

MASTEROPPGAVE

Using Quizlet for Vocabulary Learning

- is Quizlet more effective and motivating than non-digital methods?

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Abstract

Globalization has increased the need for understanding different languages, and the ability to communicate in foreign languages is an advantage. This is reflected in the Norwegian National Curricula (Norwegian Directory for Education and Training, 2020), and although vocabulary learning is a difficult part of language learning to many students (Silverman & Hines, 2009, as cited in Kassem, 2018, p. 250), it is impossible to learn a foreign language without learning the vocabulary.

The purpose of this study is to examine if the digital tool Quizlet can be useful for vocabulary learning. The aim was to investigate if using the digital tool Quizlet for vocabulary learning in a Norwegian lower secondary school makes the learning more effective and motivating than using traditional, non-digital tools. A mixed-method approach combining pre- and post-tests, focus group interviews and individual interviews were used to gather data. Students participated in both tests and interviews, while teachers only took part in the latter.

The results showed that Quizlet does not change the vocabulary scores significantly compared to traditional methods. Teachers and most students agree that it is not a useful tool for learning new vocabulary, but it is motivating and gives variation. The best results are seen using a combination of traditional methods and digital tools. Regardless of proficiency in English, the students believe that it is important to learn vocabulary.

This thesis is among the first of its kind in Norway. Although other studies speak briefly of the same subject researched in my thesis, to my knowledge, similar studies have not been conducted in Norway. The data collecting period was interrupted by the COVID-19 pandemic, and the results may have been different if the project timeline had proceeded as initially planned. As a consequence, I believe that further research should be conducted, in a larger scale and over a longer testing period, with pre-, post-, and postponed tests.

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1. Introduction

1.1 Background

Globalization has always made people connect and come closer, and when people of different countries and cultures meet, the need for understanding different languages increases. The importance of being able to communicate is continuously increasing and the ability to communicate in one or several foreign languages is an advantage, for both personal and professional reasons. The Norwegian National Curricula reflects this, stating that a main area with the subject of English is to make the students capable of communicating with other people, both locally and globally (Norwegian Directorate for Education and Training, 2020).

Learning a foreign language is impossible without learning the vocabulary. Vocabulary is the essence of a language, and nothing can be said without it. Knowing some words in a foreign language is helpful when you do not know the grammar of that language, and the more many words are acquired, the more the language is mastered. This is acknowledged by the English Subject Curriculum, emphasizing the importance of word acquisition throughout the curriculum (Norwegian Directorate for Education and Training, 2020).

Traditional methods for acquiring vocabulary in a language have included worksheets and repetitions, often discouraging students eager to learn a new language. According to Silverman and Hines (2009, as cited in Kassem, 2018, p. 250), vocabulary is a difficult part of language learning for many students, and a hindrance for the understanding of a language. Motivation is often a problem and finding vocabulary teaching methods that are useful as well as motivating is a difficult and time-consuming task for the teachers. It is also a common belief amongst teachers and students that serious learning must be hard work, and if it is fun, it is probably not important or serious (Dörnyei, 2001, p. 72). Nonetheless, finding motivating tasks is essential for teachers in order to encourage their students to improve their language.

Students of all ages love gaming. The use of games in vocabulary learning may not only inspire the students, but also take away some of the pressure of language learning. Various methods may be used, and according to Dörnyei, gaming has three main advantages; it breaks the monotony, it makes the tasks more interesting, and it increases student involvement (2001,

p. 73). Games often used in language learning are games like Alias¹ and Guess Who², quiz-games that are popular and fun, and provide opportunities to use the language and obtain new vocabulary. Using games in a non-game context is called gamification and is described by Kim as “using game techniques to make activities more engaging and fun” (2011, 6:17).

Online gamification is possible due to the introduction of digital tools in schools.

Consequently, these tools provide opportunities for making vocabulary learning engaging and interesting. Alabbasi found that online gamification is more motivating than traditional methods, and that online gamification is welcomed by the students (2018, p. 34). This is supported in studies by Korlu and Mede, who found that online gamification increased the students’ interest in language learning and made them feel more confident (2018, p. 64), and Zarzycka-Piskorz, who claims that gamification may affect the students’ motivation because it can be engaging and fun (2016, p. 22).

There are several digital gamification tools available, providing engaging and varied online activities. Quizlet³ is one of these gamification tools that combines gaming and modern technology and is a tool that can motivate language learners as it combines traditional methods with the digital world. It is selected for this thesis as it is easily accessible on all devices, free and easy to use.

1.2 Research questions and aim

Learning new vocabulary is important and required in order to communicate in foreign languages. However, research indicates that most foreign language learners struggle to learn new vocabulary and often are unenthusiastic, negligent, and uninvolved about vocabulary acquisition (Anjaniputra & Salasbila, 2018, p. 1). Wang and Tahir claim that teachers find it difficult to engage and motivate the students, and that combining technology with game-based learning may involve the students in a positive way (2020, pp. 1-2). New digital tools, and especially digital gamification tools, give unique possibilities when it comes to creating new learning methods. Digital gamification can strengthen students’ motivation and involvement, making learning more fun and engaging (Kingsley & Grabner-Hagen, 2017, p. 545).

¹ Alias is a board game where the players explain the words to each other

² Guess Who is a guessing game where the players use yes- or no-questions to figure out a character

³ Quizlet.com

However, students with access to computers or tablets are easily distracted, both when working individually and in groups (Benzimra et al., 2017). According to some teachers, the competitive part of gamified learning makes some students focus more on achieving points than the learning process (Alabbasi, 2018, p. 41-42).

This thesis investigates the students' vocabulary learning and experience outcome using digital gamification tools and is useful for teachers who are curious about the advantages – and disadvantages – using these tools. In this study I aim to test the tools with Norwegian students. To my knowledge, there are two relatively recent studies about vocabulary learning using digital gamification, both are conducted in the United States. Nahmod examined vocabulary quiz scores when the students used the online gamification tool Kahoot⁴ in her Master thesis (2017, p. v), while Donovan interviewed special education students about their use of Quizlet for her Master thesis. The main focus was to see if the tool helped the students increase their vocabulary (2017, p. 38). I have also found a Norwegian study by Dašić, who for her Master thesis studied the connection between the gaming habits of 14 Norwegian lower secondary school students' and their lexical richness and essay grades, as well as their attitude toward gaming as a method for language learning (2019, p. II). Although the researchers touched into the same subject researched in my thesis, similar studies have, to my knowledge, not been conducted in Norway.

The listed studies differ from mine in several ways. The main digital tool for my study is Quizlet, while Nahmod (2017) and Dašić (2019) used other digital tools. Special education students participated in Nahmod's and Donovan's (2017) studies, while only general education students participate in my study. Finally, with around 100 participants in my study, my sample size is significantly larger than in the other studies. Nahmod included 50 students in her study (2017, p. 19), Dašić used 14 students (2019, p. 22), while Donovan had 6 students (2017, p. 16). However, their goals are similar to my study in their aim to investigate if digital tools help language learners to increase their vocabulary acquisition and motivation. Like Nahmod (2017, p. 4) My hypotheses are that the vocabulary scores and motivation will improve for the students who use Quizlet.

The aim of this study is to investigate if using the digital tool Quizlet for vocabulary learning in a Norwegian lower secondary school makes the learning more effective and motivating

⁴ Create.kahoot.it

than using traditional, non-digital tools. The study aims to answer the following research questions:

1. To what extent does the use of Quizlet help students improve their vocabulary, and is there a relation between the vocabulary acquisition and the students' opinion on learning English?
2. How will a group of students describe the possible benefits of using Quizlet and other digital tools in their language learning?
3. What are the attitudes of the selected foreign language teachers towards using Quizlet and other digital tools for vocabulary teaching?
4. In what ways can Quizlet be a useful tool for Norwegian students when working with vocabulary in a foreign language?

My intention is to gather both qualitative and quantitative data in order to investigate if Quizlet is a useful tool when learning new vocabulary. I will use vocabulary pre- and post-tests, and conduct interviews with students and teachers. My hypotheses are that using Quizlet will motivate the students and improve their vocabulary acquisition.

1.3 Thesis structure

Following this introduction chapter, chapter 2 will present the theoretical framework used in this study, namely theories about vocabulary learning and gamification, as well as selected official steering documents that provide principles and guidelines for vocabulary learning and use of digital tools in the classroom. Digitalization in Norwegian schools will also be discussed, and Quizlet is introduced. Chapter 3 presents the methods and material used in this study, and the tests that are employed to collect data are introduced and explained. There will also be information about the classroom teaching and the home schooling. In chapter 4, the results from the tests are presented, and the results are discussed in chapter 5. The findings from interviews with students and teachers will also be discussed. Finally, chapter 6 sums up the thesis and gives a conclusion.

2. Theoretical overview

In this section, I will investigate theoretical framework that is relevant for my study. This includes a brief overview of previous research on vocabulary learning, including theories and methods that are developed for vocabulary acquisition. I also take a closer look at the concepts of gamification and online gamification and explore both positive and negative aspects of their use in teaching. Digitalization in Norwegian schools will be discussed, along with the one-to-one program and the theories of CALL, MALL and BYOD. Finally, the official steering documents for Norwegian schools will be presented.

2.1 Vocabulary learning and acquisition

In order to communicate in a foreign country, a basic understanding of the words you hear or read is important. Due to globalization, the world is more connected than ever, and being able to speak, or at least understand, some words or sentences in other languages is important in many settings. For the language learner, the aim should be to become a competent user of the target language, and according to Cook, it is an advantage to learn a language outside of his or her home country (2008, pp. 199, 204). Vocabulary is essential for communication, but many students find it difficult to learn new words and hence avoid situations where using a foreign language is required (Alshammari, 2013, p. 1). Although knowing only a few words may be helpful, as much as 98 % of the running words must be understood in order to get an acceptable understanding of a text (Hsueh-Chao & Nation, 2000, p. 422).

Numerous methods for vocabulary learning have been developed through the years. The most common include the traditional grammar-translation method, valuing grammar explanation and translation. This method was replaced by the audio-lingual method, focusing on spoken language. The communicative language teaching method focuses on communication and interaction, while the task-based learning approach uses tasks where the students have to use the language to complete varied tasks (Cook, 2008). The natural approach method focuses on meaningful input, especially through reading (Zimmerman 1997, as cited in Fenner & Skulstad, 2020, p. 186). With the introduction of technology in schools, methods for combining traditional classroom teaching with online learning gained popularity and recognition.

Many vocabulary acquisition strategies, both digital and non-digital, focus on learning isolated words instead of how to use the words in context. This is usually done by repeating the word until it is known by heart, using flashcards, or memorizing lists. Krashen (2008, pp. 178-179) identifies this kind of teaching as “skill-building hypothesis”. This hypothesis focuses on mastering the use of grammar and vocabulary before the students can start using the language. Most texts in foreign language education are built on this hypothesis, meaning that the students do not use the “real” language until they master the rules. However, in order to learn new words, the students need to know how to use a new word in a sentence, pronounce it correctly and use it grammatically. The students also need to use the word in different contexts, to understand that it may have several meanings (Cook, 2008). Chung and Nation (2009, p. 546) claim that learning words in multi-word units is beneficial, because the words will be learned in a context. They imply that learning this way will improve the learner’s grammar, ability to speak more fluently and the ability of early communication in their learning process. The students also get the opportunity to use their prior knowledge when trying to understand new words. They will be able to understand the meaning of the text they read by combining prior knowledge with metacognitive skills, in order to determine the meaning of a word (Nahmod, 2017, p. 8). Guessing is also a learning strategy that can be useful, as long as the students see the new words in a context (Nation, 2005, as cited in Abid, 2017). They may find the new words in varied settings, and therefore be able to incorporate new words in their vocabulary bank. Using context in order to figure out a word’s meaning is recommended by Mart, who argues that isolated words are difficult to learn (2012, p. 181).

2.2 Gamification

Gamification is defined by Merriam-Webster as “the process of adding games or game like elements to something (such as a task) so as to encourage participation” (n.d.). Deterding, et al. state that the term originated in 2008 and saw widespread adoption from 2010. They define gamification as “the use of game design elements in non-game contexts” (2011, pp. 9-10). Agre et al. discuss the effect of using game elements in education, and claim that the mere joy of playing and the possibility of winning give motivation and encouragement, and that using game thinking and game elements may improve learners’ motivation and engagement (2015, p. 75). Additionally, the authors argue that if designed and used correctly, gamification may ameliorate learning (Agre et al., 2015, p. 83).

2.2.1 Online gamification

Online learning using gamification has been positively received by students and is more motivating than traditional approaches (Boeker et al., 2013, as cited in Alabassi, 2018, p. 34). Kingsley and Grabner-Hagen (2017, p. 545) call it educational gamification, explaining the concept as an instructional method where learning is made into a game. Online gamification is a technique that enhances students' performance, as it urges them to do more than expected. The teachers who were used as informants in Alabassis' study believed that online gamification gave the students a feeling of being more in control of their own learning, as well as enjoyment during the learning process (2018, p 41). Kingsley and Grabner-Hagen make similar claim by saying that the students control their learning using gamification because they are able to try multiple times, until they obtain the expected learning outcome (2017, p. 553).

Nahmod investigated the use of Kahoot with 15 to 16-year old general education students and special education students, and if the use of Kahoot had an impact on their quiz scores (2017, p. 3). Nahmod found that the scores did not increase significantly, but that the students enjoyed learning by gamification (2017, p. 28). Donovan's study included 14-year old special education students, and she found that the use of Quizlet increased vocabulary acquisition and student engagement (2017, p. 41). In Dašić's study, no relevance was found between lexical richness and time spent gaming, but an improvement was found in the grades of the gamers who increased their gaming time. The students also found that gaming increased motivation (2019, pp. 42-45).

Wang has researched the use of the online gamification tool Kahoot. The results show that the tool engaged the students and that the motivation for using the tool lasted for a long time (2014, p. 217). Hougham's study of Quizlet Live showed that the students found the digital gamification tool helpful, exciting, and enjoyable. The researcher argues that Quizlet can help students increase vocabulary knowledge and become more independent in their learning (2019, p. 31). Muthumaniraja found that Quizlet motivates and helps students in learning vocabulary (2020, p. 89). The author suggests that Quizlet is useful for reviewing and repetition of vocabulary, and provides a change from traditional learning (2020, p. 81).

2.2.2 Negative aspects

Allowing students access to personal laptops, tablets, and mobile phones in school, may cause distractions from the learning. Students participating in a study about distractions in a classroom where they used their own mobile devices reported that they occasionally or regularly used distracting activities on their mobile devices, like emailing, surfing, social media, messaging, and gaming. In their opinion, to be able to reduce disturbing activities, a regulation from the teacher and school is the best approach (Benzimra, Kay & Li, 2017, p. 974).

Poláková and Klímová observed that the students needed extra guidance in order to use the technology effectively, and that a noticeable number of students preferred learning languages with traditional methods (2019, pp. 6-10). Brooks investigated the use of educational technology and the hindrance teachers may encounter. The research shows that there is a gap between the technology that is available and the teachers' use of technology, and that specific training is needed in order to make the teachers use the technology that is available (2017). Teachers' use of technology is also studied by Eaton, who found that technology is time-consuming for the teachers. They have to deal with new tasks related to privacy settings, introduction of new tools to the students, include the digital tools in the teaching, as well as take on the role as technical support (2018, p. 75).

2.3 Digitalization in Norwegian schools

Digital tools have been used in Norwegian schools for decades, but in recent years, more schools have seen the value of a personal laptop or tablet for each student. This is known as a one-to-one computing program and provides the students with a constant access to a computing device (One-To-One, 2013). The one-to-one program allows students to use online resources, simultaneously work on group tasks online, and use online gamification tools. This also facilitates the teaching, as the teacher knows that the students have access to online resources and learning technologies. A recent survey shows that the Norwegian primary schools provide 59 % of its students with a one-to-one device, while there in total are enough devices to cover 82 % of the students. The survey covers the 50 largest municipalities in Norway with 3,5 of Norway's 5,4 million inhabitants (Gilje et al., 2020, p 9).

New classroom technology is used in addition to traditional methods in schools worldwide. A study including nearly 20 000 students and teachers from 100 countries shows that 48 % use a computer in the classroom, while 42 % use a smartphone (Bernstein, 2019). Several programs promote the use of digital tools in language teaching and learning. The use of technology in the classrooms - known as Computer Assisted Language Learning (CALL) - has been useful in vocabulary learning, as it motivates and involves students (Wieking, 2016, as cited in Anjaniputra & Salsabila, 2018, pp. 1-2). Mobile Assisted Language Learning (MALL) has also received a lot of attention, as portable devices like phones and tablets allow students to use language applications whenever and wherever they want, facilitating innovative and active learning where the students can work together (Kassem, 2018, pp. 250-252). Bring Your Own Device (BYOD) is a strategy that allows for the use of personal devices, combining CALL and MALL. Given that many Norwegian primary schools follow a one-to-one program, thus giving a personal laptop or tablet to every student, the device most students bring in addition to this is a mobile phone. As many as 97 to 99 % (Medietilsynet, 2020) of students in lower secondary school have their own mobile phone, giving them the possibility to choose between using the laptop or tablet that the school has provided, or the mobile phone. BYOD has opened for a new way for classroom teaching, allowing the students to move around, and even work outside of the classroom, presuming the students have a data program or access to the school's WIFI from their personal devices.

