A STUDY ON USING STUDENT VERSION OF INTERACTIVE WHITEBOARD SOFTWARE IN SMART PHONES IN LANGUAGE EDUCATION•

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Abstract

Material choice is an important factor in language learning and including technological tools in these material set has positive effects on learners' success because many students do not buy book but use smart phones for reading PDF or other materials. Students tendency of using smart phones also helps them in enjoying the process of using whiteboard software which is one of the favorable classroom material. Because, teenagers in the 21st century like using technological tools and including them in the learning practices increases the success and classroom atmosphere by getting students' attention. Technological tools in the learning atmosphere help students in acquiring the required knowledge in an easier way. Understanding the students' tendency to use smartphones and technological tools in addition to their positive effects on the learning process, this quantitative survey design study aims to find the participants' ideas about using the student version of whiteboard software in the classrooms with the help of their mobile phones if it is possible, and benefits of selling that software through Google or Apple markets by using 278 participants. The study supports the positive effects of technological tools on language education process.

Keywords: Interactive Whiteboards, Smartphones, Course Books, ELT, Material.

1. Introduction

There are too many differences in people's lives when 20 years ago and today are compared. Social, economic, and educational habits started to show developments with the addition of new technologies into the daily lives of the individuals. One of the biggest development in human life is the increasing use of smartphones in addition to tablets and PCs which have an older history in the social life.

Many people use smartphones for their job, social life, communication, and banking transactions and this using amount is increasing day by day with the addition of new phone models. Smith (2013) and Poushter (2016) express their increasing use of smartphones in their studies. As mentioned in Smith (2013), the percentage of people using smartphones in the World increased 56% from 35% in 2013 while the use of other cell phones decreased to 35% from 48% and no cell phone use to 9% from 17%. Poushter (2016) who examined the same subject in the same research center between 2014 and 2015 found out that 68 % of the people use smartphones in advanced economical countries and this percentage is 37% in developing and underdeveloped countries. Poushter (2016) also gives the median of the smartphone use in the World as 43%, and Turkey is above this percentage with 59%. It is understood from these studies that people in the world have a desire to use smartphone, and this desire captures new individuals in every moment. According to the study of Crossland, Silva, and Macedo (2014), even people with no vision or some vision impairment use smartphones. Although they have problems with their vision, 81% of the participants in the study of the researchers expressed that they use smartphones. This high use of smartphones makes them inevitable items to give up.

The increase in smartphone use also affected the amount of e-book reading. People read e-books through their PCs, tablets or e-book readers but smartphones removed the difficulty of being depended on an extra device for reading as they are always with people in their daily lives. The increase in e-book reading is supported with many studies such as Nicholas, Rowland, Clark, Huntington, Jamali, and Olle (2008) and Shelburne (2009). In the first study, Nicholas (2008) et al. found that 60,1 % of the participants in their study use smartphones. This percentage is very close when the students and teachers are analyzed separately. This finding also supports that e-books can be used in education and the most important two elements (teachers and students) in that process are willing to use them. The increase in the education level also increases the use of e-

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books as postgraduate students benefit from these kind of sources more than undergraduate students. Shelburne's (2009) study which includes 47000 participants also support Nicholas et al. by mentioning that e-book awareness and use is accepted by the graduate students, undergraduate students, and academic staff of the faculties and this awareness and usage is increasing quickly.

The study of Shelburne (2009) reveals the high use of e-books by expressing that 60% of the graduate and 55.5% of the undergraduate students who participated the study use e-books. Using these kinds of sources help students to reach information more quickly and economically. In addition to their disadvantages such as difficulty of reading from the screens, problems related with touring in the text, and problems about the materials, there are significant advantages of using e-books mentioned by Shelburne (2009) as instant access, being able to use keywords, being free about reaching the materials from anywhere, probability, and environmental benefits. It is clear from the study of Shelburne that e-books are used a lot and their benefits are more than their disadvantages. Students are able to reach the materials quickly and freely. Using e-books also has advantages in the learning process. Huang, Liang, Su, and Chen (2012) found in their study that using e-book can provide a better-individualized learning activities although it does not have any positive effect on reading accuracy. Another study by Wright, Fugett, and Caputa (2013) touch the point about e-book using's effect on increasing the willingness of using reading materials.

