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Title:

Unpacking the influence of gamified teaching Applications on speaking proficiency on EFL students

The case study of EFL High school students at Mohamed Bousbiat of Biskra

The study submitted to the department of English as partial fulfillment of the requirement for the degree of master in science of language.

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UNPACKING THE INFLUENCE OF GAMIFIED TEACHING APPLICATIONS ON

SPEAKING PROFICIENCY ON EFL STUDENTS

Declaration

I, Hazar Lina BOUABDALLAH, do hereby declare that this submitted work is my original

work and has not previously been submitted for any institution or university for a degree. I also

declare that a list of references is provided forward indicating all the sources of the cited and

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Dedication

"It is a beautiful thing for a person to strive for success and achieve it. Even more beautiful is to remember those who were the reason for it."

First, I thank God for giving me the strength, perseverance, and guidance to complete this work.

This work is dedicated to my beloved one, who has left me physically but never in spirit, my mother Bouzidi Houria I hope my success reaches you, and I hope you are proud.

I also dedicate this work to my parents who gave me life. To my beloved mother Bahlouli

Hayet. This success is yours. In truth, I was just a tool.

To my dear father, my hero, my safe place Bouabdallah Mohamed words are not enough to express my gratitude. You are truly my pillar in life.

To my siblings, my wings in life Ilyes and Wail.

To my dear uncle, Bahlouli Mohamed, I have never forgotten you, kind-hearted man.

To my high school teacher Awatef Mira, being a best teacher to me is what inspired me to choose this field.

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Abstract

The study is set in Biskra, Algeria, where nowadays English is taught from primary school to university level. This study aims to explore how gamified teaching apps influence the speaking proficiency of English as a Foreign Language (EFL) students in this region. It employs a quasi-experimental method, using a pre-test, observation grid, experiment, and post-test to collect data. The pre-test and observation grid help establish the students' initial speaking proficiency and behavior. The experiment involves the implementation of a gamified teaching app, followed by a post-test to measure its effects.

The results reveal significant improvements in students' speaking skills and a decrease in mispronunciations after the implementation of the gamified teaching app. The results focus on the impact of integrating gamified teaching apps experience in the subject curriculum, which might give us a significant improvement for both the instructors and students.

Keywords: Gamified Teaching Apps ,EFL (English as a Foreign Language) Students, Speaking Proficiency, English Language Learning, EFL Students, Speaking Skills, Language Acquisition, Traditional Language Learning, Educational Technology, Language Instruction, Data Collection, Sample Size.

List of Abberviation and Acronyms

EFL: English as a Foreign Language

ICT: Information and Communication Technology

IT: Information Technology

APPS: Applications

H0: Null Hypothesis

H1: Alternative Hypothesis

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General Introduction

General Introduction

1.1 Background of the Study

In recent years, there has been a lot of attention given to learning English language, not just that but also giving intention to the trend of including game elements into the learning process. The use of gamification in education is a massive benefit for motivation, user interaction, and social effects.

English is considered as an international language and widely used in many fields including business, science, politics and media all over the world, so English increasingly becomes the most desirable language to be mastered. and in Algeria, as it is taught from primary school to university this makes us think about innovative solutions that are in line with modernity. Moreover, speaking skill can be particularly challenging because they involve not just talking but also communication, meeting personal needs, and interacting with others, and experts, like Alwi et al. (2010), suggest using technology for a more engaging learning experience.

The use of gamification in language learning aims to engage students, enhance learning efficiency, expand capabilities, set clear learning objectives, encourage behavior change, and promote social interaction, also to create levels of engagement comparable to those typically achieved by games. Although some studies show uncertain or negative outcomes from gamification, many researchers have found positive effects in educational settings, including enhanced engagement, retention, knowledge acquisition, and collaboration. This research explores the impact of gamification, motivated by the effects that game elements can produce.

In this study, we aimed to study whether the gamification affects students' speaking skill. More specifically, we aimed to investigate whether distinct components of gamification affect students' ability to be fluent in the language, their advantages, disadvantages, the obstacles that both students and teachers can face while using gamification Applications. We are specifically focusing on Biskra region to understand how these apps impact English speaking skills. How do gamified teaching Applications influence the speaking proficiency of EFL students at Mohammed Bousbiat in Biskra, Algeria, and what insights can we gain to enhance language education in this context?

1.2 Problem statement

Algerian learners in general suffer from not being able to speak English fluently. For those reasons, we tried to focus our study on how to improve students" speaking skill and this would be via implementing the gamified teaching applications.