2.4 Official steering documents

The Norwegian National Curriculum, *Kunnskapsløftet 2006 (LK06)*, includes several documents that work as guidelines for teachers of English as a second language (ESL). *Framework for Basic Skills* (Norwegian Directory for Education and Training, 2012) and *English subject curriculum* (Norwegian Directory for Education and Training, 2013) have been used as references in this study. The five basic skills, namely oral, reading, writing, digital, and numeracy, are according to *Framework for Basic Skills* fundamental for learning in all subjects (2012, p. 5). *English Subject Curriculum* claims that it is necessary to be able to use the English language and know how to use it in different contexts in order to succeed in a world where English is used for international communication (2013, p. 1).

Kunnskapsløftet 2020 (LK20) is a new national curriculum that was introduced for the autumn term of 2020. Communication, language learning and meeting English texts are the most important elements in the new *English Subject Curriculum*. The basic skills for English are

reduced to four, reading, writing, oral and digital competence. Numeracy is no longer included as a basic skill in the English subject curriculum (Norwegian Directory for Education and Training, 2020). The new framework does not include 10th grade for the school year of 2020/ 2021 and is thus less relevant for this study than the version from 2013.

The *English Subject Curriculum* emphasizes that the ability to express oneself in English is crucial, and from first grade Norwegian students start learning and using English. Knowledge of words is emphasized, but the framework does not include any guidance in how to teach vocabulary (Norwegian Directory for Education and Training, 2020).

The National Curricula LK06 and LK20 both state that digital skills are the ability to use a variety of digital sources to acquire knowledge of the language and the subject of English. This enables the students to meet authentic language and communicate in English. Digital skills also involve critical use of information and sources (Norwegian Directory for Education and Training, 2013 and 2020).

3. Methodology and research design

In this chapter, the research design is outlined along with a description of the methodology. The research design is given in section 3.1, while the participating school and students are introduced in section 3.2. The research tools are presented in section 3.3, and Quizlet is described in section 3.4. The tests used in the study are outlined in section 3.5, followed by a condensed presentation of the teaching. Finally, the focus-group interviews are presented in section 3.7. The results of the research are shown in chapter 4.

3.1 Research design

The aim of the study was to investigate if using the digital tool Quizlet for vocabulary learning in a Norwegian lower secondary school makes the learning more effective and motivating than using traditional, non-digital tools. A mixed methods-approach was used to gather both quantitative and qualitative data (Dörnyei, 2007, p. 163). The quantitative data were collected using a written, anonymous test, while the qualitative data were collected through focus-group interviews with students and teachers. The vocabulary used in the tests was collected from literary texts that the students read in class. While the tests gathered information about the students' knowledge of the vocabulary, the interviews provided information about the students' motivation and opinion about learning new vocabulary in a digital environment, and the teachers' impression about using digital tools for the teaching of vocabulary.

The research period was initially planned to last four weeks in the spring term of the students' final semester of lower secondary school, and the subject for these four weeks was literature. The study was unexpectedly interrupted by the COVID-19 pandemic⁵, so the research period lasted significantly longer. There was a home-schooling period of about 8 weeks, and due to the nature of the study, the intended teaching and testing could not proceed as intended. The pre-tests were done as planned in the beginning of March 2020, and the students worked with the texts in the following four weeks, some teaching occurred in school while some was conducted digitally due to schools being closed. However, the post-tests could not be held until the students were back in school, as these were to be supervised by the researcher.

⁵ The COVID-19 pandemic is a global pandemic that spread to Norway in March 2020 and led to a national lockdown, including the closing of all schools.

Because of restrictions related to COVID-19, these final tests could not be held until the beginning of June 2020. In addition to this, the qualitative data could not be gathered from this group because the restrictions prevented face to face interviews. Therefore, an additional research period was carried out in the fall term of 2020

The restrictions that prohibited the interviews with the group that participated in the testing, led to the participation of a new group of 10th graders. These students were not involved in the tests but talked about their experience learning vocabulary and using digital tools in school. The students are in my French class and were chosen because of their knowledge using Quizlet when learning French. They have been taught in the same manner as the students participating in the tests, and by the same teacher. The teachers involved in the teacher interviews are language teachers in the participating school. The interviews were done in the beginning of the new school year of 2020 to 2021.

3.2 The school and the participants

The school participating in the study is a lower secondary school in an urban area in south-east Norway. It is where I work, and due to this thesis being a part-time study alongside full time employment, time that could be allocated to the project was limited and therefore the study was conducted only at this particular school. In addition to this, the nature of the project would have made it difficult to involve other schools and students. The project is based on selected words from three texts that 10th grade students usually read in this school.

The school has about 170 10th grade students, a size that I consider ideal for the study. The participants in the study are what Dörnyei calls an opportunity sampling (2007, p. 98). In the school year of 2019/ 2020 I taught English in two classes, while the remaining four classes were taught by three other teachers. Participating in the first part of the study were my two classes, working with Quizlet when learning new vocabulary (Quizlet-group), while two other classes worked in the traditional way, using the vocabulary lists that accompany the short stories (control group). In total, about 85 students participated in this part of the study. The last two classes were not included in the study because the original teacher was incapacitated, and it was difficult for me to involve the new substitute teacher as the collection task was complex and demanding.

Because of the restrictions described in section 3.1, a new group of students participated in the focus-group interviews. These interviews were done at the start of the school year of 2020/

2021. 13 10th grade students participated, and interviews were done in groups of 3 or 4 students from my French class. The teacher interviews were also done at the beginning of the school year. The teachers volunteered to participate, and the only requirement was that they teach a foreign language in our school. Due to the teachers' lessons throughout the school day, it was difficult to conduct group interviews, so interviews with the five participating teachers were done with one or two teachers at the time.

Before conducting the tests, I informed the participating students about the project and that it was voluntary to participate (appendix G). If they did not want to participate, they could refuse to take the paper, hand in blank or fake an answer. They were also reassured that it was anonymous and had nothing to do with their final grades in the English subject. All the students present volunteered to participate. The procedure was repeated before the interviews, and all students and teachers I asked were positive to participate.

3.3 Data collection methods

The quantitative part of the study was done using anonymous written tests, where the students translated words from English to Norwegian (appendices A and B). Two short stories and an extract from a play that the students read were selected from the textbook *New Flight 10* (Bromseth & Wigdahl, 2007), and the textbook has a list of vocabulary that the students were to learn (appendix C). In addition to this, two classes used Quizlet when learning the new vocabulary.

The qualitative part was done in one of the school's classrooms. The interviews were not recorded, but I took notes during the interview and rewrote them immediately after each interview. A similar approach was used by Dizon, who conducted a study with 9 Japanese EFL students. Dizon used pre- and post-tests to determine if the students improved the vocabulary they worked with for several weeks and used a questionnaire to get the students' impression of Quizlet (2016, p. 40).

The students' devices are important tools for this study, but may also be a disturbance, like described in section 2.3.2. In the participating school there are few regulations related to the use of laptops, and the teacher supervises how the students use their laptops. There are some regulations regarding downloading games, but the students still have access to games, social media and other websites that may distract them.

3.4 Quizlet

Quizlet is an online study application that enables gamified learning. It originates from 2005, when a 15-year-old American student created a web program in order to help him memorize vocabulary for a French test. The software program turned into Quizlet and was publicly launched in 2007 (TechTycoons, n.d.). In 2020, Quizlet has more than 50 million monthly learners, and over 400 million study sets, freely available on their website and app (Glotzbach, 2019).

Quizlet is a study application, giving students a possibility to learn using learning tools and games (TechTycoons, n.d.). It is composed of learning modules, combining concepts with definitions or descriptions, and provides for active learning both in the classroom and outside of it (Montaner-Villalba, 2019, p 305). Teachers can create classes and share study sets with the students. There is also a game called Quizlet Live, made specifically for teachers to use in the classroom. It uses the same study sets but allows the students to play as a team. This part of Quizlet helps the students master social skills, as well as their study material (Kolodny, 2016). Quizlet also lets students create their own study material and turn it into games (Quizlet, n.d.).

Quizlet is easy to use and requires little technological skills. It is available as a basic version for free, and as a paying version intended for teachers, giving more options like tracking student progress, and customizing the quizzes. The application is easily available as long as the students have individual access to a computer, tablet, or phone. It is available as a mobile app and as a website, giving schools not featuring in a one-to-one program the possibility of still using the tool. Many of the students are what Prensky calls digital natives (2001, p. 1). They grow up in a digital age, are familiar with the use of technology, and they usually have their devices easily available, facilitating the use of tools like Quizlet.

3.4.1 The different parts of Quizlet

Quizlet offers a variety of learning tools and games, making learning interactive and fun. There are five “study” options, and 3 “game” options. I will briefly present the different learning options.

Flashcards:

Flashcard is the digital version of a traditional method, with the word on one side of the card and the definition or translation on the other.

The Open Window by Saki

5.0 ★★★★★ 1 review

STUDY

Flashcards

Learn

Write

Spell

Test

Play

Match

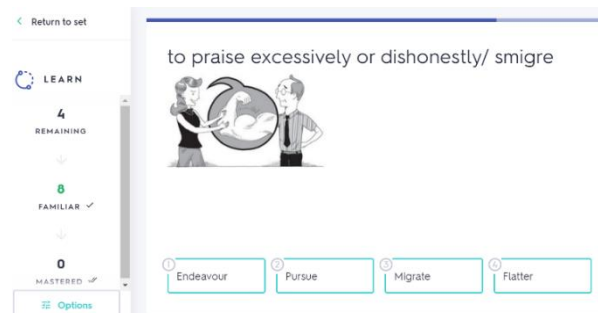
Gravity

Live



Learn:

Learn is an option where the student gets the meaning of the word, it may be a definition or a translation, and has to combine it with the correct target word.



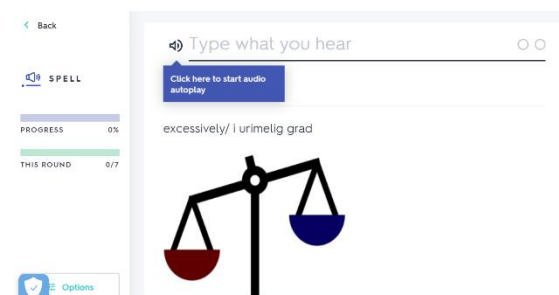
Write:

The student will get the meaning of the word and has to write the correct translation.



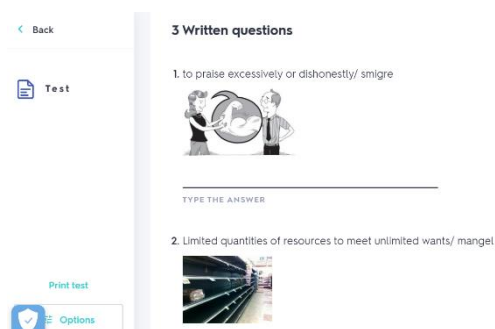
Spell:

The target word is read aloud, and the student types it. The student can see the definition.



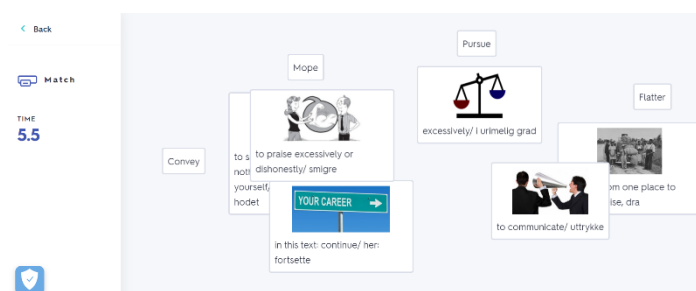
Test:

This is a combination of different questions, like translation, match, true or false and multiple choice.



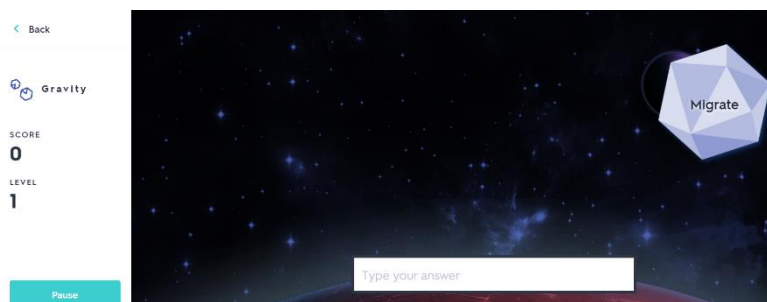
Match:

This is the first game option. The student must match the target word with the correct translation or definition.



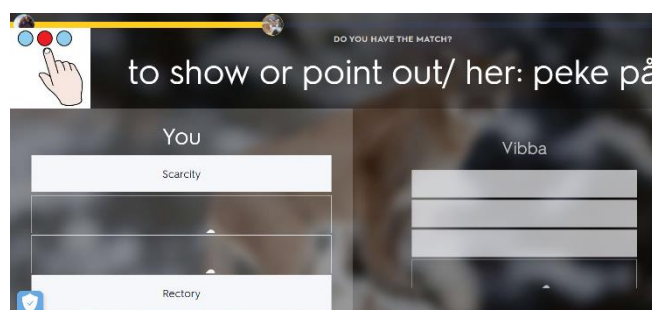
Gravity:

This is also a game, where the terms or definitions appear, and the student has to write the correct word before the meteor disappears.



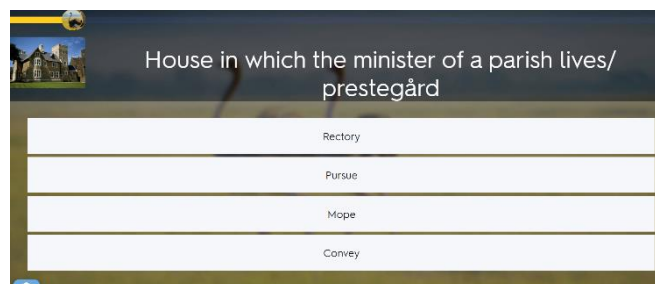
Live:

This is the newest game option, and it combines learning with collaboration. The student gets a set of words on the screen, while their group members get different words. They have to work together to win. If they use a laptop, the students will see their own screen as well as how many words their group members have answered. If they use a mobile phone, they will only see their own screen. For this game, there has to be a minimum



of 4 participants, while there is no upper number. The first group to have 12 consecutively correct answers wins.

It is also possible to let the students compete against each other individually.



3.5 The pre- and post-tests

The main data for the study are the pre- and post-tests. These two tests are almost identical, except for a few questions. The tests consist mainly of 24 words taken from the texts in *New Flight 10* (Bromseth & Wigdahl, 2007). The words are chosen from the vocabulary lists (appendix C), and I have opted for words that I assumed would be unknown to the students (like *retain*, *blotchy*, *pursue*). However, some words believed to be known to most students are included (like *theme*, *point of view*), because they would be relevant in the lessons. Frequent words (like *love*, *hate*) and transparent words (like *character*, *conflict*) are excluded from the tests. Such words are considered less relevant because the students are supposed to be familiar with these. A direct translation is chosen because it provides the most information about of the learners' knowledge of the written word. This eliminates the possibility of seeing the words in context, thus minimizing the chance of guessing the meaning.

Table 1 shows the words that are included in the pre- and post-tests. The words are regrouped in accordance with my expectations, based on the words the students are supposed to have learned previously.

Words familiar to many students	Words familiar to some students	Words familiar to few students
Setting	Trait	Playwright
Point of view	Plot	Retain
Theme	Resolve	Boundary
Enemy	Purpose	Frown
Attempt	Provide	Blotchy
Effect	Migrate	Whimper

		Bound
		Endeavour
		Flatter
		Unduly
		Pursue
		Convey

Table 1 shows the words from the tests regrouped in to familiar, familiar to some and not familiar words.

The students did the pre-test before they started working with the new texts. They ticked of their gender so I could see if there was a difference in the results between boys and girls. Then they translated the words they understood from English to Norwegian. They also answered two questions about their attitude towards learning English, where they ticked off either “yes” or “no” to the following questions:

1. Do you like learning English?
2. Do you think it is important to learn new vocabulary?

These questions were included to see if there were any discrepancies between the results and their attitudes towards learning English.

Because of COVID-19 and home schooling, the post-tests could not be performed as planned after 4 weeks of studying the texts, so the students had the post-test about 9 weeks after the pre-tests. The post-tests were similar to the pre-tests, except for one additional question:

3. Do you prefer using digital or non-digital tools when learning new vocabulary?

This question was added to investigate the students’ opinion on using digital tools and the students chose either “digital” or “non-digital”.

The students took the tests in their own classroom, under supervision. For both tests, the students were told to put away laptops, phones, and books. I handed out the test, and a pencil to those who needed it.

For the pre-tests, there were 39 students in the two classes that used Quizlet, 20 boys and 19 girls. There were 46 students in the two other classes, 27 boys and 19 girls. The results from the pre-tests are presented in section 4.1.1. The results from the post-tests are presented in section 4.1.2. For these tests, 35 students from the classes using Quizlet participated, 17 boys and 18 girls. From the two classes using traditional methods a total of 45 students responded, 25 boys and 20 girls. The classes varied in size, hence the difference in the number of students.

3.6 Teaching

The subject for the period was literature, and the students read three texts from their English textbooks: an extract from *Romeo and Juliet* by William Shakespeare, *The Open Window* by Saki, and *Ghost Walk* by Mark A. Garland. The students read one new text every week and worked with tasks related to the texts and their understanding of these. They also worked with literary terms. In the end of the literature period they discussed and compared the different texts.

