



The Effectiveness of Using a Dramatized Content through Augmented Reality to Improve English Language Fluency of High School Students.

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Abstract

This research aimed to investigate the effectiveness of dramatized content through augmented reality applications on improving English Language Fluency of High School Students. The researcher adopted the quasi-experimental approach on a sample of 60 students from grade 10 in Mostafa Kamel Official Language School/Qaliobia Governorate/Egypt, who were selected and divided randomly into two groups: an experimental group (n=30), and a control group (n=30) to achieve the research aims. The researcher used these tools: 1) EFL speaking fluency test developed by the researcher and implemented before and after the application of dramatized content through Augmented Reality. 2) EFL speaking fluency scoring rubric developed by the researcher to score students' performance on the pre-and post-test according to EFL Speaking Fluency Skills/Sub-skills. 3) The speaking fluency skills/subskills checklist developed by the researcher to identify the skills that are required for High school tenth-grade students. The results revealed that dramatized content through Augmented Reality was effective in improving English language speaking fluency among high school students in governorate schools.

KEY WORDS: Augmented Reality – Dramatized Content – Fluency – Speaking skill – High School.

المخلص

هدف البحث التعرف على فاعلية استخدام المحتوى التعليمي المقدم من خلال تقنية الواقع المعزز لتحسين مهارة الطلاقة اللغوية لدى طلاب المرحلة الثانوية بجمهورية مصر العربية. ولتحقيق أهداف البحث اعتمدت الباحثة على المنهج شبه التجريبي بالتطبيق على عينة بلغت (٦٠) طالب/وطالبة من مدرسة مصطفى كامل الرسمية المتميزة للغات/محافظة القليوبية/جمهورية مصر العربية، حيث تم اختيارهم وتقسيمهم بشكل عشوائي إلى مجموعتين؛ الأولى تجريبية تكونت من (٣٠) طالب/ة والثانية ضابطة شملت (٣٠) طالب/ة. واستخدمت الباحثة الأدوات التالية: (١) اختبار طلاقة التحدث باللغة الإنجليزية كلغة أجنبية تم تطويره بواسطة الباحثة وتم تنفيذه قبل وبعد تطبيق المحتوى الدرامي من خلال الواقع المعزز، (٢) مقياس متدرج تم تطويره بواسطة الباحثة لتقدير أداء الطلاب في الاختبار القبلي والبعدي وفقاً لمهارات التحدث بطلاقة الرئيسية والفرعية في اللغة الإنجليزية كلغة أجنبية. (٣) قائمة مهارات التحدث بطلاقة / المهارات الفرعية التي طورتها الباحثة لتحديد المهارات المطلوبة لطلاب الصف العاشر بالمدرسة الثانوية. واستمرت التجربة مدة ثمان أسابيع بواقع ثلاث حصص لكل أسبوع، حيث تم تنفيذ الدراسة خلال الفصل الثاني من العام الدراسي (٢٠٢٠/٢٠٢١). وأظهرت نتائج البحث أن المحتوى الدرامي من خلال الواقع المعزز كان له فعالية عالية في تحسين مهارة الطلاقة اللغوية الإنجليزية بين طلاب المدارس الثانوية في مدارس المحافظة.

الكلمات المفتاحية:

الواقع المعزز - المحتوى الدرامي - الطلاقة في اللغة الإنجليزية - مهارة التحدث - المدرسة الثانوية

Introduction:

English as a means of communication is currently the most widely spread language in the world. In today's global world, no one can deny or ignore the importance of English language since it is the most common language spoken everywhere. Learning is not a new concept, but educational technology is. Few people had the benefit of having access to technology that could assist them learn only a few decades ago. Technology, in general, and educational technology, in particular, is fast expanding and being used in both official and informal education today. (Dror, 2008) mentioned that Computers, mobile phones, interactive whiteboards, videos, multimedia applications, educational games and learning platforms, simulations, virtual reality, Internet and Web 2.0 applications are just some technology examples, which have been effectively used by teachers and students in educational environments.

Technology's rapid progress has altered the face of education, particularly when it is combined with sufficient pedagogical foundations. This pairing has opened up new possibilities for boosting the quality of teaching and learning. Until recently, Augmented Reality (AR) is one of the latest technologies that offer a new way to educate. The widespread use of augmented reality on mobile devices such as smartphones and tablets has become a growing phenomenon due to the increasing popularity of mobile devices around the world.

The concept of augmented reality (AR) is not new. Many advantages in teaching and learning have been identified in studies on AR technology in educational contexts (Akçayr&Akçayr, 2017). One of the reasons AR technology is so popular is because it no longer necessitates the purchase of pricey gear and equipment. Computers and mobile phones can also benefit from this technology. The increase of pupils' learning achievement is a significant benefit of adopting AR technology in education (Chang, Hou, Pan, Sung, & Chang, 2015; Ferrer-Torregrosa et al., 2015). It can also present students with instant and relevant information, such as movies and 3D pictures, to aid their processing skills and boost their learning motivation and comprehension. (Chiang, Yang, & Hwang, 2014; Yoon, Elinich, Wang, Steinmeier, & Ticker, 2012).

