

Think, Pair, and share while Using Plotagon: A Digital App for Replacing the Classroom Boredom and Demotivation with Engagement and Motivation

IMAN AL-KHALIDI

English Language Center, University of Technology and Applied Sciences, Oman

OMAIMA AL HINAI

English Language Center, University of Technology and Applied Sciences, Oman

MARIAM AL SABAH

English Language Center, University of Technology and Applied Sciences, Oman

Received: April 1, 2022 Accepted: April 17, 2022 Published: April 19, 2022

doi:10.5296/ijele.v10i1.19775 URL: <https://doi.org/10.5296/ijele.v10i1.19775>

Abstract

Plotagon (a 3D animation software) has been used as a sort of audio-visual material that has the potential of making complex concepts and content more explicit to students. This study seeks to investigate the pedagogical benefits of the implementation of Plotagon in the English language virtually and the classroom from the perspectives of EFL students. The study draws on the perspective of the quantitative approach. The quantitative data have been collected via utilizing the survey method to collect descriptive data regarding the attitudes and perceptions of Levels 1,2 and 3 foundation students at the English Language Center at the University of Technology and Applied Sciences (UTAS), Nizwa. The study has utilized Likert scale statements organized into three sections. The significance of this study lies in its uniqueness in integrating the Plotagon as an important digital app into physical as well as virtual learning that is not commonly known in the context of TESOL, especially in the region of the Arabian Gulf. The findings of the study revealed the power of Plotagon in enhancing students' understanding and language competencies and skills, in addition to its role in supporting pedagogical purposes.

Keywords: Plotagon, 3D-animation, Digital tools, EFL context

1. Introduction

In recent years, the integration of animation in education has increased dramatically, as it has been claimed to be an effective new trend for teaching effectiveness and collaborative learning. The main objective of animation is to increase learners' motivation, experience, and engagement (Asmae , 2019; Love, 2013). The use of animation has become common in multimedia teaching and learning on the basis that animations are assumed to increase interest and motivation, direct attention, illustrate procedures, and explain how things work (Lowe & Schnotize, 2008).

Among the digital tools that have recently been highlighted by teachers and researchers in the field of education is 3D animation. The latter is part of media information or ICT that has the potential of visualizing abstract concepts and “may play a pivotal role in making learning permanent” (Asmae, 2019, p.8). Animation is an innovative tool that has been recently invented to handle the most EFL challenges such as boredom, demotivation, low engagement, and less interaction.

One of the animation tools is the Plotagon that is a creative software that has been recently used as an educational app in the field of TESOL for language teaching through animation. It is a multifunction app in the TESOL context as it helps students not only in creating animated movies and digital stories from text dialogues but in oral speaking and presentation as well (Love, 2013).

However, one of the most serious issues in education, particularly in TESOL contexts, is that most pedagogical approaches put particular stress on fostering knowledge while ignoring the significance of students' learning skills, self-confidence, and attitudes. Therefore, most students consider English learning as examination-oriented.

The literature research on digital pedagogy has recently presented a plethora of research and case studies that have been carried out to investigate the role of technology in enhancing learning and academic achievement in physical as well as virtual learning. However, there haven't been studies that specifically examine the role of animation through the Plotagon app, in the Arab World and specifically in the Arabian Gulf, in solving the issues of demotivation and low engagement in online learning. Therefore, this study seeks to address this gap through reviewing the literature and case studies on the role of animation and the Plotagon software in addressing problems of demotivation and low engagement. This study becomes significant as it elaborates on the implementation of 3D animation with the utilization of Plotagon in TESOL contexts. This research suggests practical techniques related to the effective use of the Plotagon app so as to boost EFL learners' engagement and motivation in English language learning.

This study aims to raise TESOL teachers' awareness towards using the Plotagon to train students to develop their animated videos to integrate them in the tasks and activities from their textbooks and worksheets during the classroom. More specifically, this study aims to:

1. investigate the benefits of the Plotagon as an animation tool in enhancing EFL skills and competencies in the classroom as well as online learning from the perspectives of students,
2. explore how the Plotagon app affects students' engagement and motivation in EFL classroom,
3. explore students' attitudes and perspectives towards the use of the Plotagon app in promoting their English language skills and competencies.

The study is guided by these questions:

1. What are the learning benefits of the Plotagon app from the perspectives of EFL students?
2. How does Plotagon contribute to creating motivation and engagement in the EFL classroom?
3. What are students' attitudes and perspectives towards using the Plotagon app in promoting their English language skills and competencies?

The significance of this study lies in its uniqueness in integrating the Plotagon as an important digital app into online learning that is not commonly known in the context of TESOL, especially in the region of the Arabian Gulf. This study will be useful to those who train teachers in order to help them introduce in their teachings other types of digital apps as visual aids. Furthermore, this research work is useful since it reveals that teachers can use animation apps in EFL classes in order to motivate their students to increase their oral performances. Finally, the present investigation can pave the way for other researchers interested in the roles of cartoons as audio-visual aids in EFL teaching and learning.

2. Literature Review

This study aims to investigate the role of Plotagon in the EFL classroom as a digital animation tool from the perspectives of EFL students. Based on the purpose of the study, this section sheds light on the rationale and benefits of employing the Plotagon in education in general and EFL in particular. The section is organized into two parts. The first part introduces theoretical perspectives and approaches upon which the concept of animation stands. The second part, on the other hand, reports on several empirical studies that were carried out for investigating the role of Plotagon in Education and EFL learning.