In contrast to the method used in the pre- and post-tests, which was based on the grammar-translation method, the method used in the classroom was a variety of task-based learning. The method is characterized by different tasks that build on each other, and according to Cook, the tasks must focus on information and provide language outcome. It is also important that the tasks are meaningful. The language must come from the learners, and focus is on the meaning, not the structure (2008, p. 257). This method focuses on student involvement, using oral communication as a basis for learning a new language. Task-based learning can be “input-providing”, involving reading and listening, and “output-prompting”, including speaking and writing (Ellis, 2009, p. 224). This learning method will implement four of the basic skills from the English subject curriculum, reading, writing, oral and digital (Norwegian Directory for Education and Learning, 2013).

The task-based learning approach does not provide explanations but is based on the context the word is used in and using the learners’ prior knowledge (Cook, 2008, p. 63). Vocabulary was accordingly not taught directly through memorization of definitions provided by the teacher or the textbooks. However, the students were told to figure out the meaning of unfamiliar words, by using context or looking up the definitions and learn these words. They also worked with the new words when doing tasks, discussing, and writing short texts. There was a total of 108 words from the three texts in the vocabulary list, and the students were instructed to learn 40 words specified by the teacher. In addition to these 40 words, they also had to learn six words about literature that were not in the glossary lists. These words were selected by the teacher in order to help the students talk about the texts that they read. The students were told to use a pencil to mark the 40 vocabulary words with an asterisk and write by hand the six additional words (appendix C). The students did not prepare for the vocabulary tests.

Two classes used Quizlet to learn the new vocabulary. The four quizzes (appendix D) were made by the teacher and included 40 specific words from the texts, in addition to six words about literature. The students received the link in Google Classroom and were told to work with the different parts of Quizlet in the manner they thought was the most beneficial when learning new vocabulary. The students in the Quizlet group were familiar with Quizlet and knew how the different parts of the tool (described in section 3.4.1) could be used. The study options would help them learn the words, while the game options were a fun way to repeat what they had learned. The teacher also repeated this and went through the different quizzes with the students. The quizzes allowed the students to study the target word, which was explained with both the definition and the Norwegian translation. The quizzes were designed to be valuable tools for the students and were intended to motivate and engage the users. Pictures were included to help those who prefer visual illustrations of a concept, and the opportunity to learn both a definition and translation may encourage the students to broaden their knowledge of the target words.

The other two classes, representing the control group, did not get any recommendations related to how they should work with the vocabulary, only to use the vocabulary lists in the textbook to find translations of the different words and use the methods they usually prefer for learning vocabulary. Both the control group and the Quizlet-group were advised to write down the words with definitions and translations. They also used the words when they worked with tasks related to the texts. The tasks from *New Flight 3 Workbook* (Bromseth & Wigdahl, 2007) consist of comprehension, vocabulary, and grammar, while the digital tasks include grammar, pronunciation, vocabulary, and games. The gamified digital tasks are often similar to the quizzes on Quizlet, with flashcards, match, and comprehension. Using the tasks enabled the possibility to use several of the vocabulary acquisition strategies mentioned in section 2.1, including grammar-translation and task-based learning (Cook, 2008).

3.6.1 COVID-19 and home schooling

Due to the COVID-19 pandemic, most of the teaching was conducted digitally since March 2020 and during the writing of most of this thesis. Several platforms were used, but for the live teaching, the school used Microsoft Teams. The teaching in the English lessons consisted of reading, explaining, writing using shared screen, watching clips from YouTube, and

showing pictures. Screencastomatic⁶ was also used for variation, giving the students the possibility to learn at their own pace. During the lessons, the students could ask questions, both oral and written. They could also contact the teachers when they needed help after the lessons. They worked both individually and in digital groups and were able to establish their own groups where they could help each other as well as socialize. After some lessons they handed in their work, such as a small movie, answers to quizzes, short texts about the subject they worked with, or results from Quizlets and Kahoots.

The home-schooling situation was foreign to both students and teachers, and the programs used for digital teaching were also unfamiliar. A quick learning process was required, and the teachers had to make lesson plans depending on the digital tools that they were confident using, the availability of the tools, as well as the students' ability to adapt. Fortunately, due to the one-to-one program mentioned in section 2.5, all the students had a laptop available and were able to participate in the lessons. The students seemed to adapt to the situation easily. They "checked in" to each lesson and then followed instructions. The students in my classes expressed that they were comfortable with the situation and that the teaching was motivating and valuable. However, the teachers noticed that some students did not work as well as they could have done in a normal school situation.

3.7 Focus-group interviews and teacher interviews

The qualitative data were gathered through focus-group interviews with students, and teacher interviews. I conducted a semi structured interview, using a preprepared set of open-ended guiding questions (appendices E and F) where the participants were encouraged to elaborate on their answers (Dörnyei, 2007, p. 136). With these questions, the participants could answer relatively freely, allowing for more details. The interviews were done in Norwegian, allowing the participants to speak more openly than they presumably would in a foreign language. One interview was conducted with each group. There were four groups with three or four students in each group, while the teacher interviews were done with one or two teachers at the time. The participants are described in section 3.2.

The questions were related to learning English vocabulary, and what Dörnyei calls "attitudinal"; trying to figure out what people think (2007, p. 102). Examples of questions for

⁶ Screencastomatic.com

the students are “How do you like to learn vocabulary?”, “Do you like learning English?”, “Do you think Quizlet is useful?”, and “Do you think you get better scores using Quizlet?”. The teachers got questions like “What method do you prefer when teaching vocabulary?”, “What is your opinion on using digital tools for vocabulary learning?” and “Do you think a tool like Quizlet gives better results than traditional methods, and why?”.

I took notes during the interviews and rewrote these immediately after each interview.

3.8 Ethical protocol

The Norwegian Centre for Research Data (NSD) is responsible for certifying research projects in Norway. They help students and researchers with ethical and legal guidelines and aid in whether an NSD certificate is needed for a study or not. I discussed the ethical aspect of this project with NSD, and NSD informed me that I did not need ethical approval to conduct this study. No personal information was gathered. In addition, the informants are anonymized, so they cannot be identified. The students answered the questions on paper, and the interviews were not recorded or filmed, so anonymity is guaranteed. According to NSD (2020), youth aged 15 or above may consent to participate in a study without parental consent, as long as no personal information is gathered. The participants were 15 years or older, meaning that there was no need for parental consent.

Prior to both tests and interviews, I presented my project to the students (appendix G), and they were able to decline participating. For the tests, I told them that they could refuse or hand in blank answers. For the interviews, I said that they should only participate if they wanted to.

I also presented my project for the school’s principal (appendix G), who accepted that I invited students and teachers to participate in the project.

4. Results

The purpose of the study is to examine the effect of using the digital gamification tool Quizlet for vocabulary learning in a Norwegian secondary school. In this chapter, the results from the tests are presented in section 4.1, while the interviews are outlined and explained in section 4.2.

4.1 Data from the tests

Like described in chapter 3, the first part of the study consists of pre- and post-tests. Two tenth-grade classes used Quizlet (Quizlet-groups) and two tenth-grade classes used traditional, non-digital methods for learning vocabulary (control groups).

The tests consisted of 24 words the students were asked to translate from English to Norwegian, in addition to the questions presented in section 3.1.4. Most of the English words could be translated in multiple ways, and all translations that I could find in a dictionary are acknowledged. I used an English-Norwegian dictionary, *Engelsk ordbok* (Kirkeby, 2001), as well as *Oxford Advanced Learner's Dictionary* (Hornby, 1989), MerriamWebster.com and Thesaurus.com to determine if a translation was appropriate.

The students got one point for each correct word. Explanations in English are not counted (like provide – to provide for a family), nor are multiple translations as a response to one word, even though one of the translations is correct (i.e. setting – settingen/ hendelsen). The maximum result for each test is 24 points.

4.1.1 Results from the pre-test

The pre-test was done before the students started working with the relevant texts. The test consisted of 24 random words from the 46 words the students were told to learn, excluding common words and transparent words. The students got the English words and were to translate them to Norwegian. There were also two tick-off questions, concerning the students' opinion on learning English and vocabulary.

Tables 2 to 4 present important numbers from the pre-tests. They show the number of students in each group, and the average points achieved for boys and girls, as well as total points. They could get a maximum of 24 points like described in section 4.1, and the average number of points is shown. The score in percent is also shown.

Control group, translation

Pre-test, 24 words/ 24 points maximum								
Group	Number of boys	Average points/ percent boys	Number of girls	Average points/ percent girls	Number of students	Total points achieved	Average points achieved	Correct answers in percent
1 - control	13	10,3/ 45.4 %	10	6,6/ 27.5 %	23	200	8,7	36.3 %
2 - control	14	9/ 37.5 %	9	7,9/ 32.9 %	23	197	8,6	35.8 %

Table 2 shows the number of correct words in the control group at the pre-test

In average, the two classes have an almost identical score with 8.7 correct answers out of 24 words in control group 1, and 8.6 in control group 2. The total average points in the control group is 8.65. The results show that the boys have an average higher result than the girls

Quizlet-group, translation

Pre-test, 24 words/ 24 points maximum								
Group	Number of boys	Average points/ percent boys	Number of girls	Average points/ percent girls	Number of students	Total points achieved	Average points achieved	Correct answers in percent
3 - Quizlet	9	7,6/ 31.7 %	10	5,3/ 22 %	19	121	6,4	26.7 %
4 - Quizlet	11	6,9/ 28.8 %	9	9,4/ 39.2 %	20	161	8,1	33.8 %

Table 3 shows the number of correct words in the Quizlet- group at the pre-test

The results from the Quizlet-groups show that the boys have the best results in group 3, while the girls have the best results in group 4. Both classes have a lower average score than the control group classes with 6.4 points in group 3 and 8.1 in group 4. The average total result in the Quizlet-group is 7.25 points.

The results from the four classes show that the control group has an average score of 1.4 points more than the Quizlet-group at the pre-tests.

Number of correctly translated words in the pre-tests

Like described in section 3.5, some words are supposed to be familiar to most students, some to some students, and some to few students. Table 4 shows how many of the 85 students that were able to translate the different words in the pre-tests.

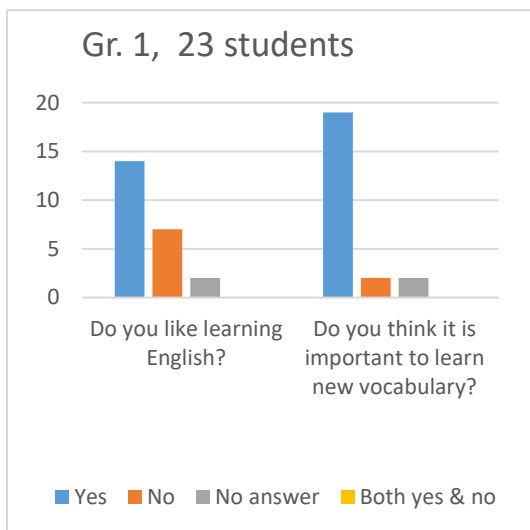
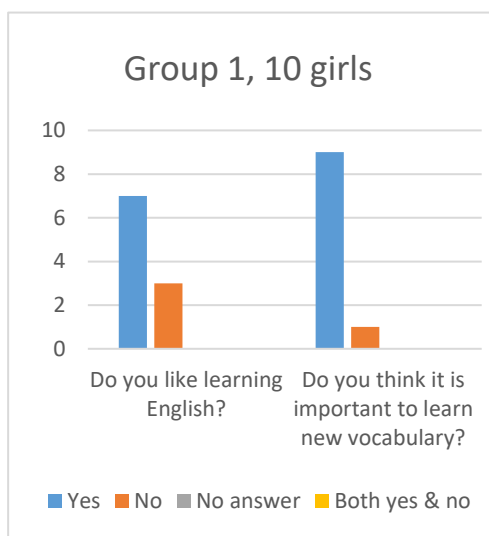
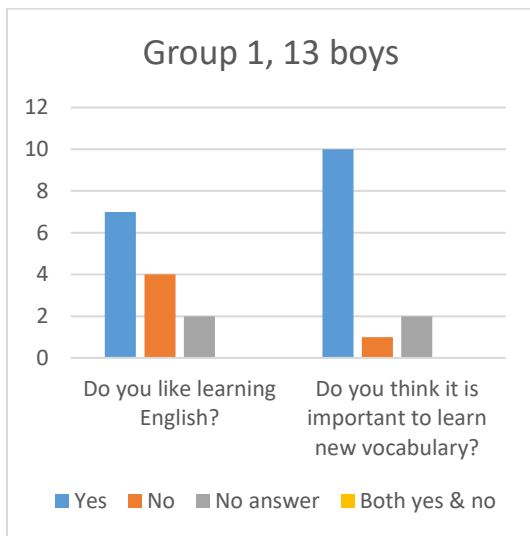
<i>Word group 1: Words familiar to many students</i>	<i>Correct translations</i>	<i>Word group 2: Words familiar to some students</i>	<i>Correct translations</i>	<i>Word group 3: Words familiar to few students</i>	<i>Correct translations</i>
Setting	16	Trait	16	Playwright	9
Point of view	31	Plot	29	Retain	13
Theme	77	Resolve	23	Boundary	41
Enemy	75	Purpose	58	Frown	9
Attempt	66	Provide	19	Blotchy	1
Effect	75	Migrate	22	Whimper	4
				Bound	32
				Endeavour	1
				Flatter	21
				Unduly	2
				Pursue	13
				Convey	7

Table 4 shows the number of students translating the words correctly in the pre-test.

Questions from the pre-tests

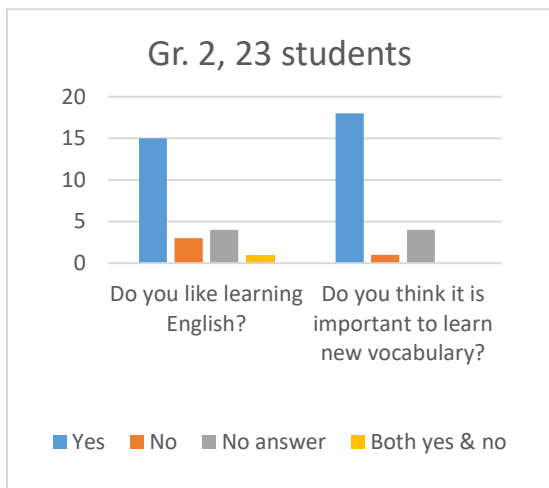
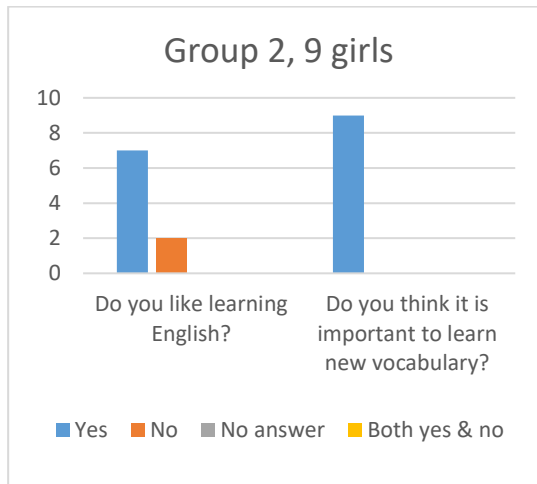
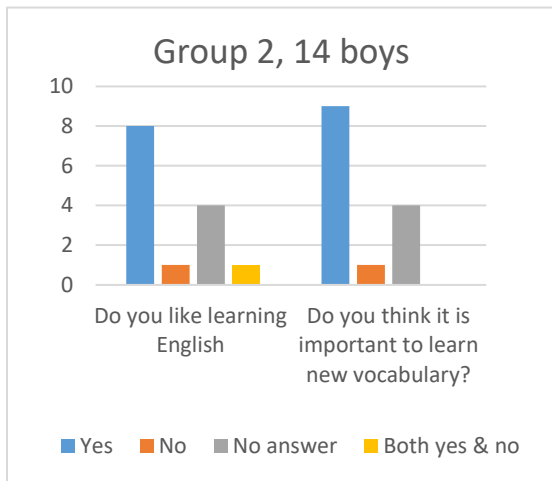
In addition to the translations, the students answered two questions about their opinion towards learning English. These were tick-off questions, with the possibility to answer either “yes” or “no”. Most students ticked off the boxes as planned, but some chose to make a third box, writing “it’s ok”, “I don’t mind it” and similar statements. Some also ticked off both “yes” and “no”. All of these are put in category called “both yes & no”. A few students chose to not answer, and their answers are in a separate category called “no answer”. When I examined the results, I only considered the students who had ticked off a pre-made box, meaning that those who made their own boxes, ticked off both “yes” and “no” or chose not to answer are not included in the analysis.