This research aims to address the challenges faced by EFL students at Mohammed Bousbiat in Biskra, Algeria, in becoming proficient in spoken English. Traditional language learning methods have shown a significant gap in developing speaking skills. This study is based on academic observations and recognizes the widespread use of gamified language learning apps among young people in Biskra, reflecting a broader shift towards integrating technology in education.

The problem lies in lack of traditional language instruction to fully address the various aspects of speaking proficiency. As English learning in Biskra progressed, it became clear that traditional methods, though foundational, lacked the necessary dynamism to develop comprehensive language skills, especially in speaking. This recognition aligns with global

trends where traditional teaching methods are being reconsidered due to evolving learner needs and advancements in educational technology.

The issue is compounded by the underexplored territory of gamified language learning apps within the Algerian EFL context. Despite the potential benefits associated with gamification, there is a dearth of specific insights into how these applications influence speaking proficiency, especially in a cultural and educational context as unique as Biskra. This gap in understanding presents a significant challenge as educators strive to adapt their pedagogical strategies to meet the evolving needs of learners.

The geographical focus of this research is Biskra, Algeria more precisely at Mohamed Bousbiat high school, Biskra is a city characterized by its distinctive cultural fabric. The focus is on EFL students in high schools in Biskra. These students face the complexities of language acquisition within the unique cultural and educational context of the region. This population was chosen to highlight the specific challenges and opportunities influencing the language learning experience in Biskra.

The central question guiding this investigation is. How do gamified language learning applications affect the speaking proficiency of EFL students at Mohamed Bousbiat high school in Biskra, Algeria? This question aims to explore the impact of gamified methods on spoken English skills within the specific context of Biskra's educational environment.

1.3 Research Questions:

On the basis of the problem stated previously and to show the Influence of Gamified Language Learning Apps on Speaking Proficiency among EFL Students in Biskra, Algeria we have formulated the following research questions to guide the research study:

Q1: What are the current challenges faced by EFL students in Biskra, Algeria, in developing speaking proficiency within the traditional language learning framework?

Q2: How do gamified language learning apps engage and motivate EFL students in Biskra, Algeria, and to what extent do they contribute to enhanced speaking proficiency?

Q3: What are the perceived advantages and disadvantages of integrating gamified language learning apps into the language learning curriculum in Biskra, Algeria, according to both students and teachers?

1.4 Research Hypotheses

Based on the above research questions, we hypothesize the following research hypotheses:

We hypothesize that if EFL students at Mohamed Bousbiat high school in Biskra
effectively engage with gamified language learning apps, there will be a discernible
improvement in their speaking proficiency both inside and outside the classroom.

1.5 Research Objectives

In correlation with the previously mentioned questions, the present research aims at the following :

- 1. Assessing the impact of gamified teaching strategies on speaking proficiency. Evaluate how integrating gamification into traditional classroom activities influences speaking skills on EFL students At Mohamed Bousbiat in Biskra. Focusing on improvements in fluency, accuracy, and overall communication.
 - 2. Investigating teacher-led gamification techniques for enhancing student engagement.

Explore how teachers can apply gamification into lessons using non-digital resources, measuring student engagement and motivation levels compared to the usual teaching methods.

1.6 Population and Sample of the Study

Sampling involves selecting a subset from the larger population under study, as it's often impractical to include every individual. This approach enables faster and more cost-effective data collection. However, the selection process must be thoughtful, as the sample will inform conclusions about the broader population.

In our current research, we carefully chose students from Mohamed Bousbiat High School in Biskra, Algeria. Specifically, we focused on a mathematics class, which was deliberately selected due to its unique characteristics. This class, comprising just 19 students, provided a best sample size for our study.

The students in this class exhibited a high level of motivation to learn English. Their proficiency in the language was noteworthy, attributed to their status as some of the most academically adept students in the school. This motivation stemmed from their recognition of English's importance in their future careers, especially considering their aspirations to pursue higher education in fields such as Artificial Intelligence, computer science, and related disciplines. Given that English proficiency is crucial for success in these fields, our sample offers valuable insights into the language learning motivations and capabilities of students with such career ambitions.

1.7 Methodology Overview

Research Methodology is a systematic framework used to solve the research problem by using the best and most feasible methods to conduct the research while aligning with the aim and objectives of your research.

The research methodology includes answering the what, why, and how of your research. To put it in simpler words, you will explain about: What is your research method, what tools you will use to collect and analyze the data, what would be your sample size, and so on? Why you are choosing what you have planned to choose? How do you intend to make use of the methods and tools to solve your research problem and carry out the research?