As Billinghamurst (2002) points out, the educational experience provided by AR is unique for a variety of reasons. Support for seamless

interaction between actual and virtual environments. There are various advantages of employing AR techniques for educational applications, according to Cerqueira and Kirner (2012). Because AR enables for rich visualization and object motion, it can help to reduce misconceptions that occur from students' incapacity to visualize topics. AR also offers the benefit of providing macro and micro visualization of objects and concepts that are not visible to the human eye. AR shows things and concepts in a variety of ways and from various viewing angles, allowing students to have a deeper understanding of the subjects (Cerqueira&Kirner, 2012). According to Geer and Sweeney (2012), using a range of media applications to teach concepts improved understanding and encouraged better collaboration among students.

The Egyptian Ministry of Education has developed a new educational system for high schools starting since 2018/2019 and also announced the provision of electronic service for students through tablets ; the students can access the content of different subjects through the learning management system located on the Egyptian Knowledge Bank , and it is worth mentioning that the content in different materials (chemistry, physics, biology, mathematics , ...) and there is nothing about English Course for them. Hence, this encourages the researcher to dramatize their English course content through AR Technology, which is simple, attractive and easy to operate. The students' ability to access , develop relevant information and services make them extremely important tools in teaching foreign languages. (Keshta 2000, P:4) explained that "English is a universal language of communication across counties in the international world of trade, business, communication, air transportation and technology". Furthermore, it is used as a second official language next to the mother language and this gives the English language fluency its importance in the Arab world in general and in Egypt in particular. Fluency in English is essential for a country wishing to compete in the global business (EF/English Proficiency Index, 2012).

The employment of theatre techniques and activities in the classroom gives second language learners interesting opportunities to practise their language in real-life situations. Moody (2009) indicates" the aim of using drama is to bridge a gap between the classroom and outside world". In a communicative language classroom where the focus is on the meaning of the language rather than the form, drama is a helpful medium.

Nowadays, educators search for new educational methods for the students to learn in a non-stressful, interactive way, which demands an efficient application of the theory and practice in acquired learning contexts, with a result to success in the future. So, the researcher presents a method that has been very effective in education for the past three decades, and that is, the application of drama, or techniques of dramatization, in teaching English for high school students. Drama is, indeed, a teaching methodology which is being used increasingly, both in educational and professional fields. Drama can also be used to help pupils connect with books. It's more engaging than plain text, and it helps visual learners while also repurposing new terms. While drama does have a recreational element, the enjoyment factor should not be overlooked. Students learn and let down their guard when they are engaged in an activity that they enjoy. Shyness and apprehension about using English might stymie learning. When kids are immersed in an active, enjoyable activity, they are more receptive to new ideas and learn more effectively. When students are having fun, they let their guard down and become less inhibited in their second language. Non-interested students will be drawn in by learning while having fun (Blatner, 1994).

Students learn how to list speech texts in the language they are learning through theatre, how to employ expressions according to the context, and how to express relationships. Students will be able to interpret particular idioms and learn how to pay attention to such components as pronunciation, intonation, and body language if the dialogues are read and played in class. Teachers claim that playing various sections of the game in the classroom improves communication and collaboration, according to Whiteson and Horovitz (1998, p. 15). Students' motivation rises as a result of their active participation in the learning process. Furthermore, mental and emotional incentive is offered when they examine a problem from real life. This allows students to discuss their experiences and obtain sympathy from others.

The researcher sees that when we use dramatization in the classroom, the students are not expected to make a perfect dramatic interpretation; rather, the goal is for them to acquire specific knowledge and skills that will be useful in real life, to develop critical thinking, and to gain confidence and independent access to various problem situations through a series of short dramatic improvisations. Dramatization of the curriculum encourages students to be creative, to create, to communicate

fluently, to exhibit their personalities, ingenuity, and uniqueness in problem-solving.

Allowing students to orally tell their own stories is one of the best ways to help them develop their imagination, speaking fluency and confidence. Using dramatized content through AR helps students to hear or read the dramatized content. Students and teachers can create short story scenes after watching AR content and discuss them together. This is great for foreign languages learning or to explore a complex issue in social sciences, for example.