In the book named as "The Interactive Whiteboard Revolution: Teaching with IWBs", Betcher and Lee (2009) wrote in the foreword that "The realization that the IWB (Interactive White Board) could allow a computer screen to be displayed to an entire- and the potential this offered- was something that amazed me" (p. III). The writers try to explain the effect and importance of IWBs which is defined as "the entire set of programs, procedures, and related documentation associated with a system and especially a computer system" (www.merriam-webster.com/dictionary/software) in Merriam-Webster dictionary. This software is an important technological gadget or a developed version of e-books with additional audio and visual supports and used in education to attract students' attention and increase their motivation. This software can provide hypermedia elements, help students or teachers to use the listening exercises and their scripts only by clicking the right point, able the user to draw pictures or write on the pages of the books, provides the answer key of the exercises in addition to games and extra activities. In order to be able to use it, four components such as computer, projector, a software and display panel are needed (Schmid, 2008). According to Betcher and Lee (2009), these IWBs created a revolution by taking the place of blackboards. Teachers started to use this software instead of writing or drawing on the board. They are able to provide 3D visuals and realistic sounds.

Using IWBs in the education process has beneficial sides. Murcia and Sheffield (2010) express the benefits of IWBs on teaching and learning science and increasing the student motivation. As it is one of the difficult duty of a teacher to pass the psychological barriers and increase student motivation, an IWB can be helpful if used correctly. Wood and Ashfield (2008) explain the effects of it as increasing the whole class acquisition and helping to increase the quality and speed of learning. IWBs effect of increasing the success in the classroom is also mentioned by Swan, Kratcoski, Schenker, and Hooft (2010) who examined the math scores of students from different grades. It is understood from both studies that IWBs not only help learning and increasing the acquisition level, it can also be used in motivation and self-esteem increasing processes.

Engagement and enhanced motivation, promoting the learning, helping different learning types, and perfect connection with hypermedia elements (Schmid, 2008) are the pedagogical benefits of using IWBs. As mentioned in the paragraphs, using IWB increases the motivation by providing visual elements in the courses. Hypermedia namely audio and visual support is one of the most important factor that provides this happening.

Contrary to the classical PPP (presentation, practice, production) model, IWB can reach different stimuli with audio-visual support. This help teacher to use various teaching styles in the classroom that addresses the students who have visual, aural, physical, verbal or logical learning styles. Akbaş and Pekdaş (2011) also support the positive effects of IWBs and indicate the innovations of the software as capturing (relations with other software), emphasizing (colouring or movement), storing (write and draw then save them), annotating notes (get notes on it), games, and linking (being able to link it with internet sites and other document styles).

High use of technological gadgets changes people's lives. Nalliveettil and Alenazi (2016) found in their study that 87 % of the students who participated their study use mobile phones with an English dictionary, 75% of them have smartphones, and majority of these students spend 4 hours every day on their phone. They use

their phone more than spending time with their families or studying lesson. They can be addicted to technology, but this addiction can be used beneficially if planned properly. Larson (2010) mentions that a device can store hundreds of books, newspapers, magazines etc. This means all the books that student will use in a school term can be stored in smartphones and using these books can be easy and more enjoyable if combined with an adapted version of whiteboard software that can be used in smartphones as an android or ios application. Using the course books with an adapted application of IWB will have economic and ecological benefits in addition to increasing the students' motivation and willingness for the courses. By taking into consideration the high use of technology and benefits of using IWB, this study examines the students' ideas about using the students' versions of whiteboard software in the classrooms with the help of their mobile phones if it is possible, and benefits of selling that software through android or ios markets.

According to the main aim of the study, research questions were developed as:

Is the whiteboard software used in the classroom beneficial?

Would it be beneficial if you were able to use the student version of whiteboard software in your phone?

Would you buy the students version of the whiteboard software if it were sold in google or ios stores?

