

**The use of mobile devices in English teaching:  
A survey study on Finnish high school  
teachers' perceptions**

Master's thesis  
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<p>Tiivistelmä - Abstract</p> <p>Teknologian kehitys tarjoaa opetukseen jatkuvasti uudenlaisia mahdollisuuksia. Erilaisten laitteiden käytöstä on tullut osa koulutyötä ja myös mobiililaitteita käytetään nykyään laajalti oppitunneilla. Koulut voivat tarjota opetuskäyttöön esimerkiksi tabletteja ja lisäksi oppilaiden omia älypuhelimia voidaan käyttää erilaisten tehtävien yhteydessä. Englannin kielen opiskeluun erilaiset sovellukset tarjoavat monenlaisia uusia mahdollisuuksia, joita pystyy soveltamaan kielten eri osa-alueiden harjoitteluun.</p> <p>Tämän Pro Gradu -tutkielman tarkoitus oli selvittää, kuinka paljon mobiililaitteita hyödynnetään englannin lukio-opetuksessa. Lisäksi mobiililaitteiden hyötyä opetuksessa pyrittiin selvittämään sekä yleisellä tasolla, että kielen eri osa-alueiden opetuksessa. Tarkasteltaviksi kielen osa-alueiksi tutkielmassa valikoituivat kuuntelun harjoittelu, suullinen työskentely, luetun ymmärtäminen sekä kirjoittaminen. Tavoitteena oli selvittää, käytetäänkö mobiililaitteita yhtä paljon eri osa-alueiden opettamisessa, sekä kokevatko opettajat niiden käytön yhtä hyödyllisenä eri osa-alueiden opetuksessa.</p> <p>Aineistonkeruu tapahtui verkkokyselyn avulla, johon vastasi yhteensä 54 lukion opettajaa. Suurin osa kyselyn kysymyksistä oli suljettuja kysymyksiä, jotka analysoitiin tilastollisin menetelmin. Lisäksi kyselyssä oli kaksi avointa kysymystä, joiden analysointiin käytettiin laadullista sisällönanalyysia.</p> <p>Tutkimuksessa saatiin selville, että mobiililaitteiden käyttö koetaan hyödylliseksi ja niitä käytetään laajalti englannin lukio-opetuksessa. Aineiston perusteella mobiililaitteita käytettiin jokaisen kielen osa-alueen opettamisessa melko saman verran. Niiden käytössä nähtiin monia hyötyjä, esimerkiksi tiedonhaku ja erilaisten itsenäisten harjoitusten toteuttaminen luokkahuoneessa ja sen ulkopuolella. Eri osa-alueiden välillä selvin ero hyödyllisyydessä oli kirjoituksen opettamisessa. Laitteiden näytön koko ja näppäimistön puuttuminen nähtiin ongelmallisina. Jatkotutkimuksissa kohderyhmää voisi laajentaa, sekä aineiston monipuolisuutta syventää esimerkiksi haastattelujen avulla.</p>	
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# 1 INTRODUCTION

The developments in the field of technology have brought new possibilities to not only our free time but also to teaching. During the last decades, traditional ways of teaching have been challenged with rapidly developing technological devices and both teachers and students have had to adjust to the changes. The devices have become more mobile and for example smartphones have in a short time become such an integral part of most of our lives that it would be difficult to imagine life without them. For teaching and learning, mobile devices have brought new possibilities but not without disadvantages. Students and teachers have needed to learn new skills and using mobile devices in learning has not always been successful. Some main problems have been technical problems with the devices, students' incapability to focus on using their own devices only for learning purposes and also teachers' own ability to create meaningful and educational content. Still, they also provide various possibilities to learning. The portability of mobile devices offers the students a chance to learn languages almost anywhere they like. Thus, they increase possibilities for distance learning and exposure to foreign languages outside school (von Zansen 2015). Moving around in the classroom is a way to invigorate teaching and since technology provides different ways to learn, the devices have become motivating tools for different types of learners. Increasing active participation during classes, effortlessly producing both oral and written material, endless amount of educational games and other material are just some advantages mobile devices have brought to language lessons (von Zansen 2015).

Nowadays, mobile devices are usually always on, always with us and always connected to the internet (Udell 2014). Thus, an easy and quick access to information has also changed the way we learn and acquire new information. Since the devices allow us to search for nearly anything we want, it has also changed the way we acquire information. It is not necessary to memorize all information, since the access to it has become so simple. Therefore, learning new skills such as critically evaluating the information from various sources and successfully using different databases is

important. Technology is widely used in the modern-day working life and ensuring students with necessary skills related to technology is an important part of their education. At best, mobile devices can help the students not only to learn languages but also to become competent users of the devices in searching for information and creating own content, which are beneficial skills for their future. In previous studies, the use of mobile devices in teaching has been examined from both teachers' and students' perspectives (e.g. Gafni et al. 2017 and Rikala, Hiltunen and Vesisenaho 2014). The studies have focused on for example attitudes towards the use of mobile devices and on specific applications. A master's thesis by Silla (2015), examined the problems in the use of mobile devices in foreign language teaching. However, in the previous studies, the use of mobile devices in the teaching of the four language skills has not been examined. Therefore, this study aims to investigate the amount and the ways in which mobile devices are used in general and also in the teaching of the separate language skills. The present study focuses on the use of mobile devices in high school English teaching in Finland. The data of the study consists of 54 high school English teachers' answers to an online questionnaire. The respondents had different amount of teaching experience. The questionnaire consisted of ten questions, eight closed questions and two open-ended questions. The closed questions were analysed statistically, and a qualitative content analysis was used to analyse the open-ended questions. The focus in the present study was both on the amount of mobile device usage and on the usefulness of mobile devices in the teaching of English. Also, respondents had to consider how well mobile devices are suited for the teaching of listening, speaking, reading and writing skills. The idea was to find out if the devices were better suited for the teaching of some of skills over others.

The present study begins with an introduction to the theoretical framework of the study. Key concepts related to mobile learning and some previous studies are explained. In chapter 3, the present study is explained in more detail. The participants, the data gathering, and the method of analysis are discussed. In the following section, the data is analysed. The chapter is divided into separate sections related to the different research

questions. In the last sections, a summary of the results is provided. Lastly, a conclusion of the present study with suggestions for further research are presented.

## **2 TECHNOLOGY IN LANGUAGE TEACHING**

In this section the key concept related to the developments in the use of technology and mobile learning are discussed. Some previous studies related to mobile learning are also examined. In addition, the teaching of the four language skills, reading, writing, listening, and speaking, are discussed.

### **2.1. Changes in the language teaching due to technology**

The new technology, such as smartphones and tablets, have become an integral part of our everyday life, and especially the younger generation is very comfortable with the modern technology. They have grown up using the technology and applications such as *Instagram*, and *WhatsApp* and are therefore even referred to as digital natives by some people (Vaarala, Johansson et al. 2014). The same devices that the majority of people use in their free time can also be useful tools in the learning and working life. The opportunities are endless since there are more and more devices and applications being developed and discovered all the time. For teachers the vast amount of new opportunities mobile devices offer can have both advantages and disadvantages. Like the devices and applications, also the learners are different and not everything suits everyone. Thus, there are about to be both successful and unsuccessful experiments that are educational for the teachers and the learners. The adoption of technology naturally changes the traditional ways of teaching but the focus should be on enhancing the teaching, not replacing all useful traditional teaching methods with the use of technology.

The new devices and their functions have led to changes in the operational environments in schools. As a result of the new technology being used in schools, formal and informal learning environments have become mixed (Vaarala, Johansson et al. 2014: 1-2). In the latest Finnish National Core Curriculum (2014), the use of information technology and



digital literacy are emphasized as a part of all teaching. Digital literacy can be referred to as a critical attitude towards different technological devices and digital environments and the ability to use various technological devices proficiently. (Vaarala, Johansson et al 2014: 2). Different digital environments can have various functions in teaching, such as producing and sharing information or playing games. Examples of digital environments that can be used as learning environments are *Wikipedia*, *Facebook*, different blogging and vlogging platforms and various discussion forums. Even if students were accustomed to using such applications and platforms in their free time, they might have used them in a different way. A student might have, for example, used *Wikipedia* to search for information of their own interest, but might not be aware of the fact that whoever can create and edit *Wikipedia* pages and thus how to make sure the information is legit. Such skills should be taught at school with the guidance of teachers.

### **2.1.1 Possibilities and challenges of using technology in foreign language teaching**

The development of technology has changed our way of learning. Computers, tablets and smartphones have become an integral part of classroom activities. They provide us an easy access to limitless amount of information and sources. Studies have shown that students have become *digital natives* (Mahrooqi and Troudi 2014: 2). Therefore, it seems natural to include technology in language teaching. However, it is a challenge for teachers to provide students with meaningful ways of using the devices for learning, so that the technology can be a useful tool. Not only has the access to knowledge radically increased in the multimodal world, but also the authorship and ownership of knowledge has gone through a change (Taalas 2005). One can find a great amount of information on the Internet and in addition create and share one's own documents for the world to see. However, students may not be aware of the ways technology can be used in language learning and therefore teachers are challenged to show their students the possibilities technology may offer for learning.

Technology provides new possibilities for language teaching. All the new language learning applications, e-dictionaries and e-books offer both teachers and students endless opportunities for learning. Open-access resources allow the teachers, and also the students, to easily share material in online platforms. Computer assisted language learning can also promote the use of target language and create authentic tasks (Thomas, Reinders and Warschauer 2013: 26). Students can relate to authentic tasks in real life environments and thus their motivation to use the language may increase. Such tasks can give them the opportunity to, for example, get to know people from other cultures who can give them insight to the way of life in other countries. Besides the contact with people around the world, teachers can enhance their classes with up-to-date texts, videos and other material (Motteram 2016: 88). Thus, authenticity can be enhanced in multiple ways. In addition, mobile devices can be used almost anywhere, which can take the language learning outside classrooms. Students can, for instance, use the learning applications whenever they want to or continue talking with foreign people online. Consequently, mobile devices also enhance students' independence in foreign language learning.

Teachers have a key role in students' *e-functioning*, which means, for instance, guiding them in the use of multiple new modalities (Dooly 2015: 14). Even though the younger generation can be competent users of technology in their free time activities, they might not be able to use the same media effectively for learning. Teachers should use fairly simple exercises and applications in their teaching since the point is to engage the students with the learning content rather than spend lots of time understanding the complexities of the applications. Also, teachers need to guide their students in the correct way of using technology, especially considering privacy, copyright and security in an online environment (Thomas, Reinders and Warschauer 2013: 26). No matter how competent the students are in the use of technology, teachers need to make sure that they understand their responsibilities. As Dooly (2015: 19) states, technology is an integral part of today's society, and therefore raising students' competence in using technology appropriately in different situations, teaches them skills that they will need in the future.

### **2.1.2 References to the use of technology in the National Core Curricula for General Upper Secondary school**

In the latest Finnish National Core Curricula for General Upper Secondary School (2015), the use of technology in teaching is referred to in several occasions. Since the devices are becoming an integral part of not only our private life, but also the working life, the teaching of such skills in school have naturally become important. Chapter 3, the Execution of teaching (2015: 14), states that students are guided to employ digital learning environments, materials and working tools to search for information and also to produce and share new information. It is also stated that students are required to purchase necessary working tools and material, if schools do not supply them with them. Such tools refer to, for example, a working lap top that can be used in the classroom as well as at home. Since the matriculation examination of the English subject is nowadays digital, it is understandable that students need to be competent and prepared to complete their matriculation examinations on their lap tops. Thus, students need to be accustomed to using their lap tops for school purposes, which teachers' can make sure by using lap tops during courses.

The Foreign language section 5.5 (2015: 107) suggests that various methods should be employed in the teaching of foreign languages and students are guided to search for, evaluate and handle information in the languages they are competent in. Needless to say, information technology is used to do so. In the learning goals of the different courses, the use of technology and digitalization are also referred to. In the second mandatory English A1 course, ENA2, the significance of technology and digitalization to our communication and welfare should be examined (2015: 110). In the fifth mandatory English A1 course, ENA5, different visions for the future of our planet are examined, especially from the point of view of technology and digitalization. Also, the status of the English language as an international language of science and technology is referred to. Since the themes suggest that technological change should be discussed from different points of views in those two courses, it seems natural to include such devices in the teaching. Many new coursebooks may also include exercises, in which the use of lap tops or mobile devices

are suggested, or even mobile applications with extra information that is not included in the course books. Such changes in the core curricula and course books are thus making the use of technology a norm in the classrooms.

## **2.2 ICT in foreign language teaching and learning**

For many years, there have been multiple different devices being used for teaching purposes. Some have worked better than others, and the evolution of technological devices in classrooms has been rapid. The first recognised term that connects technology with learning was electronic learning (e-learning), which was defined as using electronic media and tools to support teaching and learning (Berge, Muilenburg and Crompton 2013: 10). Thereafter, mobile devices have become more and more popular, which led to the discovery of a new term of mobile learning (m-learning), which will be discussed in more detail in the section below. In the next section, the evolution of e-learning to m-learning is explained thoroughly. More examples of the teaching of different language skills with mobile devices are discussed in section 3.