In the present research investigation, we employed a quasi-experimental method to see how gamified teaching apps affect speaking skills among high school students at Mohamed Bousbiat High School in Biskra. We picked studentes from mathematics classes using purposive sampling and ensured a suitable sample size, after Formulating hypotheses to answer our research question and conduct the study thoroughly. After implementing our methodology which was by usings these methods the pre test to understand how the participants' characteristics, knowledge, skills, or behaviors were before we apply our expriment, the observation grid which in the otherhand helped the researcher to provide detailed information about participants' behaviors, interactions, or responses during their usual sessions, the experiment also helped the researcher to test hypotheses and determine whether changes in the independent variable lead to changes in the dependent variable, and the post-test helped to measure the effects of gamified teaching apps and compare them to the the traditional learning style that established by the pre-test. The results revealed important insights into the

effectiveness of gamified teaching applications in enhancing high school students' speaking skills. By testing our hypotheses, we were able to ensure the good effect of gamified learning apps on speaking proficiency.

These findings contribute valuable evidence to educational research and underscore the potential benefits of incorporating play approaches into language learning curricula. Moreover, our study offers practical implications for teachers looking for innovative strategies to enhance language proficiency among students. Through a comprehensive examination of our findings, we have made meaningful contributions to advancing educational practices aimed at enhancing speaking proficiency in high schools.

Conclusion

This chapter introduces the study's background, focusing on the increasing attention given to learning English language and the trend of incorporating gamification into the learning process. The aim of the study is to investigate the impact of gamification on students' speaking skills, specifically at Mohamed Bousbiat high school in Biskra region of Algeria. It also presents the research problem, questions, hypotheses, objectives, and an overview of the methodology.

The chapter concludes that English is an important I language to master, and innovative solutions like gamification can potentially enhance the learning experience and improve speaking skills. However, the effectiveness of gamified teaching apps in the Algerian EFL context remains unexplored, presenting a significant research gap.

Chapter one:

Review of the Literature

Chapter 1: Review of the Literature

Introduction

Academically speaking, literature review provides a comprehensive view of the research subject area, it is like a guiding light for the researcher. Review of the literature is "a study that analyzes and synthesizes an existing body of literature by identifying, challenging, and advancing the building blocks of a theory through an examination of a body (or several bodies) of prior work (Post et al. 2020, p. 352).

Literature reviews as standalone pieces of work may allow researchers to enhance their understanding of prior work in their field, enabling them to more easily identify gaps in the body of literature and potential avenues for future research. More importantly, review articles may challenge established assumptions and norms of a given field or topic, recognize critical problems and factual errors, and stimulate future scientific conversations around that topic.

Literature reviews come in many different formats and purposes: some review articles conduct a critical evaluation of the literature, whereas others elect to adopt a more exploratory and descriptive approach. Some reviews examine data, methodologies, and findings, whereas others look at constructs, themes, and theories. Some reviews provide summaries by holistically synthesizing the existing research on a topic, whereas others adopt an integrative approach by assessing related and interdisciplinary work.

2.1 Speaking skill

Among the four skills listening, speaking, reading and writing that must be acquired in learning any language, speaking skill holds a significant position in inquiring a second or foreign language. According to Ur (1996), speaking encompasses all facets of understanding language, involving the conveyance of meaning through both verbal and non-verbal cues across various situations. Proficiency in speaking is so important in language learning or teaching as well, as it has a pivotal role for making communication effective.

The act of speaking and the ability to understand what is being said are intricately linked in oral communication, forming a dynamic interaction between speakers and listeners. Acquiring proficiency in speaking a language is notably more demanding than simply comprehending it (Oakhill et al., 2014; Babayiğit & Shapiro, 2020; Al-Khresheh et al., 2020). Speaking skill is closely recognized as a vital skill of language acquisition, as noted by Ur (1984), who highlighted that 'Many if not most foreign language learners are interested in learning to speak' (p. 120). Speaking is incredibly important for communicate with others, establishing social status, advancing in careers, and conducting business. It's also a primary skill that learner find it easier to learn that is why speaking skill should given more attention. (Bygate, 1987). He quoted that: "Speaking is the vehicle par excellence of social solidarity, of social ranking, of professional advancement and of business. It is also the medium through which much language is learnt, and which for many is particularly conductive for learning. Perhaps, then, the teaching of speaking merits more thought" (P, 1)

2.1.1 Aspects of Speaking

Mastering speaking is the most important skill in acquiring a foreign or second language. Of the four key language skills, speaking holds the most significance in the realm of foreign or second language acquisition. According to Brown and Yuke (1983), proficiency in speaking is the skill most scrutinized in real-life scenarios. According to Syakur (1987:3), these components include:

