

DOĞU AKDENİZ ÜNİVERSİTESİ YABANCI DİLLER YÜKSEKOKULU'NDAKİ ANDROID SİSTEMLERDE ALMANCA ÖĞRENEN ÖĞRENCİLERİN ALGILARINA İLİŞKİN BİR VAKA ÇALIŞMASI

A CASE STUDY OF A GERMAN LANGUAGE LEARNING PERCEPTIONS OF
LEARNERS ON ANDROID SYSTEMS AT THE SCHOOL OF FOREIGN
LANGUAGES, EASTERN MEDITERRANEAN UNIVERSITY

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Özet

Günümüzde, insanları mobil bilgisayarlarla donatan cep telefonlarında ve tabletlerde teknolojinin gelişmesi ve ayrıca öğrencilerin öğrenmeye uygun ve düşük maliyetli yaklaşım tercihleri nedeniyle, mobil uygulamaları eğitim amaçlı kullanma fikri giderek daha da güçleniyor. Bu nedenle, eğitim amaçlı mobil uygulamalarının avantaj ve dezavantajlarını araştırmak gelecekte sınıfı ve dışı uygulamalarının verimliliğini artıracaktır. Bunun yanında pedagojik formasyon açısından da öğretimi zenginleştirecektir. Bu araştırmanın amacı, Yabancı Diller Yüksek Okulu tarafından verilen Almanca Dil Kursuna kayıtlı olan Doğu Akdeniz Üniversitesi(DAÜ) öğrencilerinin bakış açılarını incelemektir.

Anahtar Kelimeler: Teknoloji, Cep Telefonları, Dil Öğrenme, Pedagojik Formasyon

ABSTRACT

At the present time, with the advancement of technology in mobile phones and tablets which have equipped people with mobile computers, and because of students' preferences for convenient and low-cost approach of learning, the idea of using mobile applications for educational purposes is gradually getting stronger. Hence, it is essential to investigate about the benefits and drawbacks of using applications in education and develop this idea in order to improve and prosper the future of pedagogy and expand it beyond classrooms.

The aim of this research is to analyze the viewpoint of the Eastern Mediterranean University (EMU) students, who are registered to the German Language Learning course (ELT502) which is given by the School of Foreign Languages.

In this research, a quantitative approach was used, and the required data was gathered through questionnaires which were responded to by the students at the School of Foreign Languages and has been analyzed by SPSS 25. The results of this research illustrated that students were satisfied by using this type of education and are willing to utilize it again in order to improve their language learning skills. Along with the results, this research has provided some recommendations like applying the efficient methods in M-Learning in order to improve the learners' language learning process.

Keywords: Technology, Mobile Devices, Education, Language Learning, Pedagogy

Introduction

In this century, technology and computers have been distributed all around the world. Therefore, they have significantly affected humans' lifestyle and condition in every aspect. It also had a vast influence on education. Nowadays our pedagogical system includes E-learning, distance learning, mobile learning (M-Learning) and ubiquitous learning (U- Learning).

E-Learning is explained in various approaches, but one of the most suitable and comprehensive definitions belongs to Stockley (2003). According to him:

E-learning is the delivery of a learning, training, or education program by electronic means. E-learning involves the use of a computer or electronic device (e.g., a mobile phone) in some way to provide training, educational or learning material.

It is not a novel idea, but technology could fortify it a lot during the last decade. Distance learning was founded many long times ago by instructors via sending lessons, introducing references and receiving students' assignments by mail (Moore, 1990). Nowadays E-Learning prepared the environment for mobile learning (M-Learning) so that computers and smart devices can play teachers role and media can transfer the required information.