2. Method

2.1. Research design

Aim of this study is to understand students' ideas on using electronic course books in their smartphones. Because of this reason, survey research design is used in this quantitative study in order to be able to collect as much information as possible in a short time. As mentioned in Creswell (2005), this type of design is used to understand the attitudes, opinions, behaviors or characteristics of the group or sample of a group. Using students' ideas and desires in the designing process of the education system increases the success. So, it is significant to understand students' opinions about technology and use of this technology in education and survey research design is an effective method to use while realizing this aim. Cohen, Manion, and Morrison (2000) also support Creswell by mentioning that surveys collect data in order to describe the nature of a situation or explain and relate the existing conditions. Understanding the need and benefits of using electronic sources in the language classrooms is an important step to pass in addition to the students' attitudes on using technology and smartphones in the classroom. Survey research design is also helpful in understanding the real situation, namely to answer the question that why university students should use electronic books in the courses.

Data in this study only comprises university students' general opinions about using whiteboard software version of course books in their smartphones in the 21st century. So, a cross-sectional survey design which requires the collection of data at one point in time is used by the researcher. This design was chosen by taking the Dörnyei's (2007) ideas into consideration because the writer expresses that cross-sectional design is beneficial as the researcher does not have to keep in touch with the participants for a long time that you do not need to spend extra time for their motivation, the analysis of the cross-sectional design is easier, and it is easier to protect your study against unexpected effects of the external factors. The research only aims to understand the ideas of the students in this era as the characteristics and attitudes of the community changes with time and technological advances. Because of this reason, it will not be proper to collect data in a long period.

2.2. Participants

131 male and 147 female participants who were studying in different departments of a state university joined the study. Convenient sampling method which is described by Fink (2003) as a sampling method which includes the individuals that are ready for the researcher was used. All of the 278 students were studying at the university in which the researcher is working, and it became to be easy for the researcher to reach the participants. The participants were very willing to take part in the study which means it was not compulsory for them to join this research.

2.3. Data collection and analysis tools

All the participants were studying in the same university but different departments. They used the whiteboard software of their course books in the classroom before the study. This software includes the pages of the book, audio recordings, and videos related with the course subjects. After the end of the first term which means having 14 hours of English course by using this whiteboard software, students are asked to answer the

questions of a survey designed by the researcher. The survey designed by the researcher because of insufficiency of related materials and desire of having direct answers to the research questions.

Data were analyzed with descriptive statistics, frequency analysis, and crosstab methods in SPSS software. These methods meet the aim of the study as a general understanding was tried to be gathered from students' ideas on using the students' version of whiteboard software in their smartphones. SPSS was chosen as it is one of the most significant quantitative analyzing software and this is supported by Field (2000) in the preface of his book as "SPSS is, in my opinion, the best of the commercially available statistical packages" (p. xi).

3. Results

Before starting to answer the research questions, general information about students' book ownership and their ideas about not having books are examined. It is clear from the study that 53,2% of the students who participated this study do not have a course book for their English course and 30,8% of the students who have book do not use an original copy. Only 130 students have English course book compared with 148 students who do not own a book. As mentioned in the previous sentences 30,8% of these 130 students use İllegally printed books or photocopies. Main reason of not having books is that students think English language books are too expensive. Students find original books too expensive maybe because of they are being printed in a foreign country and are affected from the foreign money currencies. Other most expressed reasons are as books are not necessary and it is difficult to carry books for each lessons.

A book named "second language learning and language teaching" is £23,41 without shipping cost and commission of the distributor and stationary. Addition of these values will increase the price approximately £30 however, kindle edition of the same book is only £22,24. Using electronic sources will decrease the price and solve the economic problems because of what students do not want to get course books. Problems of using printed books are not only limited with economy of the individuals or the community as there are also ecological results of using printed books. A university with a population of 20.000 students uses at least 100.000 books each term if each student has five courses. According to "falconwaterfree.com" and "bilimfili.com", 15 or 20 trees must be cut in order to print 2.000 books, and this means a university mentioned above cuts at least 750 trees each term.

