

Tablets in the EFL Classroom: Students' and Teachers' Attitudes

Stipanović, Iva

Master's thesis / Diplomski rad

2021

Degree Grantor / Ustanova koja je dodijelila akademski / stručni stupanj: **Josip Juraj Strossmayer University of Osijek, Faculty of Humanities and Social Sciences / Sveučilište Josipa Jurja Strossmayera u Osijeku, Filozofski fakultet**

Permanent link / Trajna poveznica: <https://urn.nsk.hr/urn:nbn:hr:142:071379>

Rights / Prava: [In copyright](#) / [Zaštićeno autorskim pravom.](#)

Download date / Datum preuzimanja: **2025-02-07**



Repository / Repozitorij:

[FFOS-repository - Repository of the Faculty of Humanities and Social Sciences Osijek](#)



J. J. Strossmayer University of Osijek

Faculty of Humanities and Social Sciences

Study Programme: Double Major MA Study Programme in English Language and Literature and German Language and Literature – Teaching English as a Foreign Language

Iva Stipanović

Tablets in the EFL Classroom: Students' and Teachers' Attitudes

Master's Thesis

Supervisor: Dr. Draženka Molnar, Assistant Professor

Osijek, 2021

J. J. Strossmayer University of Osijek

Faculty of Humanities and Social Sciences

Study Programme: Double Major MA Study Programme in English Language and Literature and German Language and Literature – Teaching English as a Foreign Language

Iva Stipanović

Tablets in the EFL Classroom: Students' and Teachers' Attitudes

Master's Thesis

Scientific area: humanities

Scientific field: philology

Scientific branch: English studies

Supervisor: Dr. Draženka Molnar, Assistant Professor

Osijek, 2021

Sveučilište J.J. Strossmayera u Osijeku

Filozofski fakultet Osijek

Studij: Dvopredmetni sveučilišni diplomski studij engleskog jezika i književnosti i
njemačkog jezika i književnosti – nastavnički smjer

Iva Stipanović

Tableti u nastavi engleskoga jezika: stavovi učenika i nastavnika

Diplomski rad

Mentorica: doc. dr. sc. Draženka Molnar

Osijek, 2021.

Sveučilište J.J. Strossmayera u Osijeku

Filozofski fakultet Osijek

Studij: Dvopredmetni sveučilišni diplomski studij engleskog jezika i književnosti i
njemačkog jezika i književnosti – nastavnički smjer

Iva Stipanović

Tableti u nastavi engleskoga jezika: stavovi učenika i nastavnika

Diplomski rad

Znanstveno područje: humanističke znanosti

Znanstveno polje: filologija

Znanstvena grana: anglistika

Mentorica: doc. dr. sc. Draženka Molnar

Osijek, 2021.

IZJAVA

Izjavljujem s punom materijalnom i moralnom odgovornošću da sam ovaj rad samostalno napravila te da u njemu nema kopiranih ili prepisanih dijelova teksta tuđih radova, a da nisu označeni kao citati s napisanim izvorom odakle su preneseni.

Svojim vlastoručnim potpisom potvrđujem da sam suglasna da Filozofski fakultet Osijek trajno pohrani i javno objavi ovaj moj rad u internetskoj bazi završnih i diplomskih radova knjižnice Filozofskog fakulteta Osijek, knjižnice Sveučilište Josipa Jurja Strossmayera u Osijeku i Nacionalne i sveučilišne knjižnice u Zagrebu.

U Osijeku, 6.9.2021.

Iva Stipanović, 0122218651

ime i prezime studenta, JMBAG

Abstract:

The use of technology, in particularly mobile devices, is widely becoming an important part of education, including foreign language teaching and learning. The main purpose of the study was to investigate students' as well as teachers' attitudes towards tablets in EFL. In overall, the results revealed that students and teachers at the primary and secondary educational level have positive attitudes towards tablets and are in favour of their use in EFL. Significant difference was found in students' attitudes towards tablets regarding their educational level. It was found that elementary school students have more positive attitudes towards tablets than high school students. The results also revealed that there is a significant correlation between students' self-evaluated mobile device skills, age, and attitudes towards tablets in EFL. The study also showed that students who use tablets in EFL classes rate their mobile device skills higher than the students who do not use them, but no significant difference in their attitudes was found.

Keywords: students, teachers, EFL, attitudes, tablets

Sažetak:

Upotreba tehnologije, posebice mobilnih uređaja, uvelike postaje važan dio obrazovanja, uključujući poučavanje i učenje stranih jezika. Glavna svrha istraživanja bila je istražiti stavove učenika i nastavnika prema tabletima u nastavi engleskog kao stranog jezika. Općenito, rezultati su pokazali da učenici i nastavnici na razini osnovnog i srednjeg obrazovanja imaju pozitivne stavove prema tabletima i podržavaju njihovu uporabu u nastavi engleskog kao stranog jezika. Značajna razlika utvrđena je u stavovima učenika prema tabletima u odnosu na njihovu obrazovnu razinu. Utvrđeno je da osnovnoškolci imaju pozitivnije stavove prema tabletima od srednjoškolaca. Rezultati su također pokazali da postoji značajna korelacija između samoprocjene znanja korištenja tehnologija, dobi i stavova učenika prema tabletima. Istraživanje je također pokazalo da učenici koji koriste tablete u nastavi engleskog kao stranog jezika ocjenjuju svoje znanje korištenja tehnologija višim nego učenici koji ih ne koriste, ali nije pronađena značajna razlika u njihovim stavovima.

Ključne riječi: učenici, nastavnici, engleski kao strani jezik, stavovi, tableti

Table of Contents

1. Introduction	1
2. Theoretical background	3
2.1 Technology and FL.....	3
2.2.1 Advantages and limitations	4
2.2 Mobile Devices in EFL Teaching and Learning.....	6
2.2.1 Benefits and challenges	7
2.2.2 Research on MALL	8
2.2.3 SAMR model.....	9
2.2.4 Students' and teachers' role.....	9
2.3 Curricular Reform in Croatia.....	10
2.4 Attitudes towards technology	11
2.5 Overview of previous studies	12
3. The present research	16
3.1 Aims and research questions	16
3.2 Participants	16
3.3 Instrument.....	17
3.4 Procedure.....	17
3.5 Results	18
4. Discussion.....	28
5. Limitations of the study.....	31
6. Conclusion.....	32
7. Bibliography	33
8. Attachments.....	39
8.1 Attachment 1: Questionnaire for Students.....	39
8.2 Attachment 2: Questionnaire for Teachers	40
8.3 Attachment 3: Open-ended Questions.....	42

1. Introduction

The use of technology has become almost an inevitable part of today's life. The same is true for its use in education along with foreign language teaching and learning. According to Mollaei (2013), the implementation of technology has become a significant part of teaching. Marwan (2015) states that the continuous advancement of information and communication technology (ICT) is also bringing changes in the way of teaching and learning a foreign language. Nowadays, the use of technology is a common part of language classes, while only two decades ago this was a rare case. The author further points out that English teachers should therefore always update their approaches to teaching.

Prensky (2001: 1) argues that today's students differ from previous generations and refers to them as "Digital Natives", because different technologies have been an integral part of their lives since their childhood. In order to keep up with the ways students' lives and learning techniques have changed, teachers need new teaching forms and tools (Violić Koprivec and Dubčić, 2018).

It has been acknowledged that using technology in foreign language (FL) teaching and learning has significant benefits for learners and teachers. Various types of technologies though can be used to teach and learn a foreign language, one of which are mobile devices. In recent years, the integration of mobile devices in education, including FL teaching and learning has been gaining growing interest. Considering the importance of teachers' and students' attitudes towards the implementation of technology in FL teaching and learning in general, and mobile devices in particular, many studies have been carried out on the topic (e.g. Hsu 2013, Saidouni and Bahloul 2016, Bozorgian 2018). However, teachers' and students' attitudes towards mobile devices in education are often different (Alshammari, 2018). The main purpose of the paper is thus to examine both students' and teachers' attitudes towards the usage of mobile devices in the Croatian EFL context.

This paper consists of two main parts. The first part of the paper provides the theoretical background and a review of previous related research. The second part of the paper outlines the results of the study conducted with the aim to investigate students' and teachers' attitudes towards mobile devices, in particularly tablets in the EFL setting. It includes the description of the method, results of the study

and their discussion. Finally, the paper brings the conclusion, implications for teaching and suggestions for future studies.

2. Theoretical background

2.1 Technology and FL

It has been argued that although useful, traditional teaching methods no longer motivate students and have become less enjoyable for them (Altun, 2015; Jayanthi and Kumar, 2016). That being said, Gilakjani (2017) states that technology has brought considerable changes to language teaching method. According to Jayanthi and Kumar (2016), technology creates both innovation and motivation for the learners.

Nonetheless, Abunowara (2014) states that the use of technology has been a part of language teaching for decades. According to Kessler (2018), language teachers nowadays have plenty of choices of technology use for language learning enhancement. Technological advancements have offered a wide range of possibilities for its integration in FL teaching and learning. Golonka et al. (2014) provide a review of different types of technology that can be utilized in FL teaching and learning, some of which include interactive whiteboards, electronic dictionaries, social networks, blogs, and mobile devices.

It is believed that the integration of technology can improve the quality of FL teaching and learning process (Altun, 2015). Abunowara (2014: 2), however, points out that the key factor of technology integration are not only tools and equipment, but also teachers who “plan, design and implement effective educational activities”.