- Vocabulary: It is obvious that people can not communicate ,share ideas,or participate in a
 discussion if they have a lack of vocabulary. Therefore,vocabulary means the appropriate
 diction which is used in communication.
- Grammar: grammar is a vital ingredient in the English language learning, According to
 Heaton (1978:5), students' ability to manipulate structure and to distinguish appropriate
 grammatical forms is essential for arranging correct sentences in conversation or speech.
 He emphasizes that the utility of grammar extends to learning the correct way to gain
 expertise in a language, both orally and in writing.
- Pronunciation: The quality of our communication with others can be significantly
 influenced. When our pronunciation is lacking, conveying our message effectively
 becomes challenging, regardless of the accuracy of our grammar and vocabulary

• Fluency:

Fluency in speaking can be described as the ability to communicate smoothly and precisely. Many learners can not achieve fluency in speech. Indicators of fluency encompass a relatively rapid speaking pace with few pauses and minimal use of filler words such as "ums" or "ers." These indicators suggest that the speaker can convey their message without extensive pauses or hesitation in searching for the appropriate language elements (Brown, 1997:4).

2.1.2 Problems in Speaking

Problems in the speaking skill divided into two aspects. Psychological aspect and language aspect.

2.1.2.1 Psychological Aspect

Juhana (2012:101) discusses several psychological hurdles students face when they try to speak in class:

- a) Fear of Making Mistakes: Many scholars argue that the fear of making mistakes is a significant obstacle to students' prepare to speak English in class. Aftat (2008), cited in Juhana (2012:101), suggests that this fear comes from concerns about correction and negative feedback. Moreover, students may worry about being criticized by their classmates or the teacher, leading to decreased motivation and participation in speaking activities. Hence, teachers play a crucial role in reassuring students that making mistakes is a natural part of learning, and can be a valuable learning experience.
- b) Shyness: Shyness is an emotional challenge that many students experience when they try to speak in English. It is a common issue that affects students' speaking performance. Gebhard (2000), referenced in Juhana (2012:101), emphasizes the importance of addressing shyness to support students in improving their speaking skills. Baldwin (2010), also highlighted that speaking in front of people is a common fear among students, and shyness may lead to mental blocks or forgetting what to say and make them nervous.

- c) Anxiety: Anxiety, characterized by feelings of tension, apprehension, and nervousness, is a common feeling for students. Referencing Horwitz et al. (2001) in Juhana (2012:102), anxiety seems like a challenge for students during speaking tasks, impacting their comfort levels and performance. As noted by Horwitz (1991) in Juhana (2012:102), language-specific anxiety can hinder oral language production, leading individuals to be less fluent than they actually are. To address this, teachers should work hard to create a learning environment that fosters comfort and reduces anxiety among students.
- d) Lack of Confidence: Lack of confidence often shows when students realize that their partners haven't understood them or when he can not understand others. In such situations, students may choose to remain silent, indicating a lack of confidence in their communication abilities. Tsui, citing Nunan (1999) in Juhana (2012:102), suggests that students lacking confidence in themselves and their English proficiency may experience communication apprehension. To solve this issue, teachers should focus on building students' confidence in speaking through supportive measures and encouragement and do not be severe or criticize them badly.
- e) Lack of Motivation: Motivation is important for the success of speaking performances in class and also affects the grades students receive. Zua (20018), as cited in Juhana (2012:103), describes motivation as an inner drive that boosts students' interest in their studies. Whether it comes from personal goals or external rewards, motivation pushes students to engage more with their learning.

In learning a language, motivation is too important factor because it is directly impacts how good students learn and use a language. When students are motivated, they are more likely

to participate and engage actively in speaking activities or discussions, work through challenges, and take risks with language. Moreover, when motivation is lacking, students may show disinterest, avoid participating, and struggle with their performance.

To keep students motivated, teachers need to create a supportive and encouraging learning environment. This means using interesting materials, providing helpful feedback, and giving students opportunities to work in groups. By following this, teachers can help students feel more confident and motivated to improve their speaking skills, leading to better results in the classroom.

2.1.2.2 Language Problems

According to Mukminatien (1999:1-10), students majoring in English often exhibit numerous errors in their spoken English. These errors encompass various aspects such as pronunciation (e.g., difficulties with tenses, prepositions, and sentence construction), vocabulary (e.g., inappropriate word selection), fluency (e.g., frequent pauses or corrections), and interactive communication (e.g., challenges in conveying intended meanings).

According to Penny Ur (1996), students' speaking difficulties can be divided to four factors.