2.1 Theoretical Background

Plotagon is a 3D animation software that can be used as an effective digital tool in education and language learning for creating animated videos. "It is a very intuitive content creation software (<https://plotagon.com>; Love, 2013) that can be used in education due to its

text-based movie creation interface, as a storytelling tool for creating short or longer films” (Alwasilah, 2019, p. 333).

Plotagon helps students create their own characters, choose scenes, write dialogs, and add emotions, sound effects, and actions, as in Figure 1 below.



Figure 1: Plotagon as a Digital Tool in Education

This software has become an ideal medium for optimizing engagement in the EFL classroom. Plotagon helps teachers present the process of learning in a fun way so that it can increase students' motivation when learning EFL or EAP. Furthermore, teachers use Plotagon to quickly create animated videos to present assignments, cover controversial topics, re-teach lessons (in a new way), and create flipped classrooms.

Love (2013) encourages teachers to use the Plotagon in the classroom as a creative digital app for endless purposes such as narrative and creative writing, oral presentations, giving feedback, and other classroom practices. The most important of all is that teachers can add content and use it for their presentations and flipped learning. Furthermore, Love (2013) states that:

What I think is quite valuable pedagogically is that it produces a very graphic output from a text-based input, which is greater for the second or foreign language classroom in particular. It also shows students to spend time reflecting on their work, which is not always the case when they are filming using a camera.

Generally, the concept of animation refers to the field of art and design that requires creativity and computer skills. Schmutz and Lowe (2008, p.304) define animation as a pictorial display that changes its structure or other properties over time and which triggers the perception of a continuous change. According to Baglama, Yucesoy, and Yikimis (2018), the animation is “a technical process that, in general, produces motion illusion in the viewer by sequencing the still images produced in the analog or digital environment in sequence” (p.671).

In education, the concept of animation carries with it the meaning of completing a process to accomplish a task. The process starts with the initial step of thinking of the scripts, selecting characters scenes, editing, and ending up with the final presentation. Animation is like many other technological tools that can be used to create and develop a task, such as blogs, software, online web tool, and application for a smartphone. Even though project-based learning leads students to develop a project, in the end, the priority is students’ participation in the learning process. In this sense, the animation draws on the approach of task-based learning. In addition, animation has the potential of providing visualization in order to solve the problems of any cognitive overload and misinterpretation (Tversky et al., 2002).

2.2 Animation Supported by Multimedia Theory

In the current technological era, the teaching and learning process has gone beyond the traditional teaching methods. In replacement to the traditional methods, multimedia learning has become a highly favorable method of delivery of information. Multimedia learning deals with using multiple media contents, such as text, images, videos, audios, and animation, for teaching and learning purposes, as shown in Figure 2. Within the context of learning, “multimedia learning theory provides a set of evidence-based principles for using technology to promote learning effectiveness” (Miguel Ramlatchan, 2019, p.4).

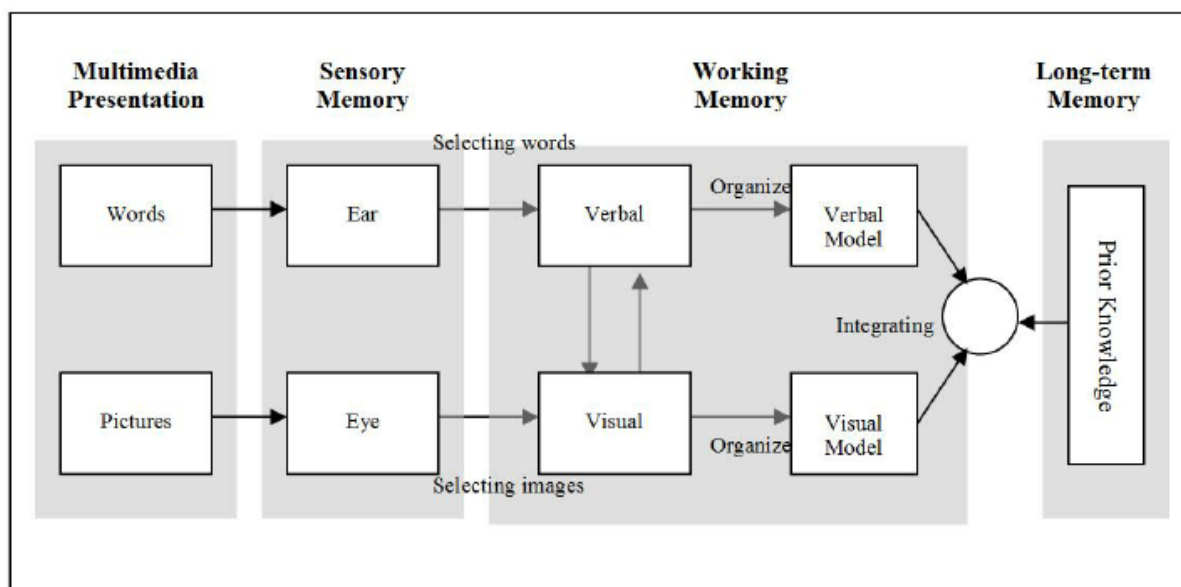


Figure 2: Multimedia Learning Theory (Adapted from Mayer, 2004)

With the advent of new technology apps and software, animation has been used as a sort of audio-visual material that has the potential of making the complex concepts and content more explicit to students (Park, 1994; Rieber, 1991; Tversky, Bauer-Morrison, & Betrancourt, 2002 in Rosen, 2009). According to Wijaya and Abbas (2019, p.112), “Animation can present procedural information more explicitly as it displays steps regularly.”