Control group 1, questions



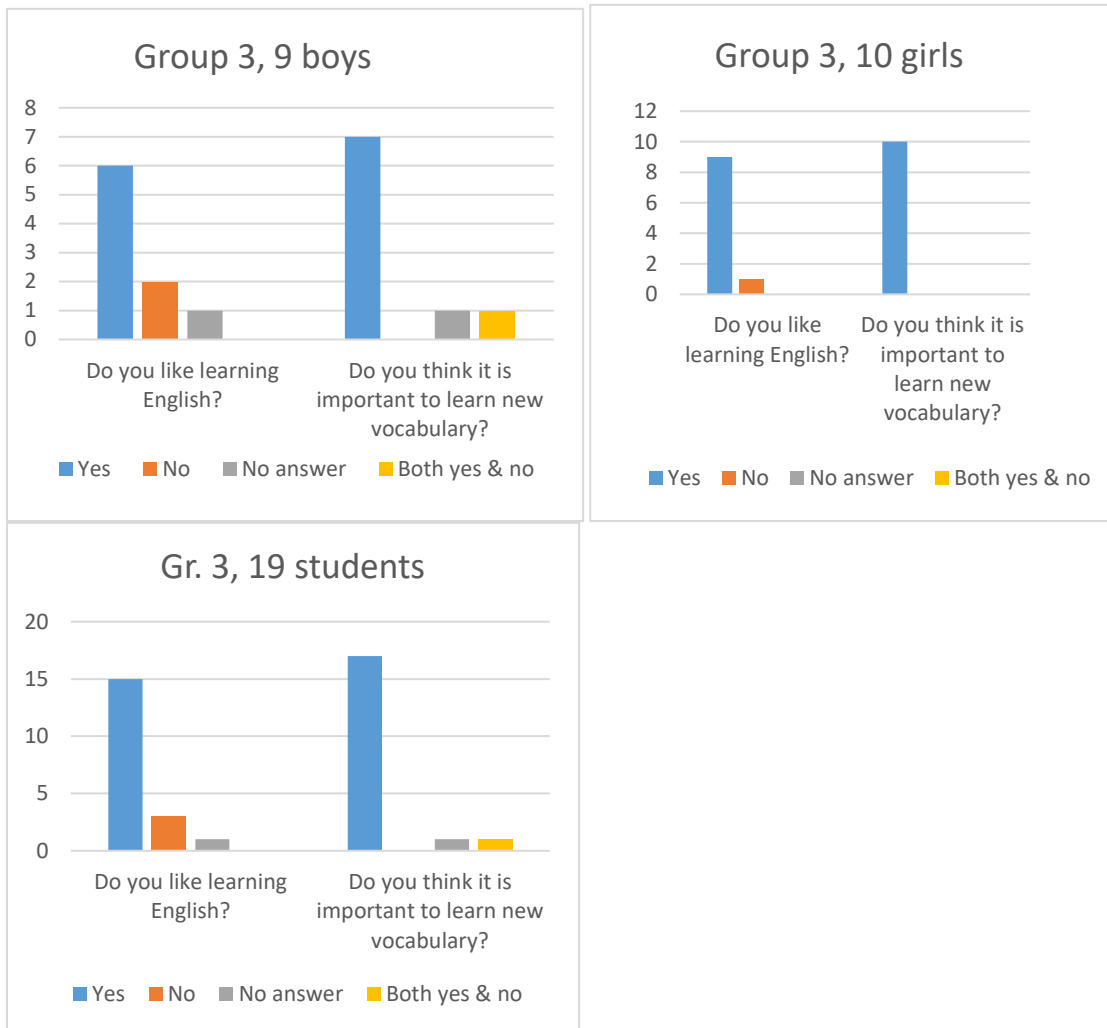
The results from group 1 show that both boys and girls like to learn English. The total result shows that 60 % of the students answer “yes” to this question. 54 % of the boys answer “yes” and 31 % “no”, while 70 % of the girls say “yes” and 30 % “no”. The total result also shows that the majority of the students agree that it is important to learn new vocabulary, with 82 % of the students answering “yes”. This group has an average score of 10.3 points for the boys and 6.6 for the girls in the vocabulary test.

Control group 2, questions



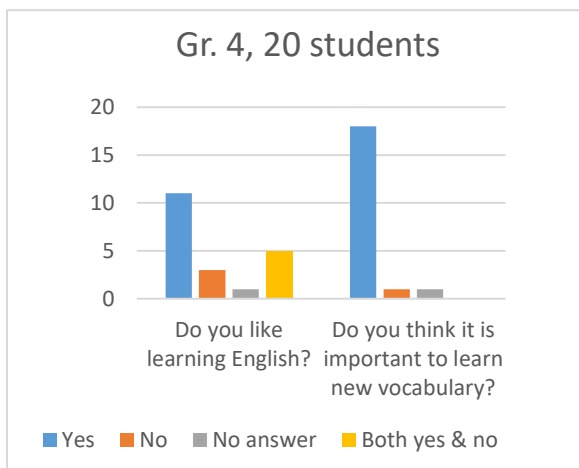
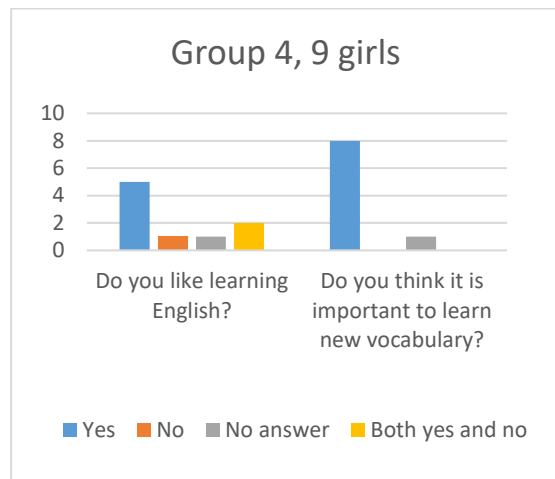
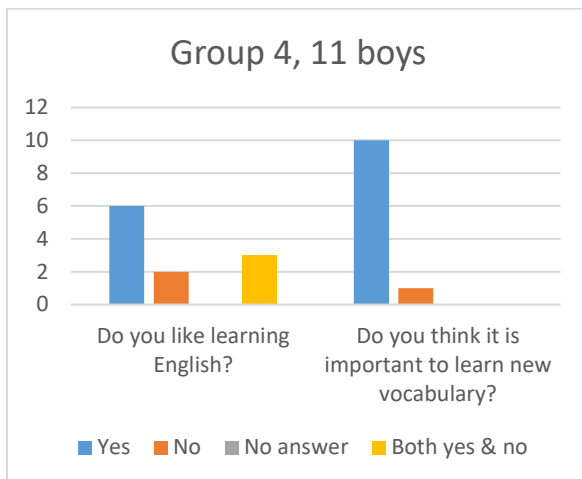
The results from group 2 show a similar result, both boys and girls say that they like learning English, while even more students think it is important to learn new vocabulary. A total of 65 % say they enjoy learning English. 57 % of the boys say that they like learning English, while 7 % say “no”. Among the girls, 78 % like to learn English, while 22 % do not like it. 78 % of the students say they find it important to learn new vocabulary. The boys’ score on the vocabulary test is 9, while the girls have a score of 7,9. We see that there is a similar result as in group 1. The boys have higher scores than the girls on the tests, but less interest in learning English.

Quizlet-group 3, questions



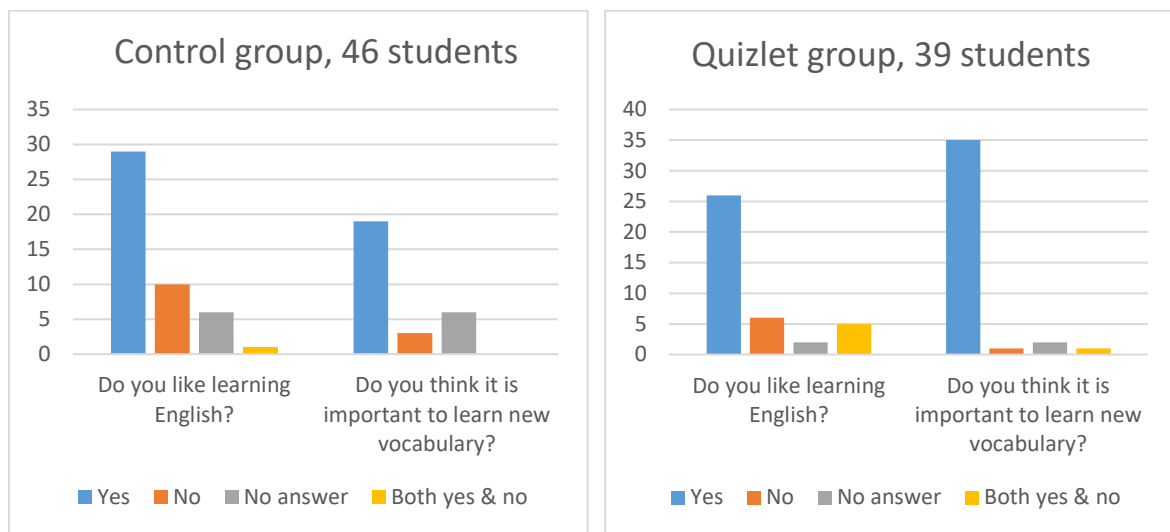
The results from group 3 show that the majority of the students like learning English, with 79 % answering “yes” to this question. 67 % of the boys answer “yes”, while 22 % say “no”. 90 % of the girls answer “yes”, while 10 % say “no”. As many as 89 % of the students find that learning new vocabulary is important. The boys in this group also have a higher vocabulary score than the girls with 7,6 points versus 5,3. Like in group 1 and 2, the girls have more interest in learning English, but lower score on the test.

Quizlet-group 4, questions



The results from group 4 differ slightly from the other groups. A total of 55 % answer that they enjoy learning English. Among the boys, 55 % answer “yes”, while 18 % say “no”. 55 % of the girls also answer that they like learning English, while 11 % say “no”. This is the lowest score in a class as a total, and also among all girls. The result for the boys is the second lowest among all. This group is the only group where girls have the highest score on the vocabulary test, with 9,4 points, while the boys have a score of 6,9 points. On the second question, this group also has a high percentage of the students answering that they think it is important to learn new vocabulary, with 90 % answering “yes” to this question.

Control group versus Quizlet-group, questions



Looking at the charts showing the two groups' answers, it is obvious that the students in the Quizlet group have the highest scores when it comes to enjoying learning English, but expressed in percentage, the difference is not significant. In the control group, 63 % answer "yes", while 21 % say "no". In the Quizlet group, 67 % say "yes" while 15 % answer "no". The Quizlet group also had the highest scores on the second question, with 90 % answering "yes" and only 3 % answering "no". In the control group, 41 % say "yes", while "7" % answer "no". The rest of the students chose not to answer or ticked off both boxes.

Results from pre-tests in relation to questions

In the pre-tests, a total of 57 students say "yes" to the question about liking to learn English, while 19 say "no". 16 of the students saying "no" scored between 0 and 10 points; 8 obtain between 0 and 5 points while 8 students score between 7 and 10 points. The students answering "yes" are spread out between 0 and 19 correct answers, with the majority, 41 students, scoring between 4 and 10 points. Most students find learning vocabulary important, with 68 answering "yes" and only 4 saying "no", evenly spread out between 0 and 19 points.

Relation between liking to learn English and the importance of learning vocabulary

In the pre-test, 76 % say "yes" to both questions, while 17 % say they do not like to learn English but still think it is important to learn new vocabulary. The remaining 7 % have answered either "no" to both questions or that they like to learn English but do not find vocabulary important. There is no significant difference between the groups.

4.1.2 Results from the post-test

The post-tests were supposed to take place after all texts had been worked with, four weeks after the pre-tests. Due to the home schooling-situation, the post-tests could not be done as planned. I had to supervise the students when they did the tests, as I could not trust the results if the students were able to use dictionary, vocabulary lists and Quizlet when they took the tests unsupervised at home. Therefore, the post-tests were done about nine weeks after the pre-tests. The vocabulary was the same as with the post-tests, as well as the questions about whether the students liked learning English and if they believed it is useful to learn new vocabulary. I also included one new question, regarding the students' preference of vocabulary learning methods; if they prefer to use digital or traditional methods. The students could use up to 15 minutes on the test, but the majority of students only used a few minutes. They were supervised during the testing period. Tables 5 to 7 show important numbers from the post-tests. The total numbers of students in each group are shown, and the average points achieved for boys and girls, as well as total points. They could get a maximum of 24 points like described in section 4.1, and the average number of points is presented. The score in percent is also shown.

Control group, translation

	Post-test, 24 words/ 24 points maximum							
Group	Number of boys	Average points/ percent boys	Number of girls	Average points/ percent girls	Number of students	Total points achieved	Average points achieved	Correct answers in percent
1 - control	13	11.4/ 47.5 %	10	9.7/ 40,4 %	23	235	10,2	42.5 %
2 - control	12	11.7/ 49 %	10	6.7/ 27.9 %	22	206	9,4	39 %

Table 5 shows the number of correct words in the control group at the post-test.

The results show that the boys still have a higher score than the girls. The total average score between the groups is 9.8 points.

Quizlet-group, translation

Post-test, 24 words/ 24 points maximum								
Group	Number of boys	Average points/ percent boys	Number of girls	Average points/ percent girls	Number of students	Total points achieved	Average points achieved	Correct answers in percent
3 - Quizlet	6	11.8/ 49.1 %	9	11.3/ 47 %	15	173	11,5	47.9 %
4 - Quizlet	11	8.5/ 35.4 %	9	11.2/ 46.7 %	20	195	9,8	40.8 %

Table 6 shows the number of correct words in the Quizlet-group at the post-test.

The results from the Quizlet-groups show that the boys in group 3 still have a higher score than the girls, and that the girls in group 4 have higher scores than the boys. Group 4 is still the only group where the girls have better results than the boys. The average score between the Quizlet-groups is 10.7 points. The results from the post-test show that the Quizlet-groups have an average of 0.9 points more than the control groups.

Number of correctly translated words in the post-tests

Table 7 shows the number of words that are translated correctly by 80 students participating in the post-tests.

<i>Word group 1: Words familiar to many students</i>	<i>Correct translations</i>	<i>Word group 2: Words familiar to some students</i>	<i>Correct translations</i>	<i>Word group 3: Words familiar to few students</i>	<i>Correct translations</i>
Setting	35	Trait	24	Playwright	16
Point of view	40	Plot	50	Retain	16
Theme	73	Resolve	36	Boundary	47
Enemy	78	Purpose	59	Frown	12
Attempt	65	Provide	27	Blotchy	9
Effect	75	Migrate	31	Whimper	9
				Bound	37
				Endeavour	0

				Flatter	27
				Unduly	1
				Pursue	22
				Convey	17

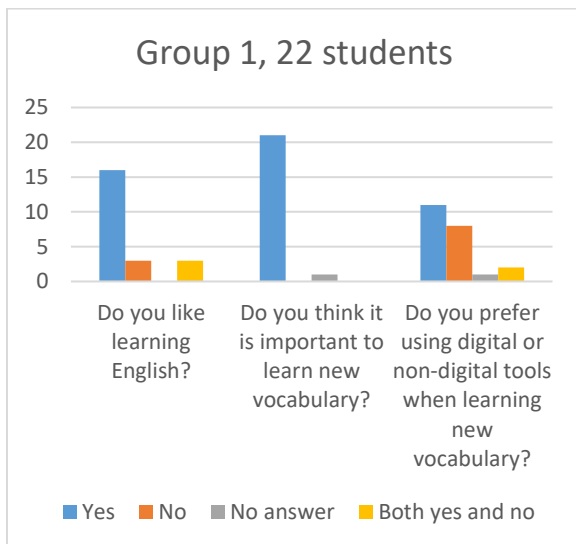
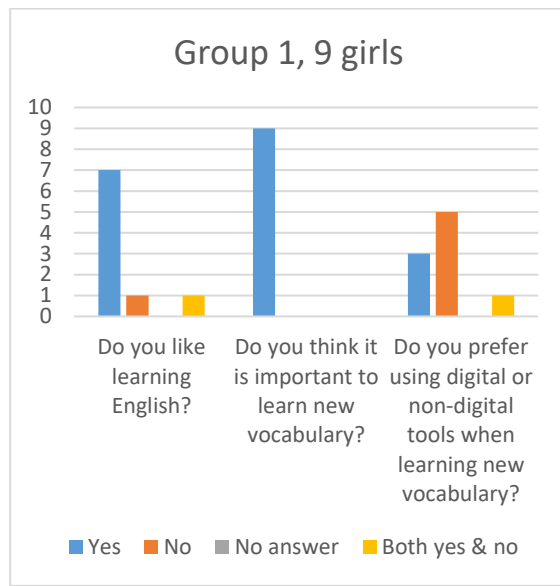
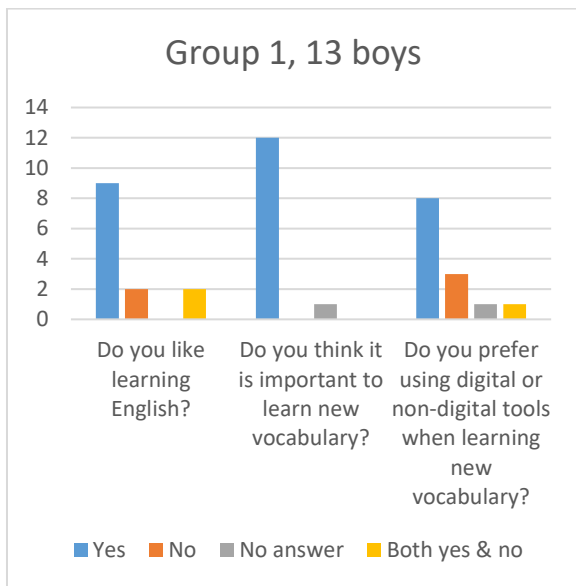
Table 7 shows the number of students translating the words correctly in the post-tests.

Questions from the post-tests

The students answered three questions in addition to translating. The two first were the same as they answered when doing the pre-test, regarding their opinion on learning English. The last, and new, question, was whether they prefer digital or non-digital tools when learning new vocabulary. Before answering, I explained that digital tools in this setting were all digital tools that could help them learn vocabulary, like Quizlet, Duolingo⁷ and translation programs. The two first questions were still tick-off questions, with the possibility to answer either “yes” or “no”. Like with the previous test, most students ticked off the boxes as planned, but some chose to make a third box, put a cross between the boxes, or tick off both “yes” and “no”. All of these were again put in category called “both yes & no”. A few students chose to not answer, and their answers are in a separate category called “no answer”. Like with the pre-tests, only the students who have ticked off a pre-made box are included in the analysis. For the new question regarding digital or non-digital tools, they could tick off either “digital” or “non-digital”.