This study also found that 96% of all students have smartphones. Students use these gadgets excessively for their daily and social lives. These small items started to take the place of computers because it is easier to use them whenever you need. Students book owning habits, their percentage of phone possession, and reasons of not having a course book such as economical or ecological make it crucial to find an update method for them. Using the student version of whiteboard software in smartphones can be the correct solution for this.

3.1. Is the whiteboard software used in the classroom beneficial?

As indicated in the analysis of the questions "Do you like whiteboard software which is used in English courses?" and "Do you think whiteboard software which is used in the classroom is beneficial?", most of the students like using these technological materials in the courses and they think using these kinds of materials is beneficial. Only 9 % of the students selected the choices of "I certainly do not like it" or "I do not like it", however; percentage of the students who selected the choices "Yes I like it" or "I certainly like it" is 66.5. It is clear that students enjoyed the process of using whiteboard software in the classroom. This will increase the fun in the learning atmosphere and help teachers to create a classroom atmosphere full of motivated and willing students.

When the other question about the benefits of whiteboard software in the classroom is taken into consideration, it is understood that 70.9 percent of the students think that these tools are certainly beneficial or beneficial for them, 24.5 percent of them think they are beneficial but not much and only 4.6 percent of those students answered as they are not or certainly not beneficial. Students think that especially video activities, game activities, listening activities, and software's ability to provide visual support for the courses are the main benefits. Participants like using these kinds of tools and they mention the benefits of it. It is understood that students like the software because of its ability to save the course from being boring by providing audio-visual support.

Table 1: Crosstabulation of students' smartphone use and who think about their benefits

		Do you think whiteboard software which is used in the classroom is beneficial?					Total
		Certainly not	No, I do not	Yes but not much	Yes I do	Certainly yes	
Do you have a smartphone?	Yes	4	9	66	132	56	267
		100.0&	100.0%	97.1 %	95.0%	96.6%	96.0%
	No	0	0	2	7	2	11
		.0%	.0%	2.9%	5.0%	3.4%	4.0%
Total		4	9	68	139	58	278
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

It is clear in the table 1 that only 13 of the 267 students who have smartphones said that whiteboard software is not beneficial. Participants of this study think that it is really beneficial to use whiteboard software and they like the process. Being able to use these kinds of software in their smartphones with their audio-visual elements instead of using classical printed books makes students happy. Students sometimes use their phones in the classroom for chatting or surfing on the Internet and using the software version of the course books in their phone will also solve this problem. They can do listening or video activities individually with their headphones and enjoy the process more. It is clear that most of the participants like using software in the classroom and they think it is beneficial for them as especially its ability to provide audio-visual materials help them enjoy the process. Because of this reason, being able to use student version of these software in smartphones instead of using classical printed books will increase the amount of acquisition in the classroom.

3.2. Would it be beneficial if you were able to use the student version of whiteboard software in your phone?

Participants also think that it will be beneficial for them to use the student version of the whiteboard software in their smartphones. Only 20 participants expressed that it will not be useful to use this software in the classroom and the amount of the students who think it is not beneficial is higher among male students. As stated in the table 2, 66.2% of the female students think that using a kind of program in their phones will help them in the learning process. By taking into consideration the abilities of the program, students desired to use it in their smartphones.

Table 2: Crosstabulation of gender and whether student version of whiteboard software will be beneficial or not

		Do you think the students version of whiteboard software would be beneficial?					Total
		Certainly not	No, I do not	Yes but not much	Yes I do	Certainly yes	
Students Gender	Male	5	10	58	36	22	131
	Female	1	4	65	34	43	147
Total		6	14	123	70	65	278

33% of the participants mentioned economic profits of using such a program. As expressed in the previous parts of the paper, buying a printed version of a book is more expensive if the shipping costs and commissions of the distributors and stationaries are added compared with the kindle edition of the same book. Students will pay less money and this will not only relieve them economically but also increase the use of books in the classrooms because 19% of the participants express that there will be an increase in the number of the books used in the classroom if this program used in the smartphones. Another advantage of it expressed by the 24% of the participants is its ability to provide a better environment. Using less printed book will decrease the papers usage, and people will cut less trees. This situation is certainly important for the environment when the amount of paper used only for the books of a university in a term is taken into account. 24 % of the participants are also sure that being able to have their own audio-visual supported book which also have course-related

game will create a more enjoyable classroom atmosphere. Having an enjoyable learning atmosphere is one of the most important steps of increasing the motivation and self-esteem, and decreasing the anxiety level. Other mentioned benefits of a student version of software in the smartphones are increasing the interest for the course, keeping pace with today's technology, and being a more inviting source of information.