### **2.2.1 From e-learning to m-learning**

The concept of e-learning started through the development of new technologies such as the WWW (Berge, Muilenburg and Crompton 2013:10.) They state that the definition of the concept was difficult at first, since there were different opinions whether it meant learning through a networked technology or if the simple use of an electrical device was enough to be referred as e-learning. Whether or not the devices were networked, if they were used to implement the learning process, it is in fact e-learning. Another definition for the term is teaching taking place in a computerized environment (Berge, Muilenburg and Crompton 2013:5). The term itself is ambiguous. As much as e-learning has been studied, scholars still have differing takes on the definition of the term. In principle, when talking about any learning where electrical devices are used in some manner, the term e-learning can be used.

First references to e-learning start from computer-based Training (CBT) in the 1980's, when the multimedia technology started to develop rapidly (Hamada 2013:9.) Hamada refers to major breakthroughs in the area, such as CD-ROMS and *Powerpoint*. They made it possible to mass-produce instructional and training materials on compact discs that were available for individuals and organizations to use in a preferred time and place. CBT was first vastly used in the aviation industry, where for example simulators were used. In the 1990s CTB also became vastly used in educational institutions. However, it was not until the late 1990s when CTB's full potential was found, when text-based material was accompanied with for example videos and audio. The developments in the field made CTB more and more popular and it also made distance learning possible, which gave for example universities the chance to offer classes online. After the use of discs, online learning materials were developed. Hamada (2013:10) explains that virtual learning environments, such as *Moodle*, made it easier for teachers to create educational content for students and monitor their participation in lessons. Teachers were able to edit their learning environments to best meet their learning agendas, and many useful aspects, such as instant messaging, discussion forums and easy delivery of students' work, made learning environments practical to use. Naturally, ever since computers became more affordable and common, the use of electronical devices in educational contexts became more popular.

Over time, electronical devices have developed into more portable and mobile, which led to the definition of a mobile device. Since mobile devices became used more and more in educational contexts, the new features they offered distinguished their use in teaching from the previous use of for example non-portable computers. Therefore, to better suit the use of such devices in learning circumstances, a new term was required, and scholars started to use a term mobile learning (m-learning) rather than e-learning. Defining the term *mobile learning* has also had its problems. Scholars have not been able to agree on the devices, that can be referred to as mobile (Berge, Muilenburg and Crompton 2013: 48). As discussed earlier, devices have gone through a massive change, which has led scholars to disagree on how to categorise electronic devices. The problem of definitions lies in the

rapid development. There are so many new devices designed in a rapid pace, which makes it difficult to predict how many of them will actually become useful in learning. Also, people can have differing opinions of the utilization of various devices. According to Berge, Muilenburg and Crompton (2013: 48-52) the utilization of easily transported devices, which can be used anytime and everywhere, is considered as m-learning and this is also the definition that I chose to use in the present study. The definition stresses the easy portability and use of a device anywhere and anytime. To simplify, a device that is easy to carry around and to use in different places and does not require constant charging may be referred to as a mobile device.

The differentiation of e-learning from m-learning is not straightforward. Since mobile devices are electronical as well, the separation of the two terms is not explicit. In fact, m-learning is a term that is included in e-learning (Berge, Muilenburg and Crompton 2013:48). Another term to consider is distance learning (d-learning). The idea of distance learning is the possibility to independently learn outside school premises no matter where one is (Berge, Muilenburg and Crompton 2013:50-52). In practice, this means giving students and learners the necessary materials to study whenever. After most of the material turned to electronical, the term e-learning has been used to define some of the distance learning, which obviously can be non-electrical as well. In this thesis, my focus is on mobile learning, which is why distance learning is not explained in more detail. Since the term mobile learning was above defined as the use of easily portable devices, we first need to define the word portable. The difference in the use of mobile devices and other electronical devices can be explained by the mobile devices being *always on, always with you* and *always connected* (Udell 2015:192-195). You use your computer or laptop, turn it off and put it away until you need it again, whereas the mobile devices are rarely turned off. Also, you might not always have your laptop with you, but most people have their smartphones on them almost everywhere they go. Udell (2015:192-195) continues on listing the ways in which our mobile devices have become an integral part of our lives. Besides the fact that the wireless connection gives an opportunity to quickly google anything, our smartphones are also our watches, alarm clocks and cameras all in one

compact device. Since mobile devices have multiple functions and can easily be used whenever, they also offer a new way to learn while being on the move. The learning does not have to happen at school or home or other place where studying normally takes place, since the learning applications can easily be used on the mobile devices while sitting on a bus, laying on the beach or whenever else there is time. Thus, the time and place of learning can be more freely decided by the learner, when the learning tool is a mobile device.

### **2.2.2. Reasons for and experiences of m-learning**

Mobile learning is many times referred to as disruptive in technology circles, since mobile devices disturb our daily activities and ways of thinking in many ways (Feser 2015:21-25). Mobile devices have become an omnipresent part of our lives, since they can be used for multiple purposes. Take for example mornings and times when we are trying to navigate ourselves to new locations. The alarm clock on our phones wakes us up and the first thing many people do in the morning, is to look at current news or social media platforms on their phones. Later, they might for example have a meeting in a café they have never been to before. Most people would use their mobile device's navigation system, or other navigation applications, to find the quickest route to the café. Thus, nowadays it takes little effort to find out whatever information we at the time need, since mobile devices are with us most of the time. Feser (2015:24) explains how mobile devices have challenged the traditional ways of teaching with the shift from "learn now, use later" to "need now, learn now". Traditionally, we have learned many new things at school and memorized the information with the idea of having learned the information since we might need it in the future. Mobile devices, however, allow us to quickly search for the information needed in a precise situation and thus learn new things when they are encountered. Even though mobile devices obviously can be used to learn in the traditional way as well, they have shifted our way of learning new information by allowing to search for and learn new information whenever we need it. Another opportunity Feser (2015:24) describes, is the shift from instructed learning to more self-directed learning. Normally, there has been a

teacher or an instructor who has determined the content that is important to learn and that is what the students have been instructed to study. Mobile devices allow people to more freely decide aspects of the same content they find important and no one can determine the information available. Naturally, there is a lot of false information on the internet, which makes it important that teachers help their students to find valid information and use reliable sources. All in all, technology has changed the time and place we look for information and learn and has in that way disrupted the more traditional ways of learning.

There are multiple reasons why mobile devices have become popular in teaching. Since students use their mobile phones outside school a lot, it makes sense to utilize their devices in the classroom as well. In many applications and games, students can work at their own pace, which makes mobile learning a great way for the teacher to individualise their teaching. In addition, the learning is not tied to a certain space, such as a classroom, and the students can continue working on the exercises on their own time outside school. The flexibility of time and space is one of the benefits of m-learning (Ferreira et al. 2013:74). Therefore, using certain mobile applications can be a great way to for example train for a vocabulary test at any time. Reasons for the use of mobile devices in language teaching are explained in an article written by a language teacher working in adult language teaching (von Zansen 2015). With mobile phones, students get to learn by doing and many times the mobile language exercises are playful and fun additions to normal lessons. If the students find mobile exercises motivating, they can continue working on them on their own time, since all they need is their own device. In addition, the use of mobile devices changes the way people communicate (abbreviations, emojis etc.) and it is important to teach students how to use the language in real life situations they might come across with.

Technology gives students an opportunity to actively participate in the teaching. Applications such as *Socrative* and *Kahoot* are tools with which teachers can create polls, quizzes or message boards (von Zansen 2015:3) Another way to present exercises or



games to students is to create a QR code and share it for the students at school. It is possible to store various material, such as videos, songs or pictures, in a QR code, which the students can easily access by scanning the code with their smartphones. They can be used in for example on quizzes or geocaching. Mobile devices also offer ways to practice oral and communicative skills. Recording speech and creating videos are excellent ways to produce and revise one's own speech. *Puppet Pals* is an application in which animated characters are chosen to present the recorded speeches or stories. It gives the students an opportunity to identify in a chosen imaginary role. Another useful way to practice real life communicative situations is to use *Skype*, or other similar video call applications. Nowadays, since the working life is more and more multinational, video calls with colleagues from other parts of the world have become common. Also, video job applications are used a lot. Therefore, it makes sense to use such applications in language teaching, since they prepare students for possible similar real-life situations in the future. Furthermore, von Zansen (2015:4-6) discusses various vocabulary applications, such as *Quizlet*, *Wordle* and *Duolingo*. They provide the students with an opportunity to study vocabulary in a more creative and visual way. The best part of such vocabulary applications is the fact that students can continue working on them outside the classroom. Thus, the little time spent on the exercises during class can inspire the students to continue on using the application on their own time and increase learning outside the language classroom. All in all, mobile applications offer countless number of ideas and exercise types, which can invigorate the teaching and offer authentic learning experiences.

### **2.3. Previous studies on m-learning**

Mobile application *Duolingo's* influence on learners' attitudes to learning in Israel was studied by Gafni et al. (2017). *Duolingo* is a free language learning application that offers its users an opportunity to learn a new language by using their own mobile devices. Different languages can be chosen to study and there are different skills, such as writing, and listening that can be practiced with it. The participants of the study (N= 89) were students of different foreign language courses. From the respondents, 58 used the

application voluntarily and for 31 of them using the application was mandatory during a course. The data was gathered by using questionnaires (Gafni et al. 2017:312). The results showed that the use of *Duolingo*, had both advantages and disadvantages. The advantages included the ability to use the application anywhere and anytime, self-learning (independent learning with feedback from the application), and the gaming aspect as a motivating factor. Even though connecting to the internet is nowadays accessible in most places and cell phone plans have become quite cheap, internet dependence was reported as the main issue. Other smaller disadvantages were the noisiness of an environment where the learning might take place and the device itself distracting from learning with its other entertainment applications. In a previous study by Gafni (2008) small screen sizes were reported as problematic but, in this study, it was not a major complaint. Perhaps people have become used to working on smaller screens. All in all, most of the respondents found *Duolingo* useful because of the freedom of independently learn a language whenever possible.

A study of teachers' attitudes, competencies and readiness to adopt mobile learning approaches was committed by Rikala, Hiltunen & Vesisenaho (2014). Three case studies were carried out, in which teachers introduced themselves with ways of using mobile devices in their teaching. Also, semi-structured interviews were used to collect data. The respondents were six teachers, some of them trainee teachers, all from Central Finland and all of them had little to none experience of mobile learning. First case study was for early childhood education related to nature education, second for primary school mathematics and the third for secondary school literary history. In all of these case studies, students used borrowed mobile phones. The idea was to compare the teachers' attitudes and competencies to use mobile devices to the amount of use and therefore find reasons why teachers choose to use mobile devices and why not. The results suggest that lack of resources and training affect the use of mobile devices. First of all, teachers were unsure if all students would have necessary devices in order to increasingly use mobile devices in their teaching. However, these case studies were carried out in 2012, and since then there has been huge developments in the field and the use of mobile devices has

increased remarkably. Therefore, such a problem quite possible does not exist anymore. The lack of time to produce mobile learning possibilities was also noted as a problem. Also, the lack of training and support were factors teachers were worried about. Thus, with proper skills, teachers might find it easier to come up with ways to use mobile devices in their teaching and thus save time. Other reasons affecting the use of mobile devices were the resistance to change, the lack of confidence, preference to traditional teaching practices and the general interest to adopt mobile devices into teaching. Naturally, teachers who have used traditional learning strategies for years, may find it difficult to change and also have little confidence on their capabilities to adopt them in their teaching. Still, four of the six teachers had the interest to try mobile learning again and it was mentioned as a way to invigorate the teaching. All in all, the teachers' experiences were rather positive. Even though there were obstacles for the use, the main problems were the lack of mobile devices and training, which have improved a lot in seven years. In many schools, training is provided for the teacher and most students nowadays have their own mobile phones with them at school, which quite possibly have reduced these obstacles.

The possible problems of the use of mobile devices in foreign language teaching was previously examined in a master's thesis by Silla (2015). His study focused on the problems that occurred when mobile devices were brought to classrooms for the first time and the problems in using them. An online questionnaire was administered, which consisted of both closed and open-ended questions. There were 36 foreign language teachers who filled in the questionnaire. Teachers' own skills in using the devices, the lack of devices for all students and problems with internet access were some examples of the problems that occurred. In addition, some teachers claimed that they did not know how mobile devices could be useful in foreign language teaching. Since some of the teachers did not have the necessary skills to use the devices themselves, enough training should be provided on the use of mobile devices in learning purposes. In addition to more training for teachers, teacher training should also provide future

teachers with proper skills in using mobile devices (2015: 63). This way, they would in the future be able to sufficiently use mobile devices in their teaching.

A study on the ways in which university students use their own devices to support their learning was committed by Nortcliffe and Middleton (2013). Respondents were students of Sheffield Hallam University's Engineering and Computing departments and the data gathering took place in two workshops. Even though the number of respondents was limited (N=5) and generalizations could not be made, a number of examples of the benefits of m-learning were gathered. The students were asked to give a 5-minute presentation on the applications they regularly used for learning purposes. They were instructed to share the applications' benefits for studying. Students also answered to a short questionnaire consisting of both closed and open-ended questions. Four main categories of the benefits of m-learning came up from the received data, which were; productivity, organisation, communication and multi-tasking (Nortcliffe and Middleton 2013:191-203). Students gave examples of the ways they could productively use their time wherever they have their mobile devices. Also, the voice recorder applications were found very useful for example during lessons, since recording was simple, and the files could easily be listened to or shared for example for someone who was absent. Organising files and documents with the help of applications such as *Dropbox* and keeping track of important dates with the help of for example *Google Calendar* were mentioned by the respondents as ways of organizing. Also, communicating with other students or lecturers was easy for example on *Facebook*. Students also found mobile applications beneficial for multitasking because of their easy access to different applications and their various features. For example, *Google Drive* was mentioned as being really practical during group work, since all the members can access and edit the files simultaneously, whenever they have an internet access. The same application also gives them an opportunity to communicate with each other. According to the questionnaire results (Nortcliffe and Middleton 2013:192) all students agreed that mobile devices had improved their learning with their various features. All in all, mobile applications' benefits for studying were extensive and university students found them extremely useful.

