# Teenagers' Attitudes Towards Mobile Technologies: A WhatsApp Example in English Classes

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#### **Abstract**

The aim of this study is to investigate teenagers" attitudes towards the use of one of the mobile technologies, namely WhatsApp, in a language classroom. Mobile technologies include social media tools and they have a great influence on people's lives all over the world. More and more students are spending a great amount of time on social media sites like Facebook, Instagram, Youtube and WhatsApp. With social media tools' becoming an inevitable part of everyday life, researchers have started to investigate their use in education with many studies. With these studies in foreign language education new terms such as Mobile Assisted Language Learning (MALL) and Mobile English Language Learning (MELL) have entered in the literature. Considering the potential benefit of social media tools in English language education and the amount of time students spend on using them, this study was carried out to explore teenagers' opinions about social media, particularly WhatsApp, to support their English lessons. The sample of the study consisted of 50 high school students who were all familiar with mobile technology tools at a private school in Turkey. Descriptive study was selected as a research method and mixed-method research design was used. A 5 point Likert-type survey specifically developed for teenagers and semi-structured interviews were employed in the study. At the end of the study, although there were also some negative remarks, it was found that students have a positive attitude towards the use of WhatsApp, as a supporting tool in English language classroom.

Keywords: mobile technologies, social media, WhatsApp, English as a Foreign Language (EFL), technology integration



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#### **EXTENDED ABSTRACT**

## Introduction

As part of mobile technologies, smartphones are the most frequently used technological devices in everyday lives of people of all ages. Since their invention in 1990s, mobile phones have undergone a great change. In time, mobile phones gained more importance and their various uses have appeared. From devices with which people could only make a call and send short messages, mobile phones have turned into "smart" devices that enable people to have an easy access to all sorts of information which have ultimately started to replace desktop computers as well as notebooks and tablets (Yurdagül & Öz, 2018:1).

Some of the most important features of mobile technologies can be cited as being portable, enabling social interaction and allowing individuality as well as having easy access to information, enabling content creation and information sharing which paved way to finding alternative ways to create a teaching and learning environment.

In this context, mobile learning can be defined as the individuals' being involved in the learning process anytime and anywhere through mobile devices (Şahan et al., 2016: 1231). As well as allowing users to connect and communicate on the go, social media appears in different forms like blogs, vlogs and instant messaging. It is used by people to gather in an online community to interact with one another, such as sharing ideas, opinions, messages, information, and sharing photos, videos leading to easy communication (Pitaloka et al., 2020: 371). Considering the need to have language use in authentic context, social media sites have attracted the learners' as well as the researchers' interest. Given the fact that social media sites have become an integral part of people's lives all around the world and there are even individuals who are addicted to them, the question here remains to be "How can teachers make use of social media tools for a better teaching and learning process?". Indeed, web assisted learning has played an important role for teachers of different levels ranging from

even primary schools to universities to support the learning environment and has been the subject of many studies (Hong et al., 2001: 223-224).

It is now known that social media exists and continues to affect people's lives in many respects. This may be attributed to the web-based services', therefore social media's, features like providing their users with an array of visual, textual and interactive information. In the context of mobile technologies and social media, mobile technologies' providing the users with the opportunity to blend formal and informal learning is said to be an advantage. This is because with mobile technologies students obtain the chance to enriched learning environments that have easy access which is different from formal settings. Furthermore, it is noticed that some social media tools such as WhatsApp is becoming more and more popular every day and has been the subject of many studies (Wijaya, 2018: 46). Starting from 2010, WhatsApp has removed the physical constraints while allowing for a variety of uses. This variety contains features including text messaging, document sharing, group chat, voice and video calls. There are many researches which considered the probable potential of this tool for educational use and conducted research implying its benefits (Aljaad, 2017: 364; Nitza & Roman, 2016: 259). In another study, students were exposed to WhatsApp supported learning environment in which they had higher scores than the students who continued their education in their traditional classroom environment (Shahbaz & Khan, 2017: 77). Specifically speaking for language education, WhatsApp has been found to be beneficial when used as part of language learning (Hassan Taj et al., 2017: 270; Ashiyan & Salehi, 2016: 123).