3.3. Would you buy the students version of the whiteboard software if it were sold in Google or Apple stores?

Table 3: Crosstabulation of student book ownership and whether they would buy student version of whiteboard software from the android or ios stores or not

		If the students version of whiteboard software that we use in the classroom was sold in google or apple stores cheaper than the normal book, would you buy it?					Total
		Certainly not	No, I do not	Yes but not much	Yes I do	Certainly yes	
Do you have a course book for your English course?	yes	4	20	39	42	25	130
	no	10	30	56	36	16	148
Total		14	50	95	78	41	278

The table above shows that most of the students who participated in this study would buy the student version of the book from Google and Apple stores. 214 of the 278 students answered as they would buy such a software and use it in their mobile phones if they had this ability and it were cheaper. Only 130 students have course books, and some of those books are not original one as they are photocopy or illegally printed books; however, 214 students would buy the original version of the student version of whiteboard software if it was sold which means that not only students but also book publishers will benefit from this application. 108 students who do not have a course book also desire to buy such a program. As mentioned before, this will increase the books in the classroom and helps teacher to be able to have a more effective learning atmosphere because it is difficult to have an English course with students who do not own book. 40 of the 64 students who do not desire to buy such a book do not normally have book. Only 24 students who have books do not want to use such a technology, and this problem can be solved by providing them with the chance of being able to choose from two choices as whether to buy the printed or smart version of the book.

4. Discussion and conclusion

Being able to select the correct material is a significant point for language learning. Nevertheless, if these materials could not be supplied, it would not be important whether the teacher had decided on the right material or not. Today most of the students do not desire to buy books if they are not obliged to do so and this situation creates problems for the language courses. In order to have a more pleasant learning atmosphere, learners and teachers should belong the correct material and use them in the classroom. On this behalf, students' attitudes not to buy the required course book is a problem which can be solved by using learners' technology addiction.

Using whiteboard software in the classroom is one of the technological attempt that helps learning and participants of this study indicated that they really like using such a software in the classroom and think that it has different benefits especially when its audio-visual elements are taken into consideration. Participants think that whiteboard software makes the classroom atmosphere more enjoyable and desired. Results of this study is also supported by Akbaş and Pektaş (2011) who found that interactive whiteboards encourage students to participate the courses and create a more enjoyable classroom atmosphere which makes those learners more enthusiastic than they normally are. Murcia and Sheffield (2010) also support the findings by underlying the motivating effect of interactive whiteboards. Using interactive whiteboards is not only beneficial for the students but also help teachers so that teachers are also eager to use such a program. Winzenried, Dalgarno, and Tinkler (2010) think that teachers have positive ideas about using interactive whiteboards and they accept the ability of such a program in improving the student success.

Participants of this study like using technology because more than 90% of them use smartphones not only for speaking but also for other things such as chatting and social sites. These electronic devices can also be used for educational purposes because as mentioned by Nicholas et al. (2008) 61.8 % of the 120 participants of their study use e-books and why not use such a book in the courses. The participants of this study thinks that

they can use interactive software in their smartphones and this will motivate them, increase original book ownership as they are eager to buy the software from Google and Ios stores, and help them to learn better.

It is understood from the results of the study that students like using technology and most of them have smartphones which are used for different aims in addition to talking or sending short text messages. Students also like using interactive whiteboards in the courses because of their audio-visual support and visual environment providing effects. As mentioned by the students, using such a program in their mobile phones instead of buying a printed book will be helpful for the language courses. If the book publishers develop such a program that can be used in the smartphones and teachers use them in the courses, too many assets such as a motivated classroom, enthusiastic students, economic and ecological profits, and increase in student success will come out.

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