Multimedia permits educators and teachers to utilize together texts, audios, videos, graphics,

animation, and other media to present comprehensive Information for their students to achieve specified course objectives (Mayer, 2014). It allows the demonstration of complicated processes in a highly interactive, animated fashion and that instructional material can be interconnected with other related topics in a more natural and intuitive way (Crosby & Stelovsky, 1995). This mode of presentation or instruction encourages lecturers in higher college contexts to take advantage of multimedia (text, pictures, animation, sound, video, and interactivity) and new devices and their applications so as to ensure learning effectiveness.

Mayer, the proponent of the Multimedia theory, states that “People learn more deeply from words and graphics than from words alone” (2009). This assertion confirms the significance of animation that contributes to teaching effectiveness through providing environments that help engage users by allowing them to partly create their own learning settings and then to play a role within those settings. According to Mayer (2009), previous research has advocated that animation can accommodate learning styles and promote students’ perceptions of the learning process. Accordingly, pedagogical strategies and learning objectives are required to be changed in response to the way they are presented digitally in the classroom.

In TESOL contexts, terms such as motivation and engagement play a crucial role in determining the effectiveness of learning. In the field of teaching and pedagogy, more and more attention is given to communicative approaches in English Language teaching (ELT). Therefore, students’ engagement has been highlighted due to its significant impact on academic performance and its role in enhancing EFL students’ communication and creating a relaxed and less- stressful environment (Richards, 2014; Brown & Lea, 2014; Nunan, 1987). In its broad sense, the term engagement is viewed as a multidimensional concept with aspects of students’ emotions, classroom behavior, and cognition (Fredricks, Blumenfeld, & Paris, 2004). The concept of students’ engagement draws on the theory of constructivism that views students’ engagement as a facilitator method leading to active learning whereby students construct their understanding of new Information by reflecting on previous experience and knowledge (Al-Khalidi, 2021; 2020; Baviskar, Hartle, & Whitney, 2009; Powell & Kalina, 2009).

Effective management of learning and teaching in the contexts of (EFL) requires various types of educational media. The educational media don’t only accelerate the learning curve of learners and assist the learners to widely understand the concepts and contents but create an atmosphere of engagement and motivation. Fortunately, we live in the era of Information and communications technology (ICT) that has opened new possibilities for promoting the effectiveness of teaching and learning (e.g., Bransford, Brown, & Cocking, 2000; Salomon, 2002). Digital technology tools have the potential to engage students with a series of activities and tasks that are carried out in a relaxing, interactive, and fun atmosphere

2.3 Plotagon: Pedagogical Values

Animation can be a powerful educational tool for learning English as a foreign language which is due to the vast amount of advantages that bring to students. The sections that follow outline several benefits of Plotagon.

2.3.1 Plotagon for Enhancing Understanding

In addition to their fun uses, previous research (e.g., Gámez and Cuellar, 2019; Marashi and Adiban, 2017; Kamalrudin, 2020; Alwasilah, 2019) advocate that the concept of 3D animation helps students to activate their thoughts, solve the problems they encounter in their learning, broaden their horizons and provide different perspectives for the subject matter. The 3D animations with their visual elements and textual information, dialogues, and gestures may be interpreted in many ways by students with their imaginations.

3D animation is a strategy that aims to help teachers and trainers to enhance students' understanding during a learning process. In this regard, Ainsworth and VanLabeke (2004) pointed out that in computerized learning environments, animations are frequently employed to enhance students' understanding of both complex processes and abstract concepts that change in time and space. Besides, it helps the mind to easily memorize and understand biological processes, natural phenomena, mechanical devices, etc. (Berney and Bétrancourt, 2016). This is due to the animation's potential in attracting students' attention and focus. Students can grasp the knowledge quickly and are able to pinpoint the key concept.

The urge to implement 3D animation in learning was mainly due to the positive impact on students' learning. Previous studies have reported that computer animations support and help students to understand difficult and complex concepts (Mayer, 2004). This is due to the 3D animation's potential in providing an equal representation of real objects in digital form. This enables the students to frequently view the animation until they grasp the content. Besides, the process of understanding is connected with comprehension, and the latter is expected through colorful images, illustrations, animated characters, funny animations, and good sound effects in the context of a text (Egounletia et al., 2018, p. 155).

Furthermore, Schnotz and Lowe (2003) refer to its important psychological effects on "learners' understanding through the cognitive and perceptual process as they can provide a great amount of visual and aural stimulation" for learners (Lum, 2009, p. 71). According to Hsu (2011), animation is considered a multimedia source that provides learners with content, context, and language (Shahani & Tahriri, 2015). Cakir (2006) refers to visual clues in the animation app such as facial expression, dress, gesture, posture, and details of the environment that help learners learn from the vision alone.

In language learning, Chan and Black (2005) studied the comparative effect of animation and static visuals on language learning. They concluded that learners get a better understanding and comprehension through animation.

Another important feature to mention about animation is the fact that it can help students to predict information and make their own hypothesis about what they think will happen, or also make a hypothesis about a specific sentence, word, idiom that could appear in the video. That way, the student can be actively present in their learning process (Cakir, 2006).

2.3.2 Plotagon and Authenticity

Concerning the language skills and aspects, animation videos are considered as an authentic

resource due to their affordances in providing learners with real-life language and images rather than artificial situations. Through animation movies, students have the opportunity to listen to "native speaker voices, reduced speeches, stress, accents, and dialects" (Sanaeifar, 2017, p.21).