2.1.2.2.1 Inhibition

Students get nervous about making mistakes or being criticized. They may also feel shy about speaking in front of their classmates because they are worried about bring attention to themselves, for example, Consider a student feels anxious whenever he has to speak in English class. He is afraid of saying the wrong thing and being corrected by the teacher or laughed at

by his classmates. Because of this fear, the student often avoids participating in class discussions and speaking activities. Even when he knows the answer, he prefers to stay quiet and do not say a word to avoid any embarrassment.

2.1.2.2.2 Difficulties in Generating Ideas

Many learners often find themselves they do not have a thing to say ,they have the idea but they do not know how to express it or they have lost the motivation to communicate. According to Rivers (1968), this inability to express oneself may stem from the choice of topics by the teacher, which might not resonate with the learner or may be unfamiliar. furthermore, when prompted to speak in a foreign language, students may struggle due to limited ideas, vocabulary, or uncertainty about grammar usage (Baker & Westrup, 2003).

2.1.2.2.3 Limited or Unequal Participation

In a group of students, some students may have limited opportunities to speak because one student can speak at a time, allowing others just to listen. This can give an unequal distribution of speaking time among students, with some dominating the conversation while others remain quite or contribute minimally.

2.1.2.2.4 Use of Native Language

Students often find their mother tongue language more comfortable to use compared to a second language ,or maybe they can not think in other language. As a result, students often incorporate their native language with the second language they are learning, which can make their language progress get slow. Harmer (1991) gave reasons for this issue. First, when students talk about topics they do not know well, they tend to use their native language. Also,

it is just natural for people to use the language they are most comfortable with. In addition, if teachers do not encourage and help the students use the new language, students are more likely to stick to their native tongue. Lastly, if teachers use the students' native language a lot, students might think it is okay to do the same they will not make any efforts to speak in the second language because teacher does not.

2.2 The Role of Teachers in Teaching Speaking

Teachers are like gardeners, planting seeds of knowledge in their students and nurturing their growth. Just as a gardener tends to their plants with care, teachers play various roles in students' education life,inside and outside the classroom. Vilar (2003) identified two important roles of teachers: managerial and instructional.

The instructional function involves creating productive learning environments and imparting knowledge to students, which are interdependent and essential for effective language instruction. Moreover, in English language teaching, teachers are expected to teach effectively, guide students, and maintain order in the classroom. However, the most critical role of teachers is to provide and support high-quality education (Leu, 2005). To achieve this, teachers should use their energy, knowledge, and motivation while adapting their roles to meet the different needs of the students. These roles may include assessing, organizing, facilitating, prompting, motivating, participating, monitoring, and modeling.

Assessment of speaking skills is often overlooked in language instruction, but it is essential for improving students' performance (Harden & Crosby, 2000). Teachers also play an important role as organizers during speaking activities, ensuring the effective application of tasks and adapting activities to suit students' needs (Harmer, 2001:275-6). Additionally,

teachers can participate in discussions, and give feedback only when necessary to understand students' challenges and ensure their active engagement in tasks. As feedback providers, teachers should offer constructive feedback that encourages students' self-confidence and motivates them to improve their speaking skills. However, excessive correction may demotivate students, so feedback should be balanced and encouraging (Harmer, 2007).

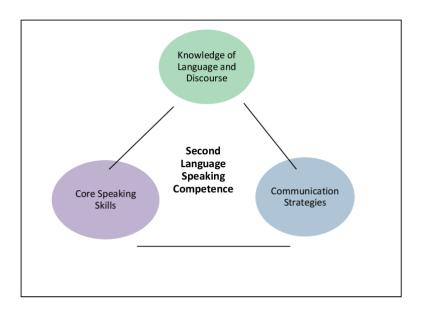


Figure 1. Components of second language speaking competence (Goh and Burns, 2012)

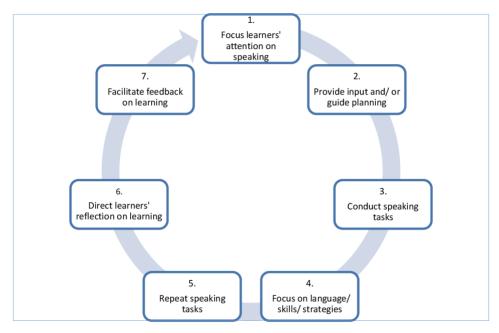


Figure 2. The Teaching-Speaking Cycle

2.3 Gamified Teaching Apps

Classrooms are adopting new innovations, with teachers incorporating new technical tools. Students now participate in collaborative programs, online discussions, and access course videos and social media platforms for learning (Sanchez et al., 2020). Recent improvements in information technology (IT) are significant for schools, providing exposure and resilience in large learning environments, meet student variation and promote inclusive and adaptive learning (Llorens-Largo et al., 2016).

