det vanskelig å kategorisere ordene dere brukt inn i "nouns" og "adjectives"?
E1: Nei.
F: Kan dere tenke dere noen utfordringer eller ulemper med å bruke dette spillet (Scribblenauts Unlimited) i undervisning?
E1: At folk ikke følger med og ikke gjør hva de skal. Hvis de begynner å gjøre noe annet enn det de får beskjed om.
E2: Ja hvis de skriver masse sånn andre ord.
E1: Eller hvis læreren prøver å si noe og så følger man ikke med siden man holder på med

F: Fordi de er så engasjerte eller?

E1: Ja

spillet.

F: Ja jeg merka det litt når dere spilte, det var ikke så lett å få inn en beskjed, så det kan jeg være enig i.

F: Kan dere tenke dere noen utfordringer eller ulemper ved å bruke spill generelt i Engelsk undervisning?

E1: Mer eller mindre det samme.

E2:Det samme, som å ikke følge med å sånn.

E1: At man ikke gjør hva man skal og sånn der.

F: Har dere noen andre kommentarer? Om spill eller bruk av spill i undervisning eller...?

E1: Nei.

E2: Nei

F: Da er vi ferdig, bra!

Appendix 9 - Interview transcription group 5

Intervju - Gruppe 5 (gutter)

E2: Fortnite og fifa..og Rise of Kingdoms.

F: Hva er deres favorittfag på skolen? E1: Engelsk. F: Er det det ja? E1: Ja. E2: Mitt er gym. F: Liker dere Engelsk faget? E1: Ja E2: Ja. F: Hvor mye tid bruker dere vanligvis på engelsklekser i uken? E1: Null sekund. E2: 10 minutt- 20 minutt. F: Du gjør ikke lekser du? E1: Jo jeg gjør noen, men ikke alltid. Jeg bruker så vidt tid på lekser. E2: Det må du jo gjøre. E1: Jo jeg bruker kanskje litt tid, 5 minutter da. F: Spiller dere video/data spill på fritiden? E1: Ja, hele tiden. E2: Ja. F: Er spillene på engelsk? E1: Ja E2: Ja både engelsk og norsk, jeg kan instille det på engelsk og det vil jeg jo som sagt. F: Kan dere nevne noen av spillene dere spiller på fritiden? E1: Fortnite, Rocketleauge, Scribblenauts...ja.

F: Rise of Kingdoms, hva er det for noe?

E2: Det er på en måte Clash of Clans, på en måte, du kan bygge din egen base også kan du...ja det er lenge siden jeg har spilt det nå da.

F: Er det på telefonen eller?

E2: Man kan spille det på telefonen og pc, men jeg spiller det på pc.

F: Er det et spill du må kjøpe eller er det gratis?

E2: Det er gratis, men det kommer jo an på hvor du kjøper det da, men jeg kjøpte det gratis.

F: Ja det var jo en god pris.

E2: Haha ja.

F: Tror dere selv at dere lærer nye engelske ord av å spille spill på engelsk?

E1: Yep.

E2: Ja.

E1: Det er sånn jeg har lært alle ordene jeg kan på engelsk.

F: Ja så bra.

F: Kan dere komme med noen spesifikke ord dere har lært fra spill?

E1: Ja toxic

F: Toxic ja, hva betyr det?

E1: Hvis du er en dårlig vinner.

E2: Jeg har ikke lært så mye sånn spesielle ord, men jeg har lært en del som jeg ikke kommer på.

F: Hvordan var det å spille Scribblenauts Unlimited i Engelsk timen? Likte dere timen?

E1: Det var veldig gøy.

E2: Jeg fikk jo ikke spilt det (eleven var vekke denne dagen).

F: Har du noe mer å si?

E1: Det var veldig gøy for det var så mange kreative ting man kunne gjøre.

E1: Jeg likte å ta på meg selv vinger så jeg kunne fly rundt. Også likte jeg å gjøre meg selv om til en tyv.

F: Snakket du sammen på engelsk, med den du spilte med, når dere spilte?

E1: Nei, for han gadd ikke å følge med.

F: Tror dere at dere lærte noen nye ord ved å spille?

E1: Ja, hvis det var noen ord jeg prøvde å skrive på engelsk som ikke funket, kom det mange ord som jeg ikke kunne som kom opp. Liksom "did you mean", også kom det masse ord som jeg ikke kunne. Jeg kunne ikke prest, jeg husker ikke helt hva det var nå da.

F: Ja, priest?

E1: Ja

F: Og kanskje du ble litt klokere på hvordan du skal skrive det riktig også?

E1: Ja, også lærte jeg sånn...forfatter.

F: Ja og hva er det?

E1: Author.

F: Ja, bra.

F: Tror dere at spillet kan brukes til å lære nye engelske ord?

E1: Ja! Det tror jeg.

E2: Jeg tror også det.

F: Hvordan lærer dere nye ord ellers?

E1: Spill

E2: Spill og skole, snakke med folk...

E1: Snakke med folk i online spill.

E2: I online spill ja.

F: Så hovedsakelig folk i online spill da?

Begge: Ja.

F: Pleier dere å snakke med folk fra andre land?

E1: Ja, hvis vi bruker mikrofonen.

E2: Ja, vi sier først hvor vi er fra og sånne ting også...

E1: Først så spør vi sånn "Hey, hello, og spør sånn where are you from?"