At the present time, because of the alteration of lifestyles, most people are very busy with their jobs and get involved in daily routines, so they cannot participate in physical classrooms. Hence, M-Learning can be a proper alternative for them. Here are some remarkable advantages of M-Learning:

- Provides ubiquitous learning environment
- Improve learners' skills in using computer and smart devices
- Admire learners to be autonomous
- Convenient time management
- Lower total costs
- Variety of courses and sources
- Convenience in discovering courses and sources
- Ease of update
- Scalability

The quality of education is measured by the methods and approaches that teachers implement while teaching. Today there are numerous methods for pedagogical aims, but teachers need to choose the most beneficial methods regarding the subject, the atmosphere of the class and level of learners, in order to maximize their comprehension, meditation and their solo and group activities, because one of the main purposes in education is to enhance the collaboration and social skills (Johnson, 1981). Therefore, it is significant to select the right methods to ameliorate the educational level. In the same way, effective M-Learning relies on learning methods appropriately selected and implemented. But the main issue is which methods are feasible to be implemented on computer devices and how to run them.

The technology has given us lots of tools and facilities which makes the teaching and learning process more effective and more convenient. With the development of portable and mobile devices, education has transferred beyond the walls of schools. Hence, learners don't necessarily need to be in classes physically.

The facts and figures illustrate the widespread use of smartphones and tablets in the last decade. Most young people have smart phones, so it will provide a good opportunity for language learners to learn and practice on their smartphones which are usually accessible. And as Campitelli and Gobet cited: Although other factors in learning such as intelligence and motivation affect performance, practice is necessary if not sufficient for acquiring expertise (Campitelli & Gobet, 2011).

There are diverse operating systems on smartphones and tablets such as Android, IOS, Windows, Symbian, et cetera. For providing an application on one of these systems, it is compulsory to find out which one runs the mentioned application in the best way, and which one has the highest market share due to the lack of time and manpower to create the application on all operating systems. Thus, this research embraces two aspects, the first one is educational, and the other aspect is related to software development. The educational aspect includes the contents and the course material which will be applied on the application, and it is necessary to be comprehensive and verified so that learners can trust the courses presented by the application. Additionally, it requires different learning methods such as learning via listening, observing pictures, doing exercises, et cetera. which makes the application more interesting for students and prevent it from being invariable. The variety of methods will also help to increase the efficiency of the course material. There are numerous factors for a software developer to deploy an app. First, the developer should decide on which system he/ she will create the application and by using which tools and languages for programming. Afterwards it is essential to choose the appropriate method for developing the software according to the subject, complexity, requirement, time, etc. Distance learning is a type of education that concentrates on teaching methods and the technology which will be applied in order to deliver teaching and the required information to students who are not physically present in a conventional pedagogical setting such as a school or university classrooms. It has also been defined as "a process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both." (Honeyman & Miller, 1993, p. 68).

The genesis of distance education goes to mid-19th century in Europe and the United States. They used to apply the latest technology of their own time to support learners who were not able to attend the classes physically, or are in a remote location, or work full time and those who want to study more autonomously. There are various types of distance education including CD-ROM Courses, Online Learning, Correspondence Courses, Tele-Courses and Mobile Learning which is the main subject of this thesis. According to (Agah T. Koruc & Ayse Alkan, 2011), the terms 'Mobile Learning' and 'Distance Learning' are used interchangeably although they have disparate meanings. D-Learning is more comprehensive in comparison with M-Learning and M-Learning is one of the most recent versions of D-Learning. Hence, Mobile Learning can be mentioned as a specific form of Distance Learning. M-Learning is described by most researchers as a method of leaning experiences via portable devices such as Laptops, tablets, Smart phones, etc. These devices along with the internet have made M-Learning possible thus, teaching and learning has crossed the classroom walls and there are no physical boundaries in education anymore. Now a days, Mobile Learning are popular because students are able to access and employ contents and instructional materials more convenient regardless of the time and place. Accordingly, demanding for online courses is increasing. In 2013, there were 5,522,194 learners enrolled in any distance education courses at degree-granting postsecondary institutions (U.S. Department of Education, National Center for Education Statistics, 2016) and online registrations is growing all around the world.