According to Zhu and Kaplan (2001), teaching with technology includes four major components: teachers, students, course content and technology (as cited in Haswani, 2014). The authors also provide a model for teaching with technology, illustrated below (Figure 1):

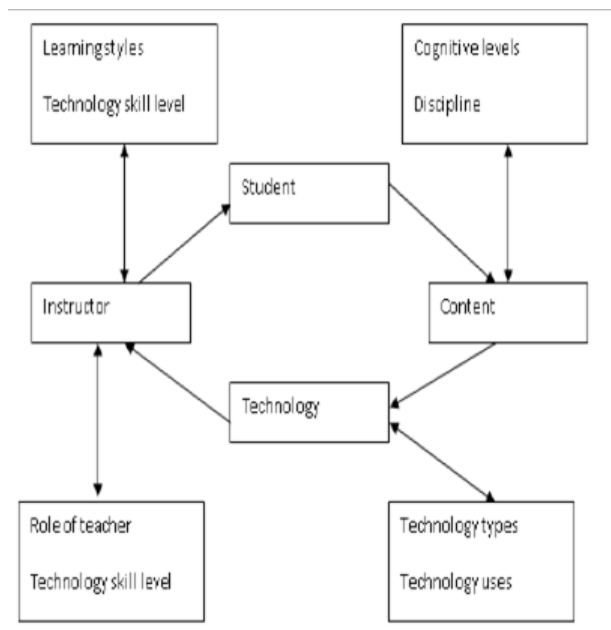


Figure 1. Model of Teaching with Technology (as cited in Haswani, 2014: 109)

Zhu and Kaplan (2001, as cited in Haswani, 2014) argue that each component needs to be considered in order to integrate technology successfully. For instance, teachers need to think about their experiences and skills in using technology as well as how they see their role in the teaching process. Students' preferred learning styles along their skills in using technology should be taken into consideration. When it comes to the content, course goals and learning objectives need to be examined in order to teach with technology effectively. Finally, possible uses and functions of technology can be analysed and examined.

2.2.1 Advantages and limitations

It has been argued that technology provides many advantages for teaching and learning, one of which is enhancement of students' motivation. Scholars agree that the usage of ICT in FL teaching and learning arouses students' language learning motivation and interest (Azmi, 2017; Jayanthi and Kumar, 2016). As explained by Azmi (2017), the integration of technology increases students' classroom participation and engagement, and it is more probable that students will develop positive attitudes towards learning when computer technology is used in the teaching and learning process. In

fact, Abukhattala's (2016) recent study has shown that students' motivation is one of the reasons why EFL teachers use technology. Another important advantage of technology integration is the plethora of authentic materials (Azmi, 2017; Jayanthi and Kumar, 2016). Namely, the integration of technology in FL teaching and learning enables authentic communication and enhances the exposure to target language in different ways (Azmi, 2017). Besides, Barani et al. (2010) state that the integration of media enables teachers to expose their students to different sources of input, which not only enriches students' language learning experiences, but also reduces the chance of becoming dependent on their teachers' dialect (as cited in Solano et al, 2017). Additionally, it has been said that the use of ICTs promotes student-centred learning and enhances collaboration and interactions (Jayanthi and Kumar, 2016). Another important advantage of ICT in education is the opportunity of distance learning, especially during the COVID-19 pandemic (Housseine and Rabha, 2020). Not only has distance learning offered sustainability of education, but its usage has also become an indispensable mode of FL teaching and learning, particularly during the COVID-19 lockdown and school closures worldwide (Housseine and Rabha, 2020).

Despite the many advantages, there are different limitations that both teachers and students can encounter when using technology. Literature shows that the lack of access to technology is one of the most common barriers in using technology in teaching (e.g. Albirini 2006; Abukhattala 2016). A study conducted in Croatia also shows that one of the biggest barriers is the lack of technology equipment in classrooms (Pović et al., 2015). The same authors further state that the additional problem is unequal access to technology among students and explain that not all students own a mobile device or a computer nor have access to the Internet at home. Lai and Kristonis (2006) claim that the use of technology requires that both teachers and learners have necessary skills and knowledge in its use. Along the same vein, a number of studies show that the lack of necessary ICT skills or competence discourage teachers from implementing technology into teaching (Albirini, 2006; Pović et al, 2015; Abukhattala 2016).

Gilajkani (2015) provides an overview of some major barriers of technology in EFL instruction, which, apart from the already mentioned ones, also include inadequate technical support, time factor, as well as teachers' attitudes. When it comes to teachers' attitudes, Ghobadi and Yeshodhara (2013) show that EFL teachers did not use technology in their classroom owing to their negative attitudes and beliefs towards it (as cited in Gilajkani, 2015). Another challenge in technology integration is

time. Namely, the search for appropriate materials and lesson preparation can often be both time and effort consuming (Abunowara, 2016). Relevant research on the topic reveals that teachers and students face similar difficulties in distance learning as well. For example, Hakim (2020) reports that, some of the most common challenges in distance learning during the COVID-19 pandemic were unstable Internet connection and lack of access to technology equipment. In addition, Hebebcı et al. (2020) mention lack of interaction as another serious limitation of distance learning.

Although technology can greatly improve and enhance teaching and learning, teachers and students need to be aware of its limitations and challenges.

2.2 Mobile Devices in EFL Teaching and Learning

Nowadays, the use of technology is increasingly shifting from desktop computers towards the use of mobile devices (Klimova, 2018). Mobile technologies are widely becoming part of education, as well as FL teaching and learning.

According to Cojocnean (2017: 60), the use of mobile devices instead of a computer for educational purposes is known as Mobile-Assisted Language Learning (MALL) and it is a part of a larger field, called Computer-Assisted Language Learning (CALL). It encompasses the use of different mobile devices, such as smartphones, or tablets (Hsu, 2013: 197). Although scholars provide different definitions, MALL generally refers to the “the formal or informal learning of a foreign language with the assistance of mobile devices” Chen (2013: 21). In other words, mobile devices can be used for language learning and teaching both inside and outside the classroom. Similarly, Baleghizadeh and Oladrostam (2010: 79-80) explain that: “[a]s with other forms of technology, mobile assisted language learning (MALL) is a branch of technology-enhanced learning which can be implemented in numerous forms including face-to face, distant or on-line modes”.

Considering that today's generations of learners have different learning needs and preferences, it is thus important that foreign language teachers adapt their teaching methods and promote active learning by integrating mobile technology (Polakova and Klimova, 2019).

2.2.1 Benefits and challenges

As already mentioned, the use of technology provides many opportunities and advantages for teaching and learning. Due to their unique features, mobile devices have been recognized as valuable teaching and learning tools. It has been argued that the use of mobile devices has a variety of educational benefits, some of which include:

”adaptation of learning to students’ learning styles and preferences, interactive learning, multimedia capabilities, ubiquitous Internet connectivity, increased understanding of learning materials, increase in students’ motivation, cost-effectiveness, enhanced communication between teachers and students, easy access, student-friendliness, and effective feedback” (Kukulka-Hulme & Shield, 2008; Milrad & Jackson, 2008; Stockwell, 2010; Walker, 2013, as cited in Dashetani 2015: 1).

Furthermore, Chartrand (2016) lists several advantages of using mobile devices in foreign language classrooms, one of which is the Internet access. Namely, language learners and teachers can access different sources of information and find a variety of learning materials. He adds that multimedia ability is another asset of using mobile devices, which enables students to further practice their foreign language in different ways, including watching videos or listening to music. Besides, learners can also record and playback their speech, and even make a comparison to a native speaker's speech. Furthermore, the use of mobile devices offers students and teachers’ immediate feedback when doing an exercise, a quiz or answering questions on a survey (Chartrand, 2016).

Nonetheless, the use of mobile device as a learning or teaching tool can be challenging in different ways. For instance, some of the challenges refer to technical issues, i.e. poor audio quality, bad Internet connection, or screen size (Chinnery, 2006). However, a barrier identified as one of the most challenging is students' reluctance of using mobile devices for learning purposes (Stockwell, 2008).

Dashtestani (2013) states that some EFL teachers lack necessary skills to prepare activities and implement mobile devices. Similarly, Albiladi and Alshareef (2018) report that lack of teacher training is one of the main challenges which hinder the use of tablets in the EFL classroom. Other challenges include teachers’ lack of time, as using mobile devices in a lesson often requires extra preparation time and effort (Albiladi and Alshareef, 2018). Chartrand (2016) points out that the use of a mobile device can also be distracting for students, which can occasionally disrupt the lesson.

Additionally, Al-Mubireek (2020) shows that many barriers impede the implementation of mobile devices in FL classrooms, including poor Internet connectivity or difficulty in supervising learners' usage of the devices.

2.2.2 Research on MALL

Much research on mobile devices' use in language learning has been done over the years, and different studies have been carried out to examine its effectiveness.

For instance, Baleghizadeh and Oladrostam (2010) examined the use of mobile device and its effects on students' grammatical accuracy while speaking. For that matter, learners in the experimental groups recorded their speech on their mobile phones during several classes, to later identify and correct their mistakes, whereas the other group was taught in a traditional way. Finally, the results showed that experimental group of students achieved higher results on the grammar test than the control group.

In another study, Wang et al. (2015) compared vocabulary teaching in two different ways: using the tablet app and traditional semantic maps. Namely, using the tablet app while learning new vocabulary enabled students to see words, pictures, example sentences and practice pronunciation. It was found that learners who were taught using tablets not only achieved better post-test results, but it also increased their motivation.