⁷ Duolingo.com is a language-learning app and website

Control group 1, questions

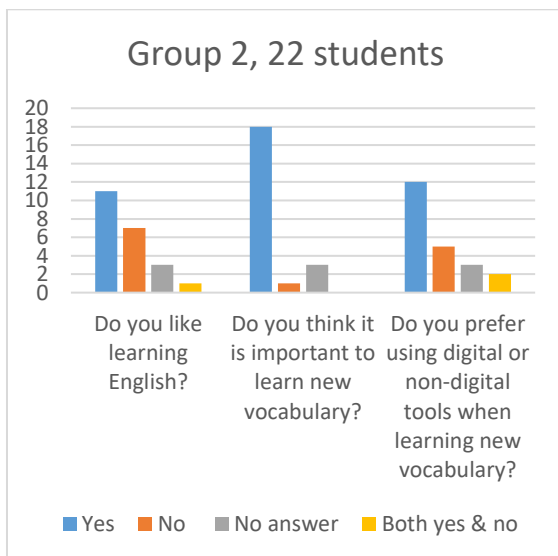
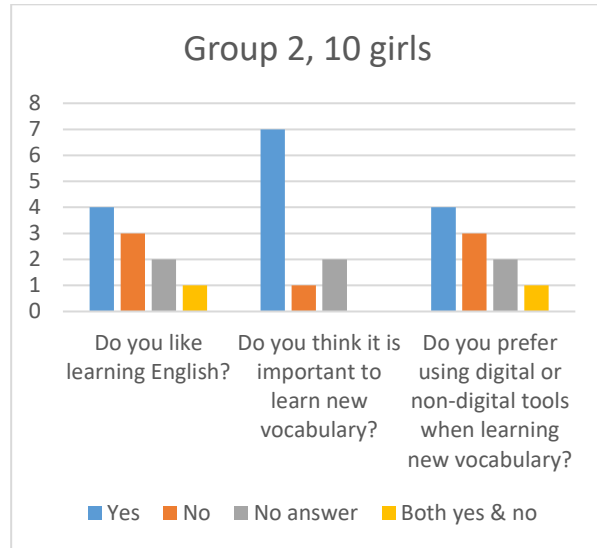
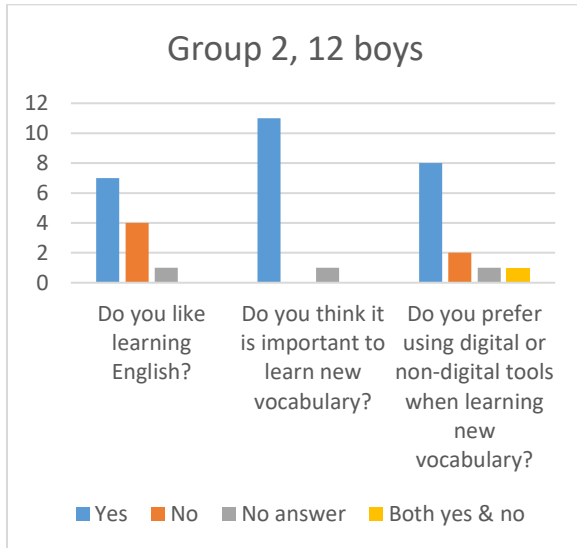


The results from group 1 show that there is a relatively high number of students who like learning English, with 72 % answering “yes”. 69 % of the boys say “yes” while 15 % say “no”. Among the girls, 78 % say “yes”, while 11 % say “no”. Most students, 95 %, think it is important to learn new vocabulary. The new question, related to the students’ opinion about using digital or non-digital tools when learning new vocabulary, shows that 61 % of the boys and 33 % of the girls prefer digital learning.

A comparison with the results from the pre-test shows that there is a higher number of students answering “yes” to questions 1 and 2 in the post-test. While a total of 60 % say they like learning English in the pre-test, 72 % say “yes” in the pre-test. Regarding the importance

of learning new vocabulary, 82 % believe it is important in the pre-test, while 95 % say “yes” in the post-test.

Control group 2, questions

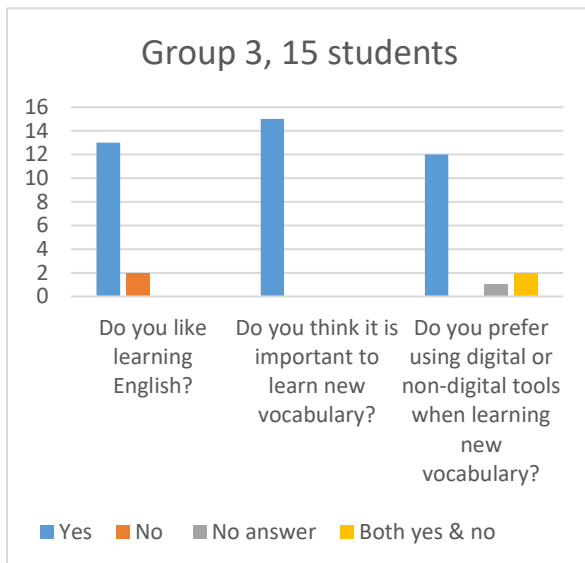
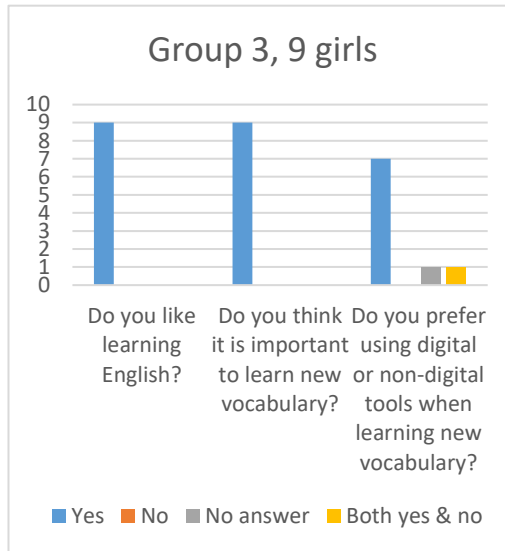
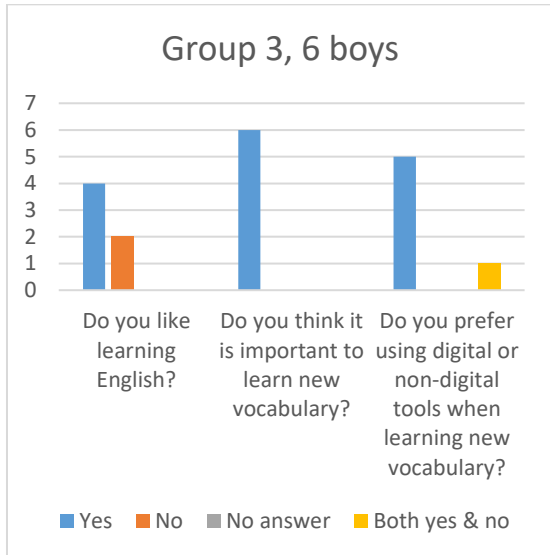


In group 2, 50 % answer that they like learning English. While 58 % of the boys answer “yes”, 33 % said “no”. Only 40 % of the girls say they like learning English, while 30 % say they do not like learning English. 81 % of the students say it is important to learn new vocabulary, while 55 % say they prefer digital tool when learning new vocabulary. 13 % say they prefer non-digital tools.

In the pre-test, 65 % of the students answer that they like learning English, while only 50 % say they like it in the post-test. Their opinion on the importance of new vocabulary has

slightly risen, while 78 % say they think it is important in the pre-test, 81 % say so in the post-test.

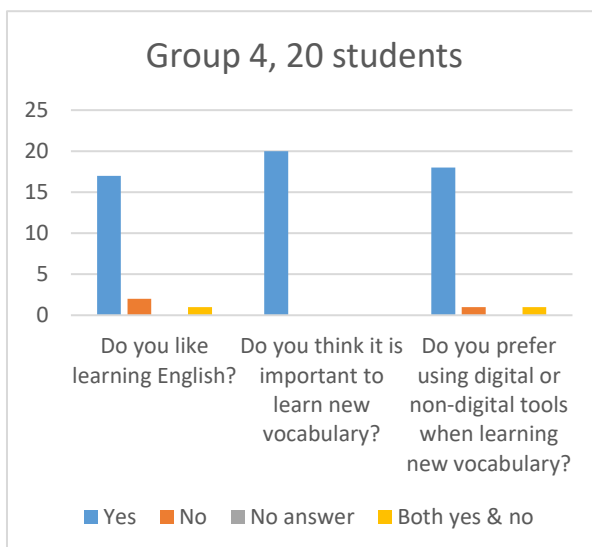
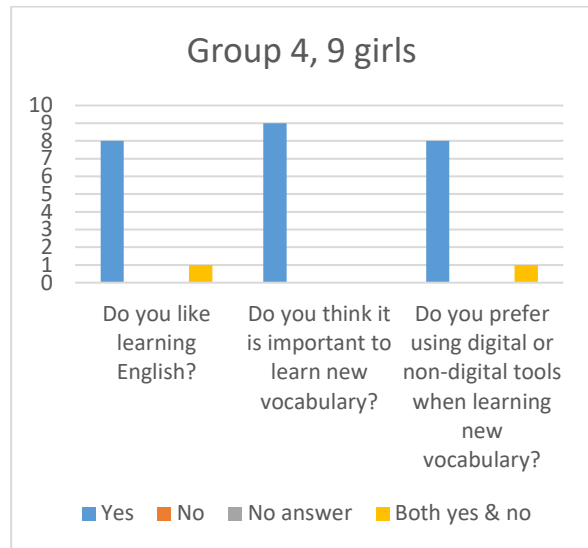
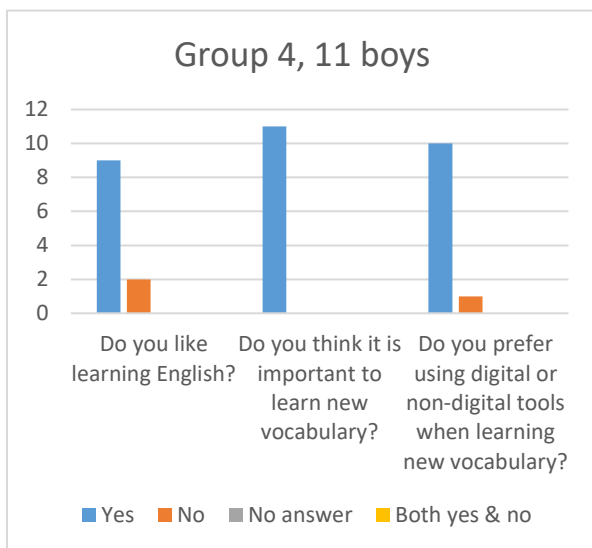
Quizlet-group 3, questions



In the first group using Quizlet, group 3, 87 % say they like learning English. 67 % of the boys and all the girls answer “yes” to this question, while 33 % of the boys say “no”. All the students think it is important to learn new vocabulary. The number of students preferring digital to non-digital tools is also high, 80 % say they prefer digital tools.

In the pre-test, 79 % answer that they like learning English, while 87 % say so in the post-test. 89 % think it is important to learn new vocabulary in the pre-test, while all the students say “yes” in the post-test.

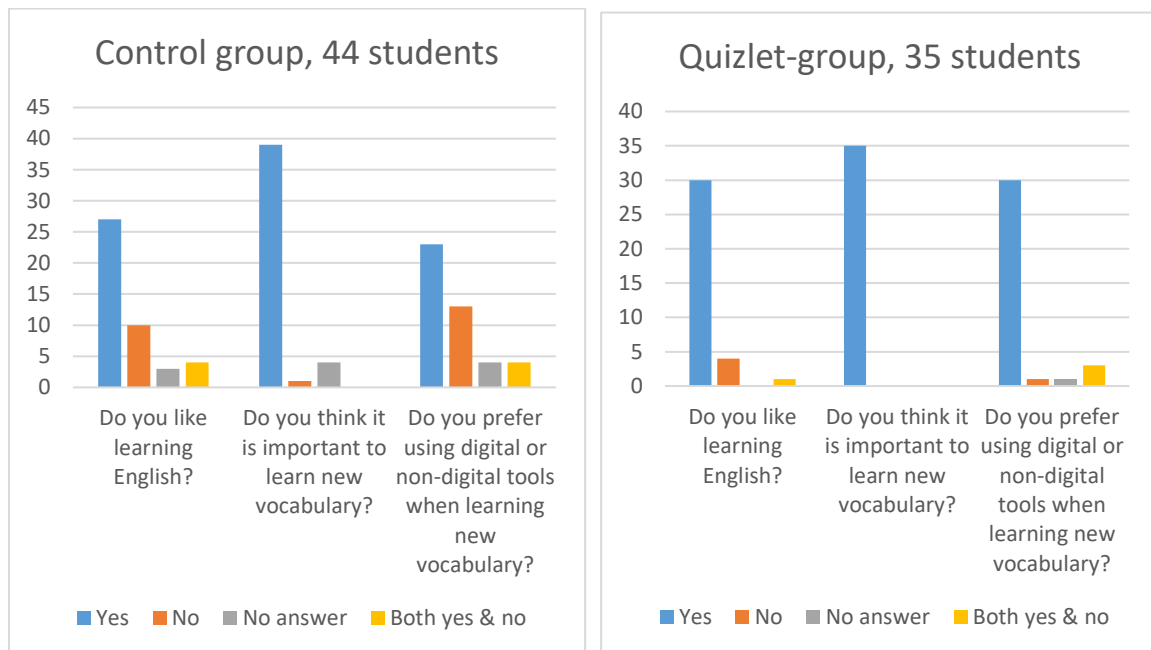
Quizlet-group 4, questions



In the second Quizlet-group, 85 % answer that they like learning English. 82 % of the boys say “yes”, while 10 % say “no”. Among the girls, 89 % answer “yes”, while no students say “no”. All the students believe it is important to learn new vocabulary. 90 % of the students prefer digital tools when learning new vocabulary.

In the pre-test, 55 % of the students say they like learning English, while 85 % say this in the post-test. 90 % say “yes” to the second question in the pre-test, while all students answer “yes” in the post-test.

Control-group versus Quizlet-group. questions



Comparing the results, we see that in the control group, 61 % answer “yes” to question 1, while the students in the Quizlet-group have a significantly higher number, with 86 % answering “yes”. In the second question, 89 % of the students in the control group say “yes”, while all the students in the Quizlet-group answer “yes”. In the control-group, 52 % answered that they prefer using digital tools when learning new vocabulary, while 86 % of the students in the Quizlet-group say “yes” to this question.

Results from post-tests in relation to questions

In the post-tests, 53 students say they like learning English, while 20 say they do not like to learn English. 14 of the students saying “no” have between 6 and 12 points, while 49 of the students answering “yes” are evenly spread between 7 and 16 correct answers. Only 1 student answered “no” to the question about the importance of learning new vocabulary, while 59 said “yes”.

The post-test included a question about using digital tools for vocabulary learning. In the control group, 19 students say they prefer to use digital tools while 13 say they prefer non-digital tools. In the Quizlet-group, 27 students say they prefer digital tools and only 1 prefer non-digital tools.

Relation between liking to learn English and the importance of learning vocabulary

In the post-test, all students say that it is important to learn new vocabulary. 80 % say they like to learn English, while 20 % say that they do not like to learn English. Like in the pre-tests, there is no remarkable difference between the control group and the Quizlet-group.

4.1.3 Comparison of pre- and post-test results

Overall test results

Group	Score from pre-test	Score from post-test	Change	Change in percent
1 - control	8.7 points/ 36.3 %	10.2 points/ 42.5 %	+ 1.5	+ 6.2 %
2 - control	8.6 points/ 35.8 %	9.4 points/ 39 %	+ 0.8	+ 2.7 %
3 - Quizlet	6.4 points/ 26.7 %	11.5 points/ 47.9 %	+ 5.1	+ 21.2 %
4 - Quizlet	8.1 points 33.8 %	9.8 points/ 40.8 %	+ 1.7	+ 7 %

Table 8 shows the overall test results

Results control group versus Quizlet-group, translation

Group	Mean score from pre-test	Mean score from post-test	Change	Change in percent
Control group, 1 & 2	8.65 points/ 36 %	9.8 points/ 40.8 %	+ 1.15	+ 4.8 %
Quizlet-group, 3 & 4	7.25 points/ 30 %	10.65 points/ 44.3 %	+ 3.4	+ 14.3 %
Total score all groups	7.95 points/ 33.1 %	10.23 points/ 42.6 %	+ 2,28	+ 9.5 %

Table 9 shows the results from the control group versus the Quizlet group

The mean results show that the control group improves their score with 4.8 %, while the Quizlet-group improves their score with 14.3 %. The total change for all groups was 9.5 %.

Words translated correctly in the pre- and post-tests

Table 10 shows the number of correctly translated words in the pre- and post-tests. The numbers indicate the percentage of students that translated the words correctly in the pre- and

post-tests. The results are in percentage because the number of students participating in the pre- and post-tests varied.