Mobile learning is a tremendous revolution in learning world, since in this type of learning there are no classrooms to force students to attend, and it would be completely voluntarily, therefore the learners are more eager to study and it make them more autonomous.

There are different types of Mobile learning and here we are introducing some categories of Mobile learning:

Tech-driven M-Learning: There are some specific devices which were innovated only for pedagogical purposes to indicate the technical capabilities in education.

Miniature and also portable E-Learning: In this category, all the wireless, handheld and ubiquitous technologies are applied to execute methods and approaches which were already used regularly in E-Learning, in the form of websites or Apps.

Linked classroom learning: The mentioned technologies are also used it classrooms to perform collaborative learning and to increase the speed of teaching and practicing such as smartboards.

Informal, personalized, situated mobile learning: The same technologies plus some additional functionalities like GPS or camera on the smart phones which can be utilized for some educational exercises that would otherwise be inconvenient or impossible.

Remote, rural, development mobile learning: The mentioned technologies can be applied to address the environmental and physical difficulties in order to support education and to deliver the context where conventional E-Learning is not efficient anymore.

This research embraces Miniature and also portable E-Learning type of M-Learning. Hence it is essential to choose the most efficient methods which their implementation is feasible on these devices.

One of the most crucial and difficult parts of learning a new language is learning and memorizing vocabulary as Thornbury (2004) cited; vocabulary is generally a matter of remembering, dissimilar to e.g. grammar learning, which is based mainly on rules.

There are various effective methods for learning vocabularies such as using photos as Wright (1990) pointed out that pictures are inspiring and draw learners' attention.

Wright has also mentioned that images provide sense of context of the language and give particular reference point. The other method which is implementable on Apps is using sound to hear the pronunciation of the words.

McCarthy (1992) has also cited that besides explaining the meaning of a word, it is also substantial to concentrate on forms, because the sound of words is one of the aspects that affect the organization of the mental lexicon.

Because of the hustle and bustle of today's life, many learners would not have free time to spend on traffic jam to reach the classroom and many students do not appreciate to learn at their office desk.

Therefore, the biggest benefit of mobile learning is its intrinsic capability to provide anytime-anywhere learning environment for learners. Joseph Katz defined general education as "the knowledge, skills, and attitudes that all of us use and live by during most of our lives—whether as parents, citizens, lovers, travelers, participants in the arts, leaders, volunteers, or Good Samaritans"

(AAC 1988, 3). At the present time, computers and operating systems have embedded in many devices such as mobile phones, telephones, TVs, and even most of modern house hold appliances.

Therefore, it is one of most significant criteria of an educated person to be capable of utilizing these systems and devices, and one of the benefits of M-Learning, particularly for older learners, is that it compels them to improve their skills for using these systems.

Luiz Fernando Capretz, Abdalha Ali and Abdelkader Ouda (2012), measured the quality of the Mobile Learning experience based on the usability of the software which is representing a course.

Considering ISO/IEC-9126-1, usability contains the comprehensibility, learnability, feasibility, and attractiveness. The most substantial criteria for representing a course is its understandability which has a direct relationship with the user interface.

Usually the best way for designing an efficient and comprehensible interface is to make it simple, so it does not confuse users and utilize variety of colors and appropriate font sizes to conduct learners which parts to pay attention more.

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Furthermore, by using a quality index based on learners' perceptions (OLQ-TLP) which includes eleven categories: "learning support, social presence, instruction, learning platform, instructor interaction, learner interaction, learning content, course design, learner satisfaction, knowledge acquisition, and ability to transfer" proposed that the most important variables, according to the teachers' perceptions, are "social presence, instruction, instructor interaction and learner interaction" and high rated variables from the students' point of view are "ability to transfer, knowledge acquisition, learner satisfaction, course design, learner content and learner interaction". Consequently, it is highly recommended to educational App developers to design a section so that students can have social activities there and have interactions with instructors and other learners.