In this section I have discussed the key concepts and aspects of the present study. In addition to the overall use of mobile devices, another focal point of the study is on the four language skills and the suitability of m-learning to the teaching of separate language skills. The teaching of the four language skills and also the connection to m-learning will be examined in the next section.

### **3 THE TEACHING OF SEPARATE LANGUAGE SKILLS**

#### **3.1. Language skills**

Language skills are commonly seen as the components that make up knowledge in a certain language. Since language knowledge as a term can be rather ambiguous, clarifying it by the division of different language skills makes sense. However, the division into separate language skills is not that simple. Perhaps the most common way to define language knowledge is the division into four language skills; reading, writing, listening and speaking and this division will also be used in the present study. These four skills can be divided into receptive and productive skills, listening and reading being receptive, and writing and speaking productive. However, there are no straightforward differences between receptive and productive skills and many times their use is intertwined. Still, in foreign language classes, these four skills are many times referred to and tested as separates; reading or listening comprehension tests, oral exercises and written texts. Therefore, even though many exercises require the use of more than one language skill, there are different ways in which teachers enhance the learning of the four language skills, which are discussed in the next sections. First, some ways in which the four language skills can be taught are discussed and later applying mobile devices in their teaching will be examined.

##### **3.1.1 Teaching reading**

The goal of reading is not just to understand the vocabulary, but the meaning of the text. In foreign language reading, it many times starts with understanding the vocabulary and

thus understanding the context of the text. Foreign language reading differs from mother language reading, since the reader usually does not have the cultural and social knowledge necessary to fully understand the target language context (Bardakçi and Akpınar 2014:137). Therefore, different strategies are needed when reading a foreign language. Readers may use either “bottom-up” or “top-down” approaches in reading. In “bottom-up” approach the focus is on word-level skills, such as understanding words and phrases. In comparison, the focus on “top-down” approach is on the whole text passage and understanding the meaning the text, rather than focusing on understanding every word. When EFL readers develop their language skills, they shift from “bottom-up” to “top-down” approach. Naturally, to be able to understand the meanings of whole passages, background knowledge of the subject is needed. One of the main difficulties English as a foreign language (EFL) readers encounter, are the lack of background knowledge on the topics of the texts. If there is no cultural knowledge of the target language’s culture, understanding the meaning of the text might be problematic. In addition, the lack of knowledge on vocabulary obviously causes problems for EFL readers. The capacity of vocabulary is one of the most relevant factors affecting reading comprehension, which makes studying new vocabulary an important part of reading skills (Bardakçi and Akpınar 2014:38).

Teaching foreign language reading should consist of different types of reading exercises. Nation (2009:6-8) discusses different principles in teaching EFL reading. Meaning-focused input consist of reading various types of texts in different ways, for example reading to search for information from the text, reading to understand content of a text and reading for fun. Therefore, students should be provided with different types of reading material in their own language proficiency level. It is important to ensure that students do not struggle too much with the vocabulary of the texts in order for them to develop their language proficiency. Students should also practice meaning-focused output, which connects reading to other language skills, such as listening and writing. Students may read a text in order to talk about a certain subject or to produce a written text. Thus,

reading background information for the purpose of producing a written answer for example, is a skill that needs practice.

Another type of reading practice is language-focused learning (Nation 2009:6-8). Especially when the students' native language differs a lot from the target language, features such as phonemic awareness and spelling become important factors in foreign language reading skills. Students should practice a range of reading strategies, such as connecting to background knowledge, posing questions, focusing on the structure of the text or guessing a word from a context. Also, students should become familiar with different text types, such as news reports, blog entries or scientific reports. In addition, learners should have practice on fluency development. In order to develop fluency, learners need to read material that does not have unfamiliar vocabulary or grammar structures. Activities for training reading fluency are for example speed reading, paired reading or scanning and skimming texts. For fluency development, learners should read a lot. Therefore, providing students with motivating and interesting texts is essential. The more they read, the more fluent readers they become, and an extensive exposure to English texts in and outside school is the key to becoming a fluent reader and user of English.

### **3.1.2 Teaching writing**

Writing is one of the productive skills, besides speaking, and it takes time and effort to produce meaningful text especially in a foreign language. A main aspect of a written text is correct spelling, which can be the first problem especially for students whose native language has different orthography. Thankfully, for Finnish students the orthography is the same. However, the spelling of English is problematic for many EFL learners, also for Finnish students, since the sounds and letters of the words are not the same in English (Yildirim 2014:114-115). Thus, being able to say a word in English and being able to write it are two different skills. Correct spelling is an important factor in conveying meaning and some focus needs to be given on practising it. Practising the spelling of individual

sounds and words is important and also a way to enhance the learners' skills as writers. Since writing a meaningful and grammatically correct text is complex as it is, learning how to correctly spell English is one of the first things needed in order to focus on creating coherent and understandable text.

There are different principles for learning to write. The same division to four principles is discussed in the teaching of reading, which are meaning-focused input, meaning-focused output, language-focused learning and fluency development. Nation also discusses the same principles (2009:93-95) regarding teaching of writing. Learners should have meaning-focused input, which means writing about something they have experience or background knowledge about. If the writing is meaningful for the writer, it is more likely to be successful as well. In the meaning-focused output principle focus is on writing about different subjects and different genres. The focus in writing should be in communicating an understandable message and learners should learn what kind of language to use in different situations. Also, getting to write about one's own interests increases the motivation to write. Therefore, starting with something the students are comfortable with, for example writing about their own interests, is a great way to get them writing. Learners need plenty of practise in writing in general in order to become successful writers and the more practice they have the better.

Nation (2009:93-95) also mentions the use of computers as an important factor in increasing the quality and speed of the writing. Since computers' writing software corrects spelling and grammar and writing on a computer is usually faster than with pen and paper, computers are useful tools in becoming a better writer. Since fluency development is closely related to the speed of writing, writing on a computer may increase fluency in foreign language writing. In addition, learners need repetitive activities and exercises with simple and familiar material in order to become more fluent writers. EFL learners also need language-focused learning in writing. In their writing, they should become aware of the stages in their writing process and create strategies to overcome difficulties they may face. Being aware of ethical issues as a writer is also



important for them to learn. Additionally, the ability to discuss their writing process and receive feedback are important factors in enhancing writing skills.

Writing can be taught by using various strategies. First of all, writing practise can consist of product and process writing (Yildirim 2014:118-119). In the product approach to writing, the interest is on the text the students have written, which teachers assess. Teachers are not involved in the writing process, and product writing takes place for example in written exams or exercises. Students fill in the gap, write one-word answer or an essay and the teachers give feedback. Usually there is also a time limit, since students need to learn how to produce written answers in a limited time. In process writing, the focus is shifted from the product to the process of writing. While writing, students get feedback from the teacher and possibly also from other students in order to enhance the text. The process can also be divided into stages of writing, such as pre-writing, planning, drafts, editing and rewriting. The idea is to have the teacher's support throughout the different stages in writing and thus improve their skills as writers. Since process writing takes more time and effort from both the teacher and the students, some teachers argue that the product writing approach is better. However, since there is no chance to correct one's text, receiving feedback is many times not useful. When students receive their corrected essays from the teacher, they many times do not pay attention to the corrections, since there is no need to rewrite the text. Therefore, they do not necessarily develop their skills as writers. Students also need practise in different genres in writing (Yildirim 2014: 119-121). Creative writing may include genres such as poems, stories and plays. Students get to use their imaginations, which can be motivating for some students. Naturally, there are some that do not find themselves that creative and prefer other more formal genres, such as news reports or job applications. Therefore, including various types of writing exercises is essential in order to firstly ensure students' awareness on how to write in different genres and secondly to provide all the students with a chance to find a writing genre that is the most suitable and pleasant for them.

### 3.1.3 Teaching listening

Listening is one of the core skills of successful communication and conversation. We first need to understand what we hear in order to speak and take part in a conversation. In our daily life, we are estimated to listen twice as much as we speak, four times more than we read, and five times more than we write (Köyalan 2014:66). We listen even when we do not pay attention to it and when studying a foreign language, it is important for teachers to provide students with enough exposure to the foreign language. Not all languages are used that much in the students' surroundings, like French in Finland, which makes it even more important for the teachers to offer students enough exposure to the language and also to suggest possible sources students can use in their free time to listen to the language.

Listening can be divided into extensive and intensive listening (Köyalan 2014:66-67). Extensive listening is something people do at all time; they hear different things around them but understanding everything is not necessary. Students can for example listen to some material of their own choice outside the classroom, without any added exercise or need to fully understand what they hear. Intensive listening in the classroom, however, requires the students to truly focus on what they hear, and complete a given task. In listening tasks, there are many times three stages: pre-listening, in-listening, and post listening (Köyalan 2014:69-72). In pre-listening, students are provided with initial information related to the listening comprehension, such as background information of the subject or new vocabulary. The idea is to raise their interest and increase concentration before the actual listening. In in-listening phase, the actual listening exercise takes place. Students are asked to listen to a text (audio tape, video etc.) and complete the given exercises. The teacher can pause the text in order for the students to be able to complete the tasks and stay on track. Lastly, the post-listening phase can consist of correcting the answers and receiving feedback on the exercise. Naturally, the pre-, and post-phases can consist of whatever else the teachers had come up with, while still staying focused on the topic of the listening exercise. In any case, there are usually various stages in intensive

listening, that prepare and reinforce the students understanding of the text that is being listened to.

Different types of listening activities aim to ensure that learners are able to understand and make use of the information they hear in the target language. During foreign language lessons, students should learn some basic strategies to not only understand classroom listening exercises, but also to be able to listen to and understand the target language in real life. Compared to listening one's mother language, while listening to a foreign language, people are bound to not understand every word that is being said. Therefore, teaching foreign language learners basic listening strategies is important, in order for them to cope in situations where they do not know every single word that is being said (Field 2008:286). There has been differing opinion on the field of L2 listening research, and Field (2008:298-302) list four different listening strategies, partially based on a list that was put together by Dörnyei and Scott in 1997. These four strategies are; avoidance, achievement, repair and pro-active strategies for listening. Avoidance strategies are important in order to not get caught up in the fact that something is not fully understood. While listening to a foreign language, learners cannot avoid such situations, and it is important for them to learn how to deal with such situations. By using achievement strategies, learner attempts to make hypothesis from the incomplete information they have been able to understand. They might, for example, try to construct a meaning by translating words into L1, focus on the key words of the topic and thus convey a meaning of the text or accept the indeterminate meanings of words. In reference to their background knowledge of a subject, listeners may be able to understand enough in order to act accordingly.

Repair strategies are the means of asking for clarification in situations, where something is not understood (Field 2008:300-302). In real life communication situations, repair strategies are essential, since asking for help or repetition of something is important. There can be loud background noises or simply too difficult language for the learner to understand and in such situations asking for clarification is necessary. While listening to

recorded speech in class, repair strategies cannot usually be used, which makes it important to practise them in other listening and speaking activities. Finally, Field (2008:300-302) discusses the pro-active strategies that consist of pre-listening, during listening and post-listening strategies that the learners can use to avoid problems in understanding during listening. Before listening, evaluating the task and the main issues of the upcoming topic may help while listening. During listening, the focus should be on the important words and main point. After listening, the learner may mentally review and reflect what was heard in order to make assumptions on it. The pro-active strategies are ways to support effective listening, whereas the other three strategies are useful in situations, where there is an actual breakdown in communication. Keeping in mind that understanding everything is not the main goal while listening to a foreign language, but rather understanding the main points is important. Therefore, for the students to survive in real life situations in the target language, learning such listening strategies is important in foreign language lessons.

### **3.1.4 Teaching speaking**

When considering being fluent in a specific language, many people intuitively associate it with the ability to speak the language. The ability to communicate with others is the most important language skill for many people, since successful communication is one of the main goals in language knowledge. Erdönmez (2014:40) explains that the internationalization of English as the medium of communication has emphasized the need to be able to successfully communicate in English. Therefore, it is imperative that English classes offer students a place to not only to learn grammatically correct English, but also how to appropriately use the language in various situations and social circles.

Erdönmez (2014:40-44) divides speaking to three main areas of knowledge, which are: Mechanics, Functions and Social and Cultural Rules and Norms. The first area of knowledge, mechanics, consist of pronunciation, grammar and vocabulary, since all of these are essential aspects of successful speaking. Common lexical phrases, grammatical issues, such as word order, or fixed expressions are common examples of mechanics,

which should be incorporated into the teaching of the spoken language. Also, it is important to teach the students non-verbal skills in English, in order to express emotions and effectively communicate in the foreign language. Connected speech is also part of the mechanics students need to learn in order to be able to produce continuous speech with correct variation and for example assimilation and omission.