Moreover, having so many features and being considered as a supporting tool in education, research at the same time suggest that social media tools can also be distracting and may not serve the purpose especially when a new content is introduced (Darghan & Strommer, 2018: 111). It is suggested in the literature that, as part of mobile technologies, social media tools can negatively affect students' outcome especially in spelling and grammar and as for the number of resources available, especially for English, some learners may feel

stuck by having to make a decision (Godwin-Jones, 2019: 8). The reason for the negative impacts found in these studies may be attributed to students' reference to sentence fragments, emoticons, abbreviations and incorrect vocabulary use. In another study which explored EFL EFL students' attitudes towards using technology in English lessons as well as to explore the impacts on academic success, it was found that students' opinions were negative (Çakır & Solak, 2014: 84-85), the researchers aimed to elicit. It is seen that although social media is thought to have benefits with having features like being free from time and place limitations, there are also debates about its use for educational purposes which makes studies investigating educational use of social media more significant (Sundgren, 2017: 3081-3082).

In the case of foreign language learning, it is true that social media use is encouraged with a positive outcome in many studies in the field and there is a great diversity in the tools used by the new generation (Yurdagül & Öz, 2018: 11-12; Şahin-Kızıl, 2017: 37). In a study that investigated the effectiveness of a mobile application, the results confirmed that students enjoyed having mobile devices in their studies especially when dealing with vocabulary while the application enhanced students' confidence in learning and provided a feasible path for individual and cooperative learning (Hao et al., 2019: 208-215). Similarly, in another study the use of vocabulary learning through mobile technologies was looked into in which the experimental group's scores were significantly higher in their vocabulary acquisition (Wang & Shih, 2015: 373).

Within the focus of this study, as it centers WhatsApp, text messages' serving as a facilitator to instant communication can lead to the investigation of their potential in language learning (Li & Cummins, 2019: 56). In this respect, considering the studies for and against social media use in education, this study finds it beneficial to further elaborate on its use in foreign language education, English in particular. Therefore, this study aims to explore the attitudes of teenagers, high school students, towards using a popular social media tool, namely WhatsApp, in English language education regarding their need to share and relationship with the teachers.

## **Purpose**

English language teaching is usually carried out in formal classroom environments with little opportunity to reach students outside the classroom walls and without supporting informal use of the target language. It is suggested that learning environments of English as a foreign language can be enhanced with social media tools' possible assistance to support students. Therefore, it can be interesting and beneficial to discover the potential of social media tools in English language learning and teaching by exploring students' attitudes towards their use.

In line with the aims of this study, the following questions are asked:

- 1) What are the teenagers' attitudes towards using WhatsApp, in English classes?
- 2) What are the teenagers' opinions towards using WhatsApp, in education in general?

## Method

The aim of this study is to explore the attitudes of the English high-school students towards WhatsApp and their opinions about using it in their English studies as well as other studies in their education. Descriptive survey design along with semi-structured interview was used. Survey model opens a path to describe situations that are present or in the past as they are and semi-structured interviews are known to enable researchers to get systematic and comparative data (Yıldırım & Şimşek, 2006: 40-43, 120-128) which this study tries to make use of.