According to (Richards, 2007), second language learners must be exposed to authentic learning material because it motivates them through making the interconnection between the content of that authentic material and the topic which is being discussed. Also, it enables learners to connect between the learning atmosphere in the classroom and the real world. Animation videos, like any other audiovisual instruments such as TV shows, cartoons, and movies, have the potential to be utilized as sources of authentic language input. In second language learning, animated cartoons have proven their effectiveness as a source of authentic audiovisual material (Al-Khalidi, 2019; Anastasia, et al., 2019, P. 541).

The concept of animation is considered a helpful source of cultural and social information in language teaching (Atkinson, 2002; Cakir, 2006; Craig, et al., 2002; Tversky, Morrison, & Betrancourt, 2000 IN Adiban, 207). For example, animation videos in the form of cartoons include social and comical scenarios and scripts that attract learners' attention and keep them more focused and connected to the learning atmosphere. Accordingly, animation videos can be a proper tool to teach students a variety of social views and understanding of peoples' behaviors by observing body language and motion to understand messages which remain with learners' daily life. Thus, cartoons have dual learning functions, they facilitate understanding of solid or abstract concepts, and they encourage learners to analyze meanings and messages from characters' behaviors or by reading their emotions in contexts. In addition, animation videos help in practicing listening skills while listening to native speakers rather than just listening to the teacher (Mekheimer, 2011).

2.3.3 Plotagon: Increasing Student Motivation and Engagement

Student engagement refers to the students' psychological input, especially their attention, interest, participation, and efforts in the process of learning. This definition includes not only the engagement of students' learning behavior but also the involvement of emotional and cognitive components.

Several case studies were conducted to investigate the impact of animation on students' engagement (Karadeniz and Yilmaz, 2017; Chelsea Liua and Elms, 2019; Gámez and Cuellar, 2019), and the majority confirmed the importance of integrating animation in EFL learning. Animation doesn't only provide authentic materials but also helps in engaging students in working on tasks and activities. The use of audiovisual as educational material in the classroom like animations and movies encourage team build group work that is significant in the teaching and learning process.

3D animation has been considered an effective approach in teaching. Its significance lies in helping the teachers to develop imaginative power amongst students by building proper knowledge. For example, the 3D can be helpful for initiating debate and focused group discussions in a classroom among learners as it stimulates them to engage in critical thinking in

order to assess and formulate their views and opinions. Learners are given the opportunity to participate in classroom discussions to support their own ideas and knowledge as well as identify others' conceptions of a particular topic with cartoons.

Previous research confirmed that the motivation to learn English as a foreign language using virtual methodologies could be a complicated process (Al-Khalidi, 2018). Animation, as a mode of technology, plays a significant role in the classroom by providing a more natural and efficient way when teaching English.

Most EFL students consider writing as a boring skill, but with the use of animation apps, it would be more interesting. "Using silent animation would help the learners to focus more on the issue which is presented in the motion picture and less in the dialogues and, therefore, it would further motivate them in trying to use as many new vocabularies as possible" (Adiban, 2017, p.213). Some authors, such as (Al-Khalidi, 2019; Canning-Wilson,2000; Bahrani and Soltani, 2014), agree that the use of animation videos affects the motivation of the learner positively as they help create a funny, relaxing atmosphere where students can feel more amused.

2.4 Plotagon: Enhancement of Language Skills

Reviewing the literature, it has been noticed that a good number of research studies have investigated the impact of using animation in the language classroom. However, most of previous studies have focused on the effects of animation on the writing skill more than other skills. Probably, this is due to the nature of the writing skills that as Nuna (2003, p.23) described as "a process that can be accomplished by tasks and activities where students are allowed to visualize, compile, edit, read, and reread". Kirsznner and Mandel (2008, p. 209) also state that writing is a process of arranging steps that involve planning, organizing information, compiling, revising, and editing. Another reason is relating to the difficulty of writing that requires more complex thinking than speaking (Weigle, 2011). In addition, Massi (2001) states that the writing is a collaborative process between authors, texts, and readers. Also, Writing is viewed as a cognitive and dynamic process and cannot be easily memorized like other language skills (Goddard & Sendi, 2008; Rao & Prasad, 2009, as cited in Marashi & Dadari, 2012). Perhaps one striking challenge is that many students consider writing as an assignment they are required to do for school, as "opposed to textual expression they engage in their own time" (Purcell, Buchanan, & Friedrich, 2013, p. 14). Therefore, students need motivation when they are assigned a writing task.

Among the useful strategies and tools in facilitating teaching writing is using animation that besides creating fun in the classroom, it helps learners have some brainstorming in their mind and a motivational teaching tool for both practicing and stimulating the writing skill (Katchen, 2002). Baratta and Jones (2008) have worked on the idea of the effect of films on academic writing skills. Although there was not an absolute improvement, the final result showed a positive feedback taken from most of the learners. In addition to the writing skill, animation may have positive effects on vocabulary acquisition and therefore leading to writing improvement (Kayaoglu, Dag Akbas, and Ozturk, 2011).

3. Research Methodology

The goal of this study is to explore students' attitudes and perspectives towards the use of the Plotagon app in promoting their English language skills and competencies and how does it affect their engagement and motivation in EFL learning in the classroom. For this purpose, the case study has been chosen as a research strategy to provide a framework for data collection and analysis (Bryman, 2011; Chappelle and Duff, 2003). Besides, a case study approach allows researchers to examine a situation analytically and holistically (Stake, 2000). This has motivated the researchers in this study to take advantage of the students' experiences who are directly involved in the phenomenon under investigation.