E2: Ja de fleste jeg spiller med er fra Nederland faktisk.

F: Ja kult, da må dere jo kommunisere på engelsk.

E1: Jeg får mange fra Norge. Men jeg finner Svensker og Dansker også.

F: Brukte du rettskrivingskontrollen i spillet?

E1: Hva er det?

F: Når det kommer sånn "did you mean"..

E1: Ja jeg brukte det.

F: Det var det hjelpsomt?

E1: Ja. Noen ganger så visste jeg ikke helt og så bare trykke jeg på noe, og så kom det noe helt annet enn det jeg mente.

F: Pleier dere å bruke ordbøker eller google translate i engelsk timene eller når dere gjør lekser?

E1: Ja

E2: Ja litt av og til.

E1: Ja på leksene gjør jeg det. Og i spansken også.

F: Hvordan gikk dere fram når dere skulle løse de ulike utfordringene dere fikk i spillet? Samarbeidet du med sidemannen?

E1: Nei, for han fulgte ikke så mye med.

F: Så du gjorde mest selv?

E1: Jeg gjorde egentlig alt selv, for han ville ikke spille, han syntes det var kjedelig.

F: Gikk du for de letteste løsningene eller prøvde du å være kreativ?

E1: Veldig mye mer kreativ.

F: Hva tenker dere om bruk av spill i Engelsk undervisning generelt?

E1: Super morsomt.

E2: Greit, morsomt...ja.

F: Ja har dere noen andre tanker om det?

E1: Annerledes, du gjør skole mer gøy.

E2: Ja det er sant. Du får opp motivasjonen hos elevene og prøver å lære mer.

F: Tror dere selv at noen av spillene dere selv spiller kan være nyttig i engelsk undervisning på skolen? Hvilke spill? På hvilken måte?

E1: Nei, det er altfor mye banneord.

E2: Jeg er litt usikker egentlig. Jeg spiller jo altfor mange sånn online spill

F: Ja det kommer jo an på spillet og hvordan det brukes, tror dere for eksempel at Minecraft kan bli brukt?

E2: Ja

E1: Ja det går det an å bruke.

E2: Det er jo matte også da.

F: Har dere hørt om Among us?

E1: Ja

E2: Ja

E2: Det kan brukes

E1: Men det har kommet en oppdatering der du ikke kan skrive hva du vil. Det kommer opp forslag til hva du kan skrive.

E2: Når det kom ut, det var da det var bra.

E1: Men det er et spill på roblox som heter "shortest answers wins", det kommer opp et spørsmål, også skal du svare for eksempel da: "what do you mostly have in your pockets"? Ogsa hvis det er "shortest answer" vil du jo finne det korteste ordet du kan da på engelsk…som du pleier å ha i lomma di.

F: Ja det er jo gøy. For på Roblox, da kan du jo lage spill i spillet på en måte?

E1: Ja du kan lage, men da tror jeg du må være "verified".

F: Så det er ikke hvem som helst som kan lage?

E1: Nei.

F: Men tror du det kan bli brukt da?

E1: Ja det kan bli brukt ja.

F: Har dere brukt spill i Engelsk undervisning før?

E1: Nei, eller på barneskolen spilte vi Minecraft, vi hadde sånn prosjekt der man skulle bygge finest hus.

F: Visste du fra før hva adjektiv og substantiv er?

E1: Nei...eller jo jeg visste det, men huska det ikke.

F: Ble du mer bevisst på hva substantiv og adjektiv er etter timen?

E1: Nei, eller jeg kan bare adjektiv... eller substantiv det er en ting?

F: Ja

E1: Også adjektiv er noe som beskriver den tingen.

F: Ja men da vet du jo hva det er for noe.

E1: Ja okei, adjektiv og substantiv, jeg lærte det. Nå kan jeg liksom forskjellen.

F: Ja det er jo bra.

F: Kan du tenke dere noen utfordringer eller ulemper med å bruke dette spillet (Scribblenauts Unlimited) i undervisning?

E1: Ulempe, hva skal det si?

F: Altså noen utfordringer, noe som kan være dumt.

E1: Hvis du ikke er så god i engelsk, så har du ikke lov å skrive det på norsk for å liksom hjelpe litt da. Så må du hele tiden ha hjelp av en lærer da. For eksempel hvis du ikke kan stige da, eller noe annet som kan få ned en katt fra et tre. Så vet du ikke helt hva du kan gjøre.

F: Ja du må kunne litt engelsk da.

E1: Ja.

F: Hva hvis dere kan bruke "dinordbok" for eksempel eller noe sånt.

E1: Da hadde det vært ganske bra.

F: Kan dere tenke dere noen utfordringer eller ulemper ved å bruke spill generelt i Engelsk undervisning?

E1: Nei, jeg ser ingen ulemper med det. Eller jo det kommer jo litt an på hva slags spill.

F: Og du da?

E2: Ja det må jo være noe...

F: Hadde det vært bra visst dere hadde spillt hele tiden liksom i engelsk undervisning?

E2: Nei det tror jeg ikke.

F: Så litt med måte?

E2: Ja, ikke for mye. Men ikke for lite heller.

F: Er det noe annet dere har lyst til å kommentere? Om bruk av spill eller?

E1: Du må komme tilbake en gang.

E2: Ha det gøy.

E1: Du må komme tilbake, det er min kommentar, så vi kan spille igjen.