The second are of knowledge, functions, involve the transactional and interactional use of the language. It is important for students to understand how language use differs in different situations to be able to for example correctly give a speech in English. One important function is the negation of language, which consists of asking for clarification and reasoning one's own opinion. It is common for foreign language speakers to encounter situations where they do not understand what is being said, or their recipient does not understand what they are trying to say, which makes it extremely important for foreign language speakers to be able to ask for clarification and rephrase their own words. Cultural rules and norms as the final are of knowledge consist of for example turn-taking and the notion that it should be noted how to address different people accordingly. Teachers should keep in mind that the core reason for learning any language is to be able to use it in real life situations. In conclusion, spoken language teaching should involve important mechanics of the language, but the actual use of the spoken language is an integral part of speech and should therefore be studied in the language classrooms.

### **3.2 The use of mobile devices in the teaching of reading, writing, listening and speaking**

Since we carry our mobile devices around almost at all times and the internet connection allows us an access to limitless amount of material, it is natural that those devices have also become a part of learning languages. However, there are both advantages and disadvantages in their use. For both reading and writing, the obvious weakness of mobile devices is their smaller screen size (Pegrum 2014:141-144). For reading texts, devices with larger screens such as tablets are convenient, but not all schools have tablets available for

students and students' mobile phones are usually the mobile devices that are being used at school. Still, reading shorter texts or quickly browsing information online is conveniently done on a mobile phone. Also, for all language use, vocabulary and translation applications are useful and easy to use on mobile devices. Pegrum (2014:142) states that the screen sizes of mobile devices are even more problematic in writing. Writing on a touchscreen usually takes more time than writing on a keyboard and therefore mobile devices are not as convenient in writing as lap tops. Therefore, in writing shorter texts, such as notes or short written answers, mobile devices can be useful but in writing any longer texts, lap tops are more suitable. One of the advantages mobile devices offer, is the extensive amount of applications, such as *Twitter* or *Instagram*, that people commonly browse on a mobile device. Those applications can not only be used for leisure but also for learning a language, since they offer platforms to follow and interact with people around the world. Naturally, teachers need to keep track on the activities students perform on their devices to make sure using them is aiding their language learning, not distracting them from it.

Compared to reading and writing, mobile devices can be even more useful in the teaching of listening and speaking. Opportunities for both extensive and intensive listening are endless; podcasts, talking books and videos are just some examples that are easily accessible on mobile devices (Pegrum 2014:144). Teachers may give their students recommendations on audio material, that they might enjoy listening outside school. Since listening in a foreign language is probably the easiest way students can increase their foreign language input, encouraging them and offering them suitable sources is useful. With ear plugs, listening is possible on the go and therefore mobile devices are useful tools. In some podcast and video broadcasts, the speed of speech can be adjusted, which may help students to better keep up with native speakers' speech. In some videos, there is a possibility to insert subtitles, and incorporating the subtitles as visual aid to the audio content may support learners in following the video. Those are just some examples on how to aid listening while using an electronic device.

Technology provides us with new ways of learning speaking skills. Pegrum (2014: 148-151) lists some examples of oral exercises on mobile devices. First of all, pronunciation is an important part of foreign language speaking. There are different applications with which pronunciation of words can be rehearsed by repeating and recording. The learner can compare their pronunciation on a native speaker and some applications even give feedback on the pronunciation. Afterwards, they may correct their mistakes by re-recording their speech as many times as necessary. Thus, such applications make it possible for every student to get feedback on their pronunciation, since a teacher may not have enough time to give every student feedback during classes. Recording one's own speech on audio tape or video is also simple on mobile devices. There are various applications that can be used to record voice or a video and there are limitless opportunities for the teacher to use those applications on foreign language teaching. Most students are competent in using different kinds of applications on their free time, for example to make *Youtube* videos or record podcasts. Those same applications are becoming more and more commonly used in classrooms as well. Students can independently make and edit their recorded tapes or videos, that can also be used in evaluation of the students' oral communication. If the whole class can record their evaluated work at the same time and send them to the teacher to be evaluated, it can save a lot of time since traditional oral communication exams are not necessary. Also, carefully prepared recordings can improve students' fluency and confidence in a foreign language. Like in any other teaching material, teachers need to come up with material they themselves feel is useful and suitable for their teaching. Mobile devices are just one addition to the more traditional way of teaching language, that can in some situations be more useful than in others.

### **3 THE PRESENT STUDY**

In this chapter, the aims of the study and the research questions are introduced. In addition, the participants and the chosen method are discussed in detail with the addition of data gathering process and method of analysis.

### **3.1 Aims of the present study**

In this research, the goal was to gain a general overview of to what extent Finnish high school English teachers utilize mobile devices in their English teaching. In addition, the teachers' views on the usefulness of the devices were at the interest of the study. The use of mobile devices has also been previously examined from the teachers' point of view (Rikala, Hiltunen & Vesisenaho 2014). In their study the focus was on the teachers' readiness to adapt to the use of new devices in their teaching. There have also been previous studies on m-learning from the students' perspective (for example Gafni et al. 2017 and Nortcliffe and Middleton 2017). The aim of the present study was to give a current overview of the use of mobile devices in Finnish high school English teaching. Also, the overall usefulness and the usefulness of the devices in the teaching of different language skills were at the interest of this study. The idea was to discover if the devices are better suited for the teaching of some skills over others. Since the idea was to gain a general view of the use and usefulness of mobile devices for learning purposes, an online survey was chosen as the method of the study. With both closed and open-ended questions in the questionnaire, the study had both quantitative and qualitative features. The method is discussed in more detail in the next section.

As mentioned above, the present study focused on the high school English teachers' perceptions of the usefulness of mobile devices in the teaching. To achieve the goal of the study, these two more specific research questions were formulated:

1. How much mobile devices are used in a high school English classroom?
2. How useful the teachers find the use of mobile devices...
  - i) in the teaching of English in general?
  - ii) in the teaching of the four language skills?

These two questions were configured to correlate with the purpose of the study, which was to discover how much high school teachers use mobile devices for teaching purposes,



how useful they found the use of the devices and if they preferred to use them in the teaching of certain language skills over others. The purpose of the first research question was to figure out the amount of mobile device use in the high school English classroom. The second question focused the usefulness of mobile devices in the teaching. The teachers were asked questions about their overall opinion of the usefulness of mobile devices in their teaching and about the applicability of the devices in the teaching of the four language skills.

### **3.2 Data collection**

In this section, the selection of participants is first explained. Furthermore, reasons behind the chosen data collecting method and the method of analysis are discussed in more detail.

#### **3.2.1 Participants**

The target group for the present study was limited to high school English teachers. I wanted to concentrate on teachers of a specific grade level, in order to gain a deeper understanding of the studied subject among a specific group of teachers. In my own experience, high school students are more usually allowed to use mobile devices in the classroom compared to pupils in lower grade levels. Primary and secondary school pupils might not be allowed to use mobile devices at all, since they tend to distract them from the actual learning. Naturally, some high school teachers might forbid the use of mobile devices as well, but the assumption was made, that high school students would more probably be allowed to use mobile devices in classes than lower class pupils.

The Association of Teachers of English in Finland (SUKOL) was approached via email in February 2019. The link to the questionnaire was published on their Facebook page, where there are about 2,800 followers. In addition, I personally published the link to the questionnaire in two Facebook groups for teachers, in a page for all English teachers called *Englannin opettajat* and in a page for high school English teachers in Finland,

called *Englannin opettajat lukiossa*. SUKOL's Facebook pages is an open access page and everyone can see their posts. Therefore, it is impossible to know how many people actually saw the posts with the link to the questionnaire. Both the *Englannin opettajat* page, with about 3,500 members, and the *Englannin opettajat lukiossa* page, with about 900 members are closed Facebook groups that only the members can view. Still, the number of members in the closed Facebook groups who actually saw the post about the link to the questionnaire is impossible to ascertain. In the post that was shared with the link, I addressed only English teachers of high school, since the target group was limited to high school English teachers. With a few reminders in the Facebook pages, I was able to receive a total of 54 answers and the link to the questionnaire was closed in the 28<sup>th</sup> of March.

### **3.2.2 Method of data collection**

An online questionnaire was chosen as the method of data gathering in the present study. The purpose was to gain a vast sample of answers from high school English teachers from all around Finland and with different amount of teaching experience. In the next paragraph, I discuss the pros and cons of questionnaires and why an online questionnaire was chosen as the method of the present study.

The amount of positive aspects of questionnaires is extensive. A questionnaire is a convenient method to gain a large amount of answers and if the number of respondents is large enough, generalizations can be done (Guthrie 2010: 77). Dörnyei and Taguchi (2009:6) explain questionnaires' efficiency with the little time and effort they take from the researcher along with the little financial resources needed. A sufficient background knowledge of the studied subject is certainly needed in order to form a well-constructed questionnaire, but after administering the questionnaire, multiple answers can be expected even in a little time. Thus, compared to an interview, a questionnaire is a more practical way to reach out to a vast number of people. Also, especially with online questionnaires, sending out questionnaires to a great number of people is rather simple, which makes questionnaires not only time-efficient, but also cost-efficient. In addition,

the analysis of the data gathered is relatively simple with the help of modern computer software. Thus, neither the data gathering, nor the analysis take much time (Dörnyei and Taguchi 2009:6). All in all, a well-constructed questionnaire is a rather uncomplicated data gathering method.

In recent years, online questionnaires have become increasingly popular. The suitability of online questionnaires is mainly depended on the internet access of the desired respondents, which nowadays is relatively good in many parts of the world (Toepoel 2016:1-3). Different online communities are quite easy to contact via the internet, for example in *Facebook*, which make online questionnaires increase the ability to gain multiple answers in little time. In addition, compared to answers on traditional printed forms, online survey answers are easier to save and the probability of errors in saving the data is lower (Vehkalahti (2014:48). Another positive factor in online questionnaires is the degree of privacy. Online questionnaires can be answered at any given time, with different technological devices. Since the answering is not tied to a certain time or place, it is easier for people to find time to concentrate on answering. Also, in many online questionnaire tools the respondents can answer anonymously. Thus, the degree of privacy in online questionnaires is high (Toepoel 2016: 11-12). All in all, both finding the respondents online and answering to online questionnaires are nowadays rather simple and increase the practicality of online questionnaires.

Questionnaires also have their downsides. First of all, people receive a vast number of questionnaires, which affects their willingness to answer them all. Since answering takes some time, it is necessary to convince the respondent that a specific questionnaire is worth answering. One way to influence the respondents' willingness to answer is to write a well-formed persuasive cover letter. An adequate cover letter consists of the basic information of the study, who is conducting the study and for what reason it is conducted (Vehkalahti 2014:47) The alleged respondent usually forms their opinion based on the cover letter, which makes it an important factor of the questionnaire. Secondly, it is crucial to ensure that all the questions are relevant and unambiguous. They can be understood in multiple

ways if they are not straightforward, which can have significant impact on the answers. Claims or questions that are not straightforward enough might in the worst case make the respondent frustrated enough to not complete the survey (Vehkalahti 2014:24). Piloting the questionnaire is an efficient way to avoid confusing questions and choice of words, which is why I piloted my questionnaire on other English teacher students. In addition, the length and format of the questionnaire must be pleasant in order to make the respondents complete the questionnaire. Respondents are not willing to spend a lot of time on a questionnaire, which makes it important to try to keep it as brief as possible (Dörnyei and Taguchi 2009:7). Consequently, it is necessary to compose an unambiguous and compact questionnaire and with the help of peer feedback try to avoid the major downsides of questionnaires.

Questionnaires can consist of closed response and/or open response questions. Closed-response questions have fixed options for the answers whereas open-ended questions give the answerer a chance to give their answer in their own words. Dörnyei and Taguchi (2009:26) list pros related to closed questions. Since in closed questions the options are fixed, respondents do not need to produce text themselves, they just circle or mark the answer closest to their opinion. Thus, answering closed response questions is quite time-efficient. The major advantage in closed response questions is the simplicity in coding the answers. Coding the closed response options numerically is simple and thus statistical analysis is rather easy to conduct. Also, a set of closed questions is easy to replicate in the future, to keep up with the current state of the studied subject (Guthrie 2010:131). On the contrary, open-ended questions do not limit the types of answers, since respondents get to free-write them. Successful open-ended questions are a way to receive comprehensive answers where the respondents' own voice is visible (Guthrie 2010:130). However, open responses need to later be categorised whereas in closed questions the categories already exist. Thus, open responses are more complicated to code than closed ones. Question types are chosen based on the expected data and using both closed and open response questions in a questionnaire is common to gain diverse research data.

In the present study, teachers' ways using of mobile devices in the teaching of English was examined. Commonly used research items in studies where people's perceptions are at interest are various rating scales. They provide options to be rated from high to low, with options in between (Guthrie 2010:132). The scales indicate different degrees of a certain category, such as *strongly agree* to *strongly disagree* or *never* to *every time*. As Dörnyei and Taguchi (2009:27) state, few people in the teaching profession are unfamiliar with scales because of their frequency in evaluation forms. Therefore, using them in the present study about teachers' perceptions seemed reasonable. The questionnaire consisted of eight closed questions and two open-ended questions. Two open-ended question were included, since it allowed the respondents' more freely to express their opinion. The questionnaire was kept quite brief, only 10 questions, in order to keep the answering quick and easy.