The findings of Polakova and Klimova's (2019) study also suggest that the use of mobile devices in EFL is effective for vocabulary learning. The results showed that learners who used mobile app in class maintained more words than learners in the control group. Additionally, the use of mobile devices supported learners' collaboration and they found it more enjoyable than the traditional teaching methods.

Furthermore, Oh et al. (2014) reported positive effects of using tablets in EFL instruction, in particularly on learners' reading skills and their learning autonomy. Namely, the reading performance of students who worked with tablets was improved, and they achieved better results in the reading post-test, compared to the student group without tablet devices. Similarly, Lan et al. (2007) found that

the usage of tablets increased the reading motivation of EFL elementary school learners and promoted their collaboration.

Leis et al. (2015) explored the effects of smartphone use in teaching and reported that the use of smartphones during EFL classes promoted learners' autonomous learning. This study showed that students who used their mobile devices during EFL classes were more prone to language learning outside the class, in comparison to the other group, which was banned from using them.

2.2.3 SAMR model

In general, technology can be utilized in numerous ways to support FL teaching and learning effectively. However, Hockly (2013) points out that technology itself does not enhance learning, instead its effectiveness primarily depends on the ways it is used.

According to Puentedura's SAMR model, technology in general, including mobile devices, can be implemented in the following four different ways (2010, as cited in Hockly, 2013):

- Substitution
- Augmentation
- Modification
- Redefinition

The first way, or the Substitution, refers to the use of technology only to replace the traditional ways of doing a task, without a functional change. In Augmentation, technology substitutes traditional ways, but adds a functional improvement. Modifications implies a redesign of a task, by using technology, while in the final stage (Redefinition), technology enables creation of new tasks previously impossible (Hockly, 2013).

2.2.4 Students' and teachers' role

The integration of technology has been changing not only teaching and learning methods, but also teachers' and students' roles. Rao (2019:228) argues that the introduction of mobile technology has

brought changes to the whole education system, and adds that teaching and learning have become more focused on the learners, which contributes to students' independent and autonomous learning. Additionally, Dumančić et al. (2016: 33) explain how students' role is changing from "passive receptors" to "active constructors" of their learning. Nonetheless, the authors add that teachers remain important, but their role is no longer limited to transmitting knowledge or lecturing, but also to co-construct students' learning.

Similarly, it has been argued that teachers should guide their students in using mobile devices for language learning (Dashetani, 2015). In fact, it has been claimed that despite having mobile devices, its effective use in language learning is not necessarily guaranteed, and it is therefore important that teachers provide guidance to their students (Chen, 2013).

2.3 Curricular Reform in Croatia

As mentioned earlier in this paper, technology has become a significant part of education. It has brought opportunities and changes to teaching and learning methods, as well as teachers' and students' roles in the learning process. The integration of technology in education has received much attention in Croatia over the years as well, and it is important to mention the latest educational reform movement.

The experimental phase of the Curricular Reform began in the school year 2018/2019 and it included 48 elementary and 26 high schools in Croatia. The objective of the experimental program was to check the applicability of new curricula, teaching resources and methods with the purpose of increasing students' competences in problem solving and their satisfaction at school as well as increasing motivation of their teachers (Stručni tim Filozofskog fakulteta Sveučilišta u Zagrebu, 2019). It should be pointed out that new technology equipment, such as projectors, laptops, and tablets, were introduced to schools, as an important part of this reform.

A new subject curriculum for English language has also been proposed. Namely, the English language curriculum now consist of three domains: Communication language competence, Intercultural

communication competence and Independence in language acquisition (MZO¹, 2019). The learning outcomes derived from “Communication language competence” are based on acquiring the knowledge about the English language, and mastering the skills for its use in communication (MZO, 2019). By achieving the learning outcomes of “Intercultural communication competence”, students will be able to notice and interpret similarities and differences between cultures as well as to communicate with English language speakers in appropriate manner (MZO, 2019). Finally, the learning outcomes derived from the domain “Independence in language acquisition” emphasize students’ independent and critical use of different learning resources, as well as the development of media literacy (MZO, 2019). It is important to mention that great emphasis is put on the use of ICT in English teaching and learning. According to MZO (2019), beside the approved textbooks and teaching materials, teachers use adapted and original materials, which also include digital, interactive, and multimedia content. Students actively participate in the process of material selection, which encourages their responsibility for learning and independence (MZO, 2019). The digital learning environment is of particular importance because, alongside the educational content, it enables intercultural encounters and authentic communication with English speakers (MZO, 2019).

2.4 Attitudes towards technology

As already explained, the use of technology offers a variety of opportunities and advantages in both teaching and learning, but literature shows that one of the important factors in their implementation are students’ and teachers’ attitudes and perceptions towards them.

It is believed that developing a positive attitude towards technology is important to enhance its integration, as well as to avoid user's resistance towards its use (Watson, 1998; cited in Alzaidiyeen 2017). According to Alshammari (2018), there is often a mismatch between students’ and teacher’s attitudes towards using mobile devices in education, and one of the reasons for it might be the way they perceive these devices.

Scholars have been increasingly investigating students' and teachers' attitudes and perceptions towards mobile devices. For instance, Ozdamli and Uzunboylu (2015) show that both teachers and students

¹ Ministarstvo znanosti i obrazovanja (eng. *Ministry of Science and Education*)

support the integration of mobile technologies in education. Moreover, Ređep et al. (2019) reports that Croatian students, regardless of gender and age, are in favour of using their mobile devices in classrooms, and consider that teaching lessons are more interesting when mobile devices are used. However, some studies show that not all students are willing to use smartphones for learning, in spite of using them for personal purposes (White and Mills, 2014). It has been found that teachers' attitudes towards mobile devices can differ in terms of gender, school level and teaching experience (Baek et al, 2017). Furthermore, Savas (2014) notes that teachers need experience in using mobile devices to develop a positive attitude towards their implementation in teaching. Over the last few years, a number of studies have focused on attitudes towards tablet devices and demonstrate that teachers and students' have positive attitudes towards them and accept their implementation (e.g. Montrieux et al., 2014; Khlaif, 2017; Dündar and Akçayir, 2014). Interestingly, the results of the study conducted in Croatia show that students who use tablets in class have more positive attitudes towards its use in education, in comparison to students who do not use them (Rončević Zubković et al., 2016).

A variety of studies have been conducted to investigate attitudes toward technology in FL teaching and learning and it has been acknowledged that students have positive attitudes towards technology in FL teaching and learning. Golonka et al. (2014: 92) confirm that the use of technology in FL learning is more enjoyable to students than traditional methods and it also makes them more engaged in the learning process as well as having a positive attitude towards learning. In general, many previous studies show that teachers have positive attitudes towards technology in EFL (e.g. Albirini, 2006; Li and Ni, 2011; Capan, 2012).

Accordingly, a number of studies have been performed to investigate EFL students' and teachers' attitudes towards mobile devices as well, and some of them will be discussed in the following part of the paper.

2.5 Overview of previous studies

Many educational studies have shown that technology plays a significant role in enhancing the language learning process. In recent years though, there has been an increasing interest in examining students' and teachers' perceptions and attitudes towards mobile devices in foreign language teaching and learning. The present research aims to examine EFL teachers' and student' attitudes towards tablet

devices. But, before proceeding to the analytical part of the research, it is important to give a theoretical overview of the previous studies and relevant research.

For example, Savas (2014) carried out a study on pre-service EFL teachers in Turkey in order to investigate their attitudes towards tablet device as an instructional tool. The researcher used pre- and post- tablet use surveys, and the results showed that the number of teachers who held positive attitudes greatly increased after using the device and gaining some experience. Furthermore, the participants of the study thought that tablet devices were effective for teaching e.g., reading, vocabulary and especially listening. However, it was found that tablets were considered to be least effective for teaching and developing writing skills.

The study of Van de Vyver (2016) aimed to analyse foreign language teachers' attitudes towards the use of mobile devices both in and outside the classroom. The participants of this study were secondary language teachers. It was found that only a small number of participants implemented tablets or smartphones in the language classrooms. Additionally, the findings revealed that teachers' attitudes towards mobile devices in the language classroom were quite neutral, but slightly more positive towards tablets than towards the use of smartphones. Nonetheless, majority of language teachers were willing to learn more about the use of mobile device for language learning and teaching purposes.

In their recent studies, Alzubi (2019) and Bozorgian (2018) also studied EFL teachers' attitudes towards mobile devices and both studies showed that teachers have positive attitudes. For instance, Alzubi's (2019) quantitative research revealed that majority of participants believed that the use of smartphones could enhance students' language learning, while their only concern was students' distraction. Bozorgian (2018) combined both quantitative and qualitative research methods, which included a questionnaire, observation, and an interview. It was found that EFL teachers had rather positive attitudes, but most of them practiced traditional ways of teaching. Moreover, teachers recognized the benefits of using mobile devices, yet they faced different challenges when implementing them, including lack of online resources or limited computer skills.

Many studies suggest that students have positive attitudes towards mobile devices as language learning tool (e.g. Hsu 2013; Alzaidiyeen, 2017).

The aim of Alzaidiyeen's (2017) study was to explore EFL student's attitudes towards tablet as a language learning tool, as well as to find out whether the attitudes differ when it comes to age, gender,

or academic year. For that matter, the author used a questionnaire, which consisted of 30 items. One hundred and nine EFL students took part in the research and the findings showed that students' attitudes towards tablet are positive. For example, the participants of the study thought that tablets were useful for language skills development and finding language learning resources. Finally, no statistically significant difference between male and female students' attitudes was found, and the attitude difference in terms of age or academic year was not statistically significant as well.