The goal of this research is to demonstrate how augmented reality technology could be used in the classroom to enhance dramatic English course content. It provides an alternate pedagogical approach to students' learning with the goal of improving their learning experience and English language fluency through the efficient use of augmented multimedia. To superimpose digital contents into student learning environments using AR application, a combination of several types of multimedia sources is employed, including 3D spatial models, photos, textual information, videos, animations, and sound, although only AR video is highlighted in this study. Drama through AR, according to the researcher, promotes critical thinking and creativity, allows students to build and practice new linguistic and behavioral skills in a relatively non-threatening environment, and can help students generate the motivation and involvement required for learning. Drama allows students to participate actively in the process of learning English because it creates a rich communicative environment in which students actively become a part of a real-world system and function according to predetermined roles as members of that group. Drama can encourage hesitant pupils gain self-confidence by giving them a different role and responsibility in drama events.

Modern Technologies in Developing Speaking Skill:

In this age of educational technology, English is more than ever considered the global language, and the talent of speech is the most vital and the one that students must acquire the most vividly, because communication is its primary goal. According to the researcher, teaching this talent is critical, and new approaches and procedures are used in this process. Traditional techniques of capturing students' attention, increasing motivation, and achieving learning objectives are being replaced by the use of technology and multimedia resources. It is

impossible to deny that multimedia has revolutionized the way teachers teach and students learn. (Rossi et al., 2017).

Students' playfulness can be sparked by technology, which can immerse them in a number of circumstances. Learners can engage in self-directed actions, self-paced interactions, privacy, and a safe atmosphere in which errors are addressed and specific feedback is supplied thanks to technology. The ability of a machine to identify mistakes and link the student to activities that address specific issues increases the value of machine feedback. Qualitative feedback in software is becoming increasingly important, according to research. The value of technology is increased when links to explanations, further support, and references are offered.

In recent years, augmented reality has begun to be used in education (Küçük, Kapakin, & Göktaş, 2016). AR books, AR gaming, discovery-based learning, object modelling, and skills training are among the five important educational applications of AR technology described by Yuen et al. (2011). AR is seen to have enormous potential and various advantages for improving teaching and learning. AR is seen to have enormous potential and multiple benefits for improving teaching and learning (Billinghurst, 2002; Cooperstock, 2001; Shelton & Hedley, 2002; Yuen et al., 2011).

Technology (particularly Augmented Reality), according to the study, is a potent instrument that can alter teaching and learning. It is a valuable tool for instructors and students to strengthen relationships; it can promote new methods to collaboration and allow teachers the opportunity to adopt and customize learning experiences to meet the needs of students. Augmented Reality's advancements have largely incorporated its uses through mobile technology, making it possible for just about anyone with a mobile device to use AR, as evidenced by the widespread popularity of online mobile games, and added that Augmented Reality has been shown to be effective in learning the English language and could improve student motivation, retention, and understanding. Learning content in 3D perspectives; encouraging ubiquitous, collaborative, and situational learning; delivering a sense of presence, immediacy, and immersion for students; picturing the invisible; and integrating formal and informal learning are all possibilities with AR. Teachers may use augmented reality to construct three-dimensional replicas of practically any object, including those that

are impossible to bring into the classroom. Furthermore, models in augmented reality can be dynamic and interactive. The availability, sophistication, and use of these devices have the potential to improve teaching and learning efficiency and effectiveness, as well as learning outcomes and skills (Morris & Lambe, 2017). An augmented reality app can display a beating heart, the planets spinning around the Sun, or a hurricane spawning. Students may explore a galaxy in the palm of their hand, examine fossils and ancient artefacts like a paleontologist, watch a volcano erupt in front of their eyes, and create virtual objects they can carry and share.

Statement of the problem:

Due to the researcher's experience in teaching English for 20 years, she has observed that High School students have difficulties in their English speaking fluency as they learn through rigid content – ordinary textbook -which lacks taste and prevents students' motivation to learn. She noticed that when her students try to communicate orally in English; they feel awkward and frustrated.

The main question could be as follows:

“What is the effectiveness of using a dramatized content through AR to improve English language fluency of high school students?”

This question could be subdivided into these sub-questions:

1-What are the required English language fluency skills for high school students?

2-What is the proposed design of dramatized content through AR to improve English language fluency of high school students?

3-What is the effect of using a dramatized content through Augmented Reality to improve English language fluency of high school students?

Design:

The research relied on the Quasi-experimental design, which included the existence of an experimental group and a control group, randomly selected cluster among the tenth grade students.

Significance of the study:

This research could:

- Benefit English teachers improve their performance when it comes to employing technology in the classroom, particularly Augmented Reality.

- Address an important topic in the academic community "Augmented Reality technology" presenting dramatized content for high school students.

- Highlight the importance of mobile learning applications, which are considered the most prominent and easiest and most widespread.

- Being a catalyst for further studies and research within the Arab environment to enrich the educational field.

- This study sets the path for future research into the use of technology, especially Augmented Reality, in the development of other abilities such as listening, reading, and writing.