### **3.3. Method of analysis**

Since the questionnaire consisted of both closed and open-ended questions, different methods of analysis were utilized. The majority of questions in the questionnaire were closed response questions, which were analysed statistically. Likert scales were used in the questionnaire, which made coding the answers rather straightforward, as Dörnyei and Taguchi explain (2009:85). Each of the response options were numbered, e.g. "never" = 1, "seldom" = 2, "time to time" = 3, "often" = 4, "almost every time" = 5. Options one and five were at the complete opposite site of the matter with the rest of the options being at the middle of the spectrum. In most Likert scales, the middle option is neutral, for example 'do not agree or disagree'. That gives the respondent an opportunity to answer something, even though they do not have any opinion. However, in cases where the respondents are expected to have experience of the matters discussed in the questionnaire questions, the neutral opinion is not necessary. Since in the present study the respondents are high school English teachers, the assumption was made that they have some experience of the studied matter. Therefore, to avoid teachers not stating their opinion,

the neutral opinion was not included in the options. The quantitative data was presented by using descriptive charts and percentages.

The data from the two open-ended questions were analysed by using qualitative content analysis, which was discussed in Dörnyei and Taguchi (2010:99). In the first phase, all the open-ended answers were read, and all important and distinct features were marked and categorised. Question 7 focused on the reasons teachers had for utilizing mobile devices in their teaching. Von Zanzen (2015) listed reasons for m-learning and similar categorisation was also used in the present study. However, the categories were modified to some extent. Question 10 focused on how teachers used mobile devices to teach different language skills. Thus, the division to four categories of listening, speaking, reading and writing was made and features related to them were marked from the answers. and After categorising the answers of the open-ended questions, the categories could be compared and analysed in more detail.

## **4 THE AMOUNT AND USEFULNESS OF USING MOBILE DEVICES IN HIGH SCHOOL ENGLISH TEACHING**

In this section, the answers to the questionnaire are examined throughout. First, the two background questions are examined. Thereafter, the answers are discussed by their reference to the research questions, which were discussed in section 3.1. The questionnaire form was in Finnish and all the answers have been translated from Finnish to English. The percentages of the answers have been rounded to the nearest full percentage.

### **4.1 The teachers' experience of teaching**

In total, 54 teachers completed the questionnaire. The first question of the present study focused on the number of years the teachers had been teaching English. The idea of the was to gain an overall view of the amount of teaching experience the participating

teachers had. The majority of the participants had many years of teaching experience. The largest group of answers were from teachers who had been teaching over 20 years (37%). Also, 15% of the teachers had been teaching for 15-20 years, and 17% had 10-15 years of experience. Thus, almost 70% of all answerers had over ten years of experience as a teacher. The smallest group of answerers were teachers with 5-10 years of experience (11%). However, the second largest group, with 20% of all answerers, were teachers with 0-5 years of experience. Therefore, even though the majority of the answerers had over ten years of experience, there were also a decent number of teachers with far less teaching experience.

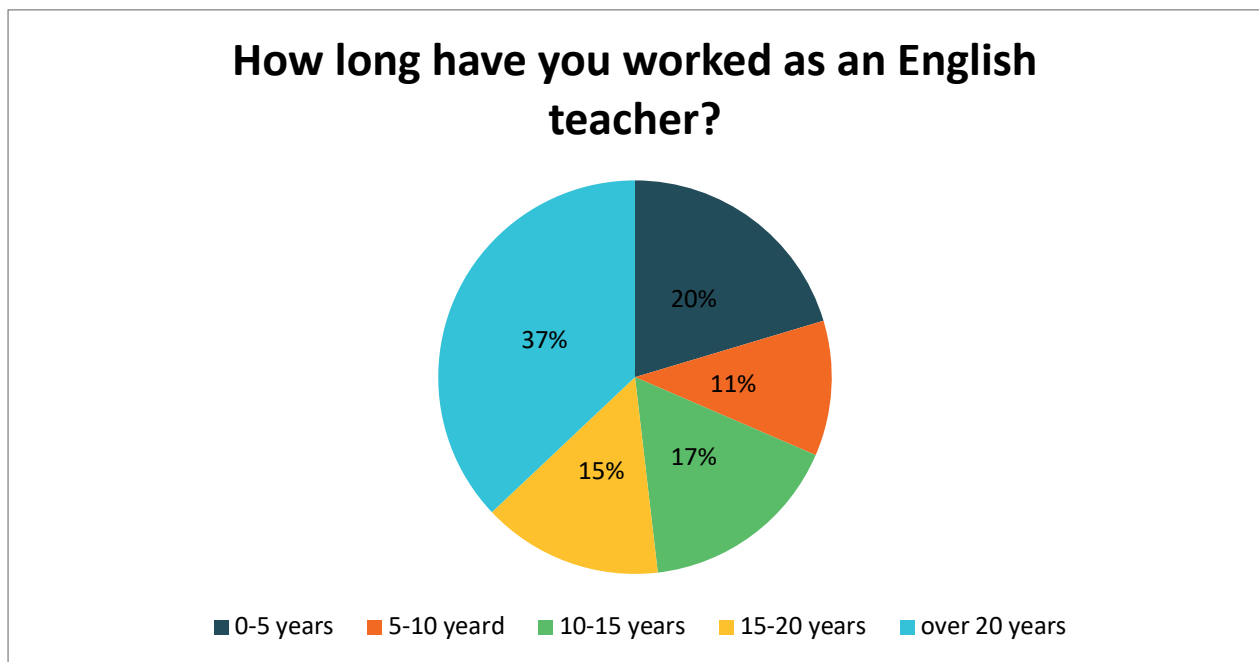


Figure 1. Teaching experience of the respondents in years.

Thereafter, teachers' ability to give guidance in the use of mobile devices to their students was examined. Even though the teachers' ability to use mobile devices was not at the interest of the study, the teachers' own skills in using mobile devices can naturally affect their willingness to adopt them to their teaching. The question was in a claim-form, suggesting that the teachers feel able to give students guidance in the use of mobile devices in learning circumstances. None of the answerers disagreed completely with the claim and only 9% of the respondents slightly disagreed. 37% of the respondents slightly

agreed with the claim, and the majority being over the half of the respondents (54%), completely agreed with the claim. Consequently, 91% of the respondents slightly or totally agreed that they were able to give students guidance in mobile device usage. Therefore, an assumption could be made that the teachers' own skills in using mobile devices had little effect on their ability or desire to include mobile devices in their teaching.

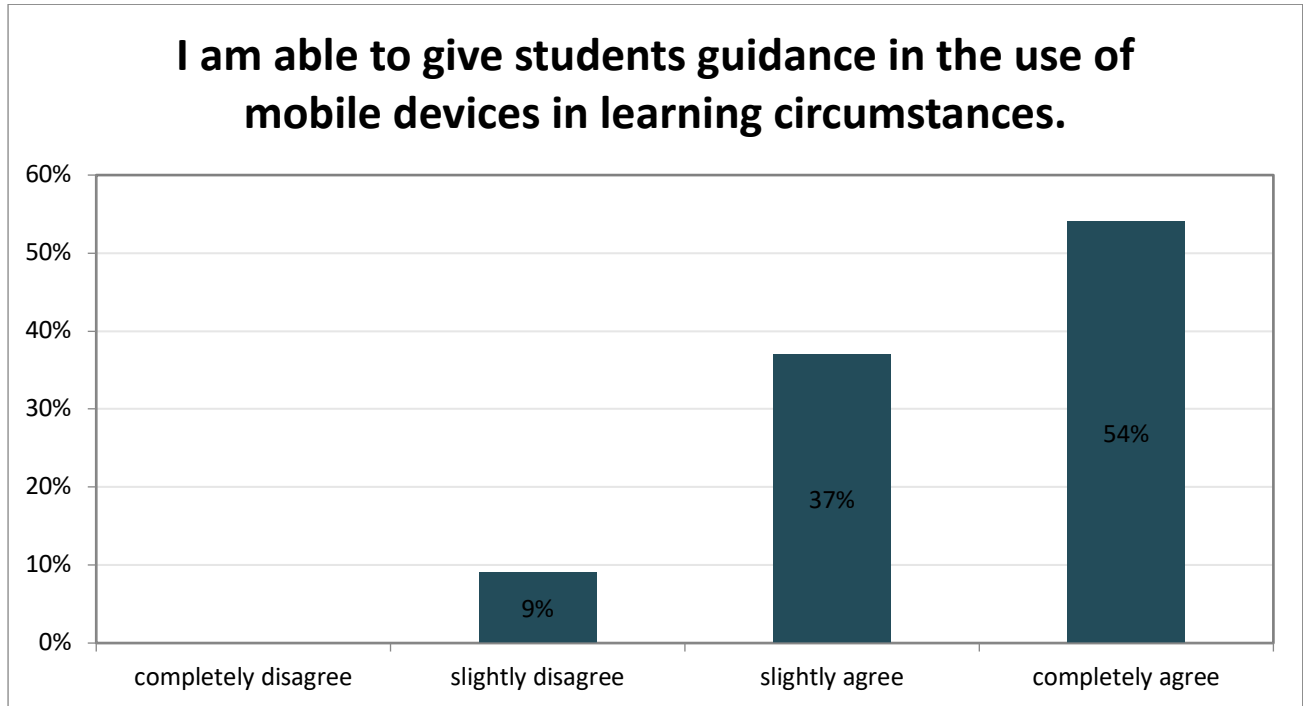


Figure 2. Teachers' views on their skills on giving students guidance in the use of mobile devices.

#### 4.2 The amount of mobile device usage in the teaching of English in high school

In the questionnaire, questions three, five and six focused on the overall amount of mobile device use in the classroom and outside classroom. Question eight focused on the amount of mobile device use in the teaching of different language skills, which will be discussed separately in section 4.5.

Question three was a claim that students are allowed to use mobile devices during lessons if they want to. Majority of the respondents, 48%, agreed completely, 33% slightly agreed, 17% slightly disagreed and none of the respondents completely disagreed. Therefore, it



can be assumed that most of the teachers see no problem in the use of mobile devices during their classes. I made an assumption based on my own experience that older students, for example in high school, are more usually allowed to use their own devices freely during lessons and at least in the present study that is true since a total of 81% of the teachers allowed the use of mobile devices often or almost always and none of the respondents completely forbid their use. Some examples of free use of mobile devices that were mentioned by the respondents in the answers to the two open-ended questions were looking up a word from a dictionary and quickly searching for some information online. Students can independently look up information on their mobile phones, which can decrease the need for the teacher's guidance and thus benefit both the students and teachers.

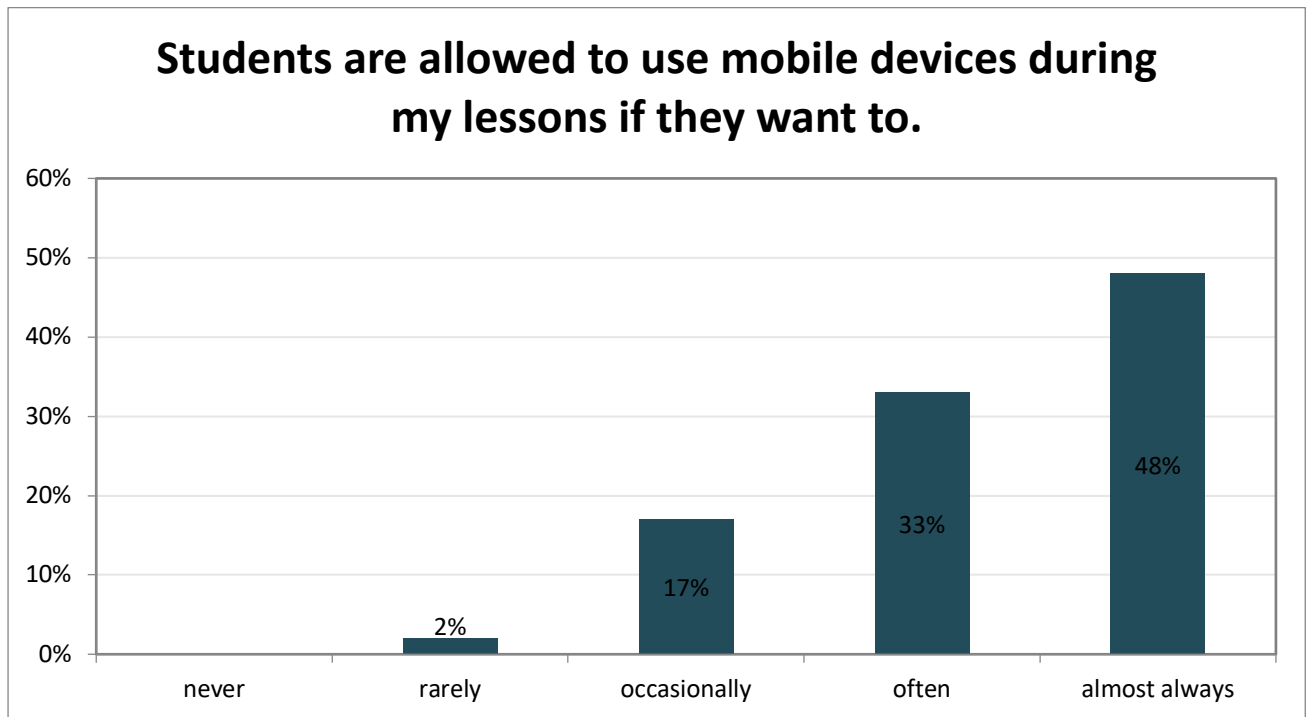


Figure 3. How often students are allowed to use mobile devices during lessons.

