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FOREIGN LANGUAGE TEACHING WITH AUGMENTED REALITY APPLICATION

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ABSTRACT: One of the main aims in Foreign Language Teaching is to actualize natural and entertaining educational environment. Foreign Language Teaching Activities should stress on motivational goals furthering interests and motivation of learners and minimizing their anxiety in language teaching activities. So as to adopt that, these activities should be designed to incite students' interests, curiosity and include some diverse alternatives from school textbooks to handheld technological devices and other electronic appliances. The alternatives for educational purposes may multiply in results of innovations and individual's access to technologies in surrounding educational environment. For the purpose, application of technological innovations and handheld technological devices should bridge the gap between real world and virtual world. In the study, a technological innovation called "Augmented Reality (AR)" is applied. The purpose of the study is to determine attitudes of learners towards AR Application which enables learners to improve their listening skills and promote the motivation towards listening activities by using smart phones and tablets. The study focuses on AR assisted learning with listening activities in school textbooks. Data were collected from 60 students in a secondary school by using 15 items of the "Augmented Reality Applications Attitude Scale In Secondary Schools" scale. For this AR educational application, three English Language teachers' opinions were consulted. It is assumed that the prototype of the AR educational system will enlarge students' motivation towards listening activities and listening competence and pave the way for a new teaching activity assisted with AR technology in foreign language teaching by shifting time and place of education and learning.

Keywords: English learning, augmented reality

INTRODUCTION

In foreign language teaching, it is imperative to form natural and entertaining educational environment that can promote learners' motivation, arouse learners' interest, and encourage them to learn foreign language. The activities and educational environment need to be created in such a way that can draw attention of students, increase the motivation and confidence of learners to learn English as a foreign language; conversely, limit negative emotions such anxiety and fear as (Musa, Lie, & Azman, 2012; Yang, Chen, & Jeng, 2010). There is an interrelationship between success and motivation. Some studies conducted before have demonstrated that increasing of motivation facilitated language learning process dramatically (Littlewood, 2001).

The various English programs on foreign language teaching have ignored attitudes factors involving motivation and interest and other factors for years. Of the most significant absence is to give enough opportunities to practice English out of the class; that is, in a real circumstances. That's way the technological applications handheld, wireless, smart phone, tablets have been tested in language teaching and different areas lately to curb the limitations mentioned above (Liu, Tan, & Chu, 2010). With usage of AR application, English teaching has enhances outcomes, motivation and interest of learners, and provide amusing and productive learning system by shifting concept of timing and location of language learning and mainly improve four skills-reading, listening, speaking and writing. Augmented Reality systems can be defined as those that allow real and virtual objects to

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coexist in the same space and be interacted with in real time (Azuma, 1997). The numerous previous studies have also stated that AR applications on English teaching has favorable outcomes in favour of students. Vate-U-Lan (2012) stated the learners increased their achievements by using 3D pop-up book created by AR and enriched the activities and give opportunities to practice language everywhere. Liu et al. (2010) suggested that Augmented Reality supported English Learning enhanced listening, reading and speaking abilities. AR oriented English teaching innovations result in high learner achievements and enable learners to acquire reading, speaking and listening abilities much more successfully than they could before.

In the study, The aim is to design an Language teaching application generated by augmented reality social platform which named ‘Aurasma’ that anyone can use by downloading from ‘android’ and ‘ios’ markets in order to enhance listening skill and limit failure of pronunciation by giving opportunities learners to practice listening activities at anytime and anywhere without CDs, laptops and computers by using their smart phones. The study also aims at creating enjoyable and learner-centered training that improve learners’ motivation and self-confidence and interest in English decrease language anxiety. For these purposes we try to understand how student’s attitude towards our augmented reality language teaching application is.