- Emphasized the effectiveness of Augmented Reality technology in education as follows:

- Developed the ability of learners to imagine.

- Developed the skills of self-education among learners.

- Made education meaningful; helped learner learn new vocabulary.

- Helped to keep learning longer.

- Helped learners to create direct educational experience through 3D objects.

- Individual differences were considered as a form of self-learning.

- Made the learning process enjoyable and interesting.

Purposes of the study:

- 1-Investigate the most appropriate fluency skills/subskills to be tested in pre/posttests.

- 2-Determine which Augmented Reality applications can dramatize content in an attractive way according to their capabilities.

- 3-Create new dramatized lessons with motions and sound in AR mood.

4-Familiarize teachers with methods of implementing Augmented Reality applications that can help facilitate students' English fluency improvement.

5- Investigate the effectiveness of dramatized content through AR on high school students' fluency level.

Hypotheses of the study:

Hypotheses1: There is a statistically significant difference at the level ($\alpha \leq 0.05$) between the mean scores of the experimental and control groups in the post application of the test as a whole for the benefit of the experimental group students.

Hypotheses2: There is a statistically significant difference at the level ($\alpha \leq 0.05$) between the mean scores of the experimental group students in the pre and post applications of the test as a whole in favor of the post application scores.

Sample of the Study:

Two classes were selected randomly from 3 classes – Tenth grade High School students - 30 students in each class. They were divided as follows:

* Experimental group applies the research / i.e., the use of dramatized content through augmented reality of English language to show its effect on students' fluency in English language.

*Control group to which normal education (the prevailing method) applies.

Table (1) Shows the number of study groups

Groups	Experimental	Control	Total
Pre	30	30	60
Post	30	30	60

Limitations of the Study:

Spatial Limits: Arab Republic of Egypt / Qalobia Governorate / New Benha City / Mostafa Kamel Official Language School.

Time Limits: The academic year 2020/2021

Human Limits: High school Students – 10th grade.

Reference limits: The Internet /Digital libraries.

Objective Limits: Augmented Reality Technology AR, English Language Curriculum “New Hello”.

Instruments of the study:

The following tools have been used in the present study:

1. An EFL speaking fluency skills/subskills checklist required for high school tenth-grade students.
2. An EFL speaking fluency test used as a pre-and post-test.
3. An EFL speaking fluency scoring rubric to score students' performance.

EFL speaking fluency skills/subskills checklist:

An augmented reality app can display a beating heart, the planets spinning around the Sun, or a hurricane spawning. Students may explore a galaxy in the palm of their hand, examine fossils and ancient artefacts like a paleontologist, watch a volcano erupt in front of their eyes, and create virtual objects they can carry and share. The skills had to be rated by jury members to identify their level of importance and suitability on a three-point scale: extremely important, important, and less important. The researcher is provided an estimated value for each degree of importance. The first level, very important = 3, the second level, important = 2, and the third level, less important = 1.

The researcher considered the factors that contribute to quality and results oriented checklist. First, She determined the precise learning outcome she wanted to investigate. She wanted to have cleared educational outcomes from both the experimental and control groups in this circumstance. As a result, she reviewed Secondary Stage (Grade 10) 'The National Curriculum Framework for English as a Foreign Language' EFL requirements and learning outcomes by speaking domain.

Secondly, she needed the checklist to contain elements that would indicate the effect of dramatized content through AR to learners. In creating her checklist, elements of free speaking fluency were found as being crucial. She also added grammar and vocabulary to the list of criteria that will be used to evaluate both the control and experimental groups. Specific language elements were incorporated into the checklist deliverables in accordance with the learning outcomes.

To test the validity of the checklist such evidence might be obtained from literature, from representatives of a relevant population, or from content experts who are asked to judge the extent to which items on the instrument represent the defined content, and thus, to ensure the

validity of the speaking fluency checklist; In its original version, it was presented to nine jury members who were experts in the fields of curriculum and English language training. The nine members were tasked with determining the importance and suitability of the checklist's sub-skills. In response to their feedback, certain items were changed in the first draught. The modifications suggested by the jury were as follows:

- Omitting some sub-skills that go beyond the students' language level at their respective age.
- Reducing the number of sub-skills to be developed appropriately by the researcher in the allotted time of the experiment.
- Adding the skill 'Non-Verbal content'.
- Adding the sub-skills 'Using facial expressions appropriately' & 'Using eye contact appropriately'.
- Adding the sub-skill 'Pronouncing consonants and vowels correctly with emphasis on problematic sounds such as /p/ and /b/, /f/ and /v/, TH sounds /θ/ and /ð/'.

The rate of agreement between the judges about the sub-skills ranged between (77.8% - 100%), which is a high level of agreement, and therefore all sub-skills were retained except only three subskills ranged (22.2%- 33.3%) and the researcher omitted them.