## **Sampling and Participants**

Descriptive studies are usually carried out with large groups. However, there are not many classes which use WhatsApp as a supplementary tool in their English classes. Therefore, in order to get a deeper understanding of the questions presented, purposive sampling method was used in this study. Purposive sampling is defined as choosing specific situations in

terms of achieving information that is rich in nature in line with the aim of the study (Büyüköztürk et al., 2012: 90). The study was carried out at a private school in Turkey. The participants were 50 B1 level high school students continuing their education at grade 10. They had 9 hours of compulsory English lessons every week. The sample consisted of 26 males and 24 females. Their English lessons aimed to provide students with proficiency in reading, writing, listening and speaking skills of language. All the participants knew about and were active users of social media tools, WhatsApp in particular. The students in the study were all members of a WhatsApp group in which their teacher was also a member to assist them in practising the target language, English and had been using it for three weeks before the researcher was allowed in the group. The students were not allowed to use their mobile phones during school except the time for extracurricular activities allocated to them and PE lessons. Various supplementary activities were posted on a daily basis according to the curriculum including the comprehension of each unit with class discussions, target vocabulary items, translations and videos regarding the topic covered in the class. The teacher of the class had 12 years of teaching experience in total and was working in the same institution for 9 years. She was a person who liked following the new trends in her profession and tried to keep herself up to date. The teacher of the class cooperated with the researcher and invited her to the group to follow the process. After observing the class discussions and participations in the group as well as confirming the class teacher for four weeks, the researcher distributed a survey and interviewed students to explore their attitudes toward the whole process.

## **Instruments**

For the quantitative data, a five-point Likert-scale questionnaire developed specifically for teenagers was applied to examine students' attitudes toward social media (Otrar & Argın, 2015: 397-399). The internal consistency of the scale is  $\alpha$ =.85. The items included in the survey included categories as need to share and relationship with the teachers. The need to share

category is made up of 8 questions in total and the category named relationship with the teachers is composed of 3 questions. As for the internal consistency of the sub-categories of the scale for the need to share  $\alpha$ =.80 and relationship with teachers is  $\alpha$ =.85 which shows that there is high internal consistency. 50 students participated in the study. Students were asked to decide at which level they agreed with the following statements (1= totally disagree and 5= totally agree).

For the qualitative data, a semi-structured interview was carried out with five randomly selected students among the volunteers and the researcher asked their opinions about using a social media tool as part of their studies in English lessons and generally for their education. In order to make the items in the survey suitable to this study, the items in the survey were modified to include WhatsApp instead of referring to it generally as social media. The survey included sub-categories and in this study the items in it were used according to the questions that covered "the need to share" and "the relationship with the teachers". Since the survey was specifically designed for teenagers and covered areas to reveal their attitude to social media, the interview questions kept limited and specific to WhatsApp use in general for educational purposes and for English studies. The interview questions were prepared by the researcher and another expert's opinion was referred to. In the first question students' ideas about WhatsApp use in education were asked and in the second question their ideas about its use in English language studies were tried to be explored. Before the actual interview a pilot interview was conducted. The interviews were conducted in Turkish, recorded and later transcribed. The questions asked in the interview are as follows:

- 1. What do you think of using WhatsApp to support your English studies?
- 2. What do you think of using WhatsApp in education in general?

# Implementation

The students were informed about the study and they were asked to fill in the social media survey. Among the students who completed the survey, a semi-structured interview was carried out with five students who were chosen randomly three days after the survey was given.

Table 1 illustrates the mapping of questionnaire items.

**Table 1.**Mapping Survey Items

Questionnaire Items	Question Numbers
Opinions regarding students' need to share in WhatsApp	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8
Opinions regarding students' relationship with their teachers	Q9, Q10, Q11

Table 2 illustrates the items in the survey. Questions from 1 to 8 were about the need to share and questions 9 to 11 were about the relationship with teachers.

**Table 2.**Items in the survey

1	I like making posts that I see on WhatsApp as the topic of our conversation with my
	friends
2	I like making comments on the content on WhatsApp
3	I like sharing things like documents, video and music on WhatsApp
4	I like my posts being liked by my friends on WhatsApp
5	I think I can reach people who have the same interest and goals as me through
	WhatsApp
6	I enjoy spending time on WhatsApp
7	I like finding out about activities thanks to WhatsApp
8	My friends' comments on my posts make me happy
9	I like following my teachers on WhatsApp

10	I like my teachers' following what I write on WhatsApp.
11	My teachers' following me on WhatsApp makes me feel valuable

# **Findings**

# **Analysis of the Quantitative Data**

50 students (N=50) formed the subjects of this research. The mean ratings and the frequency distributions in percentages can be seen in the tables below. As can be seen in Table 3, the overall mean is 72% suggesting that students agreed to the items presented in favour of the application ranking from agree to strongly agree. 9% ranked their scores disagree to totally disagree and 9.5% ranked as undecided. Therefore, it can be claimed that 72% of the students thought that WhatsApp can be used to assist their English lessons.