Others, such as Chen (2013), examined students' attitudes towards tablets in informal EFL learning settings. The participants were given a questionnaire, which included 5-point Likert scale items. It was found that the learners' attitudes towards tablet devices were highly positive. In fact, according to the participants, tablet devices were easy to use, as well as effective for language learning.

Some authors, such as Saidouni and Bahloul (2016), investigated both students' and teachers' attitudes towards mobile devices (smartphones) in the EFL classroom. The instrument used in the research was a questionnaire, which collected both quantitative and qualitative data. Overall, the results revealed that teachers as well as students at the university level had positive attitudes towards mobile devices in the EFL classroom. In fact, the majority of students and teachers thought that mobile devices could be used to practice speaking, listening, and reading skills, but believed they were least suitable for developing writing skills.

However, to the author's best knowledge, attitudes towards mobile devices, especially tablets, in EFL have been scarcely investigated in Croatia.

For instance, Lerga et al. (2017) examined students' attitudes towards tablets in the EFL classroom. The sample of the study consisted of two groups of elementary school students. Namely, the first group were students who attended traditional EFL classes, and were not using tablet devices, whereas the other group were using them for a longer time period. The participants of both groups expressed their attitudes on given statements using the 5-point Likert scale. The results of the research revealed more positive attitudes among learners who used tablets regularly. However, the attitudes of students attending traditional classes became somewhat more positive, after they had participated in an EFL lesson using tablet devices, as part of the research.

The overview of the previous studies showed that foreign language teachers and students mostly have positive attitudes towards mobile devices in EFL. However, there is a lack of research in this area in Croatia. Hence, the current study will attempt to fill that void.

3. The present research

In the following part of the paper, the research on students' and teachers' attitudes towards tablet devices in EFL will be presented.

3.1 Aims and research questions

The general aim of the following research is to examine attitudes and perception of both students and teachers towards mobile devices, specifically tablet devices, in EFL classrooms at the primary and secondary educational level. The research questions for this study are as follows:

1. What are students' attitudes towards the use of tablets in EFL classes?
2. Is there a difference in students' attitudes towards the use of tablets in EFL classes regarding their educational level?
3. What is the relationship between students' self-evaluated mobile device skills, age, and attitudes towards tablets in EFL?
4. Is there a difference in attitudes towards tablets between students who use and those who do not use tablets in EFL classes? Is there a difference in their self-evaluated mobile device skills?
5. What are teachers' attitudes towards the use of tablets in EFL classroom?

3.2 Participants

The sample of the study consisted of 229 students, 75 of which (32,8%) are male and 154 (67,2%) are female. The number of elementary and high school students was evenly distributed, as there were 116 (50,7%) elementary school students, and 113 (49,3%) high school students. Elementary school students were 5th graders, and high school students were attending 1st grade at the time of the research. As expected, almost every participant of the study, i.e. 222 (96,9%), owned a mobile device. Students were also asked about the purpose of using their mobile device in general and it was found that students were using their devices both for personal and learning purposes. The number of students who were using tablet devices in EFL classes at the time of the study was 126 (55%). It should be noted that all participants were allowed to use that tablet at home as well, and its use was not limited to the classroom use only. The remaining 103 students (45%) were not provided with tablet devices and were not using them in EFL classes at the time of this research.

Along with the students, 4 EFL teachers also took part in the research. All participants were female. Half of them were elementary school teachers, while the other half were high school teachers. Furthermore, half of the participants were aged 36-45 years, while one participant was between 25-35 years old, and one was between 46-55 years old. All participants owned a mobile device, but were also provided with tablet devices and were actively using them in ELT.

3.3 Instrument

The instrument employed in the research was a questionnaire. Namely two questionnaires, one for the students (Attachment 1) and one for the teachers (Attachment 2), were designed for the purposes of this study. The questionnaire items, however, were mostly modified from previous research studies (e.g. Alzaidiyeen, 2017, Chen, 2013). Both questionnaires consisted of two sections. As for the students' questionnaire, the first part aimed to elicit respondents' demographic information such as gender, grade, as well as to identify students' mobile device ownership and self-assessed mobile device skills, while the second and the main part consisted of 14 statements which deal with students' attitudes and perceptions towards a tablet in EFL. The participants were asked to indicate the level of their agreement with each statement on a five-point Likert scale: 1 – I strongly disagree, 2 – I disagree, 3- neither agree or disagree 4 – I agree, 5 – I strongly agree. The first part of the questionnaire for the teachers also collected demographic information (e.g., age, mobile device ownership, frequency of tablet use in ELT), while the second part also included 14-Likert scale items. The initial idea was to do a face-to-face interview with the EFL teachers, but due to teachers' lack of time, it was decided to include 5 open-ended questions, which the participants could answer in a written form (Attachment 3).

3.4 Procedure

The research was carried out in three elementary and three high schools in Osijek, in 2018 and 2019. All participants were informed about the research aims and were also informed that their participation was on a voluntary basis and anonymous. It took no more than 15 minutes to fill out the questionnaire, although there was no time limitation for it. Before the analysis, the values of negatively worded items

were reversed. The data was analysed using IBM SPSS Statistics 20, in which descriptive statistics, Pearson correlation and independent sample t-tests were the statistical methods employed.

3.5 Results

3.5.1 Students' attitudes

The following table (Table 1) presents the descriptive results for learners' attitudes towards the use of tablet devices in the EFL classroom.

Table 1. Descriptive Statistics (descending) for students' attitudes towards tablets in EFL (N=229)

	N	Min.	Max.	Mean	SD
I like using a tablet in the classroom.	229	1.00	5.00	3.92	1.29
Multimedia features enhance the exposure to target language.	229	1.00	5.00	3.85	1.07
Using a tablet improves my listening skills.	229	1.00	5.00	3.75	1.20
Using a tablet improves my reading skills.	229	1.00	5.00	3.59	1.24
I work more independently when using a tablet in the classroom.	229	1.00	5.00	3.58	1.29
The use of tablets enhances participation in EFL class.	229	1.00	5.00	3.48	1.28
I like reading texts in English on a tablet.	229	1.00	5.00	3.48	1.28
Using a tablet improves my speaking skills.	229	1.00	5.00	3.41	1.30
It is easier to learn vocabulary when using a tablet in class.	229	1.00	5.00	3.38	1.32

It is easier to learn grammar when using a tablet in class.	229	1.00	5.00	3.30	1.35
The use of tablets in the classroom is distracting.	229	1.00	5.00	3.28	1.44
The use of tablets in class encourages me to study English outside the class.	229	1.00	5.00	3.13	1.39
Using a tablet improves my writing skills.	228	1.00	5.00	2.98	1.37
Technical issues disturb the teaching and learning process.	229	1.00	5.00	2.69	1.47
Valid N (listwise)	228				

The descriptive analysis of the results shows that the participants mainly have positive attitudes towards tablets in EFL. It is apparent from the table that students like the use of tablets in EFL classes ($M=3.92$, $SD=1.29$). The participants think that the use of these devices enhances exposure to target language ($M=3.85$, $SD=1.07$). Besides, the results show that participants consider tablet devices effective for developing language skills, in particularly listening and reading. There are 74 (32,3%) students who strongly agree and 75 (32,8%) students who mostly agree that the use of tablets improves listening skills, whereas only 17 (7,4%) students totally disagree with that statement. Furthermore, the participants also find tablets effective for improving reading skills, and there are 62 (27,1%) students who strongly agree with it. The results show that there are 56 (24,6%) participants who strongly agree that the use of tablets improves speaking skills, but there are also 52 (22,7%) participants who neither agree nor disagree with it. Out of four language skills, the lowest mean value was obtained for writing skills ($M=2.98$, $SD= 1.37$). Namely, 46 (20,1%) learners strongly disagree, and 39 (17%) students mostly disagree that the use of tablets improves writing skills, but 55 (24 %) students neither agree nor disagree.

According to the results (Table 1), the participants believe that using tablets makes them work more independently (M=3.58, S=1.29) and when it comes to their participants in class, 55 students (24%) strongly agree and 76 (33,2) mostly agree that the use of tablets enhances their participation. It seems that the participants have somewhat positive attitudes when it comes to reading on tablet devices (M=3.48, SD=1.28). The results (Table 1) also show that students have quite neutral attitudes when asked whether it is easier to learn grammar and vocabulary when using tablets in class. They also had to rate whether the use of tablets in class encourages them to learn EFL outside the classroom, and the results showed that the attitudes are quite neutral (M=3.13, SD= 1.39). Namely, 43 (18,8 %) students strongly agree, but similarly 44 (19,2 %) students strongly disagree with the statement.

As it can be seen in Table 1, the participants find the use of tablets in class somewhat distracting, as 65 (28,4%) strongly agree, and 46 (20,1%) mostly agree with that statement, whereas 43 (18,8%) neither agree nor disagree. When it comes to technical issues, it is apparent that students mostly think that technical issues do not disturb the learning process (M=2.69, SD=1.47). Namely, 73 (31,9%) students strongly agree, and 40 (17,5%) students somewhat agree that technical issues disturb the teaching and learning process. On the contrary, there are 35 (15,3%) students who strongly disagree with it.

The second aim of this research was to examine whether there is a difference between elementary and high school students' attitudes towards the use of tablet devices in EFL in overall. Therefore, an independent sample t-test was conducted, and the results are presented in the table below (Table 2).