However, this shift in education requires both intellectual and technical progress (Ge, 2018). Theories emphasize the necessity of adapting strategies to improve students' understanding. Student-centered learning, the most important aspect of active learning, is now admittedly as an effective educational approach that goes with learners' individual learning styles (Freeman et al., 2014). Today, a large range of ICT resources are available across different platforms like the internet, radio, TV, smartphones, laptops, computers, and tablets, with some devices having educational benefits (Agrawal and Mittal, 2018). Most of these devices can be used by both students and lecturers (Vezne, 2020). Application software works to inspire individuals and encourage different personal and mutually beneficial practices.

One of the most extended developments in this area involves the merging of technology, which typically employs design elements to stimulate motivation across different activities (Hamari et al., 2015; Gokbulut, 2020). Moreover, with the appearance of smartphones and interactive technology, games have become a more interesting and relevant learning resource in a different educational contexts (Ge 2018). Differences between "gaming" and "gamebased," according to researchers. Learning" He explained that through "game-based learning", students use games to achieve their educational goals. "Playing" is an important part of the learning process when learning through play. Applying games is known to develop the learning process.

In addition, the Gamification completely removes the game settings and increases the level of learning activity that is full reward (Kim et al. 2009; Al-Azzawi et al. 2016; Seker and Ozdamli 2017. Furthermore, the word "gamification" originated from the digital media sector. It was first created in 2002, and according to Rodrigues et al. (2019), it used for the first time in document was published in 2008. Moreover, it has spread widely into other fields since 2010.

Gaming is becoming more and more recognized in the scientific field (Bai et al. 2020). Simple objectives in games are more easily divided into short-term, manageable aims, giving players a seamless feeling of accomplishment through rewards that act as outside motivators (De-Marcos et al. 2014). Consequently, to motivate students and make learning enjoyable gamification strategies are applied in learning environments and, in general, to capitalize on the human desire for competition to reward achievement (Rizzardini et al. 2016).

In different fields of study, the extreme standard game components are points, challenges, levels, leader boards/rank, and badges (Barata et al. 2017; Hamari and Koivisto 2015; Sailer et al. 2017). In addition, recitations, accomplishments, goals that are explicit, push, and feedback (Hamari and Koivisto 2015). Teams, progress bar, and narrative (Sailer et al. 2017).

Accordingly, a productive online learning environment may promote faculty-student communication, student exchange and collaboration, time on task, quick feedback, active learning techniques, communication of strong standards, and respect for diversity and learning practices of any student (Urh et al. 2015). The gamifcation saw important factor that is considerable in education and to improve student engagement in classrooms. It tries mix encouragement with outward inspiration to enhance participation and inspiration (Kyewski and Krämer 2018).

Gamified teaching apps encourage them to take an active part in decision-making, it is especially ideal for active learning, it provides students with a healthy and enjoyable atmosphere to explore . gamifed seeks to have more fun and participation in school, thus offering constructive input that motivates, inspires, and make students able to involve or engage in the classroom . Since encouragement is not a simple task, effective creation and

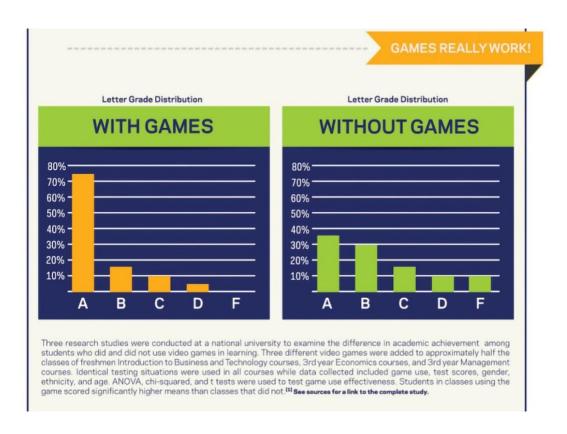
implementation of the gamification interface requires significant work (Aldemir et al. 2018). Therefore, a well-designed instructional game offers players opportunities for improvement, presents significant challenges that may be too difficult for individual players to overcome, and adapts communities based on learners' behaviour (Urh et al., 2015).