3.1 Method of Data Collection

This study is based on the perspective of the quantitative approach. The main source of data collection was a questionnaire survey. The researchers used a self-made questionnaire as a research instrument for the collection of data. The questionnaire survey included 23 items organized in three sections. The first section includes items (1-9) relating to students' opinions on the learning benefits of the Plotagon app. The second section, on the other hand, includes items (1-8) relating to students' opinions about the pedagogical benefits of the Plotagon app. The third section includes items (1-6) regarding the importance of the Plotagon app in enhancing students' language competency and language skills. The items in the survey part have been gathered and designed according to the theoretical views and previous studies. The online survey comprises the Likert scale (Strongly Agree), (Agree), (Neutral), (Strongly Disagree), and (Disagree). The questionnaires were sent to students online to be completed at a convenient time and returned to the researcher.

To ensure the validity, reliability, and accuracy of the questionnaire, the survey items were sent to three experts in TESOL who teach English in the English Language Center at the UTAS. They provided feedback and comments on the statement and organization of the items. The questionnaire was then modified based on their feedback.

3.2 Participants

Based on the research objectives and questions, the participants of this study were a sample of students. Around 70 undergraduate students enrolled in Level 4 in the Foundation program and were taught by the same teacher. The student sample has been involved in this case study due to their experience in using and evaluating digital tools, including animation tools, in EFL learning. Thus, investigating the utilization of the Plotagon in EFL classes from the perspective of students can reveal significant insights into the effectiveness of the experience (Creswell, 2007; Dorney, 2011; Ritchie et al., 2014; Cohen et al., 2000; Punch, 2009).

Before the participant students answered the questionnaire survey, the teacher explained the purpose of the study and elaborated on the items to make it clear for them. They were told that giving their views and perspectives would contribute to developing and updating the material selection and methods of teaching.

3.3 Findings of the Study

This section presents the findings and discussion of data regarding the benefits of implementing the Plotagon as an animation tool in EFL classroom. Findings found in this research study are organized in terms of the research questions presented in this paper:

A. What perceived learning benefits do EFL students at the foundation level draw regarding the utilization of Plotagon as an instructional 3D animation?

The first research question seeks to investigate students' perception of the advantage of the Plotagon in English language subjects. Participants of the study were requested to rate the learning benefits of the Plotagon based on their perspectives and experience in digital tools. Table I shows how the participants answered the ten questions that would determine a conclusion for the research first question. As shown in Table 1, the students was asked to rate the learning benefits of the 3D animation Plotagon. The data analysis shows that the majority of the participants had agreed that the 3D animation Plotagon has many learning benefits. More than half of the participants agreed (34) and strongly agreed (27) that Plotagon helps them understand more effectively. However, around (25) of the participants remained neutral, and very few showed disagreement (5) and strong disagreement (3).

With regard to whether Plotagon makes learning more meaningful, more than half of the respondents were between agreed (50) and strongly agreed (14), while very few of them around (2) and (2) were between disagreed and strongly disagreed. On the other hand, (29) were neutral.

With regard to Item (5), most of the students strongly agreed (47) and (29) agreed that the Plotagon helps them understand abstract concepts and terms clearly, whereas those who disagreed and strongly disagreed were very few (4) and (2), respectively. Also, the percentage of those who were neutral was low, around (13).

A. Table 1: Learning benefits of 3D animation (Plotagon)

Item	SA	A	N	D	SD
1. I understand more effectively with the use of 3D animation App.	27	34	25	5	3
2. The utilization of 3D animation (Plotagon) App makes the learning more meaningful.	14	50	29	2	2
3. The 3D animation app (Plotagon) helps me understand abstract concepts and terms clearly.	47	29	13	4	2
4. The 3D animation app (Plotagon) helps me understand and explore the culture of the target English language more	30	38	24	3	1

than the traditional materials.					
5. I would rather be studying from 3D instructional animation over textbooks.	18	29	35	4	10
6. The 3D animation app (Plotagon) facilitates critical thinking.	33	19	39	4	1
7. The 3D animation app (Plotagon) makes classroom activities more fun and enjoyable compared to traditional teaching.	26	44	20	4	2
8. Instructional 3D animation could replace traditional teaching due to its advantages.	32	24	26	7	4
9. Using the 3D animation app (Plotagon) as a medium of teaching is very important for classroom and online learning.	30	30	32	2	2

B How does Plotagon contribute to creating motivation, engagement, and communication in the EFL classroom?

The second research question seeks to investigate students' perception of the usefulness of the Plotagon in creating motivation and engagement in the EFL classroom. The participants of the study were requested to rate the usefulness of the Plotagon in this regard. A total of eight items were given to seek the answer to the second research question. In general, the participants of the study showed positive responses toward the three-D animation tool Plotagon in creating motivation and engagement in the EFL classroom.

As shown in Table 2, students agreed that the Plotagon helps increase their motivation, engagement, communication, plus creating fun and enjoyment in the class. As shown in Table 2, students were asked to rate the effects of the Plotagon on their motivation; around (34) agreed and (28) strongly agreed. Likewise, in item 2, around (30) participants strongly agreed and (30) agreed that the Plotagon may increase their engagement in the class. However, (30) students were neutral, whereas only (9) disagreed.