<i>Word group 1: Words familiar to many students</i>	<i>Pre- tests</i>	<i>Post- tests</i>	<i>Word group 2: Words familiar to some students</i>	<i>Pre- tests</i>	<i>Post- tests</i>	<i>Word group 3: Words familiar to few students</i>	<i>Pre- tests</i>	<i>Post- tests</i>
Setting	36	44	Trait	19	30	Playwright	11	20
Point of view	45	50	Plot	34	63	Retain	15	20
Theme	91	91	Resolve	27	44	Boundary	48	59
Enemy	88	98	Purpose	68	74	Frown	11	15
Attempt	78	81	Provide	22	34	Blotchy	0,1	11
Effect	88	94	Migrate	26	39	Whimper	0,5	11
						Bound	38	46
						Endeavour	0,1	0
						Flatter	25	34
						Unduly	0,2	0,1
						Pursue	15	28
						Convey	1	21

Table 10 shows the changes in percent from the pre-tests to the post-tests.

4.2 Interviews

In this section, I will present the results from the focus group interviews with 13 students and 5 teachers. The questions addressed in the interviews are designed to generate information in order to answer some of the research questions and will help to explain the results from the tests. The questions for the students revolved around learning foreign languages and new vocabulary, and which methods they prefer to use when learning vocabulary (appendix E). The questions for the teachers focused on their vocabulary teaching, and the use of digital tools (appendix F).

The students answered the questions politely and seriously but did not engage in any discussions. When asked to elaborate on their answers, they did so in turns, without interrupting or commenting on what the other participants said. The answers mostly concurred, but when the participants had different opinions, the listeners did not try to discuss

what had been said. The teachers seemed more interested than the students and were eager to present their opinions.

I will give a summarized report of the answers from students and teachers separately. The answers are presented as one student group and one teacher group.

4.2.1 Focus-group interviews with students

The questions for the students revolved around learning foreign languages and the methods the students prefer. The interviews were conducted in Norwegian and I have translated the answers into English.

1. What is your experience about learning foreign languages?

The students agree that it is important and useful to learn foreign languages, to be able to communicate with people they meet, for example when they are on holiday, talking to people when gaming, or meeting tourists who do not speak Norwegian. One says “I think it is really exiting. I travel a lot and use what I have learned in school when I’m on holiday”. Two students say that it is exciting and fascinating, while three think it is difficult and time consuming. One student says, “I believe I find it difficult because the grammar is so different from Norwegian”.

2. While reading a text, how often do you encounter new words?

Most of the students agree that they rarely encounter unfamiliar words when they read an English text, but one says that he often experiences unknown words. Another student says, “I sometimes see new words, but I don’t think it’s so difficult because I usually understand the meaning from context”. Three of the students have a good explanation to why they do not encounter many unknown words; they explain that they usually read texts that are aimed at their age, like texts they use in school and young adult fiction.

3. How do you find/ solve the meaning of the new words you encounter in your reading?

Most of the students are able to figure out the meaning from context, but three say that they look up words they do not understand online. One student admits that he does not bother looking up unfamiliar words even though he does not understand them from context but hopes that he will still understand most of the text. Another student says he struggles with foreign

terms that are not similar to the Norwegian ones. The students agree that guessing from context is a good strategy.

4. Do you think it is important to learn new words? Why?

The students agree that it is important to learn new vocabulary. One student believes it is important to see connections in the language and that new vocabulary makes him able to use different terms. Another student finds it helpful in getting more profound knowledge of a language, while five students mention that a better vocabulary improves their communicative skills. One student says it is important but really boring. One girl says “It depends. Sometimes the stuff we read is really boring and then I don’t think it’s so important to learn the new words”.

5. During language lessons, which vocabulary learning methods do you prefer?

Speaking is the most important method according to the students, all of them mention this as a favourite method. Five students believe that gaming in general is a good method, and six say that Quizlet is useful. Repetition and memorizing are suitable methods according to eight students, this can be either digital or in writing or speaking.

6. Do you prefer digital or traditional methods when learning new vocabulary?

The students say that traditional methods, like talking, writing the words, reading and looking up words in a dictionary are best for the learning process. The digital methods are useful for repetitions, and the students also mention that digital tools, like Quizlet and Duolingo, make the learning more fun than the traditional methods. One student says, “To me, it’s best to use traditional methods because I have to focus more and then I remember better”.

7. Is Quizlet an interesting and useful tool for learning vocabulary, and if yes, how?

All of the students say that Quizlet is useful for repetitions, and that it is motivating to see how their results improve. However, they agree that new vocabulary must be known before using the tool. Five students think it is a fun way to work with vocabulary, and one says it is a motivating method for quick learning. Two believe that it is better to talk, while one claims that Quizlet is useful because one has to write the words. Quizlet Live is mentioned by eight students as a fun and motivating way to work with vocabulary. They agree that the competitive aspect makes it interesting. One student says “I think it’s fun to use Quizlet for repetitions, but it’s not the best method for learning”.

8. Do you think traditional or digital methods will give you better results?

None of the students believe that Quizlet alone will give them the best results. They agree that other methods like writing and speaking will give the best results, and that Quizlet is a good addition to the traditional learning methods.

9. Is gamification useful when it comes to learning new vocabulary? If so, why?

The students say that gamification in general is not very useful for learning new vocabulary but may be useful for repetitions. One thinks that it is a convenient way to use new words, while two believe it is fun and gives more variation to the learning process. Several boys mention that they find all kinds of digital gamification useful, while none of the girls mention this.

4.2.2 Teacher interviews

My initial plan was to conduct a focus-group interview with the five teachers who volunteered to be interviewed, but their timetables did not provide an opportunity to meet at the same time during the school day, so I ended up doing one interview with two teachers, and three interviews with one teacher. The interview with two teachers was done in English, as they preferred this, while the other interviews were conducted in Norwegian. I have translated the Norwegian answers into English.

1. Which methods do you employ when teaching vocabulary?

Several methods are mentioned, both digital and non-digital. The digital methods consist of Quizlet, Duolingo and tasks from websites related to the books used in the lessons. The non-digital methods are flashcards, inductive learning using texts, explaining things using the whiteboard, memory, crosswords, word domino, find the meaning from context, jumble words, word finder, use the glossary words to make sentences, translations, practice pronunciation by listening to texts and repeat the teacher's pronunciation. One teacher says "I usually use a lot of small gadgets, but it's frustrating to both me and the students that we can't use them now because of Corona".

2. Do you feel confident using digital tools for language teaching, and how did you learn to use these tools?

Most of the teachers claim that they are confident using digital tools and that it has become a habit to use them, but one teacher expresses uncertainty about the reliability of the tools. If he

has planned to use tools that do not work, it is time consuming and he has to spontaneously make new plans. This is a new teacher, and he says he hopes this will be easier with time and experience. Another teacher says, “I am not confident because I have no formal training, but I use digital tools because it is motivating for the students”. The teachers agree that they have mostly learned using the digital tools by doing, but they can also get help from colleagues and students.

3. Have you ever used digital tools in your teaching?

All the teachers answer yes to this.

4. If yes, which tool/s do you most, and how often?

All the teachers say that they often use the online resources that belong to the teaching material they use, and that they also use YouTube to show small video clips, like grammar explanations, music videos and clips where the students can hear different English accents. Quizlet and Kahoot are mentioned by three teachers, while one teacher says she often uses LearnLab⁸ to ensure that the students are involved in the learning process. Tools like OneNote, Clarify, and dictionaries are also mentioned, although the teachers do not directly use them for language learning, they say they are more like additional resources.

5. If yes, for what kind of tasks do you use them?

Repetition is the main reason for using digital tools, according to the teachers. The tasks are mostly related to repetition of words or grammar where the students can revise what they have learned. These are often premade tasks that are available on suitable websites, or quizzes on Quizlet or Kahoot that are made by the teachers themselves or other users.

6. How do you enforce the rules that are required when using digital tools?

The teachers agree that observation is a key factor. One teacher believes that it is important to know the class in order to know what rules that must be enforced. She says “With some classes, I know that I can trust them and that they will do what they are told, but with other classes, I continuously have to walk around in the classroom to control what they do with their devices”. Another teacher claims that he cannot trust the students 100 %, but still has to give them the opportunity to show that they can be trusted. It is also important to tell the

⁸ Learnlab.net is a free, digital resource for education

students that they have responsibility towards their own learning process, so they should spend their time wisely. Two teachers say that they give the students short deadlines for their tasks, so they do not have more time than they need, limiting the possibilities to do other things.

7. Do you think digital tools give better results than traditional methods, and why?

The teachers express that digital and traditional methods complement each other, and their opinion is that the best result come from using both. One teacher says that it does not really matter what we think, as it is necessary to learn how to use digital tools in today's society. She also believes that using digital tools is motivating for the students because it gives variation and a change from traditional methods, and that this may lead to better results as the students are eager to use the digital tools. Another teacher agrees with this and says that a lot of learning comes automatically when the students use digital tools, as they can be immersed in the language in multiple ways.

8. Have you used Quizlet with your language classes?

Three teachers use Quizlet regularly, while two teachers do not use it.

If yes:

How do you use Quizlet?

The teachers say that they use Quizlet for repetition of vocabulary and grammar. They also use it for motivation, as their impression is that students believe it is fun and useful.

Which parts of Quizlet do you think are the most motivating for the students?

One teacher explains that she often uses Flashcards, and lets the students work together, asking each other the words. This enhances vocabulary and encourages the students to speak. The two other teachers say that Quizlet Live is what they believe is the most motivating for the students, as it gives them the opportunity to work together, and because the students love the competition.

If no:

Two teachers answer no.

Why not? Have you used Quizlet and chosen not to continue, if so, why?

One teacher is not familiar with the tool, while the other has used it but choose to use other digital tools, like those described in question 4. She says, "I mostly find what I need in the online resources related to the teaching material I use. There's really no reason to make new material when the already existing material is good".

Does the technology discourage you?

Both teachers answer that technology does not discourage them, and that they use several digital tools in their teaching.

9. What is your opinion about using digital tools for vocabulary learning? Are there any advantages or disadvantages?

The teachers agree that it is useful, as it gives a change from other teaching, and the students seem to find digital tools motivating. One teacher says, "Digital tools give the students the possibility to practise as much as they want, and the students can work independently at their own pace". Another teacher believes that the tools may distract the students, and that the teachers must ensure that the digital tools do not come in the way of the learning. She also claims that the tasks should be time limited, to avoid that the students get bored and start doing other things.

5. Discussion

In this chapter, the results from the two tests and the focus group interviews are discussed and related to the theory in chapter 2. If applicable, the results are compared to similar studies.

In section 1.2, it is described that the aim of the study is to investigate if using the digital tool Quizlet for vocabulary learning in a Norwegian lower secondary school makes the learning more effective and motivating than using traditional, non-digital tools. The research questions are:

1. To what extent does the use of Quizlet help students improve their vocabulary, and is there a relation between the vocabulary acquisition and the students' opinion on learning English?
2. How will a group of students describe the benefits of using Quizlet and other digital tools in their language learning?
3. What are the attitudes of the selected foreign language teachers towards using Quizlet and other digital tools for vocabulary teaching?
4. In what way can Quizlet be a useful tool for Norwegian students when working with vocabulary in a foreign language?

Section 5.1 debates the results from the tests in relation to question 1, while the findings from question 2 are discussed in section 5.2. Section 5.3 examines question 3, while the findings related to question 4 are discussed in section 5.4.

5.1 To what extent does the use of Quizlet help students improve their vocabulary, and is there a relation between the vocabulary acquisition and the students' opinion on learning English?

The tables in chapter 4 show that all groups participating in the tests improve their vocabulary acquisition during the duration of the study. Looking at the final results from the control group versus the Quizlet-group, the numbers are noticeable. The control group improves their score with 4.8 %, while the Quizlet-group improves their score with 14.3 %. This implies that using Quizlet is advantageous for the classes using this tool, seeing that their score improves with 9.5 % more than the control group. However, looking at the results per class, the difference in score is not significant between group 1, which is the highest scoring control

group class, with an improvement of 6.2 %, and group 4, the lowest scoring Quizlet-group class, who has 7 % improvement. There may be several reasons for this, the one standing out is the possibility that group 1 worked better with the vocabulary than group 4.

The results are lower than I anticipated for both groups. I expected that the students would improve their vocabulary more than the results show. The students have acquired few new words from the texts they have read, something that may imply that learning new vocabulary is a complex task. However, the students have also studied the words individually, and according to Mart, isolated words are difficult to learn (2012, p. 181). This concurs with Cook, who states that “effective acquisition of vocabulary can never be just the learning of individual words and their meanings in isolation (2008, p. 51). The members of the group with the lowest result, group 2, have improved their vocabulary with an average of as low as 0.8 points, while in group 3, the highest scoring group, the members have improved their results with averagely 5.1 points. As 1 point equals 1 word, the students have learned between 1 and 5 of the 24 words that are used in the vocabulary tests, chosen from the total of 46 words they were to study. The result from my study is similar to Nahmod’s, as her research did not show a significant difference in vocabulary test scores with students using Kahoot (2017, p. 30). It is also worth noticing that these results are not congruent with the statements from the students participating in the interviews, who claim that they rarely encounter new words in texts they read.

Some of the words translated in the tests were in theory familiar to the students. Words from word group 1 that are correctly considered familiar are *theme*, *enemy* and *effect*. 88 to 91 % of the students knew these at the pre-test. However, only 36 % manage to translate *setting*, a word I thought would be familiar to most. From word group 2, *plot*, *resolve*, *provide* and *migrate* are words that I assumed only some students would know, and 22 to 34 % are able to translate these words, while as many as 68 % translate *purpose* correctly. Among the words in group 3, less than 1 % of the students can translate *blotchy*, *whimper*, *endeavour* and *unduly*, words I reckoned would be unfamiliar for most students, but two other words from the same group, *boundary* and *bound*, are translated by 38 and 48 % of the students. In the post-tests, there is little difference in word group 1, familiar words. The largest change in word group 2, words that are familiar to some students, is the word *plot*. 34 % manage to translate this in the pre-test, and 63 % in the post-test. Among the unfamiliar words in group 3, *convey* has the biggest change, from 1 to 21 %. *Endeavour* and *unduly* have less correct answers in the post-test than in the pre-test, and the reason may be that some students participating in the pre-test

did not participate in the post-test, and vice versa. These results do not show any noticeable differences between the words in group 2 and 3. There are even less changes in group 1, but this may be a result of the high percentage of students already familiar with these words.

The students also answered questions about their opinion on learning English and the importance of learning new vocabulary. The students in groups 1, 3 and 4 express that they like learning English more in the post-test than in the pre-test, and they also find it more important to learn new vocabulary in the post-test. This may signify that focusing on vocabulary made the students value the significance of learning a second language, and that learning vocabulary is crucial. It is interesting to see that for both tests, the boys from these groups seem to have less interest in learning English than the girls, and yet the boys in two of three groups have a higher score in the tests.

The students from group 2 differ from the other groups, saying that they like learning English less in the post-test than in the pre-test. This seems inconsistent but may be a result of a difficult time during the pandemic. The time span is rather long between the pre- and the post-tests, so it is possible that the students in this group have changed how they feel about learning English during this period. The students from group 2 are quite consistent in their response regarding the importance of learning new vocabulary, this enhances the possibility that the numbers regarding learning English are rational. Seeing that this group has the lowest vocabulary score, with a change of 0.8 points, or 2.7 %, may imply that they did not like working with vocabulary.

Looking at the numbers from all groups, there is a clear relation between liking to learn English and believing that it is important to learn new vocabulary. In the pre-test, 67 % of the students say “yes” to both questions, and the number has risen to 80 % in the post-test. It is also interesting to see that the students who express that they do not like to learn English believe that acquiring new vocabulary is important. Because most students say they find it important to learn new vocabulary, there is no relation between the score in the tests and finding learning new vocabulary important.

In the pre-tests, 84 % of the students who say that they do not like learning English score less than 10 points, while the students answering that they like learning English are more evenly spread out. However, 72 % of these students score between 4 and 10 points. The data from the post-tests show similar results, implying that there is no relation between low scores and the enjoyment of learning English.

To sum this up, using Quizlet gives better results when the control group is compared with the Quizlet group. Broken down into classes, the results seem random, and one control group and one Quizlet-group have practically the same results. In general, all groups have very low scores. The results from the tests are relatively consistent with the groups' responses regarding learning English and the importance of vocabulary. There is an indisputable relation between liking to learn English and finding it important to learn new vocabulary. However, there is no remarkable relation between vocabulary acquisition and the students' opinion on learning English.

5.2 How will a group of students describe the possible benefits of using Quizlet and other digital tools in their language learning?

The 13 students participating in the interviews find it important and useful to learn foreign languages and say that learning new vocabulary is crucial. They agree that speaking is important when learning vocabulary, and that traditional methods like speaking, writing, and reading are the best for the learning process. This concurs with the findings of Poláková and Klímová, who observed that many students preferred to use traditional methods for language learning (2019, pp. 6-10), and the encoding hypothesis, stating that taking notes is important for learning (van der Meer & van der Weel, 2017, p. 1). The students also say that context is important, and that they often guess the meaning of a word from the context. This corresponds with the findings of Nation, who claims that guessing from context is a useful strategy (2005, as cited in Abid, 2017). The students also express that digital tools are useful in the learning process. They believe that these tools can make the learning more enjoyable and are valuable for repetition. The students are all familiar with using Quizlet as a tool for learning vocabulary. They say it is motivating and fun to use Quizlet and agree that it is a good tool for repetitions. They also think that Quizlet Live is a fun and useful tool, and that it is motivating to work as a group and compete with other students. This corresponds with Hougham's (2019, p. 31) and Muthumaniraja's (2020, p. 89) findings. In their studies, they observed that Quizlet Live was a useful tool for vocabulary learning. However, the students in my study agree that other methods should also be used for learning vocabulary. They do not believe that Quizlet alone will improve their results.