However, Student engagement should give more interest to the educational objectives, regardless of whether it is encouraged or not. Consideration must be given to students' profiles and the available school resources (da Rocha Seixas et al., 2016). Moreover, Urh et al. (2015) identified one of the most important factors in e-learning, including pedagogy, technology, design, administration, personnel, learning materials, and finances. The use of technology trends give the desired behavior for incorporating gaming elements and enhancing educational results. This approach confirms positive education, concern with the importance of learning through social interactions with the world and peers (York and Dehaan, 2018). There is mounting evidence that gamification is widely acknowledged as a valuable teaching tool for creating engaging learning environments.

The findings of gamifed in education focused on observational data from the last research aims at validating the benefits from division in favor of its ability to inspire, engage and influence socially while enabling students to immerse themselves in experiential learning (Lopez and Tucker 2019; Zainuddin et al. 2020a). It is necessary to seek to measure the impact of gamifed on student education to explain the gamifed of teaching.

2.3.1 The Power of Using the Gamified Teaching Apps for Student and Instructor

The world of education is changing everyday, and one of the latest changes or trends to take off is the use of gamification.



2.3.1.1Advantages of Using the Gamified Teaching Apps for Student

The researchers confirms that applying the game components into the online learning environment provides a good achievement, facilitate learning, and encourages students and increases their motivation (Jayalath and Esichaikul 2020). Many educators hope that employing gamification will motivate students to learn and enhance their school participation in a good

way. In this approach, teachers play a central role as facilitators of learning, guiding students through reading texts, answering questions, and completing content

Incorporating games into the classes emerges from the belief that the games' essence and what allows them enjoyable increases the students' internal enthusiasm to be involved in learning activities. The international study findings on creative teaching and learning, when the educational environments surrounded by supportive and overall culture it is obvious that leaning will flourish(Hamari and Nousiainen 2015). It was also hypothesized that the intrinsic engagement of games would increase students' engagement in the learning process, thus promoting constructive learning, problem-based learning, and experiential learning. (Smiderle et al. 2020).

Gamification aims to enhance particular skills, establish meaningful learning objectives, foster student engagement, optimize learning outcomes, and encourage shifts in attitudes and social interaction, it has common concepts of play design include dynamic mode, social engagement, freedom of choice, freedom to fail, and quick reactions(Dicheva et al. 2015). When combined with scientific concepts like periodic learning and retention, gamification goes beyond superficial benefits like points, badges, and levels. It can stimulate behavioral change, providing deeper impact and engagement. (Furdu et al. 2017; Strmečki et al. 2015). Moreover,quick Feedback provides contextual feedback on students' learning performance, increasing opportunities for group learning by informing learners of their performance during challenges or final cases, thus promoting social engagement. Additionally, allowing them to choose to fail serves as an incentive for students to resubmit assignments and revisit their homework without penalty. (Smiderle et al. 2020). Besides, increasing users' self-esteem and inspiration (Urh et al. 2015). According to the researchers' study, gamification is widely

recognized as effective for enhancing student learning across different educational approaches. For example, well-designed gamification can significantly increase student engagement in online activities. Moreover, online discussions provide learners with flexibility and ample time to reflect, contributing to the delivery of accurate and thoughtful content. Additionally, Su (2017) used a gamification approach in a geometric arithmetic curriculum and noticed that the students' learning output was boosted.



2.3.1.2 The Advantages of Using the Gamified Teaching Apps for Teachers

Gamification in education offers a valuable tool to speed learning and increase important abilities.

Gamification helps in teach complicated subjects, and promote systems thinking (Ding et al., 2018). it can be a valuable tool to gain knowledge and improve essential capacities such as decision-making, cooperation, and communication (Dicheva et al., 2015). Additionally, gamification in an educational environment improves the relationship between students and the instructor and increases their feeling of inventiveness (Brifa et al., 2020). Moreover, gamification is flexible because using it can meet various learning needs, including product sales, client service, soft skills development, and awareness-building, leading to performance gains for institutions (Furdu et al., 2017)

2.3.2 Obstacles in Implementing Gamified Education

There is still a differing perception of the concept of gamification even after integrating it into the classroom to improve teaching outcomes at various levels. Despite numerous studies conducted, gamification in education remains a subject of widespread controversy (Smiderle et al., 2020). This may be due to the word "gamification," which is often associated with play, entertainment, and fun rather than learning. On the other hand, it is incorrect to view gamification as the ideal solution for learners and educators (Papp and Theresa, 2017).