With regard to Item 3 concerning the role of the Plotagon in making communication more easily with their peers, the table shows that most of the students (40) and (20) agreed and strongly agreed, respectively. However, around (34) were neutral, and only (3) students disagreed. In item 4, the participants (40) strongly agreed and (20) agreed that utilization of Plotagon would help in creating fun and enjoyment. Only (24) were neutral, while (3) disagreed and (1) strongly disagreed.

Item 5 ranked the students' preferences regarding the role of the Plotagon in helping them

feel more comfortable while working on tasks and activities. The result is also similar to other items. Most of the participants (35) and (29) agreed and strongly agreed that the Plotagon makes them more comfortable while doing tasks, whereas (29) participants remained neutral. On the contrary, only (3) participants and (1) participants disagreed and strongly disagreed. In Item 6, the participants also agreed (31) and (21) strongly agreed that the Plotagon helps in enhancing their confidence and reduces speaking anxiety.

Finally, The participants highly ranked their preferences regarding the importance of the Plotagon in minimizing their hesitation when communicating in English. Around (27) of the participants agreed, and (29) strongly agreed that the Plotagon is important in the point mentioned earlier. Similarly, in Item 8, (38) and (27) of the participants were between agreed and strongly agreed, respectively, that The 3D animation app (Plotagon) promotes increases their willingness to communicate in the English language.

Table 2: Effects of the 3D animation app (Plotagon) on students' motivation Section

Item	SA	A	N	D	SD
1. The 3D animation App (Plotagon) increases my motivation in learning English.	28	34	26	4	3
2. The 3D animation app (Plotagon) increases my engagement in classroom and online activities.	30	30	30	9	0
3. The 3D animation app (Plotagon) helps me to communicate easily with my peers.	40	20	34	3	0
4. The 3D animation app (Plotagon) is a creative, fun, and enjoyable method.	29	40	24	3	1
5. The 3D animation app (Plotagon) excites me and makes me more comfortable while doing tasks and activities.	35	29	28	3	1
6. The 3D animation app (Plotagon) enhances my confidence and reduces speaking anxiety.	31	21	32	12	1
7. The 3D animation app (Plotagon) helps minimize hesitation to learn and participate in communication in English.	27	29	37	2	2
8. The 3D animation app (Plotagon) promotes/ increases willingness to communicate in English language.	38	27	24	5	1

Table 3: Role of the 3D animation app (Plotagon) in Enhancing Language Skills and Competencies

Item	SA	A	N	D	SD
1. The 3D animation app (Plotagon) helps English language students improve their speaking skills.	47	21	26	2	1
2. The 3D animation app (Plotagon) helps English language students improve their listening skills.	40	26	23	7	1
3. The 3D animation app (Plotagon) helps English language students improve their writing skills.	35	21	31	5	2
4. The 3D app (Plotagon) introduces students to modern writing patterns.	29	24	36	5	1
5. The 3D animation app (Plotagon) helps English language students improve their reading comprehension skills	39	24	36	5	1
6. The 3D animation app (Plotagon) helps English language learners improve their vocabulary.	47	21	26	2	1

About the role of the Plotagon in enhancing language skills and competencies of EFL students, Table 3 shows high ranks for agreeing and strongly agreeing on responses. For example, around (47) and (21) participants strongly agreed and agreed, respectively, that the Plotagon helps improve the speaking skills of EFL students. However, (26) participants were neutral while only (2) students disagreed and (1) strongly disagreed. Similarly, with the listening skill, most of the participants strongly agreed (40) and (26) agreed that the Plotagon contributes positively to improving the listening skills.

According to the writing skills, most of the participants were in favor of the role of the Plotagon in this regard. Table 3 shows that (35) and (21) participants strongly agreed and agreed that the Plotagon plays a positive role in improving their writing skills. However, around one-third of the participants (31) were neutral, and only (5) and (2) disagreed and strongly disagreed, respectively, with the statement. Also, most of the participants strongly agreed (29) and agreed (24) that the Plotagon has a role in introducing modern writing patterns. Nevertheless, around (36) participants were neutral, and very few (5) and (1) who were between disagreed and strongly disagreed.

Item 5 ranked the participants' preferences regarding the role of the Plotagon in enhancing

reading comprehension. Most of the participants were between strongly agreed and agreed (39) and (24), respectively, whereas (36) remained neutral—very few participants (5) and (1) who disagreed and strongly disagreed.

Finally, item 6 was also ranked highly as most of the participants (27) and (21) strongly agreed and agreed, respectively, that the Plotagon helps in improving vocabulary acquisition. On the contrary, less than one-third of the participants were neutral (26), whereas (2) and (1) disagreed and strongly disagreed.

4. Discussion of the Findings

The survey questionnaire explored the students' preferences of the advantages of the 3D Plotagon app. Evidence from the questionnaire shows that the majority of students are in favor of the Plotagon app. The high rates of students' responses can be categorized into three categories. Two categories relate to students' learning, including understanding and language competencies, and one category relates to pedagogical features such as interaction, motivation, communication, and engagement.

The first finding concerning the importance of the Plotagon in enhancing students' understanding is in alignment with the theory of Multi-Media by Mayer (2005), who points out that "People learn more deeply from words and graphics than from words alone" (p.2). This assertion confirms the significance of the Plotagon as an animation tool that contributes to teaching effectiveness through providing environments that help engage users by allowing them to partly create their own learning settings and then to play a role within those settings. According to Mayer (2009), animation can accommodate learning styles and promote students' perceptions of the learning process. This implies that pedagogical strategies and learning objectives are required to be changed in response to the way they are presented digitally in the classroom.