The students participating in the pre- and post-tests answered a question related to using digital tools when learning new vocabulary. The group using Quizlet has a high number of

students answering that they prefer digital tools, as many as 86 % answer “yes” to this question. In the group not using Quizlet, only 52 % answer that they prefer using digital tools. This may signify that the group using Quizlet enjoy using the tool, and that the other group does not know that it is a useful tool.

In summary, the students participating in the interviews say that traditional methods like speaking, writing, and reading are the best for the learning process, but that digital tools like Quizlet are useful for repetitions and making lessons varied and fun. The group using Quizlet for learning vocabulary say they prefer using Quizlet over traditional methods when learning vocabulary.

5.3 What are the attitudes of the selected language teachers towards using Quizlet and other digital tools for vocabulary teaching?

The 5 teachers participating in the interviews use several methods when teaching vocabulary, including numerous digital tools. They say it has become a habit to use the tools, they have become a part of their toolkit, like Kim predicted gamification tools would be (2011, 6:14). The teachers say that varied methods complement each other, and that the best results come from combining traditional and digital methods. They express confidence in using digital tools, and explain that they often use online resources like textbook tasks, Quizlet and Kahoot. These tools are mainly used for repetitions, often in order to have some variation from other methods. In the teachers’ opinion, this can give better results because the students are often motivated by using digital tools. This corresponds with the opinion of the three teachers using Quizlet in their language lessons, they say that they use it for repetition and to motivate the students. They also say that the group-based activities are the most popular. All teachers agree that digital tools are useful, that it seems to motivate the students, and that it facilitates learning as the students may work at their own pace and repeat the tasks as many times as they want.

The teachers also have some negative attitudes. One teacher mentions that the digital tools may distract the students and come in the way of the learning. Two teachers say that it is important to control the students’ use of their computers, if not they will often start doing things not related to the tasks. This aligns with Benzimra et al.’s findings (2017, p. 974). They claim that the school and teacher have to regulate the use of computers. The teachers say that it is important to be attentive, while at the same time show the students that they must take responsibility for their own learning,

To sum this up, the teachers agree that digital tools are useful, and when used correctly, they are good for repetition, motivating the students and have variation in the lessons. However, it is important to pay attention to avoid the students drifting off. They believe the best results come from combining digital and traditional methods. The teachers who have used Quizlet say their impression is that the students think it is motivating and gives variation in the learning process.

5.4 In what ways can Quizlet be a useful tool for Norwegian students when working with vocabulary in a foreign language?

The results from the tests and the interviews show that Quizlet is a good tool for repetition of already learned material, and according to Krashen (2008, pp. 178-179), it is important to repeat the vocabulary so the students know the words well before they start using the language. The students claim that Quizlet is useful with known vocabulary, and that Quizlet is a good addition to traditional learning methods. This is in accordance with the teachers' opinion. The teachers express that digital and traditional tools complement each other, and that it is advantageous to combine these. Quizlet can also be beneficial for motivation and provide variation in the learning process.

Based on the results, Quizlet does not seem to be to be a more useful tool for learning new vocabulary than traditional methods, but the results may be affected by the long testing period. However, the students and teachers agree that Quizlet is useful for repeating words that they have already learned, implying that the tool is beneficial when working with vocabulary.

6. Conclusion

The aim of this thesis was to investigate if using the digital tool Quizlet for vocabulary learning in a Norwegian lower secondary school makes the learning more effective and motivating than using traditional, non-digital tools. The research employed a mixed method study using quantitative and qualitative data. The quantitative data were gathered from vocabulary tests involving 80 students in the first test and 85 in the second test, while the qualitative data were collected through interviews with 13 students and 5 English teachers. The study aims to answer four research questions, concerning the use of Quizlet and other digital tools in vocabulary learning.

The data collected from tests and interviews suggest that using Quizlet only marginally improves vocabulary acquisition. Therefore, compared to the traditional method, it is not a more effective tool for learning new vocabulary. However, it is a useful tool for repetition. It is also acknowledged as a valuable tool for making lessons varied and fun and is motivating to the students. These findings are in alignment with Nahmod's results (2017, p. 28).

My first hypothesis was that Quizlet would improve the students' vocabulary results and that the groups using Quizlet would show a significantly better result than the groups using traditional, non-digital methods, like Donovan found in her study (20117, p. 41). However, the results from the tests are not congruent with my expectations. The data show that the Quizlet-group improved their result with 9.5 % more than the control group, but looking at the data from each group, the results seem random. The results do not show a big difference between the best control group and the lowest scoring Quizlet-group.

According to the students and the teachers, Quizlet is a useful tool for repetitions, and digital methods are useful when working with vocabulary. Nonetheless, other methods are more suitable for teaching and learning new material. The students believe that traditional methods like writing and speaking will give better results than Quizlet and other digital tools. There is, however, a difference between the groups. The students from the interviews and the students from the control group say they prefer traditional, non-digital methods when learning new vocabulary, while the Quizlet-group say they prefer digital tools. The teachers also say that traditional methods should be used, but that Quizlet can give good results in combination with these traditional approaches.

My second hypothesis was that Quizlet is motivating for the students. The students from the interviews and the teachers agree that Quizlet can be used for variation in the lessons, and that it is motivating for the students to use the tool. The students agree that particularly Quizlet Live is motivating, and that they enjoy working together and competing against other students. This corresponds to my hypothesis regarding motivation.

As replies to my research questions, my analysis found that:

- Quizlet does not give a remarkable improvement in vocabulary acquisition compared with traditional methods
- The students who like to learn English also believe that learning vocabulary is important
- The students find learning English vocabulary important regardless of their proficiency in English
- Most students prefer using traditional methods for learning but believe that digital tools like Quizlet are useful for repetition and variation
- A smaller group of students prefer to use Quizlet over traditional methods even in the learning process
- Teachers think digital tools are useful, and that it has become a habit to use digital tools
- The teachers believe that the best results come from a combination of digital and traditional methods
- According to the teachers using Quizlet, the tool is motivating and gives variation
- When using digital tools, it is important that the teachers pay attention to what the students do, and that the use must be regulated
- Students and teachers agree that Quizlet is a useful tool for repetition of already learned material

The aim of this study was to examine if Quizlet is useful for vocabulary learning. Based on the results from the tests and interviews, it can be concluded that Quizlet increases motivation and engagement. It is suitable for repetitions, but not very useful for vocabulary acquisition. Students and teachers believe that Quizlet is best used in combination with traditional, non-digital tools. Based on these conclusions, it is recommended that Quizlet is used as a supplement to traditional methods.

6.1 Reliability and validity

In this section, the reliability and validity of the study will be examined. It is crucial to acquire precise results, and to interpret the retrieved data correctly. Data from test results and interviews have provided sufficient information for the study, and the results are understandable and partly coherent with previous studies.

Due to COVID-19 and the closing of schools, the project timeline did not go as intended. The results may have been different if the project had proceeded as initially planned. The time span from the pre-test to the post-test was long, and this may have affected the outcome. The teaching was also different than planned, and it was difficult to control how the students worked with vocabulary and other tasks. Another consideration is that I had to use a new student group for the interviews, these students were not involved in the project from the beginning and had not been a part of the testing. This may have influenced their answers, as they had not worked with Quizlet in the same way as the Quizlet-groups did.

During tests and interviews I was present, so misunderstandings and questions were resolved immediately. As all students were 10th graders, they were capable of understanding the tasks and answering the questions. The participants of the interviews may have been affected by me being either the teacher or a colleague, but I believe that the interviews went well and that the participants were able to express their opinions.

The results from the tests and interviews are in general congruent, which signifies that the information that has been gathered is reliable. Although the number of participants is quite low, I believe my findings from the interviews represent the opinions of the respondents. When it comes to the test results, they are not as I expected, and I believe that this is due to the school situation during the testing period.

I chose to take notes during the interviews instead of recording them. I am efficient when taking notes and wrote the participants' answers by hand. I then rewrote my notes directly after the interviews. This method highly depends on the notetakers' memory and note taking abilities, and although I believe I have been able to convey the participants' opinions, the reliability of the answers could have been higher if I had recorded the interviews.

6.2 Suggestions for future research

This study has researched if the use of Quizlet makes vocabulary learning more effective and motivating. The first hypothesis was that Quizlet would improve the students' vocabulary results. The data shows that the Quizlet-group improved their results with 9.5 % more than the control group, but the difference between the highest scoring control group and the lowest scoring Quizlet-group is only 0.2 %. This is definitely something that should be further researched, and a suggestion is to also compare the results from the tests with the participants' grades, in order to see if the results are coherent. It is also suggested to have a longer testing period, with pre-, post-, and postponed tests.

The other hypothesis was that Quizlet would be motivating to the students, and according to the data, this is correct. However, I found a discrepancy; motivation should encourage learning, however, the students using Quizlet did not get significantly better results than the students using traditional methods. Further research is needed to look into this. In order to get a more solid result, a survey including a broader range of participants is required. A questionnaire could be used, to collect the opinion of more students than can be gathered in interviews. It is also possible that the interview participants would have been more eager to discuss if they did not know the person interviewing them, so it is advisable to do this with unfamiliar students.

Another interesting topic that was only slightly touched in this study, is the relation between the students' digital life and their opinions about using digital tools. They are digitally connected all the time, but still believe that they learn better with traditional methods. It would be an interesting topic for another study.

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Pre-test on literature vocabulary

Girl Boy

Translate the words into Norwegian:

1	Trait	
2	Setting	
3	Point of view	
4	Theme	
5	Plot	
6	Resolve	
7	Playwright	
8	Enemy	
9	Retain	
10	Boundary	
11	Attempt	
12	Purpose	
13	Frown	
14	Blotchy	
15	Whimper	
16	Bound	
17	Effect	
18	Provide	
19	Endeavour	
20	Flatter	
21	Unduly	
22	Migrate	
23	Pursue	
24	Convey	

Do you like learning English?

Yes

No

Do you think it is important to learn new vocabulary?

Yes

No

Post-test on literature vocabulary

Girl

Boy

Translate the words into Norwegian:

1	Trait	
2	Setting	
3	Point of view	
4	Theme	
5	Plot	
6	Resolve	
7	Playwright	
8	Enemy	
9	Retain	
10	Boundary	
11	Attempt	
12	Purpose	
13	Frown	
14	Blotchy	
15	Whimper	
16	Bound	
17	Effect	
18	Provide	
19	Endeavour	
20	Flatter	
21	Unduly	
22	Migrate	
23	Pursue	
24	Convey	

Do you like learning English?

Yes

No

Do you think it is important to learn new vocabulary?

Yes

No

Do you prefer using digital or non-digital tools when learning new vocabulary?

Digital

Non-digital

C Rainbow boys

Cupid /'kju:pɪd/ Amør
wobbly /'wɒblɪ/ vaklende, skjelvende/vaklande, skjelvande
gender /'dʒendə/ kjønn
shuffle /'ʃʌfl/ subbe
uneasy /ʌn'i:zi/ urolig/uroleg
zap of electricity /zæp əv ,lek'trɪsətɪ/ elektrisk stråle
ignore /ɪg'nɔ:/ overse/oversjå
wad /wɒd/ bunke
napkin /'næpkɪn/ serviett
stop short /stɒp ʃɔ:t/ bråstoppe
barrage /bæ'rɑ:ʒ/ sperreleid/sperreeld
queer /kwiə/ homofil
polite /pə'laɪt/ høflig/høflig
monopolize /mə'nɒpələɪz/ legge beslag på/legge beslag på
leisurely /'leɪʒəli/ bedagelig, makelig/bedageleg, makeleg
extend /ɪk'stend/ strekke/strekkje
intend /ɪn'tend/ mene, ha til hensikt/meine, tenkje
casually /'kæʒuəli/ tilfeldig
trajectory /trə'dʒektəri/ bane, kurs
klutz (AmE) /klʌts/ klossmajor, kløne
cushion /'kʊʃn/ pute
artery /'ɑ:təri/ blodåre, pulsåre
flamethrower /'fleɪm,θrəʊə/ flammekaster/flamme-kastar
current /'kʌrənt/ strøm/straum
lurk /lɜ:k/ lure, ligge på lur/lure, ligge på lur
deny /di'naɪ/ nekte
goofy /'gu:fi/ toskete
significant /sɪg'nɪfɪkənt/ viktig, betydningsfull/viktig, som har mykje å seie
tender /'tenda/ øm, sart
vein /veɪn/ blodåre, vene
palm /pɑ:m/ håndflate/handflate
be intertwined /,ɪntə'twaɪnd/ være sammenflettet/vere samanfletta
hovercraft /'hɒvəkra:ft/ luftputebåt
yearning /'jɜ:nɪŋ/ lengtende/lengtande
slack /slæk/ slapp
aisle /aɪl/ midtgang

D Romeo and Juliet

plot /plɒt/ handling, intrige
playwright /'pleɪraɪt/ skuespillforfatter, dramatiker /skodespelforfatter, dramatikar
Capulet /'kæpjuleɪt/
Montague /'mɒntəgju:/
orchard /'ɔ:tʃəd/ frukthage
*enemy /'enəmi/ fiende
aware of /ə'weə əv/ klar over, oppmerksom på/klar over, oppmerksom på

deny, refuse /di'naɪ/ /rɪ'fju:z/ nekte, ikke ville kjennes ved/nekte, ikkje ville kjennast ved
*acknowledge /ək'nɒlɪdʒ/ vedkjenne seg
*retain /rɪ'teɪn/ beholde/behalde
*perfection /pə'fekʃn/ fullkommenhet/fullkommen-skap
doff, shed /dɒf/ /ʃed/ kaste av, ta av (om f.eks. klær/om t.d. klede)
henceforth /,hens'fɔ:θ/ heretter
stumble on /'stʌmbl ɒn/ snuble over, her: trengje seg innpå seg innpå/snuble over, her: trengje seg innpå
*utterance /'ʌtərəns/ ytring
hither /'hɪðə/ hit
kinsman /'kɪnzmən/ slektning
*boundary /'baʊndrɪ/ grense
*attempt /ə'tempt/ prøve (seg på)
alack /ə'læk/ akk
*peril /'perəl/ fare
enmity /'enmɪtɪ/ fiendskap
cloak /kləʊk/ kappe
*postpone /,pəʊst'pəʊn/ utsette/utsetje
bud /bʌd/ knopp
prove /pru:v/ her: vise seg å være/her: vise seg å vere
repose /rɪ'pəʊz/ hvile/kvile
vow /vaʊ/ (høytidelig) løfte/(høgtideleg) lovnad
*request /rɪ'kwest/ ønske, be om/ønskje, be om
bounty /'baʊntɪ/ her: godhet, gavmildhet/godheit, gjevarglede
boundless /'baʊndlɪs/ endelos, grenseløs/endelaus, grenselaus
infinite /'ɪnfɪnɪt/ uten ende/utan ende
*purpose /'pɜ:pəs/ hensikt/føremål, meining
procure /prə'kjʊə/ få tak i, skaffe til veie/få tak i, skaffe til vegar
beseech /bɪ'si:tʃ/ bønnfalle
presently /'prezntli/ straks
court /kɔ:t/ kurtisere
shackles /'ʃæklz/ lenker/lenkjer
cherish /'tʃerɪʃ/ elske, være glad i/elske, vere glad i
sorrow /'sɒrəʊ/ sorg
conquer /'kɒŋkə/ seire over/sigre over
*grief /gri:f/ (dyp) sorg/(djup) sorg

Did you know this about William Shakespeare and his time?

parish record /'pærɪʃ 'rekɔ:d/ kirkebok/kyrkjebok
baptise /'bæptəɪz/ døpe/døype
foul-smelling /,faʊl'smelɪŋ/ illeluktende/ille-luktande
roof /ru:f/ (ytre) tak
cancel /'kænsəl/ avlyse
interrupt /,ɪntə'rʌpt/ avbryte

Chapter 2 It's a mystery to me

A The Tower of London, the most haunted place in Britain?

beefeater /'bi:fi:tə/ vaktmann ved Tower of London
behead /br'hed/ halshogge
detail /'di:teɪl/ opplysning, detalj
execution /,eksə'kju:ʃn/ henrettelse/avretting
Raleigh /'rɔ:lɪ/
Lieutenant /leɪ'tenənt/
countess /'kauntɪs/ grevinne
Salisbury /'sɔ:lzbəri/
headsman /'hedzmən/ bøddel
violent /'vɪələnt/ voldsom/grufull
visual imprint /'vɪʒuəl/ synlig spor, avtrykk som kan sees/synleg spor, avtrykk som ein kan sjå
on the contrary /'kɒntrəri/ tvert imot
tickled pink /'tɪklɪd pɪŋk/ henrykt, begeistret/oppglødd, begeistra
genuine /'dʒenjʊn/ ekte

B An unsolved mystery: "Jack the Ripper"