Table 2. Independent t-test (learners' educational level and attitudes towards tablet use)

	Class	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
attitudes	Elementary school	116	3.60	.77	3.324	226	.001***
	High school	112	3.24	.87			

**p < 0.05 level (2-tailed)*

The results in the Table 2 reveal that there is statistically significant difference in terms of students' educational level, indicating that elementary school EFL learners (M=3.60, SD= .76) have more positive attitudes than high school learners (M=3.24, SD= .86).

Another research aim was to examine the relationship between age and self-evaluated mobile device skill as well as to find out whether students who rate their proficiency higher have more positive attitudes towards tablet use.

Students were asked to self-evaluate their skills in using mobile devices on a scale from 1-5 (1= insufficient, 5= excellent) and the descriptive statistic revealed that they mostly consider themselves as proficient users (M=4.32, SD= .76). The results are further presented in the table below (Table 3).

Table 3. Frequency (Students' self-evaluated mobile device skill)

	Frequency	Percent	Valid Percent	Cumulative Percent
sufficient	6	2.6	2.6	2.6
average	23	10.0	10.0	12.7
Valid proficient	92	40.2	40.2	52.8
excellent	108	47.2	47.2	100.0
Total	229	100.0	100.0	

In other to answer the third research question, the Pearson correlation test was conducted. The results (Table 4) demonstrate that there is a small, negative but significant correlation between students' age and their self-evaluated mobile device skills. The results also show that there is small, positive, and significant correlation between self-evaluated mobile devices skills and attitudes towards tablets in EFL.

Table 4. Pearson's Correlation (self-evaluated mobile device skills, age and attitudes)

		age	attitudes	self-evaluated mobile device skills
age	Pearson Correlation	1	-.216**	-.150*
	Sig. (2-tailed)		.001	.023
	N	229	228	229
attitudes	Pearson Correlation	-.216**	1	.158*
	Sig. (2-tailed)	.,		.017
	N	228	228	228
self-evaluated mobile device skills	Pearson Correlation	-.150*	.158*	1
	Sig. (2-tailed)	.023	.017	
	N	229	228	229

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

The independent t-test was also applied in order to find out whether there is a significant difference between tablet users and non-users in their attitudes towards tablets in overall. Even though students who do not use tablets in EFL class have slightly more positive attitudes than the students who use them, the difference in their attitudes is not statistically significant, as it can be seen in the table below.

Table 5. Independent t-test (tablet use and attitudes towards tablets)

	Tablet use	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
attitudes	yes	126	3.38	.70	-.914	178.659	.362
	no	102	3.48	.97			

**p < 0.05 level (2-tailed)*

An independent t-test was again used to see whether there is a significant difference in self-evaluated mobile device skills when it comes to students' prior use of tablets in EFL classes. According to the results (Table 6), students who use tablets in EFL class rate their mobile device skills higher than the students who do not use them, and the difference is statistically significant.

Table 6. Independent t-test (tablet use mobile device skill)

	Tablet use	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Self-evaluated mobile device skills	yes	126	4.50	.68	4.128	227	.000***
	no	103	4.09	.78			

* $p < 0.05$ level (2-tailed)

3.5.2 Teachers' attitudes

Teachers were also asked to self-evaluate their ability to use technology on a scale from 1-5 (1= insufficient, 5= excellent). Descriptive analysis shows that teachers generally consider themselves as proficient users (M=4.00, SD=1.41) and (see Table 7). When it comes to the teachers' frequency of tablet use for teaching purposes, one of the participants (25%) claimed to use it sometimes, two participants (50%) often and one (25%) always.

Table 7. Teachers self-evaluated mobile device skill

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	sufficient	1	25.0	25.0
	proficient	1	25.0	50.0
	excellent	2	50.0	100.0
	Total	4	100.0	100.0

3.5.2.1 Quantitative data

The study also aimed to explore EFL teacher’s attitudes towards tablet devices. Firstly, descriptive statistics analysis was conducted, and the results are presented in the following table (Table 8).

Table 8. Descriptive Statistics for teachers’ attitudes towards tablets in ELF

	N	Min.	Max.	Mean	SD
Using a tablet improves students' listening skills.	4	4.00	5.00	4.50	.57
I like using a tablet in the classroom.	4	4.00	5.00	4.50	.57
The use of tablets in the classroom is distracting.	4	4.00	5.00	4.50	.57
Multimedia features enhance the exposure to target language.	4	3.00	5.00	4.25	.95
Using a tablet improves students' reading skills.	4	3.00	5.00	4.00	.81
It is easier to teach with tablets in class.	4	4.00	4.00	4.00	.00
Students work more independently when using a tablet in the classroom.	4	3.00	5.00	4.00	.81
The use of tablets enhances students’ participation in class.	4	4.00	4.00	4.00	.00
Using a tablet improves students' speaking skills.	4	2.00	5.00	3.50	1.29
Using a tablet improves students' writing skills.	4	2.00	5.00	3.25	1.50
Preparing tablet-based lessons is time-consuming.	4	2.00	4.00	3.25	.95

Students learn more easily when using tablets in class.	4	3.00	4.00	3.25	.50
The use of tablets in class encourages students to study English outside the class.	4	2.00	4.00	3.00	1.15
Technical issues disturb the teaching and learning process.	4	2.00	4.00	2.75	.95
Valid N (listwise)	4				

The results presented in the Table 8 show that surveyed teachers generally have highly positive attitudes towards tablets in EFL. The analysis shows that teachers like using tablets in class (M=4.50, SD= .57), but also think that the use of these devices enhances exposure to target language (M=4.25, SD= .95), as well as students' classroom participation (M=4.00, SD= .00). Interestingly, half of the surveyed teachers strongly agree, and the other half mostly agree that the use of tablets in class is distracting. When it comes to the language skills development, it is apparent that the use of tablets is considered effective for developing listening (M=4.50, SD= .57) and reading skills (M=4.00, SD .81). The analysis also shows that all participants (100%) mostly agree that teaching is easier when using tablets in class, but half of them also mostly agree that it is time-consuming to prepare tablet-based lessons. When asked whether students learn more easily when tablets are used in class, most of the surveyed teachers (75%) remain undecided. Somewhat lower mean value suggest that the participants do not think that technical issues disturb the teaching and learning process (M=2.75, SD=. 95). Specifically, half of the surveyed teachers somewhat disagree with that statement, while one (25%) mostly agrees, and one (25%) is undecided.

3.5.2.2 Qualitative data

In order to gain a deeper understanding of teachers' attitudes and opinions on the use of tablet devices in EFL, teachers were asked 5 open-ended questions (see Appendix 3). Two participants agreed to participate in this part of the research, both of which have been using tablets in their EFL teaching.

The following part presents their answers, but in order to protect the participants' anonymity, they are referred to as Teacher A (high school EFL teacher) and Teacher B (elementary school teacher).

1. When asked whether they like using tablets during their English lessons, both teachers gave positive answers. However, they stated that their teaching does not rely solely on the use of mobile devices. One teacher stated: *"I prefer tablet-based English lesson, but that doesn't mean I use them on everyday basis. I sometimes base my whole lessons on tablets and sometimes I use them only in a particular phase of the lesson"*. Additionally, the same teacher added that the students *"are more motivated and engaged when we use tablets in the classroom"* (Teacher A), suggesting that the students share the positive attitude with the teacher.

The other teacher claimed: *"I prefer a combination of a traditional and tablet-based English lessons. A tablet-based game for motivation or revision and the rest of activities in real time"* (Teacher B)

2. Teachers were also asked whether their EFL lessons differ when they use tablet devices in classes and if so, how. Similar answers were provided by both participants.

One teacher stated: *"I never use them 'just to use them', but I always try to think carefully before implementing them. They are very useful for student collaboration activities when they do research on the Internet, they are also useful for different games that I create to practice grammar and vocabulary"* (Teacher A).

Teacher B: *"Tablet-based game for motivation or revision. My English lessons without tablets are different in a way that there is more individual or peer work."*

3. The participants were asked to name any difficulties or barriers when implementing tablets. The teachers agreed that the difficulties they face mostly relate to the technology itself. In fact, teachers seem to encounter mainly technical issues.

One teacher explained that: *"technological difficulties happen all the time (bad connection, empty battery), but I learned to deal with them. It also happens that students forget their tablets, but we have spare ones in the classroom"* (Teacher A).

The other participant also mentioned battery-problems or students forgetting to bring their mobile devices, but *"we solve it by working in pairs, if somebody has two mobile phones/tablets, they share it. I give them my phone as well"* (Teacher B). Although technical difficulties are quite common and pose different problems, teachers do not seem to be discouraged in using tablets, but rather they find different ways to overcome such problems.

4. In teachers' opinion, tablet devices are effective for developing language skills. However, one teacher emphasized that *“all four skills can be improved significantly when using tablets but only if the activities are well-planned and if the teacher knows when and how to use them”* (Teacher A).

The other participant believes that *“it promotes developing reading and writing/spelling skills. As far as listening skills are concerned, the same participant pointed out that the use of tablet devices “can promote developing listening skills only with the headphones on”* (Teacher B).

5. Finally, the teachers had to express their thoughts on what the main advantages and disadvantages of using tablet devices to teach and learn EFL are. According to their answers, the disadvantages are greatly outnumbered. The following advantages were listed by one participant:

Teacher A: *“Benefits of using tablets: they are very intuitive to use and you don't need to be tech-savvy to use them; they allow you to create engaging materials for your students; it moves learning outside of the classroom because there are hundreds of apps that you can recommend to your students to use outside of classroom; tablets take interaction in a foreign language classroom to a whole new level; students are more active and tablets spark their creativity; student assessment and classroom management are much easier through the usage of tablets.* For the other teacher, tablet devices in EFL are *“fun, easy, motivating; easy to implement (...)”*.