The second finding reveals the role of the Plotagon in supporting the pedagogical process in an EFL context through motivation, interaction, engagement, and interaction. This finding also confirms the communicative approach, student-centered learning, and the Communicative Information Theory (CIT) that put a great emphasis on the significant role of technology in the classroom through creating a context of humor, integration, engagement, and the like (Brown and Lea, 2014; Al-Khalidi, 2020a, 2020b). This implies that the Plotagon can be used as an animation mode of technology that is supposed to play a significant role in the classroom by providing a more natural and efficient way when teaching English.

This finding also agrees with the perspective of the theory of constructivism, which advocates that knowledge, new skills, and learning occur "through shared activity, through community engagement, dialogue, and communication in a community of shared activity" (Schrader, 2018, p.28). This implies that the Plotagon can be used as a constructivist technique to help students increase their language skills more than the traditional teaching method of the English language. Hence, through Plotagon, students can be encouraged to think, pair, and share their knowledge and skills.

According to Question Three concerning the effects of the Plotagon on enhancing students' English language skills and competencies, the overall outcome showed a positive indication from the part of the students. This implies that the Plotagon can be used as a means for language teaching and learning as they may develop students' writing, reading, speaking, and listening skills.

Probably, the most surprising finding is relating to the respondents' attitudes towards the importance of the Plotagon in enhancing two related skills, speaking and listening, as both got a high 'Agree' rating based on the Likert Scale. This leads to the implication that the Plotagon has the potential of providing authentic speaking practices to the EFL classroom context. This finding may disagree with a number of previous studies (such as Alwasilah, 2019; Marashi and Adiban, 2017; Gámez and Cuellar, 2019) that mainly focused on investigating the role of the Plotagon in enhancing the writing skill.

5. Conclusion

This research focuses on students' views about using the 3D animation app-Plotagon-as a pedagogical tool in the EFL classroom context. In regard to the data and findings presented above, it clearly shows that the Plotagon is considered a useful tool in upgrading EFL students' proficiency and skills in the English language. From the evidence shown in this study, it is very clear that the use of the Plotagon offers a lot of pedagogical advantages to the teaching and learning of a language through providing effective platforms and tools. Most importantly, the students agreed that the Plotagon app has positive effects on their English language learning skills, particularly writing and vocabulary.

Hopefully, through this study, the language policymakers, in the context of the entire study, will look into the curriculum and revise it to replace learning materials and textbooks with digital learning resources so that the students who study EFL at the foundation level can use them in accordance with their own pace.

For further research, researchers can explore how Plotagon apps can be integrated into online learning. Further research is also required to address how Plotagon Apps contribute to enhancing the acquisition of language skills such as reading, listening, and writing, as well as vocabulary and grammar.

References

- Al-Khalidi, I., & Nizwa, O. (2021a). Examining teachers' beliefs on developing a digital pedagogical framework based on the SAMR Model for undergraduate English language learning. *International Journal of English Language Education*, 9(1), 106-125.
- Al-Khalidi, I. (2021b). Using the Triple E Framework as an instructional design tool for the assessment of technology integration in a variety of TESOL contexts. *The Asian ESP Journal*, 17(2), 47-72.

- Al-Khalidi, I., & Khouni, O. (2021c). Investigating the effectiveness of social media platforms (SMPs) in English Language Teaching and Learning from EFL Students' Perspectives. *Journal of Applied Linguistics and Language Research*, 8(4), 46-64.
- Alkhalidi, I. (2020). Developing a flipped learning model for teaching EAP students struggling with multi-level challenges in a college context. *International Journal of Applied Linguistics and English Literature*, 9(6), 1-12.
- Al Khalidi, I. (2019). Investigating motivational factors in EFL classroom from the Perspectives of students at a tertiary context in Oman. In *English Language Teaching Research in the Middle East and North Africa* (pp. 479-505). Palgrave Macmillan, Cham.
- Al-Khalidi, I. (2018). The power of video materials in EFL classroom from the perspectives of teachers and students. *Journal of Applied Linguistics and Language Research*, 5(5), 161-181.
- Asmyae, B. A. (2019). Animation as an educational tool to learn English vocabulary in a Catalan Primary School.
- Anggraenia, A. D., Penturyb, H. J., & Adelina, N. (2019). Blending Humour and Animation in English Learning for Students of English Education Programs in Universities contexts, 5(6).
- Ainsworth, S., & VanLabeke, N. (2004). Multiple forms of dynamic representation. *Learning and instruction*, 14(3), 241-255.
- Alwasilah, A. C. (2011). *Pokoknya Kualitatif [Qualitative, That's All]*. Jakarta: Pustaka Jaya.
- Bahrani, T., & Soltani, R. (2012). The pedagogical values of cartoons. *Research on Humanities and Social Sciences*, 1(4), 19-22.
- Baglama, B., Yucesoy, Y., & Yikmis, A. (2018). Using Animation as a Means of Enhancing Learning of Individuals with Special Needs. *TEM Journal*, 7(3), 670-677.
- Baviskar 1, S. N., Hartle, R. T., & Whitney, T. (2009). Essential criteria to characterize constructivist teaching: Derived from a review of the literature and applied to five constructivist-teaching method articles. *International Journal of Science Education*, 31(4), 541-550.
- Berney, S., & Bétrancourt, M. (2016). Does animation enhance learning? Meta-analysis *Computers & Education*, 101, 150-167.
- Bransford, J., Brophy, S., & Williams, S. (2000). When computer technologies meet the learning sciences: Issues and opportunities. *Journal of Applied Developmental Psychology*, 21(1), 59-84.
- Craig, S. D., Gholson, B., & Driscoll, D. M. (2002). Animated pedagogical agents in multimedia educational environments: Effects of agent properties, picture features and redundancy. *Journal of educational psychology*, 94(2), 428.