Wen-Hsiung Wu, Yen-Chun Jim Wu, Chun-Yu Chen, Hao-Yun Kao, Che-Hung Lin & Sih-Han Huang (2012) examined M-Learning via meta-analysis of 164 studies between 2003 and 2010 and the final results of that survey are: 1) The most effective criteria of a M-Learning system is the design of it. 2) The research results of the M-Learning studies are remarkably positive. 3) Mobile learning is more widespread at higher education institutions. 4) The most common devices that are utilized for M-Learning are mobile phones and PDAs but it will be replaced by the new technology. Creating a strong framework for Mobile Learning depends on three crucial elements that are integration of tools, pedagogical approaches, and assessment techniques. These elements lead instruction method to a student-center approach and carry out Constructivism as a theory that describes the learning procedures. It is necessary that teachers should check the learning strategy of the Mobile Learning system because the lack of effective teaching strategies may cause an unsuccessful learning.

Tom H Brown (2003) explains the role of M-Learning in the future of E-Learning and its educational qualifications by reviewing the impacts of M-Learning in South Africa. He has also explained the difference between E-Learning and M-Learning and its benefits and drawbacks along with introducing some models for M-Learning via mobile phones in 2003 and 2004. He believes that the challenge is to design and develop proper learning environments and softwares, based on sound instructional principles in order to optimize learning in the M-Learning environment. Nowadays most of students own smart phones with the ability to connect to the internet and it is beneficial to develop a didactical environment on these devices to engage the distance learners with courses while at home or work, or on a journey.

Methodology

This study took place in School of Foreign Languages at Eastern Mediterranean University. As a population, the beginner level students who are involved in German language learning are going to be worked with. Regarding the reliability and validity the researcher will use a questionnaire which is already published by: Chen, X. B. (2013). Tablets for informal language learning: Student usage and attitudes. *Language learning & technology*, 17(1), 20-36. The permission from the author of this article has already been taken. Finally the findings from then questionnaire are going to be analyzed by using the SPSS program. This thesis requires the basic knowledge of German language, Java programming and the knowledge and ability to employ the methods inside of the application. So the researcher should be able to speak the German language and to be able to recognize and implement the most useful and exciting methods for the language learners of German. The researcher needs to gather data from language learning books about the division of information and components in every lesson and pay attention to the proper numbers of exercises per each lesson.

The next phase of the thesis is the programming. For developing an application the developer should decide which operating system he/she wants to run the application on. The researcher decided to choose the android operating system due to its large market share with the percentage of 85 in comparison to others including IOS and windows with the proportion of 14.7% and 0.1% respectively. Therefore, to design an application on android, the developer needs to choose a developer tool and the best and newest one for android is the Android Studio.

Android Studio has two phases, the first one is the User Interface designing which is really significant, because the language learners will observe the interface and if it is not pleasant enough they would not get attracted to the application and lose the interest. The other phase is programming. The language used for programming with this tool is Java. In this phase the developer applies the whole logic and structure of the application which is the most important part of the application.

Methodology

This research applied questionnaire as an instrument for collecting data about the language learners' perception about E-learning and use of technology in education. The questionnaires had been distributed to students and necessary explanations had been made for them. Any project requires appropriate instruments for achieving determined goals. Like all projects, a researcher requires some instruments and approaches for gathering required data and information. According to the subject and the field of a research, researchers utilize different method of data collection such as questionnaire, interviews, observation, tests, video and audio record and etc.

The students who studied German language at the School of Foreign Languages at Eastern Mediterranean University were the participants of this research. These students were from different countries such as Turkey, Jordan, Cyprus, Libya etc. with different educational background that is to say not all of them studied German as a foreign language before. They have various aims for learning German language, some of them mentioned that they want to become a teacher, some of them are willing to go to Germany and a few would like to just pass the course. The participants were between 20 and 26. It was on voluntarily basis to participate into the research in order to collect information about the M-Learning courses and their habits in use of electronic devices in educational purpose.