Jack the Ripper /dʒæk ðə 'rɪpə/ «Buksprettaren Jack»
originate from /ə'ɪdʒɪneɪt/ stamme fra/frå, komme fra/kome frå
apron /'eɪprən/ forkle/forklede
shelter /'ʃeltə/ ly, husly
unfortunate /ʌn'fɔ:tʃənət/ uheldig, ulykkelig/ulukkeleg
on the loose /lu:s/ på frifot
do one's rounds /raʊndz/ patruljere
stained /steɪnd/ flekkete, tilsøt
victim /'vɪktɪm/ offer
convince /kən'vɪns/ overbevise/overtyde
hoax /həʊks/ puss, spøk
kidney /'kɪdnɪ/ nyre
forensic science /fə'rensɪk/ teknisk etterforskning/ teknisk etterforskning
confess /kən'fes/ tilstå
release /rɪ'li:s/ løslate, slippe fri/sleppe laus
midwife /'mɪdwaɪf/ jordmor
surgical knife /'sɜ:dʒɪkl/ skalpell, operasjonskniv
accuse of /ə'kju:z/ beskylde for/skulde for
available /ə'veɪləbl/ tilgjengelig/tilgjengeleg

C Ghost walk

*frown /'fraʊn/ se morsk ut/sjå morsk ut
pumpkin /'pʌmpkɪn/ gresskar/graskar
count on /kaʊnt ɒn/ regne med/rekne med
steeple /'sti:pl/ kirketårn/kyrkjetårn
*blotchy /'blɒtʃɪ/ skjoldete, flekkete
stained glass window /steɪnd glɑ:s 'wɪndəʊ/ kirkevindu med glassmaleri/kyrkjevindaug med glasmaleri

action: det som skjer i historien
character: karakter
climax: vendepunkt i en historie
conflict: konflikt

*fall (AmE) /fɔ:l/ høst/haust
*whimper /'wɪmpə/ klynke
*bound /baʊnd/ bundet/bunden
butt /bʌt/ (gevær)kolbe
*effect /ɪ'fekt/ virkning/verknad
*sense /sens/ føle
*provide /prə'vaɪd/ skaffe (til veie)/skaffe (til vegar)
*snuggle /'snʌɡl/ smyge seg inntil
*fade /feɪd/ falme, svinne bort
*trait /treɪ(t)/ trekk, kjennetegn/trekk, kjenneteikn
*setting /'setɪŋ/ miljø
*point of view /pɔɪnt əv vju:/ synsvinkel
*resolve /rɪ'zɒlv/ løse/løyse
*theme /θi:m/ tema

Oh, mysterious world!

crop circle /krɒp 'sɜ:kl/ kornsirkel, sirkel av flattrykt avling
cereal /'si:riəl/ korn
similar /'sɪmɪlə/ liknende/liknande
reveal /rɪ'vi:l/ avsløre
wire /waɪə/ ståltråd
prankster /'præŋkstə/ spøkefugl
triangle /'traɪ.æŋɡl/ trekant, triangel
alter /'ɔ:lta/ endre, forandre
apply /ə'plai/ gjelde
without a trace /wɪ'ðaʊt ə treɪs/ sporløst/utan spor
abduct /æb'dʌkt/ bortføre, kidnappe
cease /si:s/ slutte, opphøre
cardboard /'kɑ:dbɔ:d/ papp, kartong
razor blade /'reɪzəbleɪd/ barberblad

D The open window

macabre /mə'kɑ:brə/ makaber
self-possessed /,selfpə'zest/ rolig, behersket/roleg
*endeavour /en'devə/ prøve
*flatter /'flætə/ smigre/smikre
*unduly /ʌn'dju:lɪ/ i urimelig grad/i urimeleg grad
discount /dɪs'kaʊnt/ overse/ikkje bry seg om
*migrate /maɪ'greɪt/ reise, dra
rural retreat /'ru:əl rɪ'tri:t/ nærmest: sted på landet/nærast: stad på landet
*mope /məʊp/ sture, henge med hodet/hengje med hovudet
letter of introduction /,ɪntrə'dʌkʃən/ presentasjonsbrev
*rectory /'rektəri/ prestegård/prestegard
*pursue /pə'sju:/ her: fortsette/fortsetje
*indicate /'ɪndɪkeɪt/ her: peke på/peike på

moor /mɔ:/ hei, mo
snipe /snaɪp/ snipe, en/ein slags fugl
engulf /ɪn'ɡʌlf/ synke/søkke
treacherous /'treɪtʃərəs/ lumsk, forrædersk

protagonist: hovedperson
Short story: novelle

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Glossary

bog /bɒg/ (henge)myr/(hengje)myr
 falter /'fɔ:lət/ nøle, famle
 bound /baʊnd/ bykse, sprette
 bustle into /'bʌsl/ komme farende inn/kome farande inn
 marsh /mɑ:ʃ/ myrlendt terreng
 ✱ scarcity /'skeəsəti/ mangel
 ghastly /'gɑ:stli/ fæl, grufull
 fragment /'frægmənt/ (brøk)del
 anniversary /,æni'vɜ:səri/ årsmålsdag, jubileum
 ✱ delusion /di'lju:ʒn/ vrangforestilling/vrangforestilling
 acquaintance /ə'kweɪntəns/ bekjent/kjenning
 ailment /'eɪlmənt/ sykdom/sjukdom
 infirmity /ɪn'fɜ:mɪti/ svakhet/mangel
 yawn /jɔ:n/ gjesp/geisp
 alert /ə'lɜ:t/ våken, oppmerksom/vaken, merksam
 ✱ convey /kən'veɪ/ utrykke/uttrykke
 comprehension /,kɒmpri'henʃn/ forståelse/forståing
 twilight /'twɔ:lɪt/ skumring
 ✱ additionally /ə'dɪfənəlɪ/ i tillegg
 burden /'bɜ:dn/ nedlesse, tyngde/tyngje
 hoarse /hɔ:s/ hes/hås
 gravel /'grævl/ grus
 imminent /'ɪmɪnənt/ nært forestående/nært forestående
 avoid imminent collision /kə'ɪʒn/ unngå å kollidere
 mackintosh /'mækɪntɔ:ʃ/ regnfrakk
 bolt out /bɔ:lt/ styrte ut
 cemetery /'semitri/ kirkegård/kyrkjegard
 pariah /'pæriə, pə'ri:ə/ paria, utstøtt person/utstøytt person
 romance /rəʊ'mæns/ her: fantasifull historie
 at short notice /fɔ:t 'nəʊtɪs/ på kort varsel

Chapter 3 On the edge

A King of the Hill

cheer /tʃɪə/ oppmuntre, heie på
 glow /gləʊ/ gløde
 tense /tens/ spent, anspent/spent
 electrified /ɪ'lektɪfaɪd/ ladet/lada
 brisk /brɪsk/ frisk, skarp
 pale /peɪl/ blek/bleik
 it's due /dju:/ det er ventet/det er venta
 rail /reɪl/ rekkverk
 approach /ə'prəʊtʃ/ nærme seg
 vague /veɪg/ svak
 recall /rɪ'kɔ:l/ huske/hugse
 hushed /hʌʃt/ dempet/dempa
 traits /treɪts/ trekk, her: sjangertrekk
 challenge /'tʃælɪndʒ/ utfordring

B Boot camp for bad boys?

boot camp /'bu:t kæmp/ «forbedringsleir»/«forbetningsleir»

scold /skəʊld/ skjenne på
 cajole /kə'dʒəʊl/ overtale, snakke rundt
 juvenile delinquent /dʒu:vɪnənt dɪ'lɪŋkwənt/ ungdomsforbryter/ungdomsforbrytar
 unruly /ʌn'ru:lɪ/ uregjerlig, vill/uregjerleg, vill
 brat /bræt/ uskikkelig unge/uskikkeleg unge
 sound /saʊnd/ sunn, frisk
 responsibility /rɪ'spɒnsə'bɪləti/ ansvar
 obedience /ə'bi:diəns/ lydighet/lydnad
 trace /treɪs/ spor
 weary /wɪəri/ sliten, trett/sliten, trøyyt
 banned /bænd/ bannlyst, forbudt/bannlyst, forbode
 dormitory /'dɔ:mɪtri/ sovesal
 coach /kəʊtʃ/ instruktør, trener/instruktør, trenar
 foot locker /'fʊtlɒkə/ høyt, smalt garderobeskap/høgt, smalt garderobeskap
 random /'rændəm/ tilfeldig
 well adjusted /ə'dʒʌstɪd/ veltilpasset/veltilpassa
 adolescent /,ædə'lesnt/ ungdom
 mental state /'mentl steɪt/ mental tilstand
 equipped /ɪ'kwɪpt/ utstyrt, rustet/utstyrt, rusta
 severe /sɪ'veɪə/ alvorlig/alvorleg
 psychologist /saɪ'kɒlədʒɪst/ psykolog
 consideration /kən,sɪdə'reɪʃn/ omtanke, hensynsfullhet/omtanke, omsyn
 politeness /pə'laɪtnɪs/ høflighet/høfleg framferd
 means /mi:nz/ middel, metode
 struggle /'strʌgl/ streve, kjempe

C Go ask Alice

thrilled /θrɪld/ henrykt/oppglødd
 elated /ɪ'leɪtɪd/ oppstemt, jublende glad/oppstemd, jublende glad
 morbid /'mɔ:bɪd/ makaber, syk/makaber, sjuk
 tremendous /trɪ'mendəs/ overveldende, voldsom/overveldende, valdsam
 at ease /i:z/ avslappet/avslappa
 cushion /'kʊʃn/ pute
 wink /wɪŋk/ blunke
 moisture /'mɔɪstʃə/ fuktighet, svette/fukt, sveitte
 scalp /skælp/ hodebunn/hovudbotn
 apprehension /,æprɪ'henʃn/ engstelse, frykt/otte, frykt
 strangle, suffocate /'stræŋgl/ /'sʌfəkeɪt/ kvele
 caress /kə'res/ kjærtegne/kjærteikne
 swirl /swɜ:l/ virvle/kvervle
 soggy /'sɒɡɪ/ rå, tung, vasstrukken
 uninhibited /,ʌnɪn'hɪbɪtɪd/ fri, uhemmet/fri, uhemma
 Jell-O /dʒeləʊ/ (dessert) gelé
 eternity /ɪ'tɜ:nəti/ evighet/æve
 virtuous /'vɜ:tʃuəs/ prektig
 sackcloth /'sækklɒθ/ sekkestrie
 acid /'æsɪd/ «syre», LSD

Quizlet

The Open Window by Saki

Study online at quizlet.com/_87kygo

1. Additionally	also, in addition/ i tillegg
2. Convey	to communicate/ uttrykke
3. Delusion	false belief/ vrangforestilling
4. Endeavour	try hard to do or achieve something/ prøve
5. Flatter	to praise excessively or dishonestly/ smigre
6. Indicate	to show or point out/ her: peke på
7. Migrate	to move from one place to another/ reise, dra
8. Mope	to spend your time doing nothing and feeling sorry for yourself/ sture, henge med hodet
9. Pursue	in this text: continue/ her: fortsette
10. Rectory	House in which the minister of a parish lives/ prestegård
11. Scarcity	Limited quantities of resources to meet unlimited wants/ mangel
12. Unduly	excessively/ i urimelig grad

Quizlet

Romeo and Juliet - the Balcony Scene

Study online at quizlet.com/_87kzch

1. Acknowledge	recognize; admit/ vedkjenne seg
2. Attempt	To try; to make an effort/ prøve (seg på)
3. Boundary	An invisible line that marks the extent of a state's territory/ grense
4. Enemy	a person who hates or wants to harm another/ fiende
5. Grief	A period of deep sorrow/ (dyp) sorg
6. Perfection	condition of being perfect or excellent/ fullkommenhet
7. Peril	danger/ fare
8. Postpone	to do something at a time or date after it was originally planned/ utsette
9. Purpose	One's intention or objective in a speech or piece of writing/ hensikt, mening
10. Request	to ask for/ ønske, be om
11. Retain	to hold or keep/ beholde
12. Utterance	a spoken word, statement, or vocal sound/ ytring

Quizlet

Ghost Walk

Study online at quizlet.com/_85bvff

1.	blotchy	Spotted/ skjoldete, flekkete
2.	bound	Restrained/ bundet
3.	effect	Result/ virkning
4.	fade	Lose color/ falme
5.	fall	The season after summer/ høst
6.	frown	Grimace/ se morsk ut
7.	provide	Make available/ skaffe
8.	sense	Feeling/ føle
9.	snuggle	Lie or press closely/ smyge seg inntil
10.	whimper	Moan/ klynke

Quizlet

Literature

Study online at quizlet.com/_80zome

1.	Action	Everything that happens in a story (det som skjer i historien)
2.	Character	A figure in a story (karakter)
3.	Climax	The turning point in a story (vendepunkt i en historie)
4.	Conflict	A struggle between opposing forces (konflikt)
5.	Plot	Sequence of events in a story (handling)
6.	Point of view	the perspective from which a story is told (synsvinkel)
7.	Protagonist	The main character in a story (hovedperson)
8.	Resolve	The solution to the problem, often at the end of the story (løsning)
9.	Setting	The time and place of a story (hvor finner handlingen sted)
10.	Short story	A brief work of fiction (novelle)
11.	Theme	Central idea of a work of literature (tema, emne)
12.	Trait	Specific characteristic of an individual (karaktertrekk)

Questions for students:

1. What is your experience about learning foreign languages?
2. While reading a text, how often do you encounter new words?
3. How do you find/solve meaning of the new words you encounter in your reading?
4. Do you think it is important to learn these new words? Why?
5. During language lessons, which vocabulary learning methods do you prefer?
6. Do you prefer digital or traditional methods when learning new vocabulary?
7. Is Quizlet an interesting and useful tool for learning vocabulary, and if yes, how?
8. Do you think traditional or digital methods will give you better results?
9. Is gamification useful when it comes to learning new vocabulary? If so, why?

Questions for teachers:

1. Which methods do you employ when teaching vocabulary?
2. Do you feel confident using digital tools, for language teaching, and how did you learn to use these tools?
3. Have you ever used digital tools in your teaching?
4. If yes, which tool/s do you use most, and how often?
5. If yes, for what kind of tasks do you use them?
6. How do you enforce the rules that are required when using digital tools?
7. Do you think digital tools give better results than traditional methods, and why?
8. Have you used Quizlet with your language classes?
If yes:
How do you use Quizlet?

Which parts of Quizlet do you think is the most motivating for the students?

If no:
Why not? Have you used Quizlet and chosen not to continue, if so, why?

Does the technology discourage you?
9. What is your opinion about using digital tools for vocabulary learning? Are there any advantages or disadvantages?

Samtykke til deltakelse i prosjekt

I forbindelse med masteroppgaven min i fremmedspråk i skolen, engelsk, ved Høgskolen i Østfold, ønsker jeg å hente inn data vedrørende innlæring av nye ord. Masteroppgavens tema er bruken av Quizlet i undervisningen.

Jeg skal sammenligne forkunnskap med hva elevene har lært etter å ha jobbet med nye ord. I tillegg ønsker jeg korte tilbakemeldinger etter noen av timene. Jeg kommer også til å be om et intervju med noen få, og kommer tilbake til dette. Intervjuene vil foregå muntlig og det vil ikke bli filmet eller tatt opptak.

Jeg presiserer at alle opplysninger som kommer fram vil bli anonymisert. Jeg har taushetsplikt og vil ikke snakke med noen om hva ulike elever og lærere har sagt og/ eller skrevet. Opplysninger behandles konfidensielt og vil kun benyttes i denne oppgaven.

Videre vil jeg opplyse om at det er helt frivillig å delta i studien og at elevene når som helst kan trekke sitt samtykke uten å oppgi grunn.

Ettersom undersøkelsen er anonym, holder det med muntlig samtykke fra elever og andre deltakere. Alle deltakere er over 15 år.

Drammen, 21.02.20

Vibeke Skattenborg

Reflections

Writing this thesis has been a challenging process, due to many factors. Lack of motivation combined with several delays has made the process slow and demanding. When I finally was on track, the COVID-19 pandemic interrupted my progress and made it impossible to continue with my initial plan. However, the study reached some useful conclusions and may hopefully be of interest for other teachers.

Many years as a teacher of English and French have given me uncountable moments of frustration because it is so difficult to motivate and engage the students in learning vocabulary. I have tried numerous methods, but the students do not seem to find it interesting, even though they understand the importance of learning foreign languages. With the introduction of digital tools that could be used for vocabulary learning, I imagined that things would improve. However, after several years using Quizlet, I was not sure if it actually improved the students' vocabulary acquisition or not. As I used it with all my students, it was difficult to see if their results were better using Quizlet than traditional, non-digital tools. I assumed the results were better with Quizlet but was eager to find out if I was correct. I also wanted to investigate if Quizlet increased motivation for learning vocabulary. It was quite disappointing to see that Quizlet did not help the students in their vocabulary acquisition, and I was also surprised to hear that the students participating in the focus-group interviews prefer to use traditional, non-digital methods. Although these students find using Quizlet motivating and a nice change from ordinary teaching, they believe that good learning comes from traditional methods. The teachers I interviewed share the students' opinion and believe that a combination of digital and non-digital methods will give the best learning.

A major issue with my study is the interruption that caused the project to be delayed. This led to several factors that may have disrupted the results. The first is that it was difficult for the teachers to follow up student progress because we were teaching digitally, while the second is that the post-test could not be taken directly after the teaching period. The third problem is that the students participating in the tests could not be interviewed, so I had to find a new group for the interviews. This group had used Quizlet in my French lessons, but not as extensively as the students in my English classes. I do not know if the results would have been different if I were able to proceed as planned, but it would be interesting if another researcher would follow this up with a similar study.

Several other problems could have been brought up, as writing this thesis was not a straightforward process. However, I hope the results are useful for other teachers, particularly those regarding the students' opinion about using Quizlet in addition to the good old methods of speaking, reading, and listening.