**Table 3.**Opinions for Need to Share

			Frequency (%)	
Question Numbers	Mean	disagree	undecided	agree
Q1	3.6	10.5	6.5	72
Q2	3.6	5	6.5	76.5
Q3	3.8	11.5	12.5	77.5
Q4	3.6	11	11	75
Q5	3.8	7	19	67
Q6	3.7	8	7.5	74.5
Q7	3.6	12	6.5	64
Q8	3.5	7	6.5	69.5
Overall Mean	3.6	9	9.5	72

Table 4 expresses the efficiency of WhatsApp in serving their relationships with the teachers. It is seen that 76.3% of the students agreed to find WhatsApp as a useful tool for developing their relationships with the teachers.

**Table 4.**Opinions for Relationship with Teachers

			Frequency (%)	
Question Numbers	Mean	disagree	undecided	agree
Q9	3.6	14.5	6.5	84.5
Q10	3.8	5	7.5	77.5
Q11	3.5	9	12.5	67
Overall Mean	3.6	9.5	8.8	76.3

# **Analysis of the Qualitative Data**

After applying the survey, the researcher interviewed five students to get an insight about their opinions regarding using WhatsApp, and their education in general. For the analysis of the semi-structured interview, content analysis was used. Content analysis is defined as a technique that involves summarization of the text according to the messages they convey (Altunişik et al., 2010: 322). Due to the nature of the semi-structured interview technique, there were also many reflections regarding the sub-questions appeared in the interviews which led to obtain themes more than the number of the participants. The interviews revealed that students had positive attitudes towards using WhatsApp as part of their English lessons. Although it was not in the scope of the interview, the interviews also revealed that they had positive opinions regarding their relationships with the teachers. The most frequently occurred themes that came out of the interviews can be seen in Table 5 below.

**Table 5.**The themes from the interviews

WhatsApp	f	%
Facilitating fun learning environment	11	30,5
Increasing motivation	9	25
Providing rapid access	8	22,2
Fostering collaboration	6	16,7
Off topic messages	2	5,6
Total	36	100

Facilitating fun learning environment. Students often mentioned that it was fun to join the activities in the group and it provided a relaxing atmosphere while studying. Students also mentioned it would be appropriate to use WhatsApp in other classes. In this respect student K2 reflected "Well, I don't see why we don't use WhatsApp. It is easy and fun. I always want to know what my friends or my teacher would share there and it's a shame we can't do this in class. Maybe because they don't want us to have fun in classes while studying.. I mean it would be great if we can do this in other lessons as well like Turkish".

Increasing motivation. Students reflected their views as participating in the group formed an enjoyable time while dealing with their studies and this increased their motivation to find out more about their studies. Student K4 "I am always curious about what my friends think about my posts and I am also curious about what they share. This keeps me motivated. We share really useful things there How can I say? It isn't like in the class but we learn new things. I sometimes didn't realize that our teacher assigned us something and it was actually part of the homework because I really liked it and wanted to share more things".

**Providing rapid access.** Students reflected their views on the availability of information with no time and place limit which also led to easy communication. To illustrate, student E1

expressed his views as "It's something we all use. I mean there isn't anyone I know who doesn't use WhatsApp. I am always on the phone and it would be good to see all my friends and the teacher there sharing stuff like what we do at school. Everyone will share things and the teacher is there doing things in English. It doesn't even matter if I am not at home. I have my phone and I can ask anything I want. I am not sure about Maths and physics but we can definitely use it in English."