Data Analysis

The SPSS v.25 was used to analyze the quantitative data. All the gathered data from the questionnaire was entered into SPSS in order to analyse and reach for the findings. The value of mean and median of the collected data have been calculated in order to demonstrate that it has been distributed correctly. Also by applying one-sample t-test the significance level of all items are revealed to show how correct the statistical evidence was. The goal of analyzing data and information was to gain usable and effective information via examining, cleansing and modeling gathered data. The researchers needed to analyze all the data they have gathered in order to illustrate the data and comprehend the all of the participants answers accurately. This was one of the most important phases of the research strategy. If the researchers understood the collected data incorrectly, it could cause trouble to all phases of the research. Therefore it was critical to analyze data precisely.

Findings and Discussion

All the students who studies German Language at the School of Foreign Languages were surveyed about the effectiveness of using mobile phones and tablet computers in their quality of learning of foreign language during their academic program. For doing so, thirty 5-point Likert scale questions were designed. In the 5-point Likert scale, point 1 is represented for "Strongly Disagree", point 2 is represented for "Disagree", point 3 is represented for "Neutral", point 4 is represented for "Agree", and point 5 is represented for "Strongly Agree".

Table 1. The participants' point of view of using tablet computers in language learning.

	Mean	Median
Q1. I find the tablet computer cumbersome to use.	3.67	4.00
Q2. Learning to use the tablet computer is easy for me.	4.06	4.00
Q3. Interacting with the tablet computer is often frustrating.	2.67	3.00
Q4. I find it easy to get the tablet computer to do what I want it to do.	4.06	4.00
Q5. The tablet computer is rigid and inflexible to interact with.	3.00	3.00
Q6. It is easy for me to remember how to perform tasks when using the tablet computer.	4.06	4.00
Q7. Interacting with the tablet computer requires a lot of mental effort.	2.75	3.00
Q8. My interaction with the tablet computer is clear and understandable.	4.00	4.00
Q9. I find it takes a lot of effort to become skillful at using the tablet computer.	3.19	3.50
Q10. Overall, I find the tablet computer easy to use.	3.88	4.00
Q11. Using the tablet computer helps me a lot in foreign language learning.	4.19	4.00
Q12. Using the tablet computer gives me greater control over my learning of the foreign language.	3.88	4.00
Q13. The tablet computer enables me to accomplish learning tasks more quickly.	3.81	4.00
Q14. The tablet computer supports critical aspects of my study.	3.69	4.00
Q15. Using the tablet computer increases my learning outcomes.	3.88	4.00
Q16. Using the tablet computer improves my foreign language performance.	3.81	4.00
Q17. Using the tablet computer allows me to accomplish more learning tasks than would otherwise be possible.	3.50	4.00
Q18. Using the tablet computer enhances my effectiveness on study.	3.88	4.00
Q19. Using the tablet computer makes it easier to study.	3.88	4.00
Q20. Overall, I find the tablet computer useful in my study.	3.94	4.00
Q21. I find it interesting to use the tablet computer for foreign language learning.	3.94	4.00
Q22. I find it interesting to participate in the project.	3.69	4.00
Q23. I find it interesting to carry out tasks on the tablet computer.	3.81	4.00
Q24. I am willing to continue using tablet computers for foreign language learning.	4.06	4.00
Q25. I am willing to participate in any follow-up research on tablet-assisted language learning.	3.88	4.00
Q26. I am willing to carry out more tasks on tablet computers.	3.56	4.00
Q27. I am happy to have learned more about how to use tablet computer for foreign language learning.	4.06	4.00
Q28. I am willing to learn more about how to better utilize tablet computers to learn a foreign language more effectively.	3.81	4.00
Q29. I am satisfied with the functions offered by the tablet computer.	3.63	4.00
Q30. Overall, I am satisfied with using tablet computers for learning a foreign language.	3.81	4.00