Question five was a claim that the teacher instructs the students to use mobile devices during lessons. Whereas in the previous claim the focus was on the students' independent use of mobile devices during lessons, this focused only on the instructed use. Mobile devices can be instructed to use in various ways, for example to play games, search for

information or to record one's speech. Compared to the students' independent use, decreased number of respondents noted that they instruct their students to use the devices. Only 15% of the respondents claimed to instruct the use almost always, whereas in the previous question about the independent use of mobile devices, 48% answered almost always. However, majority of the respondents (46%) claimed of instructing the use of mobile devices often, which means that the instructed use is also common. 33% of the respondents claimed of instructing the usage of mobile devices occasionally and only 6% rarely. Like in the previous question, none of the respondents never instructed their students to use mobile device. The most significant difference between the answers about the free and instructed usage of mobile devices, is in the almost always category. 48% of the respondents claimed that their students could use their mobile devices almost always if they wanted to, whereas during their classes only 15% almost always instructed their students to use mobile devices. However, like mentioned above, 46% of the respondents often instructed their students to use mobile devices, which means that both optional and mandatory use of mobile devices is common.

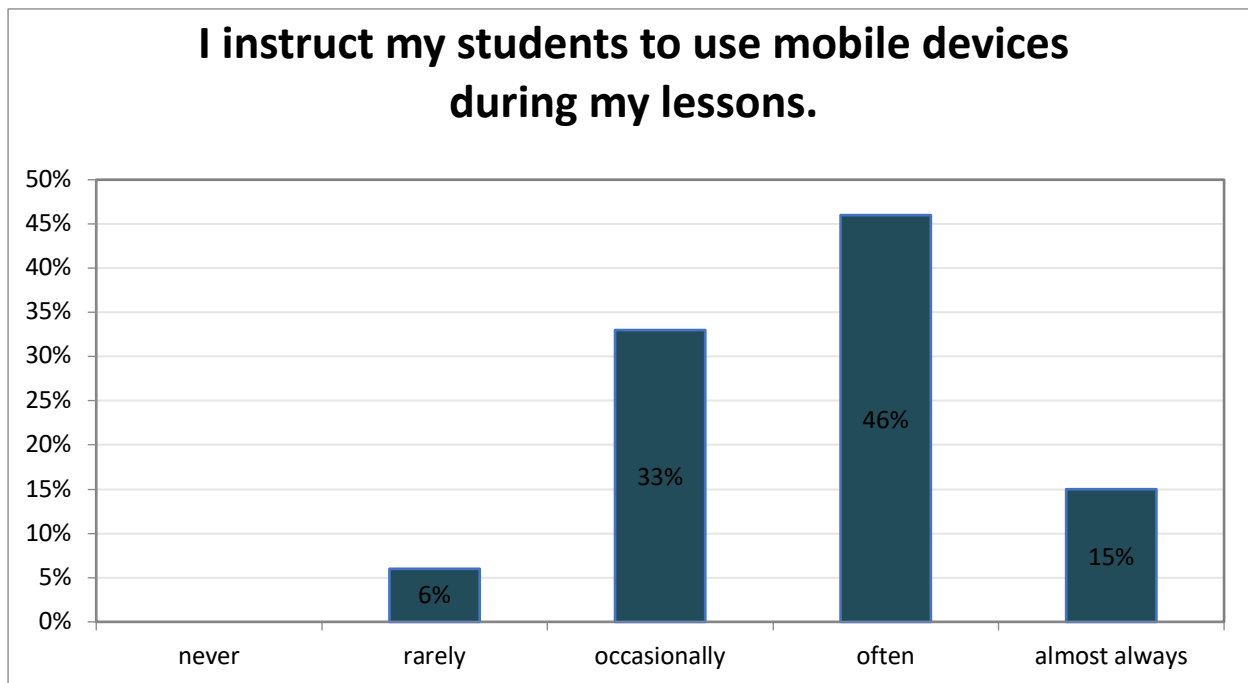


Figure 4. How often the teachers instruct their students to use mobile devices during lesson.

Question six was a claim focusing on the use of mobile devices in learning circumstances outside school. Since there are plenty of applications and creative ways in which mobile devices can be utilized to learn a language, it was interesting to find out how often the teachers instructed mobile device use outside their lessons. Also, to learn a language, the exposure to the language has to be more than a few foreign language lessons per week, which makes learning languages outside lessons more and more important. 20% of the respondents instructed the outside use of mobile devices almost always, 37% often, 35% occasionally, 8% rarely and again none of the respondents said that they never instructed their students to use mobile devices for learning purposes outside school. There is little difference between the instructed use during lessons and outside lessons. Again, the majority claimed to instruct often. However, in this question the difference between the options occasionally and often is minimal (35% < 37%), whereas the difference between the options occasionally and often, was more visible in the previous question (33% < 46%). There is a slight increase in the both extreme options rarely (6% < 8%) and almost always (15% < 20%) (since never is mentioned by no one).

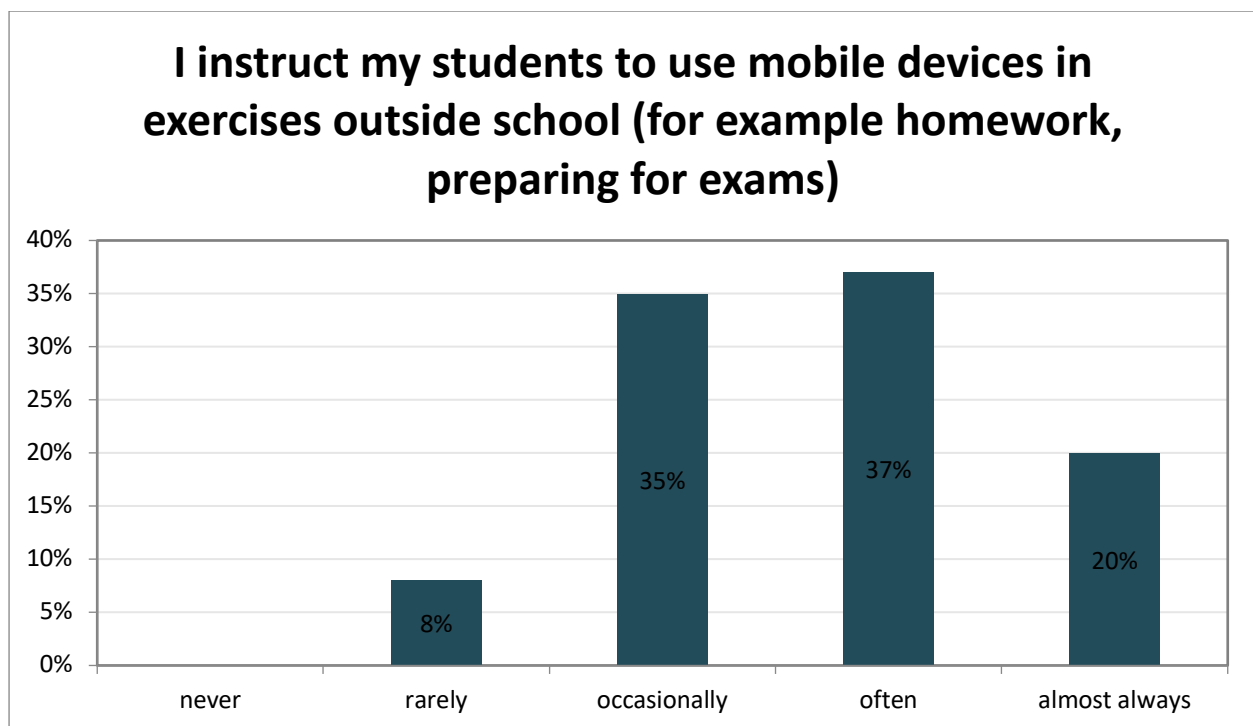


Figure 5. How often teachers instruct students to use mobile devices outside school.

Mobile devices are used a lot in English teaching in high school. Based on the questionnaire, students are quite freely allowed to use mobile devices whenever they want to. Also, instructed exercises in and outside the classroom are common. There was little difference in the amount of instructed use of mobile devices in and outside school. Therefore, it can be assumed, that high school teachers utilize mobile devices for various types of exercises and the distance learning opportunities mobile devices offer have been recognized by the teachers.

### **4.3. The usefulness of mobile devices**

Besides the amount mobile device use, respondents were asked questions related to the usefulness of mobile devices, and reasons for their opinions. In previous studies, various positive and negative outcomes of mobile device use have come out, which made it interesting to find out if similar issues come up among the respondents of the present study.

Question three was a simple claim stating: I find the use of mobile devices useful. The majority of respondents agreed with the claim; 35% completely agreed and 56% slightly agreed. Thus, it is evident, that the attitude towards the use of mobile devices is mainly positive. The rest of the respondents, 9%, slightly disagreed and again, none of them completely disagreed. Since the amount of mobile device use was immense, it is not surprising that the majority of respondents found the use of mobile devices useful. Since none of the respondents completely disagreed with the claim, an assumption can be made that all the high school English teachers found mobile devices in some level useful in learning circumstances. There are various ways in which mobile devices can be useful in the teaching and the specific reasons identified in the present study are discussed in the next sections.

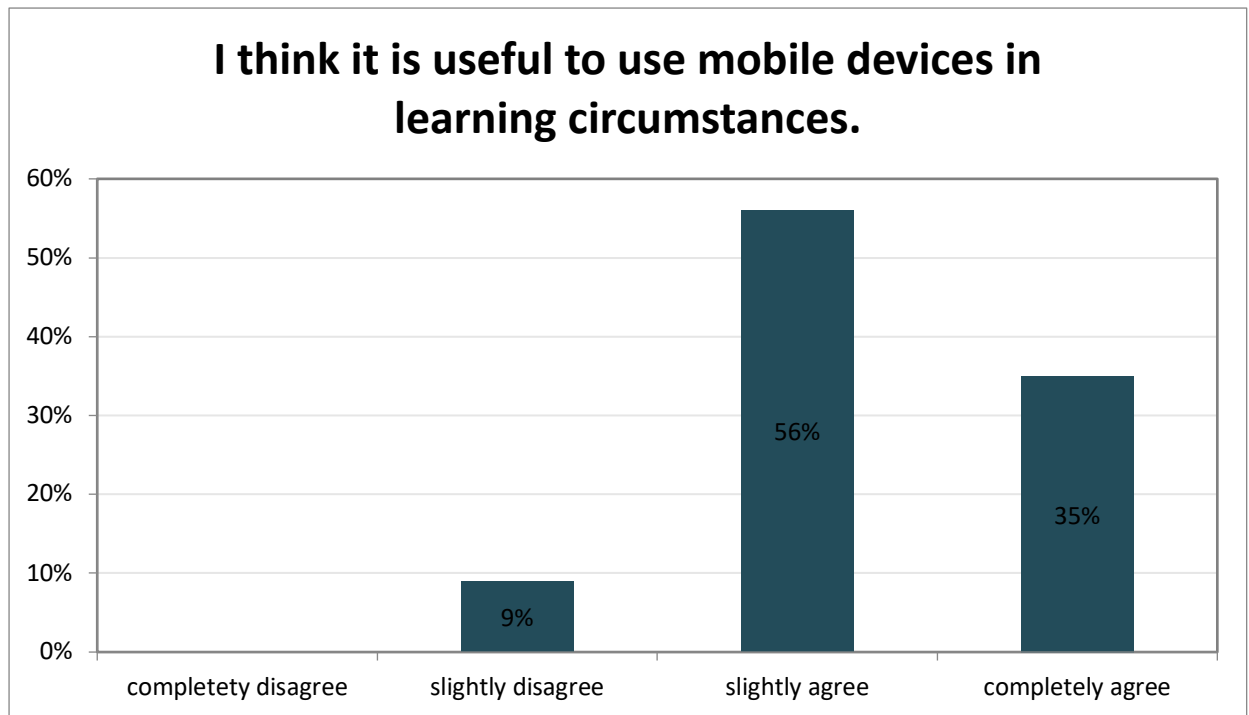


Figure 6. How useful mobile devices are in learning circumstances.

Question seven was the first open-ended question of the questionnaire and its focus was on the reasons if and why teachers find mobile devices useful. The respondents were instructed to write down reason for the use of mobile devices in learning circumstances. There were various types of reasons, which I have categorised into five categories. Von Zansen (2015) discussed reasons for m-learning in her article and the categories are partially based on her article.

#### 4.3.1. Utilizing their own devices in learning

##### Example 1

Because it is natural to them. Using mobile devices is part of their everyday life so I might as well make it useful. (Teacher 7)

The most commonly mentioned reason to use mobile devices was the simplicity of their use. As mentioned in the first example above, mobile devices have become a part of students' everyday lives and using them also for learning purposes seems reasonable.