However, both participants agree that there are some disadvantages as well. Interestingly, none of the mentioned disadvantages refer to the (language) learning in particular. Rather, the participants again mentioned technical issues. The Internet connection problems seems to be a major limitation because in that case *“your planned lesson is jeopardized so you always need to have plan B “*, as explained by one participant (Teacher A).

For the other teacher it is *“frustrating when technology fails”* and preparing such lessons is *“time-consuming”* (Teacher B).

4. Discussion

This study aimed to explore teachers' attitudes towards mobile technology in EFL. The purpose of this research was to investigate both students' and teachers' attitudes towards tablet device in EFL classrooms in the Croatian context.

With the respect to the first research question, it was found that EFL students generally have positive attitudes towards using tablets. These results are in compliance with many studies, which dealt with EFL students' attitudes towards mobile devices (e.g. Alzaidiyeen 2017). Based on the results of this study (Table 1), it can be concluded that students mainly support the integration of tablets in EFL. It seems possible that these results are due to students' familiarity with the use of mobile devices. In fact, almost all students in this study own and use a mobile device. According to the results (Table 1), students find tablets both enjoyable and effective for language learning. In particular, they agree that the use of tablets enhances the exposure to the target language, as well as development of receptive language skills, i.e. listening and reading. Like in some other studies (e.g. Saidouni and Bahloul, 2016; Alzaidiyeen, 2017) the students find mobile device least suitable for developing writing skills, and such findings can be attributed to mobile device's screen size. Additionally, the participants of the study believe that the use of tablets enhances their participation in class. Surprisingly, students mostly think that technical issues do not disturb the learning process.

Furthermore, the second questions in this study sought to determine if there is a difference between elementary and high school students' attitudes towards tablet use in EFL in overall. Unlike Alzaidiyeen's (2017) study, which revealed that EFL learners' attitudes towards tablets were not determined by the academic year of participants, the findings of this study show that there is a statistically significant difference in educational level, which indicates that elementary school EFL students have more positive attitudes towards tablets than high school learners. A possible explanation for this might be that older students are used to traditional language teaching and learning methods, thus may not embrace such changes easily, or change their learning habits, and therefore need more time to accept mobile devices a learning tool.

Another important finding of the study is that there is a small, negative but significant correlation between students' age and their self-evaluated mobile device skills. What this means is that older students rate themselves as less proficient technology users. A possible explanation might be that

older students are more critical of their competencies and knowledge, whereas younger students have less realistic views of their skills, and tend to overestimate their abilities.

Furthermore, the results of the study also show a small, positive, and significant relationship between self-evaluated mobile devices skills and attitudes towards tablets in EFL. In other words, students who perceive themselves as more competent technology users have more positive attitudes towards tablets in EFL. It seems possible that the use of technology is easier for them and therefore have positive attitudes towards its use.

The research also aimed to examine whether there is a difference in EFL students' attitudes towards tablet when it comes to its prior use. For example, Lerga et al. (2017) showed that students who were using tablets in EFL classes regularly had more positive attitudes than the students attending traditional classes. Similarly, Rončević Zubković et al. (2016) report that students who use tablets in class have more positive attitudes towards their use in education, compared to students who do not use tablets in class. However, the results of this study do not support previous findings. Contrary to expectations, the results of this study found no statistically significant difference in attitudes between tablet users and non-users in EFL.

As expected, it was found that tablet users rate their mobile device skills higher than the tablet non-users, which is in line with the study of Rončević Zubković et al. (2016). The reason for this might be that the students who use tablets in the EFL classroom have more experience in their use both in the classroom and well as outside, and have developed necessary skills and competence.

Finally, the attitudes of EFL teachers were also investigated by means of a questionnaire, and mostly through the interviews conducted with two EFL teachers. Overall, the findings are quite positive and suggest that teachers are in favour of using mobile devices, which answers the final research question. Based on the results, it could be concluded that the attitudes of EFL teachers towards tablets are quite positive, and these results are in agreement with other studies (e.g. Savas, 2014; Alzubi, 2019; Saidouni and Bahloul, 2016). Namely, the quantitative results of this study show that EFL teachers consider tablet devices as an effective foreign language teaching and learning tool. Specifically, the teachers enjoy using tablets in the EFL classrooms, but they also believe it can enhance students' foreign language learning. Similar to Alzubi's (2019) findings, teachers seem to be concerned with distractions caused by the use of mobile devices. Moreover, this study shows that EFL teachers think

that the use of mobile devices not only enhances students' participation and exposure to the target language, but also develops their language skills, i.e. listening and reading. In fact, as found in other studies (e.g. Savas, 2014), tablet device is considered to be the most effective for developing listening skills. However, teachers believe that the use of tablets is least suitable for improving writing skills, which is in agreement with some previous studies (e.g. Savas, 2014; Saidouni and Bahloul, 2016).

Furthermore, other important findings were obtained through open-ended questions. Although teachers consider mobile devices as effective teaching and learning tools, they do not rely solely on the use of mobile devices, but rather combine them with traditional teaching methods. In fact, teachers use mobile devices in many ways and the integration of tablets in their lessons seems to be carefully planned. Moreover, teachers recognize variety of teaching and learning benefits that the use of mobile devices offers, while there are only few limitations and barriers mentioned. Teachers report that preparing tablet-based lessons requires extra time, which confirms previous findings in the literature (e.g. Albiladi and Alshareef, 2018). Other mentioned barriers include technical issues and occasional lack of equipment as students forget to bring their tablets. When it comes to technical issues, it appears that Internet connection problems are quite common, as reported in different studies (e.g. Al-Mubireek, 2020). Nonetheless, teachers in this study are aware of possible challenges and limitations, and therefore find different ways to overcome them, rather than avoid technology usage.

5. Limitations of the study

The study aimed to investigate EFL students' and teachers' attitudes and perceptions towards mobile device as a teaching and learning tool. Although this research provided some valuable and noteworthy findings, there are several limitations and drawbacks that should be noted.

It should be acknowledged that the sample size used in this study was relatively small, and therefore the findings cannot be generalized to the whole population. The participants of this study were only from Osijek, and therefore cannot be considered as a representative sample of Croatian teachers and students. It is important to note that only several schools were using tablets at the time of the research, which limited the number of students and teachers, and thus the collection of data. In fact, a major limitation was the small number of EFL teachers who participated in this study, especially the number of interviewed teachers. Therefore, it is suggested that future studies include larger number of participants to gain more reliable results. Another limitation was the instrument used in this research. Considering that the questionnaire was designed for the purpose of this study, it is possible that some important questions were not included. Moreover, additional items and open-ended questions could have been used to gain more data on students' attitudes and perceptions, as well as their use of mobile devices for foreign language learning purposes. Additionally, the study focused on students' and teachers' attitudes towards a particular mobile technology, i.e. tablet device. However, investigating their perceptions and attitudes towards the use of other types of technology as well as examining their attitudes towards mobile devices in informal settings would have provided valuable results, which could have supported the current findings and conclusions. Nonetheless, all of these are possibilities for further research.

6. Conclusion

This research was conducted with the aim of investigating EFL students' and teachers' attitudes towards mobile devices in foreign language teaching and learning in Croatia.

Based on the findings in this study, it can be concluded that both students and teachers have positive attitudes towards mobile devices and are in favour of their implementation in EFL. The study found that generally, both students and teachers considered tablets as an effective FL learning tool. It can be concluded that elementary school students have more positive attitudes than high school learners in overall and that there is a significant correlation between self-evaluated mobile device skills, age, and attitudes towards tablets in EFL. The study shows that students who use tablets in class rate their mobile device skills higher than the students who do not use them, but their attitudes towards tablets in EFL do not differ statistically.

Taken together, these results suggest that generally both students and teachers are keen on using technology for learning purposes and support the integration of mobile devices in EFL classrooms. Positive attitude towards tablets suggests promising future for the use of mobile devices in foreign language teaching and learning in the Croatian context. However, we should not expect that both students and teachers will embrace new technology at the same rate. In other words, some teachers and students may immediately show positive attitudes towards technology, while others might be reluctant or unwilling to use it in education. It is important to note that teachers and students might need time to accept new technologies, as well as to learn how to use them effectively.

More research is certainly needed to better understand students' and teachers' attitudes and perceptions towards the usage of mobile devices in EFL classrooms, particularly in Croatia. Future studies should include a higher number of participants to gain more reliable and systematic results. It would also be advisable to conduct a longitudinal study in order to compare students' and teachers' attitudes towards the use of mobile devices over a longer period of time. Finally, future studies could investigate other factors that influence students' and teachers' attitudes towards mobile devices.