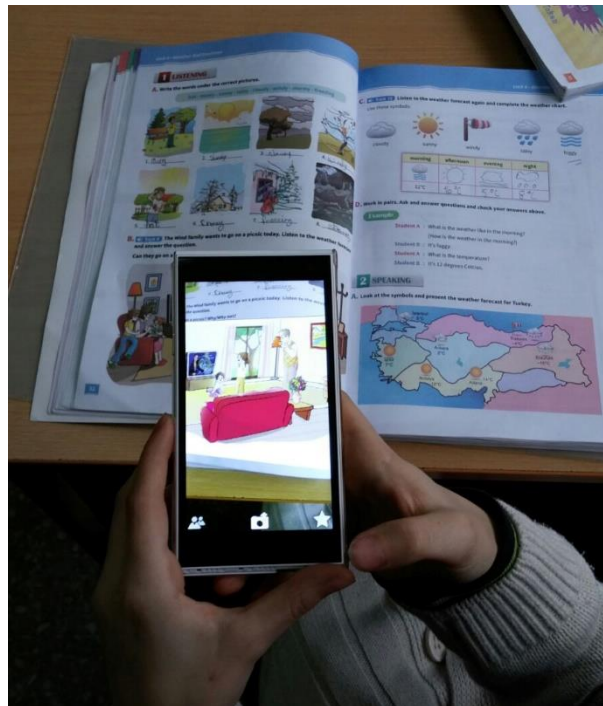


Figure 1. A student when using AR language teaching application in ‘Aurasma’ platform

METHOD

In this study we use an attitude scale (Küçük, Yılmaz, Baydas, & Göktas, 2014) which is consisting of totally 15 substances and three sub-dimensions that will help determining the attitudes of secondary school students towards the use of AR language teaching application. The sub-dimension of scale are “willingness”, “anxiety”, “satisfaction” and its validity and reliability has been proven. The sample of the study is composed of 60 sixth-grade students 33 of males and 27 of females.

First we create score groups to evaluate the scores obtained from attitude scale. Attitude scores were divided into 5 groups is shown at table 1.

Table 1. Rating groups of attitude score averages

	<i>never</i>	<i>rarely</i>	<i>occasionally</i>	<i>often</i>	<i>always</i>
Willingness	7 - 12.6	12.7 - 18.2	18.3 - 23.8	23.9 - 29.4	29.5 - 35
Satisfaction	2 - 3.6	3.7 - 5.2	5.3 - 6.8	6.9 - 8.4	8.5 - 10
Anxiety	6 - 10.8	10.9 - 15.6	15.6 - 20.4	20.5 - 25.2	25.3 - 30

After that we analyzed the data to find levels of students’ attitude towards the use of AR language teaching application.

FINDINGS

Attitude scale and its sub-dimensions score for the evaluation of student's attitude is shown in Table 2.

Table 2. Attitude of students towards the using of AR language teaching application

	\bar{X}	S	Minimum	Maximum
Willingness	33.23	3.88	15	35
Satisfaction	9.21	1.56	3	10
Anxiety	8.06	3.60	6	26

When table 2 is analyzed, at the sub-dimension of attitude scale, it can be seen that students have high mean levels of "willingness" and "satisfaction" so students are "always" willingly and satisfy and "never" anxious towards using the AR language teaching application according to table 1. The attitudes of students from scale that the distribution by gender is shown at Table 3.

Table 3. A comparison of scale components in reference to gender

		N	\bar{X}	Std. Deviation	Std. Error
Willingness	Female	27	33.22	4.04	.77
	Male	33	33.24	3.82	.66
Satisfaction	Female	27	9.25	1.5	.29
	Male	33	9.18	1.62	.28
Anxiety	Female	27	8.29	3.99	.76
	Male	33	7.87	3.29	.57

According to the table 3, the mean of willingness (\bar{X} female =33.22, \bar{X} male = 33.24) satisfaction (\bar{X} female =1.5, \bar{X} male = 1.62) and anxiety (\bar{X} female =8.29, \bar{X} male = 7.87) are close for both males and females.

DISCUSSION

In this study, we found that the students who use AR applications in English learning show positive attitude towards the mobile AR application in addition they had very comfortable and enjoy during the lessons. Besides they have intention to use this technology in the future for other lessons and subjects because of the application attract their attention and increase their motivation. There are several similar studies also in literature access very similar results (Chang, Chen, Huang, & Huang, 2011; Kucuk, Yilmaz, & Goktas, 2014; Vate-U-Lan, 2012) their recommendation's that more applications could be designed with new simple effective learning environment. Our recommendation that many different education models, styles and teaching strategies can be used with AR technology in classroom and analyzed teacher's opinion which would be suitable. We will adjust our AR application based on the experimental results and the participants' feedback to determine in terms of other variable in the future.

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