Fostering collaboration. Students commented that when they participated in the activities carried out via WhatsApp, they also learned from each other. It encouraged collaboration. One of the students E3 reflected "It is already nice. We all like it and help each other maybe because we are also relaxed. We have our own WhatsApp group but it isn't in English of course. I mean we ask about the homework and things there but here it's like everyone helps each other. Sometimes they don't even want to help but it just happens. I mean somebody writes one thing and I write another and we compare and in the end we help out each other and learn I think".

Off topic messages. This is the only negative theme that came up in the interviews. Students mentioned about the disturbances of the irrelevant messages in the group. In this context student K4 expressed her views as "I mean it's OK if they do it in our own WhatsApp group but our teacher had an idea when she set up the group. It's been going on nice and I think we all know why we are in this group and it is different. I mean what's the point of sharing something not about English in this group? But I still like it I must say".

## **Discussion & Conclusion**

Among some of the reasons for users choosing a social media tool are interaction, rapidity and simplicity and it has been argued for long that social media tools may have the potential to enrich learning environments regarding the spreading of information, providing interaction with the teacher as well as being rapid and simple (Oztürk, 2019: 68; Kartal, 2019:

352-361). By the same token, the main purpose of this study was to explore teenagers' attitudes towards WhatsApp and its use in education, specifically in English language education. At the end of the study, it can be suggested in a general framework that the attitudes of students towards WhatsApp were mostly positive. Students mentioned that they would enjoy using a social media tool to support their English studies in parallel with their curriculum. Therefore, the data obtained have led to the conclusion that WhatsApp can be a supporting tool for English language learners at high school. Both the quantitative and qualitative findings suggest that WhatsApp has the potential to be used as a social media tool that can assist English language studies. The results of this small scale study are aligned with many studies that suggest social media tools as supplementary tools in education as they can be considered as an easy and convenient way of practicing the target language (Aşıksoy, 2018: 247; Avcı & Adıgüzel, 2017: 54-55; Çetinkaya & Sütçü, 2018: 511). Specifically speaking, previous researches focusing on social media integration and mobile instant messaging in particular highlight that these tools' having features such as activating collaboration and participation in class, being time and place free platforms contribute to the achievement of educational purposes (Bouhnik & Deshen, 2014: 228-229).

Technology is now part of our lives and has taken up a great amount of place in especially young people's lives all over the world. It is difficult to address the extent these tools can go to. Mobile technologies have transformed the ways to access information. Therefore, it has become more important to consider technological tools as part of learning and teaching environments to improve language proficiency skills. As of January 2020, the number of active internet users is 4.54 billion and WhatsApp has 1.600 million active users (Statista, 2020). In this sense, language education research on this issue is still young when the effects, acceptance and use of mobile assissted language learning are considered and more research is needed to contribute to the field (Hoi, 2020: 146; Manca, 2020: 11). However, it should be noted that even the findings of this small scale study suggest that social media tools like

WhatsApp takes a great place in the lives of people of all ages and can be considered as a path to unprecedented opportunities for educational purposes.

On the whole, the idea in this study is not to promote social media and build expectations towards its creating magic in language classes. The idea here may be considering the positive attitudes of high school students towards social media. Social media tools like WhatsApp can be integrated into language learning environments. This is because they allow students' becoming active agents who have almost constant access to information. Bearing this in mind and considering students' growing interest in social media, it can be given a chance to have a place in language classes where teachers can assign tasks, share different materials and encourage collaboration outside the classroom walls supporting English language education and may be involving other subjects in education as a whole.

#### Limitations

This study is not without limits. First of all, this study should be considered in EFL in Turkish context at B1 English level. Moreover, it was conducted with relatively small number of high school students, 50 students, which should be taken with caution before making overgeneralizations. More research is needed to investigate the possible use and potential benefits of social media tools in different English language learning and teaching contexts as well as in other subjects.