7. Bibliography

- Abukhattala, I. (2016). The Use of Technology in Language Classrooms in Libya. *International Journal of Social Science and Humanity*, 6(4), 262–267. <https://doi.org/10.7763/ijssh.2016.v6.655>
- Abunowara, A. M. (2014). Using Technology in EFL/ESL Classroom. *International Journal of Humanities and Cultural Studies*, 1(2), 1-18.
- Albiladi, W. S., & Alshareef, K. K. (2018). The Use of Tablets in Teaching English in Saudi Arabia: Implications and Challenges. *International Journal of English and Education*, 7(3), 281-294.
- Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers & Education*, 47(4), 373-398.
- Al-Mubireek, S. (2020). Teacher Perceptions of the Effectiveness of Using Handheld Devices in Saudi EFL Classroom Practices. *International Journal of Emerging Technologies in Learning (IJET)*, 15(22), 204. <https://doi.org/10.3991/ijet.v15i22.16689>
- Alshammari, R. (2018). Mobile Devices in EFL Teaching in Saudi Arabia: A Comparison of Student and Faculty Attitudes and Usage. *Journal of Education and Practice*, 9(17), 10-19.
- Altun, M. (2015). The Integration Of Technology Into Foreign Language Teaching. *International Journal on New Trends in Education and Their Implications*, 6(1), 22-27.
- Alzaidiyeen, N. J. (2017). English as a Foreign Language Students Attitudes towards the Utilization of iPad in Language Learning. *Malaysian Online Journal of Educational Technology*. 5(3), 16-24.
- Alzubi, A. (2019). Teachers' Perceptions on Using Smartphones in English as a Foreign Language Context. *Research in Social Sciences and Technology*, 4(1), 92-104. <https://doi.org/10.46303/ressat.04.01.5>
- Azmi, N. (2017). The Benefits of Using ICT in the EFL Classroom: From Perceived Utility to Potential Challenges. *Journal of Educational and Social Research*, 7(1), 111-118.

- Baek, Y., Zhang, H., & Yun, S. (2017). Teachers' attitudes toward mobile learning in Korea. *The Turkish Online Journal of Educational Technology*, 16(1), 154–163.
- Baleghizadeh, S., & Olandrostam, E. (2010). The Effect of Mobile Assisted Language Learning (MALL) on Grammatical Accuracy of EFL Students. *Mextesol Journal*, 34(2), 77-86.
- Bozorgian, H. (2018). Teachers' attitudes towards the use of MALL instruction in Iranian EFL context. *International Journal of Humanities*, 25(3), 1–18.
- Capan, S. A. (2012). Teacher attitudes towards computer use in EFL classrooms. *Frontiers of language and teaching*, 3(2), 248-254.
- Chartrand, R. (2016). Advantages and Disadvantages of Using Mobile Devices in a University Language Classroom. *Bulletin of the Institute of Foreign Language Education Kurume University*, 23, 1–13.
- Chen, X.-B. (2013). Tablets for informal language learning: Student usage and attitudes. *Language Learning & Technology*. 17(1). 20–36. <http://dx.doi.org/10125/24503>.
- Chinnery, G. M. (2006). Going to the MALL: Mobile assisted language learning. *Language learning & technology*, 10(1), 9-16.
- Cojocnean, D. (2017). Mobile learning in the foreign language classroom - challenges and opportunities. *Journal of Pedagogy*, 1, 59–72.
- Dashtestani, R. (2013). Implementing Mobile-assisted Language Learning (MALL) in an EFL Context: Iranian EFL Teachers' Perspectives on Challenges and Affordances. *The JALT CALL Journal*, 9(2), 149-168.
- Dashtestani, R. (2015). Moving bravely towards mobile learning: Iranian students' use of mobile devices for learning English as a foreign language. *Computer Assisted Language Learning*, 29(4), 815–832. <https://doi.org/10.1080/09588221.2015.1069360>
- Dumančić, M., Matijević, M., & Topolovčan, T. (2016). How Mobile Learning Can Change Education. *Online International Interdisciplinary Research Journal*, 6, 31-37.
- Dündar, H., Akçayir M. (2014). Implementing tablet PCs in schools: Students' attitudes and opinions. *Computers in Human Behavior*, 32, 40-46.

- Gilakjani, A. P. (2017). A Review of the Literature on the Integration of Technology into the Learning and Teaching of English Language Skills. *International Journal of English Linguistics*, 7(5), 95-106.
- Gilakjani, A. P., Sabouri, N. B., & Zabihniaemran, A. (2015). What are the barriers to the use of computer technology in EFL instruction? *Rev. Eur. Stud.*, 7(11), 213–221. <https://doi.org/10.5539/res.v7n11p213>
- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer assisted language learning*, 27(1), 70-105.
- Hakim, B. (2020). Technology Integrated Online Classrooms and the Challenges Faced by the EFL Teachers in Saudi Arabia during the COVID-19 Pandemic. *International Journal of Applied Linguistics and English Literature*, 9(5), 33. <https://doi.org/10.7575/aiac.ijalel.v.9n.5p.33>
- Haswani, F. (2014). The role of technology in EFL classroom. *IJEE (Indonesian Journal of English Education)*, 1(2), 107-118.
- Hebebcı, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of Views of Students and Teachers on Distance Education Practices during the Coronavirus (COVID-19) Pandemic. *International Journal of Technology in Education and Science*, 4(4), 267–282. <https://doi.org/10.46328/ijtes.v4i4.113>
- Hockly, N. (2013). Technology for the language teacher: Mobile learning. *ELT Journal*, 67(1), 80–84. doi:10.1093/elt/ccs064
- Housseine, B., & Rabha, S. (2020). The need of distance learning in the Wake of COVID-19 in Morocco: teachers' attitudes and challenges in the EFL instruction. *International Journal of Language and Literary Studies*, 2(3), 240-256.
- Hsu, L. (2013). English as a foreign language learners' perception of mobile assisted language learning: a cross-national study. *Computer Assisted Language Learning*, 26(3), 197-213.
- Jayanthi, N. S. & Kumar, R. V. (2016). Use of ICT in English language teaching and learning. *Journal of English language and literature*, 3(2), 34-38.

- Kessler, G. (2018). Technology and the future of language teaching. *Foreign Language Annals*, 51(1), 205–218. <https://doi.org/10.1111/flan.12318>
- Khlaif, Z. (2017). Factors influencing teachers' attitudes toward mobile technology integration in K-12. *Technology, Knowledge and Learning*, 23(1), 161–175.
- Klimova, B. (2018). Mobile phones and/or smartphones and their apps for teaching English as a foreign language. *Education and Information Technologies*. 23(3), 1091-1099.
- Lai, C. C., & Kritsonis, W. A. (2006). The advantages and disadvantages of computer technology in second language acquisition. *Online Submission*, 3(1).
- Lan. Y. J., Sung. Y. T., & Chang. K. E. (2007). A mobile-device-supported peer-assisted learning system for collaborative early EFL reading. *Language Learning & Technology*. 11(3), 130-151.
- Leis, A., Tohei, A., & Cooke, S. D. (2015). Smartphone assisted language learning and autonomy. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 5(3), 75-88.
- Lerga, R., Čandrić, S. & Holenko Dlab, M. (2017). The Use of ICT in the English Language Classroom. In: Biljanović, P. (ed.) Proceedings of the 40th International Convention MIPRO 2017.
- Li, G., & Ni, X. (2011). Primary EFL teachers' technology use in China: Patterns and perceptions. *RELC Journal*, 21(1), 69-85.
- Marwan, A. (2015). Empowering English through Project-Based Learning with ICT. *Turkish Online Journal of Educational Technology*, 14, 28-37.
- Ministarstvo znanosti i obrazovanja. (2019). Odluka o donošenju kurikuluma za nastavni predmet Engleski jezik za osnovne škole i gimnazije u Republici Hrvatskoj. *Narodne novine*. URL: https://narodne-novine.nn.hr/clanci/sluzbeni/2019_01_7_139.html

- Mollaei, F., & Riasati, M. J. (2013). Teachers' Perceptions of Using Technology in Teaching EFL. *International Journal of Applied Linguistics & English Literature*, 2(1), 13–22. <https://doi.org/10.7575/ijalel.v.2n.1p.13>
- Montrieux, H., Courtois, C., Raes, A., Schellens, T., & De Marez, L. (2014). Mobile learning in secondary education: Teachers' and students' perceptions and acceptance of tablet computers. *International Journal of Mobile and Blended Learning*, 6(2), 26–40. <https://doi.org/10.4018/ijmbl.2014040103>.
- Oh, Junil, Lee, Hee-Kyung, Park, Myongsu, & Cho, Yunkyung. (2014). Exploring the effects of tablet PC-based English learning. *English Teaching*, 69(3), 151-176.
- Ozdamli, F. and Uzunboylu, H. (2015). M-learning adequacy and perceptions of students and teachers in secondary schools. *British Journal of Educational Technology*, 46(1), 159-172. <https://doi.org/10.1111/bjet.12136>
- Polakova, P., & Klimova, B. (2019). Mobile Technology and Generation Z in the English Language Classroom-A Preliminary Study. *Education Sciences*. 9(3), 203.
- Pović, T., Veleglavac, K., Čarapina, M., Jaguš, T. & Botički, I. (2015). Primjena informacijsko-komunikacijske tehnologije u osnovnim i srednjim školama u Republici Hrvatskoj. In: Proceedings of the Carnet User Conference 2015 (CUC2015).
- Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), 1–6. <https://doi.org/10.1108/10748120110424816>
- Rao, P. S. (2019). The Use of Mobile Assisted Language Learning (MALL) Technology in Teaching and Learning in English Classrooms. *Research Journal Of English (RJOE)*, 4(2), 225-238.
- Ređep, T., Leček, T., Pavičić Zajec, T. (2019). Realizacija m-učenja primjenom BYOD modela u osnovnoj školi. *Politehnika: Časopis za tehnički odgoj i obrazovanje*, 3(2), DOI: <https://doi.org/10.36978/cte.3.2.3>
- Rončević Zubković, B., Količ-Vehovec, S., Kalebić Maglica, B., Smojver-Ažić, S. i Pahljina-Reinić, R. (2016). Attitudes of students and parents towards ICT with regard to the experience of using

the iPad in classroom. *Suvremena psihologija*, 19 (1), 37-46. <https://doi.org/10.21465/2016-SP-191-03>

Saidouni, K. & A. Bahloul. (2016). Teachers and students' attitudes towards using mobile-assisted language learning in higher education. *Arab World English Journal (SI)*. 3. 123-140. <https://doi.org/10.2139/ssrn.2822983>

Savas, P. (2014). Tablet PCs as instructional tools in English as a foreign language education. *TOJET: The Turkish Online Journal of Educational Technology*. 13(1). 217- 222.