One of the reasons von Zansen (2015) also listed in her article was the utilization of the mobile phones students always carry with them. Multiple respondents (N=12) referred to mobile phones as useful tools that students almost always have with them and can use whenever they need to quickly look up something. Using them to also learn a language seemed reasonable, since the students are so comfortable and used to using their mobile phones in their everyday life. The easier access of mobile phones compared to lap tops were mentioned by a few (N=5) respondents. Students tend to forget their lap tops sometimes, or they have no battery on them, and in such situations mobile phones can replace lap tops. Also, mobile phones are easy and quick to use, which make them perfect tools to for example quickly look up a word from a dictionary application. In addition, a vast amount of learning applications was mentioned by the respondents. Respondents also referred to book series that only have the alphabetical vocabulary lists in the applications, which have naturally increased the use of mobile devices. They also offer different ways to study words, which is useful for example when studying for an exam. Such applications that can also be used outside the classroom can increase the use of foreign language outside language lessons. Since the students use their mobile phones constantly, they might also from time to time use them to learn languages.

#### **4.3.2. Active participation and motivation**

Various types of learning applications were mentioned by the respondents. *Quizlet*, *Quizlet live*, *Kahoot* and flip cards were mentioned in the answers. Also, recording speech or video and exercises that require moving around were mentioned. It was even mentioned in some answers, that mobile phones are used in such activities, since they are easier to use than lap tops (*Kahoot*, recording speech). Thus, mobile phones provide many ways to spice up a lesson. The main reasons for the use of mobile devices were to invigorate a lesson, to motivate the students and to make the lessons more versatile. The similar motivating gaming aspect was also mentioned by students in a study by Gafni et al. (2017). Naturally, the easy access to games and other learning applications provide the teachers with more opportunities to do something different. Also, playfulness and action-

based learning were mentioned. Since the devices are rather small, moving around in the classroom with a mobile phone is easy. The playfulness was seen as a motivating factor during lessons, even at high school level, as is seen in the following example:

Example 2.

they invigorate teaching, for example even if we are talking about high school students, many of them still find playing sensible (e.g. Quizlet live) (Teacher 36)

Even high school students enjoy the playfulness during lessons and using them to motivate them was seen useful. All in all, mobile devices were mentioned as useful tools in motivating the students and giving them a chance to actively participate in the learning.

#### **4.3.3. Authentic culture and communication**

It is essential to understand the foreign cultures and to be able to communicate accordingly. It was mentioned in the answers that mobile devices can bring the real world into the classroom. The access to authentic communicative situations was also mentioned in von Zansen (2015). Modern technology has made it possible to discover places that are on the other side of the world, which can teach the students more about foreign cultures (Thomas, Reinders and Warschauer 2013: 26). Also, since technology provides us with the access to excessive amount of information, searching for different kind of information is an important skill for the students to learn. A respondent referred to the skill of searching for information in the following example:

Example 3:

Searching for information is an essential skill and, in my opinion, it should be practiced regularly. (Teacher 49)

Not only learning the language, but also other necessary skills should be taught in school. Even if we live in a society filled with new technology and devices, it is important to give the students guidance on how to find necessary and truthful information from the internet (Vaarala, Johansson et al 2014: 2). Also, reading news were referred to in the answers, and providing the students with news sources in a foreign language is another way of teaching them cultural information. Also, the proper use of mobile and other devices is a necessary

skill in the students future working life and therefore providing them assistance in the proper use of mobile and other technological devices is an essential skill for their future.

#### **4.3.4 The comparison between mobile devices and lap tops**

Even though the interest of the present study was not lap tops, preferring to use lap tops rather than mobile devices was mentioned in some answers (N=6). In high school, owning a lap top for school purposes is nowadays mandatory and they are used constantly. In the answers, comparisons between the use of lap tops and mobile devices were made. Even though some gave examples of situations where mobile devices are more convenient than lap tops (e.g. *Kahoot*), overall many respondents preferred to use lap tops. It was mentioned that in high school, lap tops are used more than mobile devices. Also, the overall usefulness of mobile devices was questioned, as it is presented in the next two examples:

**Example 4:**

no noticeable added value in high school. Most of the mobile applications are just superficially nice.  
(Teacher 3)

**Example 5:**

All students have lap tops, which are incomparable to mobile devices. (Teacher 51)

Lap tops were described as incomparable to mobile devices and in example 4 the use of mobile devices was questioned altogether. Some respondents though that their use did not add any value to the lessons and that they could be replaced by the use of lap tops. Reasons for preferring the use of lap tops were for example the restricting size of mobile device screens and students' tendency to get distracted by them. According to Ganfi (2017) students thought that the distraction of entertainment applications was a disadvantage of m-learning. In his study, the restricting size of the screens was only mentioned by a few students. Only three respondents mentioned sometimes banning the use of mobile devices. One respondent commented on banning their use as follows:



#### Example 6:

Whatever the device, the idea is to learn. I do not see any difference between mobile and other devices and therefore do not understand forbidding their use. (Teacher 11)

Naturally, learning must be at the essence when using mobile devices during lessons. There is no point in playing participating learning games, if the students are on their own social media page while they should be playing. Depending on the students' ability to concentrate on using their own devices for learning purposes, mobile devices can be either helpful or distracting tools. All in all, according to some respondents, lap tops are more suitable for high school English teaching than mobile devices and teachers have differing opinions on the usefulness of mobile devices. However, since there were examples of both positive and negative effects of the use of mobile devices, it is safe to say that they divide opinions.

#### **4.5 The teaching of the four language skills**

The idea of the present study was also to discover if mobile device use is more suitable for some language skills than others. The division to four language skill was made, and these were reading, writing, listening and speaking. Although the questions in the questionnaire focused on these four skills, there were also references to vocabulary and grammar teaching, which will be discussed in a separate section. Respondents were asked about the amount and usefulness of the use of mobile devices in the teaching of the four separate language skills and the final open-ended question of the questionnaire asked them to name examples of the ways in which they used them in the teaching of these skills.

Question 8 focused on the amount of mobile device use in the teaching of the four language skills. In the answers, there are no significant differences between the different language skills. The average to all of them was around 3, which meant that there were no significant differences found. The exact data is presented in the table below (Figure 7). The answers focused on the medium options *rarely*, *occasionally* or *often*. in all of the categories there were only few never or almost never options chosen. In listening, reading

and oral comprehension, occasional use of mobile devices was clearly chosen the most, in all of these categories more than 40% of respondents had chosen the option occasionally. Only in the written comprehension section, the division between different options was more evenly distributed. About 33% answered rarely, 24% occasionally and 30% often. Still, significant differences cannot be found, which means that there were no substantial differences found in the amount of mobile device use in the teaching of the different language skills.

	never	rarely	occasionally	often	almost always	Average
listening comprehension	3	15	24	11	1	2.85
	5.56%	27.78%	44.44%	20.37%	1.85%	
reading comprehension	5	10	23	15	1	2.94
	9.26%	18.52%	42.59%	27.78%	1.85%	
oral comprehension	4	11	25	12	2	2.94
	7.41%	20.37%	46.3%	22.22%	3.7%	
written comprehension	4	18	13	16	3	2.93
	7.41%	33.33%	24.07%	29.63%	5.56%	
<b>Total</b>	<b>16</b>	<b>54</b>	<b>85</b>	<b>54</b>	<b>7</b>	<b>2.92</b>

Figure 7. The amount of mobile device use in the teaching of the four language skills.

In question nine, the focus was shifted from the amount of mobile device use to the usefulness of mobile devices in the teaching of the four language skills. Since there were no significant differences on the amount of the use of mobile devices between different

language skills, it was interesting to see that there were more differences in the usefulness of mobile devices in the teaching of the different language skills. The options to the question were not at all, quite badly, quite well and very well. In listening comprehension, none of the respondents had chosen the option none at all. 5.55% thought that mobile devices are quite badly suitable, 48.15% quite well suitable and 46.30% very well suitable. All in all, the clear majority found them quite well or very well suitable in the teaching of listening skills. In reading comprehension, again none of the respondents had chosen the option not at all, 25.92% quite badly, 48.15% quite well and 25.93% very well. In oral comprehension, none of the respondents had chosen the none at all option, 12.96% quite badly, 48.15% quite well and 38.89% very well. Especially the answers related to listening and speaking skills were immensely similar, in the answers related to reading skills there was a bit more division between the positive and negative options. Overall, the respondents found using mobile devices useful in the teaching of all these skills.

Responses related to written comprehension differ the most from the others. Two of the respondents, 3.7%, had chosen not at all, 44.45% quite badly, 31.48% quite well and 20.37% very well. Almost half of the respondents found mobile devices either quite badly or not at all suitable for the teaching of written skills, which was significantly different than in the other skills. In all of the other categories, the exact same majority, 48.15% of the respondents thought that the use of mobile devices was quite well suitable in the teaching of the language skills. All in all, in all of the skills except for writing comprehension, the clear majority of answerers thought that mobile devices were either quite well or very well suitable whereas in written comprehension, there was a clear division between the respondents. A total of 48.15% of the respondents thought that mobile devices were either not at all or quite badly suited for the teaching of writing skills and the rest of the respondents, 51.85% thought that they were quite well or very well suited. Thus, the teachers were clearly divided in their opinions, some found them useful and other did not. All in all, mobile devices were the most suitable for the teaching of listening skills (even though the differences between listening, speaking and reading were not substantial) and the least suitable for the teaching of writing skills.

	<b>not at all</b>	<b>quite poorly</b>	<b>quite well</b>	<b>very well</b>	<b>Average</b>
listening comprehension	0	3	26	25	3.41
	0%	5.55%	48.15%	46.3%	
reading comprehension	0	14	26	14	3
	0%	25.92%	48.15%	25.93%	
oral comprehension	0	7	26	21	3.26
	0%	12.96%	48.15%	38.89%	
written comprehension	2	24	17	11	2,69
	3.7%	44.45%	31.48%	20.37%	
<b>Total</b>	<b>2</b>	<b>48</b>	<b>95</b>	<b>71</b>	<b>3.09</b>

Figure 8. The suitability of mobile devices in the teaching of the four language skills.

The final question of the questionnaire was an open-ended question. Respondents were asked to name different ways they use mobile devices in the teaching of the four language skills. They were not requested to name something from all of the categories and were therefore able to write down whatever came to their minds at the time. It was also noted, that if teachers do not use mobile devices at all in the teaching of the four language skills, they may leave the question unanswered. A total of 48/54 filled in their answers to the final question. It suggests that 6 of the respondents did not use the devices at all, but it is also possible that some just did not have time or were not interested to write in their answers since it was not mandatory.

### 4.5.1 Reading

Using different sources to read texts on mobile devices were used in the teaching of reading. Since there are endless amount of information on the internet, searching for information on their own devices was mentioned in many of the responses (N=12). Different kind of texts, such as news, scientific articles and blogs were mentioned to be useful in reading comprehension exercises. There were some references (N=6) to the use of lap tops being more convenient because of their larger screen sizes, but mobile devices were also found useful especially for quick reading exercises. Pegrum (2014) also mentioned that mobile devices are suitable for quickly browsing for information or reading shorter texts, but for reading longer texts they are not as suitable as devices with bigger screens (e.g. lap tops). Providing the students with sources they can use to read in English on their free time was mentioned by some of the respondents (N=4). They were given tips on where to find more texts related to the topics discussed in the chapters of the books and topics of their own interests. Since mobile devices are small and easy to carry around, one respondent mentioned how students can conveniently use their own mobile phones for reading on a bus. The ability to use the devices whenever there is time, gives the students a chance to for example read the homework on their way home.

### 4.5.2. Writing

In the answers related to the teaching of writing, it was explicitly mentioned by some (N=6) that mobile devices are not quite suitable. There were no such references to the other three language skills. It was mentioned that in high school level, especially in writing longer texts, mobile devices are not suitable devices and the use of lap tops is preferred. Below, there are two examples from the answers.

#### Example 8:

The least suitable for writing. Writing short answers works okay, but producing longer texts is always more difficult (with mobile devices) (Teacher 30)

#### Example 9:

I prefer using lap tops in writing exercises in high school, I do not find mobile devices useful tools (in writing), especially not for writing longer texts. (Teacher 14)

Indeed, writing longer texts is more convenient on a lap top, since there is a key board, which was also discussed in Pegrum (2014). Written exercises in high school can be longer texts, that would be inconvenient to write on a mobile device. Still, they were used to produce shorter written exercises. Applications that made combining text and pictures simple were used. Also, some students used their mobile phones' notes applications to make notes. Mobile devices could also be used in vocabulary tests. Since it was mentioned in the answers of question seven, that mobile devices are many times used if the lap top's battery is low or if the students have forgotten to bring their lap tops, it might be that mobile devices are many times used to replace lap tops, if they are not available. In any case, based on both the closed and open-ended answers, using mobile devices in writing was found the least suitable of the four skills by the respondents. Still, in writing shorted texts, mobile devices were sometimes used, and they could be used to replace lap tops in some occasions.

#### **4.5.3. Listening**

Listening to texts and videos on students' own mobile devices were mentioned multiple times(N=10) in the answers. According to the answers, students' own devices are useful in listening comprehension exercises, if students have their ear plugs with them. Naturally, in a classroom full of students, ear plugs are necessary, which was also mentioned by Pegrum (2014). Even listening comprehension tests on the students' own devices were mentioned by one respondent. *Youtube* was mentioned multiple time by the respondents, as a source for different types of videos, for example news, and they were listened to in class. Another source for videos that was mentioned was *TED Talks*, which is a page for short videos, usually in the form of powerful talks. Additionally, music and podcasts were mentioned. One respondent mentioned that students used their mobile devices in listening activities mostly outside school, and that the teacher had provided them with suitable videos and podcasts to listen to on their free time. The teachers' ability to effortlessly increase students' exposure to foreign language by recommending easily accessible material was also disgressed in Pegrum (2014). Naturally, since for example

*Youtube* videos and podcasts have become increasingly popular, providing students with educational content from such channels might increase their exposure to a foreign language in their free time. All in all, listening to texts in various forms with mobile devices was found useful.