EFL speaking fluency test used as a pre-and post-test:

The test aimed at measuring students' speaking fluency before and after the treatment. It was designed by the researcher where the students were asked to watch the dramatized content created by the researcher on different topics through AR then they were asked to:

- Complete a story.
- Complete a situation.
- Describe a scene.
- Give their opinion.
- Suggest a solution.
- Tell what they know about different topics.
- Summarize and choose a suitable title.
- Compare.
- Express the mood/intentions of characters.

EFL speaking test scoring rubric:

The stability of the Rubric was calculated by the method of multiple observers through the researcher correcting the test according to the prepared rubric, then another colleague correcting the same test of the survey sample of (30) students according to the same rubric, then the stability of the rubric was calculated using the Cooper equation through The number of agreement and disagreement times between the researcher and the colleague. The percentage of reliability coefficient in each of the skills ranged between (86.7% - 100%), which are high stability coefficients, and therefore the rubrics can be trusted to correct the test.

Test validity:

The test validity was calculated by the following methods:

The method of validity of arbitrators:

The validity of the judges was used to determine the validity of the test. By presenting the test to a group of judges, to take their opinions regarding:

*Adequacy of the instructions provided to students to answer the test correctly.

*Validity of vocabulary scientifically and linguistically.

*Suitable vocabulary for sample students.

*The suitability of each question to the skill to be measured.

*Each question achieves its objective.

* Any other amendments that the arbitrators see.

The arbitrators agreed on:

* Validity of vocabulary, relevance, and test validity.

*Suitability of vocabulary for sample students.

*Suitability of each question to the skill to be measured.

Internal consistency validity:

The researcher used the SPSS V.18 program to calculate the validity of the test internal consistency by calculating the correlation coefficient between the students' score in each skill and the total score of the test, and the following table shows the test skills validity coefficients:

Table (2)

The correlation coefficient between the degree of each skill and the total score of the test (N = 30)

No	Skill	Correlation
1	Producing correct spoken language.	0.486**
2	Pronouncing consonants and vowels correctly with emphasis on problematic sounds such as /p/ and /b/, /f/ and /v/, TH sounds /θ/ and /ð/	0.565**
3	Using word and sentence stress, intonation properly	0.519**
4	Using grammatical (tenses, nouns and adjectives) rules correctly.	0.632**
5	Using connectors like "and", "but" and "because", on the other hand.... etc.	0.384*
6	Using appropriate Correct vocabulary.	0.435*
7	Using varied appropriate vocabulary	0.678**
8	Knowing synonyms & antonyms of most vocabulary.	0.633**
9	Using dictionary to look up the pronunciations	0.484**
10	Communicating appropriately in different contexts.	0.631**
11	Speaking continuously without unneeded pauses or hesitations	0.589**
12	Speaking smoothly and spontaneously.	0.624**
13	Using gap fillers appropriately.	0.661**
14	Emphasizing meaning in real environment.	0.579**
15	Conveying message in an understandable way	0.709**
16	Using facial expressions appropriately.	0.534**
17	Using eye contact appropriately.	0.709**

It is clear from the previous table that all correlation coefficients function at 0.05 and 0.01, indicating the validity of the test's internal consistency.

Test Reliability:

The test reliability was calculated in two ways, as following:

Test- Retest :

The test was applied to the students of the pilot study, then it was re-applied to the same sample with a time interval of two weeks, and the Pearson correlation coefficient was calculated between the scores of the pupils in the two applications using the SPSS program (V. 18), and the value of the correlation coefficient between the two applications in each main and Sub skill, as well as the test as a whole.

Table(3) Test Re-Test

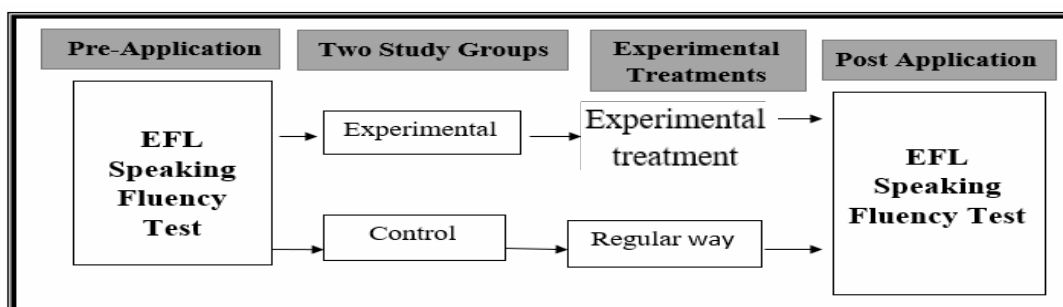


Table (4)

The coefficients for the stability of the sub-skills, the main and the test as a whole