According to the table (41), the value of mean and median in all questions are close together and even in some questions they are exactly same. This fact illustrates that the data has been distributed normally. As it can be observed in the table, all means and medians are above 3 except means of questions 3 and 7 showing the tendency to "agreement". Among all, the answer to question 11 has the highest mean value showing the tendency to "strongly agreement". Answers of question 11 (Using the tablet computer helps me a lot in foreign language learning) reflect the usefulness of using table in learning of a foreign language. In order to realize which items are significant, one-sample t-test has been applied in this research and the results of this test are presented on the next page. According to the p-value in the t-test table, it reveals that all the items except questions 3, 5, 7, 9, 13 and 26 are significant. Based on the mean values it is seen that in general students were not agree that using of table either need a lot of mental effort or is frustrating, although based on the related standard deviations students have different opinion about these considerations. Based on the computed standard deviations students have the most degree of dissension about question 20 (Overall, I find the tablet computer useful in my study) with the standard deviation 1.389.

Table 2. One-sample t-test
 Test Value = 3

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Q.1	3.162	14	.007	.667	.21	1.12
Q.2	4.576	15	.000	1.063	.57	1.56
Q.3	-1.160	14	.265	-.333	-.95	.28
Q.4	4.000	15	.001	1.063	.50	1.63
Q.5	.000	15	1.000	.000	-.55	.55
Q.6	5.506	15	.000	1.063	.65	1.47
Q.7	-1.074	15	.300	-.250	-.75	.25
Q.8	4.140	15	.001	1.000	.49	1.51
Q.9	.716	15	.485	.188	-.37	.75
Q.10	3.217	15	.006	.875	.30	1.45
Q.11	4.842	15	.000	1.188	.66	1.71
Q.12	3.217	15	.006	.875	.30	1.45
Q.13	2.931	15	.010	.813	.22	1.40
Q.14	3.467	15	.003	.688	.26	1.11
Q.15	2.671	15	.017	.875	.18	1.57
Q.16	2.546	15	.022	.813	.13	1.49
Q.17	1.581	15	.135	.500	-.17	1.17
Q.18	3.050	15	.008	.875	.26	1.49
Q.19	3.217	15	.006	.875	.30	1.45
Q.20	2.700	15	.016	.938	.20	1.68
Q.21	2.798	15	.014	.938	.22	1.65
Q.22	2.551	15	.022	.688	.11	1.26
Q.23	3.105	15	.007	.813	.25	1.37
Q.24	6.249	15	.000	1.063	.70	1.42
Q.25	3.656	15	.002	.875	.36	1.39
Q.26	2.058	15	.057	.563	-.02	1.15
Q.27	3.782	15	.002	1.063	.46	1.66
Q.28	2.546	15	.022	.813	.13	1.49
Q.29	3.101	15	.007	.625	.20	1.05
Q.30	3.105	15	.007	.813	.25	1.37

The research outcomes showed that most of the students believe using smart devices are convenient and they usually find it appealing. The research results also illustrated that the greater number of learners remember how to perform tasks on the smart devices, and they have also mentioned that their interactions with these devices are clear and comprehensible.

Although the lack of interest and the confusion in utilizing the smart devices from behalf of learners used to be one of the main problems in D-Learning and M-Learning as discussed in the introduction, the young university students had shown enthusiasm and flexibility in using technology for learning which solves many problems in this field. Moreover, most of the learners who had previously tried learning a new language with mobile phones and tablets, believe that it was effective and helpful, and they were willing to use these devices continuously.

On the contrary, one of the most substantial drawbacks and problems of the mobile learning as stated by Ustunloughlu, E. (2009), is the difficulty in engaging the students. Ustunloughlu believes that students do not sufficiently autonomous without the presence of a teacher. Therefore, it is necessary to create enough interest and motivation in people to use mobile phones or tablets for educational purposes. The results of the research illustrated that most of the educational Apps suffer from the lack of proper learning strategies and quality. (Chu, Hwang, Tsai. 2009) also cited that one of the main existing problems in learning a foreign language through smart devices, is the lack of proper learning strategies and facilities that can allow students to learn a new language via mobile Apps. Therefore, it is highly recommended to have a skilled instructor in charge of representing and controlling the course materials.