#### 4.5.4. Speaking

According to the respondents, mobile devices are especially useful in oral exercises. Mobile phones have voice recorders, which students can use to record their own speech. Pegrum (2014) discussed recording one's own speech to listen to and correct possible mistakes in pronunciation, which was also mentioned by the respondents. Also, voice recorders were used to record longer speeches, texts from course books and interviews. Both recording speech and videos are easily done with mobile devices, which was also reported in the study by Nortcliffe and Middleton (2013) Especially the time-efficiency of mobile devices was complimented in the answers. In addition to oral exercises, oral comprehension exams could also be done on students' own mobile phones. It was mentioned that they could be done alone, in pairs or even on their own time at home and returning their recorded speeches or videos was easy, since they could be shared on for example a learning platform, as it was mentioned in the following example.

##### Example 7:

quick oral exercises are easily recorded and/or recorded on a video on a mobile device and then shared on a learning platform or sent to a classmate or the teacher for evaluation. (Teacher 30)

Not only recording speech, but also sharing recorded material was easily done on mobile devices. *Whatsapp* was also mentioned in a couple of answers (N=4). *Whatsapp* voice notes were used to record and send voice messages to others. However, one respondent mentioned not wanting to use *Whatsapp* with their students, since it would require sharing their phone number with the students. Thankfully, there are many other cloud computing services, like *Dropbox* that was recommended in Nortcliffe and Middleton (2013), where phone numbers or other personal information does not have to be shared with others. All in all, using mobile devices to record speech and videos was found convenient by many

respondents, since recording voice notes or videos and sharing them to other students and to the teacher was simple.

#### **4.5.5 Other references to the use of mobile devices**

Not all the answers were directly related to any of the four language skills, which is why I decided to discuss them in a separate section. First of all, vocabulary applications were mentioned in the answers. *Kahoot* and *Quizlet* were popular among the respondents, one even mentioned that *Quizlet* is used almost in all lessons. In *Kahoot*, after registering, different types of questionnaires can be created. Also, existing open-access questionnaires can be found and played by whoever. In *Quizlet*, after registering, one can create a set of vocabulary and phrases that can be practiced in different ways, for example with flashcards and spelling exercises. Students can use *Quizlet* on their own devices whenever they want, which makes *Quizlet* a convenient way to for example practise for a vocabulary test on their own time. *Quizlet* sets can also be played in a live mode, where all the students play the game at the same time during a lesson. Both *Quizlet* and *Quizlet live* were mentioned in the answers. Other questionnaires, for example course feedback and self-evaluation could also be done with mobile devices. One respondent mentioned creating polls about various subjects that students answered on their mobile phones. Their answers were used as a background for discussion exercises on class. Also, virtual glasses could be connected to students' own mobile devices and used on lessons. Since some course books include material on an electronical form, for example vocabulary applications, both lap tops and mobile devices were used to access the material. The amount of material on the internet is endless and different ways to utilize mobile devices were discovered all the time, as one of the respondents said to conclude their answer:

Example 10:

The list is endless, every week I come up with new ideas. (Teacher 16)



#### **4.6. Summary of the results**

Even though the number of respondents was fairly low (54), the group of respondents was quite heterogenous. Even though the majority of the respondents had over 20 years of teaching experience, the second largest group of respondents had only 0-5 years of experience. Overall, the amount of experience of the teachers varied. A significant majority of the respondents felt capable of giving guidance in the use of mobile devices if necessary. Thus, the presumption could be made that the teachers' own skills in using mobile devices did affect their ability or desire to use them in their teaching.

After the background questions, I examined the answers related to the amount of mobile device usage. Respondents were asked how often the students were allowed to independently use their mobile devices during lessons and how often the teachers themselves instructed them to use mobile devices both during lessons and at home. Interestingly, a clear majority of the respondents allowed their students to use their mobile devices whenever they wanted to during class. Also, instructing the students to use mobile devices during lessons was extremely common. According to the data, mobile devices were instructed to be used both inside and outside the classroom. There were no significant differences between the amount of instructed mobile device use that happened during lesson and that was instructed for home work. All in all, mobile devices were used a lot.

Next, the usefulness of the devices was discussed. According to the data, the use of mobile devices was found useful by the majority of the respondents. In the answers to the open-ended question, how and why mobile devices were used were discussed in more detail. Since students were competent users of mobile devices and overall used their own devices a lot, it was natural to use them for learning as well. Mobile devices also invigorated the lessons and motivated the students. Additionally, they provided access to authentic cultural material, which enhanced students' cultural knowledge and authentic communication skills. Since multiple respondents compared lap tops and

mobile devices in the data, it was also discussed. Especially the screen size and the absence of a keyboard was seen as a problem. To summarise, teachers found mobile devices useful and gave multiple examples on how they can be used in the teaching of English.

Finally, the use of mobile devices in teaching of different language skills was examined. According to the data, mobile devices were evenly used to the teaching of all the four language skills. There were no significant differences on the amount of use among the skills and the average usage for all of them was around 3 (occasionally). However, there were more differences in the answers related to the usefulness of the devices. A clear majority of the respondents thought that mobile devices were quite well or very well suitable for the teaching of listening, reading and speaking skills. Only a small minority thought that they were quite poorly suitable. None of the respondents felt that mobile devices were not at all suitable for the teaching of listening, speaking or reading skills. Thus, the overall opinion was that mobile devices were useful in the teaching of these skills.

According to the data, mobile devices were the least suitable for the teaching of writing skills. Two respondents thought that they were not at all suitable and almost half of the respondents felt that they were quite poorly suited for the teaching of writing skills. Still, the other half of the respondents felt that they were quite well or very well suitable. Thus, there was a clear division between the respondents. In the answers to the final open-ended question, there were some explanations for the differing opinions. Some respondents stated that mobile devices are not at all suitable for the teaching of writing, mainly because of the small screen sizes, the lack of a keyboard and since the students have lap tops, that are more suitable for the teaching of writing skills. Still, mobile devices could be used for writing shorter texts, such as notes or shorter answers. However, the division between respondents' answers related to the suitability of mobile devices in the teaching of writing should be considered when interpreting the answers.

In the final open-ended question respondents shared their examples on how mobile devices can be used in the teaching of the four language skills. Answers related to writing skills were discussed below. The internet provided various possibilities to teach both listening and reading skills. Different text genres, such as news, blogs and scientific articles could be read on mobile devices. For listening activities, for example music, videos and podcasts that could be listened to either with the whole class or independently with ear plugs. Mobile devices made it possible to access listening or reading material both during lessons and outside school and teachers suggested related material for their students to listen to or read on their free time. According to the data, respondents considered mobile devices especially useful in the teaching of speaking skills. Recording speech or taking a video was easy on a mobile device, and even easier than on a lap top. Also, sharing material to other students or to the teacher was easy on a mobile device. In addition to the four language skills mentioned on the questions, there were multiple mentions of vocabulary applications, such as *Kahoot* and *Quizlet*. Especially the easy access to information and for example games was the reason why mobile devices were used. All in all, related to all the language skills, there were multiple examples of how they can be used and according to the data it is safe to say that high school teachers of English have discovered the advantages and disadvantages of mobile devices.

## 5 CONCLUSION

The aim of the present study was to discover how much high school teachers of English use mobile devices in their teaching and how useful they find using them. Also, the suitability of mobile devices in the teaching of different language skills was examined in order to discover possible preferences among the teachers. Since mobile devices have taken more and more visible role in our everyday lives, using them also in teaching and learning has become popular. There have been previous studies related to m-learning, but since the devices and their features develop in a quick pace, the possibilities mobile devices offer for learning increase rapidly. Also, the use of mobile devices in the

teaching of the four language skills has not explicitly been examined before. The data was gathered with an online questionnaire and a total of 54 Finnish high school teachers answered the questionnaire. Since the number of respondents is rather limited, generalizations cannot be done based on this study. However, it offers an overview of the amount of mobile device usage and discusses the advantages and disadvantages of their use.

According to the study, mobile devices are extensively used in high school English teaching. Teachers allow their student to freely use them during lessons for example to seek for information. Instructing students to use their devices both during lessons and at home is common. Thus, using the devices for learning purposes was frequent. Overall, the teachers found the use of mobile devices useful in the teaching of English, and a plenty of examples were discussed in the analysis. Some examples of the advantages of mobile devices in learning were the easy and quick access to information, useful learning applications and the ability to easily create and share data. However, disadvantages were also found, especially related to the teaching of writing. The screen size, a lack of key board and the lap tops' better features for learning were mentioned by the respondents. The study discussed the high school English teachers' overall opinions of the use of mobile devices in learning. For further studies, the target group could be teachers of other grade levels or teacher from other countries in order to make comparisons. Furthermore, a similar study could be implemented, with students as respondents.

The study offers scholars and teachers of English an overlook of the ways in which Finnish high school teachers of English use mobile devices for teaching purposes. Different examples of utilizing mobile devices may serve as an inspiration to other teachers. Since the majority of respondents found mobile learning useful, integrating them into teaching of English seems reasonable. Therefore, providing future teachers enough training during their education on the useful ways of utilizing mobile devices

for teaching purposes is sensible. Since the technological devices develop in a rapid pace, ensuring enough training for all teachers is important.

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# APPENDIX: THE QUESTIONNAIRE



## Mobiililaitteiden käyttö osana englannin kielen lukio-opetusta

Kyselyn tarkoituksena on selvittää, kuinka mobiililaitteita käytetään englannin kielen lukio-opetukseen. Pysin selvittämään, kuinka paljon mobiililaitteita käytetään ja kuinka hyödylliseksi opettajat kokevat niiden käytön. Lisäksi tarkoituksena on selvittää mahdollisia eroja mobiililaitteiden käytössä kielen eri osa-alueiden opetuksessa.

Mobiililaitteella tarkoitetaan kosketusnäyttöistä ja helposti siirrettävissä olevaa langatonta laitetta. Esimerkkejä tällaisista laitteista ovat älypuhelin ja tabletti. Lämpäreiden ja tietokoneiden käyttö rajataan tutkimuksen ulkopuolelle. Mobiililaitteiden käyttö oppimistarkoituksissa voi tarkoittaa oppilaiden, opettajan tai molempien käyttöä.

Vastaaminen vie noin 5-10 minuuttia. Toteutan kyselyn osana Pro Gradu-tutkielmaani, joka julkaistaan Jyväskylän yliopiston julkaisuarkistossa ensi kesän aikana. Suuri kiitos jokaisesta vastauksesta!

Jenni Raiskinmäki

### 1. Kuinka kauan olet toiminut englannin opettajana?

- 0-5 vuotta
- 5-10 vuotta
- 10-15 vuotta
- 15-20 vuotta
- yli 20 vuotta

### 2. Osaan ohjeistaa oppilaita käyttämään mobiililaitteita oppimistarkoituksissa.

- täysin eri mieltä
- jokseenkin eri mieltä
- jokseenkin samaa mieltä
- täysin samaa mieltä

### 3. Oppilaat saavat halutessaan käyttää mobiililaitteita oppitunneillani.

- ei koskaan
- harvoin
- joskus
- usein
- melkein aina

**4. Pidän mobiililaitteiden käyttöä oppimistarkoituksissa hyödyllisenä.**

- täysin eri mieltä
- jokseenkin eri mieltä
- jokseenkin samaa mieltä
- täysin samaa mieltä

**5. Ohjeistan oppilaita käyttämään mobiililaitteita oppitunneillani.**

- en koskaan
- harvoin
- joskus
- usein
- melkein aina

**6. Ohjeistan oppilaita käyttämään mobiililaitteita oppitunnin ulkopuolella tehtävien harjoitusten parissa (esimerkiksi kotitehtävät, kokeisiin valmistautuminen)**

- en koskaan
- harvoin
- joskus
- usein
- melkein aina

**7. Miksi käytät mobiililaitteita oppimistarkoituksissa? (oppitunneilla tai niiden ulkopuolella)  
Jos et käytä koskaan, miksi?**

**8. Käytän mobiililaitteita kielen eri osa-alueiden oppimistarkoituksissa**

	en koskaan	harvoin	joskus	usein	melkein aina
kuullun ymmärtäminen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
luetun ymmärtäminen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
suullinen tuottaminen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
kirjallinen tuottaminen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**9. Kuinka arvioit mobiililaitteiden sopivan kielen eri osa-alueiden oppimiseen?**

	ei lainkaan	melko huonosti	melko hyvin	erittäin hyvin
kuullun ymmärtäminen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
luetun ymmärtäminen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
suullinen tuottaminen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
kirjallinen tuottaminen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**10. Miten käytät mobiililaitteita kielen eri osa-alueiden oppimistarkoituksissa? Kerro esimerkkejä. Jos et käytä ollenkaan, voit jättää kohdan tyhjäksi.**

Lähetä