Correlation	SKILL	
0.841**	Producing correct spoken language.	Pronunciation
0.693**	Pronouncing consonants and vowels correctly with emphasis on problematic sounds such as /p/ and /b/, /f/ and /v/, TH sounds /θ/ and /ð/	
0.725**	Using word and sentence stress, intonation properly	
0.624**	ALL Pronunciation	
0.757**	Using grammatical (tenses, nouns and adjectives) rules correctly.	Grammar
0.860**	Using connectors like "and", "but" and "because", on the other hand.... etc.	
0.867**	All Grammar	
0.792**	Using appropriate vocabulary.	Vocabulary
0.784**	Using varied appropriate vocabulary	
0.793**	Knowing synonyms & antonyms of most vocabulary.	
0.671**	Using dictionary to look up the pronunciations	
.792**	All Vocabulary	
0.843**	Communicating appropriately in different contexts.	Fluency
0.793**	Speaking continuously without unneeded pauses or hesitations	
0.627**	Speaking smoothly and spontaneously.	
0.737**	Using gap fillers appropriately.	
0.749**	Emphasizing meaning in real environment.	

EFL Speaking Fluency Test

0.659**	All Fluency	
0.709**	Conveying message in an understandable way	Comprehensibility
0.709**	All Comprehensibility	
0.693**	Using facial expressions appropriately.	Non-Verbal content
0.558**	Using eye contact appropriately.	
0.730**	All Non-Verbal content	
0.757**	EFL Speaking Fluency TestALL	

It is clear from the previous table that the values of the correlation coefficients are all significant at (0.01) level, which indicates the stability of the test.

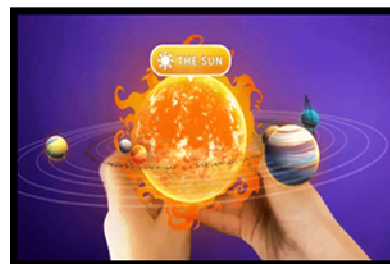
Cronbach's Alpha:

The Cronbach alpha coefficient was calculated for the test as a whole and the value of the Cronbach alpha coefficient was (0.876), which is a high value and therefore the test results can be trusted.

Treatment

1)Selecting AR Platform to dramatize English content:

The researcher selected CoSpaces Edu with Merge Cube Add on after testing a variety of AR platforms as the platform that would better suit the needs for her analysis. In choosing CoSpaces Edu as a forum for dramatizing English content, a number of factors contributed to the researcher's decision as this platform allows users to:



- Easily build in 3D with kid-friendly creation tools.
- Add interactions with block-based coding or advanced scripting.
- Explore creations in Virtual Reality or Augmented Reality.
- Manage classes, let students collaborate and view their work in real-time.
- Use this platform in schools or in camps & workshops.
- Make kids future-ready with 21st Century skills and the 4 C's.

(Four C's are Critical thinking, Collaboration, Communication and Creativity)

- Let students become creators (Enable students to build and code their own experiences, not just consume them).
- Use one tool for all (Use CoSpaces Edu across all age-levels, subject areas and multiple devices).

-
- Bring the Wow! into the classroom (Engage and captivate your students to enhance their digital literacy skills).
 - Work on any device! (Create anywhere, anytime and on any device).

The researcher delivered different topics via Microsoft Teams as a credited LMS from the Egyptian Ministry of Education. All students already have accounts to be in touch with their teachers. So, the researcher benefited from this opportunity to overcome the lockdown resulted from Covid-19 and presented the dramatized content made in CoSpaces Edu in Microsoft Teams Class. Every week the researcher sends a new assignment for students. They watch the dramatized lesson, then upload their responses in a video type and return it to the researcher to grade it according to the research tools.

2)Student preparation:

- Students needed access to a mobile device (with AR compatibility) with the CoSpaces Edu app installed.
- Students needed access to a MERGE Cube.
- Students needed the QR code/Shared Link/Shared Code for the CoSpace that teacher have created.
- Students joined Microsoft Teams – The class created by the teacher- to follow up the dramatized content.
- Students checked their assignments regularly and watched the dramatized content.
- Students recorded their responses according to the assignment and returned them to the teacher.
- Students attended online meetings via Microsoft Teams to check their speaking fluency.

Teacher preparation:

- Teacher needed a CoSpaces Edu Pro account. (Free for a month then can renew with a different email).
- Teacher needed either a tablet device with the CoSpaces Edu app installed or a computer with access to the internet (cospaces.io).
- Teacher created the dramatized content according to skills/subskills.
- Teacher needed a MERGE Cube to test out lessons created by CoSpace Edu.
- Teacher created Microsoft Teams class and add students from the experimental group.
- Teacher assigned new assignments regularly to test the skills/subskills

- Teacher listened to students' responses and graded then returned the result to students.
- Teacher created new online meetings regularly to check students' speaking fluency.