What is more, McCarthy (1990) and Wright (2004) expressed the significance and effectiveness of using pictures and sound in learning a new language. Creating a task-based environment causes more repetition for learners and it will accelerate the process of learning. Also, to motivate students to practice the new language more, it is beneficial to create an opportunity for them to communicate with other learners or experts. There are some approaches which are novel and can be applied on smart devices as well such as: 1) Asking students to take picture from every new word they learn and upload it and share it with other learners in order to help them in more efficient memorising, 2) Embedding some games in the learning App which will be done by learners through writing or speaking with the device in German, 3) Creating the possibility for learners and encouraging them to communicate not just with writing or uploading pictures, but also with uploading music with lyrics and videos.

Conclusion and Suggestions

To conclude, some of the most popular methods which can be used in language learning are as follows:

- 1) Creating a task-based learning environment,
- 2) Using pictures instead of explaining something for learners,
- 3) Applying vocal method for learners which is tremendously effective in vocabulary learning,
- 4) Encouraging students to communicate with each other.

Some novel approaches that can be applied on smart devices are:

- 1) Asking students to take picture from every new word they learn and upload it and share it with other learners in order to help them in more efficient memorising,
- 2) Embedding some games in the learning App which will be done by learners through writing or speaking with the device in German,
- 3) Creating the possibility for learners and encouraging them to communicate not just with writing or uploading pictures, but also with uploading music with lyrics and videos.

One of the main existing problems in learning a foreign language through smart devices, was the lack of proper learning strategies and facilities that can conduct students to learn a new language via mobile Apps. The other problem was the lack of independency in students without the presence of a teacher. The majority of the learners believed that using smart devices were convenient and they usually found it appealing. The larger number of students mentioned that their interactions with these devices were clear and understandable.

Most of the learners who have previously tried learning a new language with mobile phones and tablets, believed that it was effective and helpful, and they are keen on to use these devices continuously. It is highly recommended to design a simple and user-friendly environment for the App to reduce the complexity and increase the efficiency. As emphasized in the introduction, “M-Learning” is an effective learning approach, so it represents courses materials to learners regardless the time and place. Nowadays as supported by other researchers such as (Keegan, 2002) and (Caudill, 2007) the M-Learning will grow in future due to the advances in hardware and software technologies. Traxler (2005):

“Any educational provision where the sole or dominant technologies are handheld or palmtop devices”

The traditional teaching and learning method are under attack from many criticisms, particularly who supports the constructivist teaching approach which focuses on the students’ activity and endeavour. These facts guided the researchers to apply the methods in application which gives opportunity to students to become an active learner by creating a student centre environment which engage them in learning by doing different types of exercises. On the other hand, this research had increased the researchers’ programming skills in order to carry out a substantial project and implement the ideas and algorithms to create an App for Android devices. But the main question is, what makes a successful language learning App? The answer to this question is that the App should have the ability to attract learners and users and encourage them to use the App and learn more. The application requires to have an appealing and user-friendly interface, so it does not intimidate and make learners reluctant from learning a new skill. It is also essential to have various methods and types of exercises which students find them interesting, so it helps them to study more efficient and increase their enthusiasm for more learning.

For future research, it can be suggested that this research had only been applied to German language; however, this App can support other languages as well in order to foster online teaching-learning by using the latest technologies and teaching/learning methods. Only the first lesson of this App has been prepared due to the lack of time and manpower. This App will be completed and will support all courses required for beginners in German.

Applying “*Communication Segment*” in the App enhances the quality of mobile learning and give students the opportunity to communicate with others and experts as well.

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