## Suggestions

- As cited above, the participants of this study were teenagers studying at a private school. A similar study can be conducted with the same or different age groups at different schools.
- This is a small-scale study with relatively small group size which makes it difficult to make generalizations. Larger group sizes may give different results.

There are many technological tools and applications. The same study with a different social media tool can be conducted instead of WhatsApp.

#### **Conflict of Interest**

I have no conflict of interest with anyone.

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## **Ethics Committee Permit Information**

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#### References

- Altunışık, R., Coşkun, R., Bayraktaroğlu, S.,& Yıldırım, E. (2010). Sosyal Bilimlerde Araştırma Yöntemleri SPSS Uygulamalı (6.Baskı). *Sakarya Yayıncılık*.
- Aljaad, N.H.M. (2017). WhatsApp for Educational Purposes for Female Students at College of Education King Saud University. *Education*, 137(3), 344-366.
- Ashiyan, Z., & Salehi, H. (2016). Impact of WhatsApp on Learning and Retention of Collocation Knowledge among Iranian EFL Learners. *Advances in Language and Literary Studies*, 7(5), 112-127. http://dx.doi.org/10.7575/aiac.alls.v.7n.5p.112
- Aşıksoy, G. (2018). ELT Students' Attitudes and Awareness Towards the Use of Web 2.0 Technologies for Language Learning. Journal of Language and Linguistic Studies, 14(2), 240-251.
- Avci, H., & Adiguzel, T. (2017). A case study on mobile-blended collaborative learning in an English as a foreign language (EFL) context. *International Review of Research in Open and Distributed Learning*, 18(7). https://doi.org/10.19173/irrodl.v18i7.3261
- Bouhnik, D., Deshen, M., & Gan, R. (2014). WhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education: Research*, 13(1), 217-231.
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2012). Bilimsel araştırma yöntemleri (Geliştirilmiş 11. baskı). *Pegem Akademi*.
- Chartrand, R. (2012). Social networking for language learners: Creating meaningful output with Web 2.0 tools. *Knowledge Management & E-Learning: An International Journal*, 4(1), 97-101. https://doi.org/10.34105/j.kmel.2012.04.009