So, for the researcher, Cospaces is a web-based platform that makes creating AR content simple for users. It also helps users, using an internet connection, to create 3D spaces. The latest version of MAKER is available free of charge and makes it possible to build AR material of decent quality. In addition, its easy access makes it possible for users to produce simple AR content by providing brief training sessions where beginners or even elementary school students can learn, its easy access enables users to create simple AR content. It also offers more sophisticated feature block coding and can be used as an authoring platform for advanced computational thought.

Microsoft Teams gives one place for classes, meetings, assignments, files, and collaboration. Users can easily find, share, and edit files in real time using familiar apps like Word, PowerPoint, and Excel in Microsoft Teams.

Results of the Study:

The researcher interprets the results of the hypotheses as follows:

Interpretation of the results of the first hypothesis:

The researcher tested the first hypothesis which supposed that there was a statistically significant difference at the level ($\alpha \leq 0.05$) between the mean scores of the experimental and control groups in the post application of the test as a whole for the benefit of the experimental group students. The value of "T" was calculated for the independent samples (Independent- Samples T Test) for the significance of the differences between the mean scores of the two experimental and control groups in the post application of the test as a whole, and for measuring the size of the experimental treatment effect in the test as a whole, the effect size (2η) was calculated, and the following table shows that.

Table (5)

Results of the T-test between the mean scores of the two experimental and control groups in the post application of the test as a whole, and for measuring the size of the experimental treatment effect in the test as a whole.

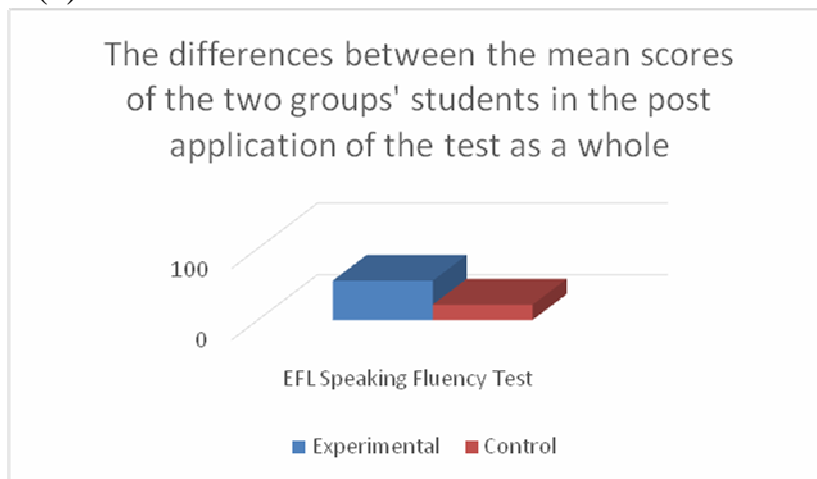
Skills	Group	No.	Mean	Std. Deviation	T-value	DF	α Sig	η^2
EFL Speaking Fluency Test	Experimental	30	55.03	2.13	54.41	58	0.01	0.981
	Control	30	21.50	2.62				

It is clear from the previous table:

- There was a statistically significant difference at ($\alpha \leq 0.01$) between the mean scores of the experimental and control groups in the post application of the test as a whole for the benefit of the experimental group students, and this indicated acceptance of the first hypothesis of the research hypothesis. Additionally, the researcher found that the size of the effect of the experimental treatment η^2 on the test as a whole was 0.981, which was a large value, that indicates the effectiveness of the experimental treatment in the test as a whole.

The following graph shows the differences between the mean scores of the two groups' students in the post application of the test as a whole.

Chart (1)



Interpretation of the results of the second hypothesis:

The researcher tested the second hypothesis which supposed that there was a statistically significant difference at the level ($\alpha \leq 0.05$) between the mean scores of the experimental group students in the pre and post applications of the test as a whole in favor of the post application scores. The value of "T" was calculated for the correlated samples (Paired- Samples T-Test) for the significance of the differences

between the mean scores of the experimental group students in the pre- and post-applications in the test as a whole, and to measure the size of the effect of the experimental treatment in the test as a whole, the effect size (2η) was calculated, and the following table shows that.

Table (6)

Results of the t-test between the mean scores of the experimental group students in the pre- and post-applications of the test as a whole.