- Kalina, C., & Powell, K. C. (2009). Cognitive and social constructivism: Developing tools for an effective classroom. *Education, 130*(2), 241-250.
- Egounleti, P. M., Hindeme, U. O. S., & Sonou, T. K. (2018). Examining the Impacts of Cartoons on Motivating EFL Beginner Students to Speak English Language in Beninese Secondary Schools: The Case Study of Some Secondary Schools in the Atlantic Region. *American Academic Scientific Research Journal for Engineering, Technology, and Sciences, 50*(1), 155-180.
- Chan, M., & Black, J. (2005, June). When can animation improve learning? Some implications on human computer interaction and learning. In *EdMedia+ Innovate Learning* (pp. 933-938). Association for the Advancement of Computing in Education (AACE).
- Cakir, I. (2006). The use of video as an audio-visual material in foreign language teaching classroom. *The Turkish Online Journal of Educational Technology TOJET, 5*(4), 67-72.
- Canning-Wilson, C. (2000). Practical Aspects of Using Video in the Foreign Language Classroom. *The Internet TESL Journal, Vol.6, No.2*.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed method approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Cakiroglu, U., & Yilmaz, H. (2017). Using videos and 3D animations for conceptual learning in basic computer units. *Contemporary Educational Technology, 8*(4), 390-405.
- Liu, C., & Elms, P. (2019). Animating student engagement: The impacts of cartoon instructional videos on learning experience. *Research in Learning Technology, 27*.
- Guzmán Gámez, D. Y., & Moreno Cuellar, J. A. (2019). The use of Plotagon to enhance the English writing skill in secondary school students. *Profile Issues in Teachers Professional Development, 21*(1), 139-153.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of educational research, 74*(1), 59-109.
- Gámez, D. Y. G. & Cuellar, J. A. M. (2019). The Use of Plotagon to Enhance the Students Writing Skills in Secondary School Students. *Profile: Issues in Teachers' Professional Development, 21*(1), 139-153. <https://doi.org/10.15446/profile.v21n1.71721>
- Kirszber, L.G., & Mandell, S. R. (2000). *Writing first: Practice in context with readings*. Boston: Bedford/St. Martins.
- Kamalrudin, A. (2020). *Using Animation to Facilitate Second Language Learning* (Doctoral dissertation).
- Love, D. (2013, November 25). Turning your students into movie directors with Plotagon [Web log post]. Retrieved from <https://digiteacher.wordpress.com/2013/11/25/turning-your-students-intomovie-directors-with-Plotagon/>

- Marashi, H., & Dadari, L. (2012). The Impact of Using Task-based Writing on EFL Learners' Writing Performance and Creativity. *Theory & Practice in Language Studies*, 2(12).
- Marashi, H., & Adiban, H. (2017). THE EFFECT OF USING SHORT SILENT ANIMATIONS ON EFL LEARNERS' WRITING. *English Review: Journal of English Education*, 5(2), 207-216.
- Mayer, R. E. (2014). Cognitive theory of multimedia learning. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (pp. 43-71). Cambridge University Press.
- Mekheimer, M. A. (2018). Effects of E-dictionaries on Reading comprehension and vocabulary learning in EFL. college students: A re-examination. *Journal of the Faculty of Education at Beni Suef*, 1, 413-464.
- Mayer, R. E. (2005). Introduction to multimedia learning. *The Cambridge handbook of multimedia learning*, 2, 1-24.
- Nunan, D. (1987). Communicative language teaching: Making it work. *ELT journal*, 41(2), 136-145.
- Purcell, K., Buchanan, J., & Friedrich, L. (2013). The impact of digital tools on student writing and how writing is taught in schools. *Washington, DC: Pew Research Center*, 16.
- Ramlatchan, M. (2019). Multimedia learning theory and instructional message design.
- Richards, J. C. (2014). *Communicative Language teaching today*. Cambridge: Cambridge University Press.
- Rosen, Y. (2009). The effects of an animation-based on-line learning environment on transfer of knowledge and on motivation for science and technology learning. *Journal of Educational Computing Research*, 40(4), 451-467.
- Salomon, G. (2002). The nature of peace education: Not all programs are created equal. *Peace education: The concept, principles, and practices around the world*, 3-13.
- Shahani, S., & Tahriri, A. (2015). The impact of silent and freeze-frame viewing techniques of video materials on the intermediate EFL learners' listening comprehension. *Sage Open*, 5(2), 2158244015585999.
- Sanaeifar, S. H. (2017). The effect of watching English language animation movies on learning idioms: A case of Iranian EFL learners. *European Journal of English Language Teaching*.
- Tversky, B., Morrison, J. B., & Betrancourt, M. (2002). Animation: can it facilitate?. *International journal of human-computer studies*, 57(4), 247-262.
- Wijaya, H., & Abbas, R. A. (2018). Animation effectiveness for E-learning with progressive web APP approach: A narrative review. *International Journal of Engineering and Technology (UAE)*, 7(4), 112-120. <https://doi.org/10.14419/ijet.v7i4.11.20785>

Copyright Disclaimer

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).