Skupnjak, D. (2014), Mobitel u nastavi: stavovi i iskustva učitelja. In: Prskalo, I., Jurčević, A., Braičić, Z. (ed.), *14. Dani Mate Demarina - Suvremeni izazovi teorije i prakse odgoja i obrazovanja*. Zagreb: Učiteljski fakultet; Sveučilište u Zagrebu, 275-283

Solano, L., Cabrera, P., Ulehlova, E., & Espinoza, V. (2017). Exploring the Use of Educational Technology in EFL Teaching: A case Study of Primary Education in the South Region of Ecuador. *Teaching English with Tehnology*. 17(2), 77-86.

Stockwell, G. (2008). Investigating learner preparedness for and usage patterns of mobile learning. *ReCALL*, 20(3), 253-270.

Stručni tim Filozofskog fakulteta Sveučilišta u Zagrebu. (2019). *Vrednovanje eksperimentalnog programa Škola za život u školskoj godini 2018./2019. Objedinjeno izvješće*. Available at: <https://skolazazivot.hr/vrednovanjeeksperimentalnoga-programa-skola-za-zivot-u-skolskoj-godini-2018-2019/> (accessed on August 11, 2021).

Van de Vyver, J. (2016). Mobile-assisted language learning community and culture in French-speaking Belgium: the teachers' perspective. *CALL communities and culture—short papers from EUROCALL*, 450-455.

Violčić Koprivec, A., Dubčić, J. (2018). Facebook kao obrazovni alat u nastavi stranih jezika. *MediAnali*, 12 (15), 69-84.

Wang, Bor & Teng, C. & Chen, H. (2015). Using iPad to Facilitate English Vocabulary Learning. *International Journal of Information and Education Technology*. 5. 100-104. 10.7763/IJET.2015.V5.484.

White, J., & Mills, D. J. (2014). Examining attitudes towards and usage of smartphone technology among Japanese university students studying EFL. *CALL-EJ*, 15(2), 1-15.

8. Attachments

8.1 Attachment 1: Questionnaire for Students

Uporaba tableta u nastavi engleskog jezika

Cilj je ovoga istraživanja ispitati stavove učenika o **korištenju tableta u nastavi engleskoga jezika**. Anketa je u potpunosti **anonimna** i provodi se u sklopu istraživanja za diplomski rad na nastavničkom studiju engleskoga jezika i književnosti.

Unaprijed Vam zahvaljujem na uloženom trudu i vremenu.

1. Škola: _____
2. Razred: _____
3. Spol (zaokružiti): M Ž
4. Posjedujem mobitel (pametni telefon): a) da b) ne

4.1. Ako DA, za što najčešće koristiš mobitel kod kuće?

(poredaj od najmanje često 1 do najčešće 5)

- _____ učenje i ponavljanje gradiva
- _____ pisanje domaće zadaće
- _____ pronalazak dodatnih materijala za učenje
- _____ društvene mreže
- _____ igranje igrica

5. Kako bi ocijenio/la svoju sposobnost i znanje korištenja tehnologija ?

1 nedovoljno 2 dovoljno 3 dobro 4 vrlo dobro 5 odlično

6. Sljedeće tvrdnje odnose se na nastavu engleskog jezika. Molim te da ocijeniš u kojoj mjeri se slažeš s tim tvrdnjama tako da zaokružiš broj za svaku tvrdnju:

1 uopće se ne slažem, 2 djelomično se slažem, 3 nemam stav, 4 većinom se slažem, 5 u potpunosti se slažem

1. Korištenje tableta u nastavi engleskoga potiče moju aktivnost na satu.	1	2	3	4	5
2. Korištenje tableta tijekom nastave potiče moju samostalnost u rješavanju zadataka.	1	2	3	4	5
3. Korištenje tableta odvlači moju pozornost od nastave.	1	2	3	4	5
4. Lakše usvajam novi vokabular kada koristimo tablete na satu.	1	2	3	4	5
5. Lakše usvajam gramatiku kada koristimo tablete na satu.	1	2	3	4	5
6. Korištenje tableta u nastavi potiče me da dodatno učim engleski jezik izvan nastave.	1	2	3	4	5
7. Tehničke poteškoće (loš ton, slaba internetska veza i slično) ometa me u nastavi i učenju.	1	2	3	4	5
8. Multimedijalni sadržaji potiču izloženost izvornim govornicima engleskog jezika.	1	2	3	4	5
9. Rado koristim tablet na nastavi engleskog jezika.	1	2	3	4	5
10. Volim čitati tekstove na tabletu pisane na engleskom jeziku.	1	2	3	4	5
11. Smatram da uporabom tableta na nastavi engleskog jezika razvijam svoju vještinu pisanja.	1	2	3	4	5
12. Smatram da uporabom tableta na nastavi engleskog jezika razvijam svoju vještinu čitanja.	1	2	3	4	5
13. Smatram da uporabom tableta na nastavi engleskog jezika razvijam svoju vještinu govorenja.	1	2	3	4	5
14. Smatram da uporabom tableta na nastavi engleskog jezika razvijam svoju vještinu slušanja.	1	2	3	4	5

8.2 Attachment 2: Questionnaire for Teachers

Uporaba tableta u nastavi engleskog jezika

Cilj je ovoga istraživanja ispitati stavove nastavnika o **korištenju tableta u nastavi engleskoga**

jezika. Anketa je u potpunosti **anonimna** i provodi se u sklopu istraživanja za diplomski rad na nastavničkom studiju engleskoga jezika i književnosti.

Unaprijed Vam zahvaljujem na uloženom trudu i vremenu.

1. Mjesto rada (zaokružiti): a) osnovna škola b) srednja škola

2. Zaokružite vašu starosnu dob:
 - a) od 25 do 35 godina
 - b) od 36 do 45 godina
 - c) od 46 do 55 godina
 - d) više od 56 godina

3. Posjedujem mobitel (pametni telefon): a) da b) ne

4. Kako biste ocijenili vašu sposobnost i znanje korištenja informacijskih i komunikacijskih tehnologija ?

1 nedovoljno 2 dovoljno 3 dobro 4 vrlo dobro 5 odlično

5. Koliko često upotrebljavate tablete u nastavi engleskog jezika?

- 1 nikada
- 2 manje od jednom mjesečno
- 3 nekoliko puta mjesečno
- 4 gotovo svaki sat
- 5 svaki sat

6. Molim Vas da ocijenite u kojoj mjeri se slažete sljedećim tvrdnjama. Sve tvrdnje odnose se na nastavu engleskog jezika.

*1 uopće se ne slažem, 2 djelomično se ne slažem, 3 nemam stav,
4 većinom se slažem, 5 u potpunosti se slažem*

1. Korištenje tableta u nastavi potiče aktivnost učenika na satu.	1	2	3	4	5
2. Korištenje tableta tijekom nastave potiče samostalnost učenika.	1	2	3	4	5
3. Smatram da korištenje tableta učenicima odvlači pozornost od nastave.	1	2	3	4	5
4. Mislim da učenici lakše usvajaju gradivo kada koristimo tablete.	1	2	3	4	5
5. Smatram da korištenje tableta olakšava izvođenje nastave.	1	2	3	4	5

6. Smatram da korištenje tableta u nastavi potiče moje učenike da dodatno uče engleski jezik izvan nastave.	1	2	3	4	5
7. Pripreme za takvu vrstu nastave vremenski su zahtjevne.	1	2	3	4	5
8. Tehničke poteškoće (loš ton, slaba internetska veza i slično) ometaju izvođenje nastave.	1	2	3	4	5
9. Rado koristim tablet u nastavi.	1	2	3	4	5
10. Korištenje multimedijalnih izvora na tabletima povećava izloženost autentičnim jezičnim materijalima.	1	2	3	4	5
11. Smatram da uporabom tableta na nastavi engleskog jezika učenici razvijaju svoju vještinu pisanja.	1	2	3	4	5
12. Smatram da uporabom tableta na nastavi engleskog jezika učenici razvijaju svoju vještinu govorenja.	1	2	3	4	5
13. Smatram da uporabom tableta na nastavi engleskog jezika učenici razvijaju svoju vještinu slušanja.	1	2	3	4	5
14. Smatram da uporabom tableta na nastavi engleskog jezika učenici razvijaju svoju vještinu čitanja.	1	2	3	4	5

8.3 Attachment 3: Open-ended Questions

1. Do you personally like using tablets during your English lessons? Which teaching approach do you prefer: traditional or tablet-based English lessons? Please support your opinion with arguments.

2. Please describe how you usually use tablets in the classroom. Do your English lessons with tablets differ from the lessons without tablets and how?

3. Were there any pedagogical, organizational, or technological difficulties when using tablets during English lessons? How did you solve these problems?

4. In your opinion, how does using tablets affect students' language skills development? Which language skill(s) can be more improved when using tablets (in comparison to other teaching materials or aids)?

5. Based on your experience, what would you list as advantages and disadvantages of using tablets in the EFL classroom?