- Cakir, R., & Solak, E. (2014). Exploring the Factors Influencing E-Learning of Turkish EFL Learners through TAM. *Turkish Online Journal of Educational Technology-TOJET*, 13(3), 79-87.
- Çetinkaya, L., & Sütçü, S. S. (2018). The effects of Facebook and WhatsApp on success in English vocabulary instruction. *Journal of Computer Assisted Learning*, 34(5), 504-514. http://dx.doi.org/10.1111/jcal.12255
- Darghan, D., & Strommer, A. (2018). Cell phone usage and academic performance: An experiment. *Computers* & *Education*, 117, 175–187. https://doi.org/10.1016/j.compedu.2017.10.006
- Godwin-Jones, R. (2019). In a World of SMART Technology, Why Learn Another Language?. *Journal of Educational Technology & Society*, 22(2), 4-13. https://dx.doi.org/10.2307/26819613
- Hassan Taj, I., Ali, F., Sipra, M.A., & Ahmad, W. (2017). Effect of Technology Enhanced Language Learning on Vocabulary Acquisition of EFL Learners. *International Journal of Applied Linguistics & English Literature*, 6(3), 262-272. http://dx.doi.org/10.7575/aiac.ijalel.v.6n.3p.262
- Hao, Y., Lee, K., Cheng, S., Sim, S. (2019). An evaluative study of a mobile application for middle school students struggling with English vocabulary learning. *Computers in Human Behavior* 95, 208-216. https://doi.org/10.1016/j.chb.2018.10.013
- Hoi, V. N. (2020). Understanding higher education learners' acceptance and use of mobile devices for language learning: A Rasch-based path modeling approach. *Computers & Education*, *146*, 103761. https://doi.org/10.1016/j.compedu.2019.103761
- Hong, K. S., Lai, K. W., & Holton, D. (2001). Web based learning environments: Observations from a web based course in a Malaysian context. *Australasian Journal of Educational Technology*, 17(3). https://doi.org/10.14742/ajet.1793
- Ince, M., & Akdemir, Ö. (2013). The investigations of using web 2.0 technologies on English writing skills of students with different learning styles. *Eurasian Journal of Educational Research*, 53, 93-106.
- Kartal, G. (2019). What's up with WhatsApp? A Critical Analysis of Mobile Instant Messaging Research in Language Learning. *International Journal of Contemporary Educational Research*, 6(2), 352-365. https://doi.org/10.33200/ijcer.599138
- Li, J., & Cummins, J. (2019). Effect of using texting on vocabulary instruction for English learners. *Language Learning & Technology*, 23(2), 43–64. https://doi.org/10125/44682
- Manca, S. (2020). Snapping, pinning, liking or texting: Investigating social media in higher education beyond Facebook. *The Internet and Higher Education*, 44, 100707. https://doi.org/10.1016/j.iheduc.2019.100707
- Nitza, D., & Roman, Y. (2016). WhatsApp Messaging: Achievements and Success in Academia. *International Journal of Higher Education*, 5(4), 255-261. http://dx.doi.org/0.5430/ijhe.v5n4p255
- Otrar, M., & Argın, F. S. (2015). Öğrencilerin sosyal medyaya ilişkin tutumlarını belirlemeye yönelik bir ölçek geliştirme çalışması. *Eğitim ve Öğretim Araştırmaları Dergisi*, *4*(1), 391-403.
- Ozturk, L. (2019). Functions and role of social media networks in learning a foreign language: A case study. *International Journal of Advanced and Applied Sciences*, 6, 6, 66-69. https://doi.org/10.21833/ijaas.2019.06.010

- Pitaloka, N. L., Anggraini, H. W., & Sari, A. Social Media for Learning English: The Views of Preservice EFL Teachers. In *4th Sriwijaya University Learning and Education International Conference (SULE-IC 2020)* (pp. 370-377). Atlantis Press. https://dx.doi.org/10.2991/assehr.k.201230.133
- Shahbaz, M., & Khan, R.M.I. (2017). Use of Mobile Immersion in Foreign Language Teaching to Enhance Target Language Vocabulary Learning. *MIER Journal of Educational Studies, Trends, & Practices*, 7(1), 66-82.
- Statista (2020). https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/.
- Sundgren, M. (2017). Blurring time and place in higher education with bring your own device applications: a literature review. *Education and Information Technologies*, *22*, *3081–3119*. http://dx.doi.org/10.1007/s10639017-9576-3
- Şahan, Ö., Çoban, M., & Razı, S. (2016). Students learn English idioms through WhatsApp: Extensive use of smartphones. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi*, 18(2), 1230-1251. http://dx.doi.org/10.17556/jef.72045
- Şahin Kızıl, A. (2017). Exploring EFL Learners' use of WEB 2.0 tools: Preliminary Findings. Pamukkale University Journal of Social Sciences Institute/Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, (27). http://dx.doi.org/10.5505/pausbed.2017.71602
- Wang, Y. H., & Shih, S. K. H. (2015). Mobile-assisted language learning: Effects on EFL vocabulary learning. *International Journal of Mobile Communications*, *13*(4), 358-375. https://doi.org/10.1504/IJMC.2015.070060
- Wijaya, A. (2018). Students'responses toward the Use of Whatsapp in Learning. *Teaching and Learning English in Multicultural Contexts* (TLEMC), 2(1).
- Yıldırım A. & Şimşek H.(2006). Sosyal bilimlerde nitel araştırma yöntemleri. Seçkin Yayıncılık.
- Yurdagül, C., & Öz, S. (2018). Attitude towards Mobile Learning in English Language Education. *Education Sciences*, 8(3), 142. https://doi.org/10.3390/educsci8030142

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