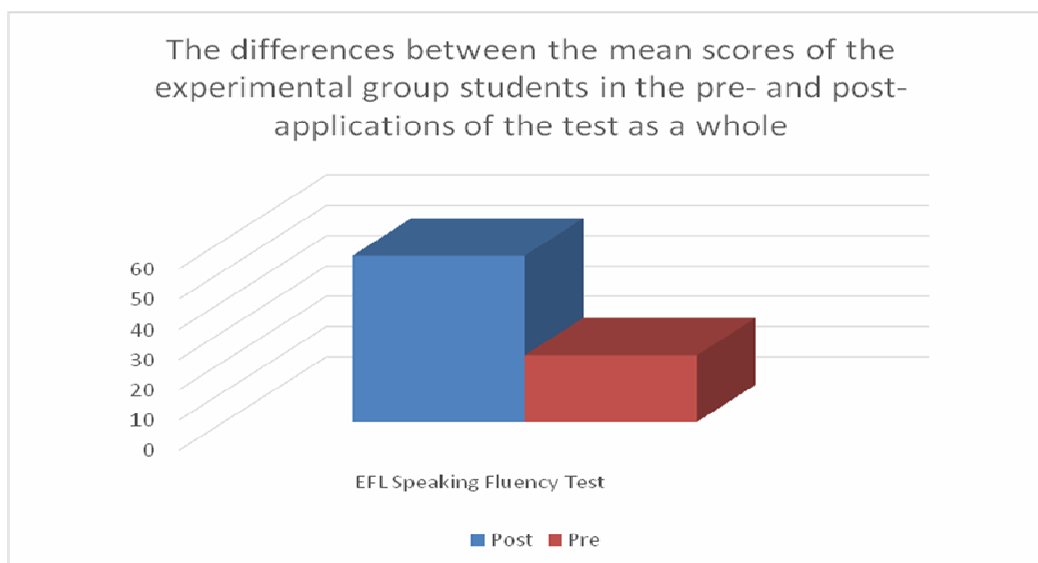
Skills	Tes t	No.	Mean	Std. Deviation	T-value	DF	α Sig	η^2
EFL Speaking Fluency Test	Pre Post	30 30	22.10 55.03	2.31 2.13	59.13	29	0.01	0.992

It is clear from the previous table:

- There was a statistically significant difference at ($\alpha \leq 0.01$) between the mean scores of the experimental group students in the pre and post applications in the test as a whole in favor of the post application scores, and this indicates acceptance of the second hypothesis. Additionally, the researcher found that the size of the effect of the experimental treatment 2η on the test as a whole was (0.992), which was a large value, and this indicates that a large proportion of the differences are attributed to the experimental treatment, which indicates the effectiveness of the experimental treatment in the test as a whole.

The following graph shows the differences between the mean scores of the experimental group students in the pre- and post-applications of the test as a whole.

Chart (2)



Pedagogical implication:

The following recommendations are made in light of the study's findings:

- 1 - Using dramatized content through AR in improving English fluency encourages the students and engages them to speak freely and confidently.
- 2 - Employing augmented reality applications to help the teaching of English skills using various technologies to create a better learning environment.
- 3 - The dramatized content through AR applications help to reduce the gap between teachers and students when interacting together.
- 4 - Students can improve their English fluency while having fun and enjoying themselves by using dramatized content through AR.
- 5 - Using dramatized content through AR develops students' vocabulary.
- 6 - The dramatized content through AR is suitable for weak and for all ages.
- 7 - Students receive immediate feedback and different sorts of reinforcement from the dramatized content via AR instructions.
- 8 - The use of AR to implement dramatic content allows teachers to improve their teaching abilities and discover new resources for their professional development.
- 9 - Students' prior knowledge is activated by using dramatized content through AR, which operates their thinking and recovers their experience with various topics.
- 10- Depending on dramatized content through AR in explaining different English lessons.
- 11- Enriching textbooks with relevant content in order to promote English fluency among secondary school students.

English language teachers are recommended to:

- In this modern age, consider using various technological programs and AR applications to improve pupils' fluency.
- Adopt a more current strategy, such as using augmented reality to dramatize content and create a new learning environment.
- Choose effective methods and techniques to encourage students to participate in class.

- Use AR to teach all English skills, including listening, speaking, reading, and writing, using dramatized content.
- Attend training courses that enable them to apply cutting-edge teaching methods such as integrating technology, particularly AR applications.
- It's critical to employ tools like AR to help students create English speeches and conversations.
- To enhance English fluency, English teachers must integrate various language skills such as listening, speaking, reading, and writing.
- Teachers should dramatize content in an engaging way based on learning outcomes.
- Use augmented reality (AR) to improve the curriculum.

Recommendations for further studies:

- This study was limited to improve the students' English speaking fluency. The dramatized content through AR should be applied with other English skills and sub-skills.
- Conducting studies to explore the effectiveness of dramatized content through AR on developing the reading comprehension.
- Conducting research into the impact of dramatised content delivered via AR on the development of students' English language listening and writing skills.
- Researching the impact of dramatised content delivered via AR on the development of tenth-grade students' oral communication skills.
- Researching the impact of dramatised content delivered via AR on the development of various English abilities in students of various grades.

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