2.3.2.1 Obstacles that Students Face

Digital learning in today's knowledge society is characterized by characteristics that are not controlled through time and place (Al-Azawi et al. 2016). Moreover, Innovative learning through games needs a lot of effort from both teachers and students as well. However, studies have shown that employing gamification components has failed to improve students' sense of group and have not substantially enhanced students' skills, lack for achievement, and inner inspiration (Mekler et al. 2017; Kyewski and Krämer 2018). According to Gartner (2015), about 80% of all gamified applications will not succeed due to inappropriate design (Urh et al. 2015). So, it must be considered to find a way to meet individual's needs to confirm a particular game (Brifa et al. 2020)

2.3.2.2 Obstacles that Teachers Face

Obstacles such as classroom issues and technological infrastructure (e.g., non-working computers or power outages and, most importantly, the Internet) contribute to the challenges of unsuccessful learning through gamified applications.

Faculty members' reluctance to adopt play elements into their teaching plans is due to a lack of conviction in the concept itself and its capabilities in improving students' understanding (Jong et al., 2015). According to Zainuddin et al. (2020), the main reason why learning through gamified applications is not successful is the use of game elements, instructional design, and technical issues. Furthermore, instructional designers need to gain an empirical understanding of each of the following: outcomes, learning objectives, and content when evaluating individual play selection (Derfer-Rozin and Pitesa 2020). We should also not

forget the problems of the Internet in Algeria, and it may require teachers a lot of time to master the use of these applications.

Conclusion

This chapter gives us a comprehensive literature review on speaking skills, the role of teachers in teaching speaking, and gamified teaching apps. It discusses the importance of speaking skills in language acquisition, the challenges faced by students in speaking, and the various roles teachers play in teaching speaking. It also explores the concept of gamified teaching apps, their advantages, and the obstacles in implementing gamified teaching apps. we concludes that gamified teaching apps can potentially enhance speaking skills and improve language learning outcomes. However, the effectiveness of these apps depends on various factors, including the design of the game, the students' motivation, and the teachers' ability to integrate these apps into the curriculum.

Chapter Two:

Field Work

UNPACKING THE INFLUENCE OF GAMIFIED TEACHING APPLICATIONS ON

SPEAKING PROFICIENCY ON EFL STUDENTS

Chapter Two: Field Work

Introduction

Field work typically begins in a specific setting although the end objective of the study

is to observe and analyze the specific behavior of a subject in that setting. The cause and effect

of a certain behavior, though, is tough to analyze due to presence of multiple variable in a

natural environment. Most of the data collection is based not entirely on cause and effect but

mostly on correlation. While field research looks for correlation, the small sample size makes

it difficult to establish a causal relationship between two or more variables.

The present chapter provides a comprehensive exposition of the research findings

presenting them and analyzing them in depth through various research methods, collected data,

visual tools like tables, graphs, and detailed explanations are used to help readers understand

the results, this data garnered through the employed research methodologies, namely the pre-

test, observation grid, experiment, and post-test.

pre-test which was like a starting point that helped the researcher understand how the

participants' characteristics, knowledge, skills, or behaviors were before we apply our

expriment, the observation grid which in the otherhand helped the researcher to provide detailed

information about participants' behaviors, interactions, or responses during their usual sessions,

experiment also helped the researcher to test hypotheses and determine whether changes in the

independent variable lead to changes in the dependent variable.

The post-test helped to measure the effects of gamified teaching apps and compare them

to the traditional learning style that established by the pre-test. It helps determine whether the

intervention had a significant impact on the outcomes with the contribution of these important

methods which played a big role in collecting date we ensure that the findings are accurate, reliable, and valid

3.1 Methodology

Research Methodology is a systematic framework used to solve the research problem by using the best and most feasible methods to conduct the research while aligning with the aim and objectives of your research.

The research methodology includes answering the what, why, and how of your research. To put it in simpler words, you will explain about: What is your research method, what tools you will use to collect and analyze the data, what would be your sample size, and so on? Why you are choosing what you have planned to choose? How do you intend to make use of the methods and tools to solve your research problem and carry out the research?

In the present research investigation, we employed a quasi-experimental method to see how gamified teaching apps affect speaking skills among high school students at Mohamed Bousbiat High School in Biskra. We picked students from mathematics classes using purposeful sampling and ensured a suitable sample size, after formulating hypotheses to answer our research question and conduct the study thoroughly.

After implementing our methodology which was by using these methods the pre test to understand how the participants' characteristics, knowledge, skills, or behaviors were before we apply our experiment ,the observation grid which in the other hand helped the researcher to provide detailed information about participants' behaviors, interactions, or responses during their usual sessions, the experiment also helped the researcher to test hypotheses and determine whether changes in the independent variable lead to changes in the dependent variable, and the

post-test helped to measure the effects of gamified teaching apps and compare them to the traditional learning style that established by the pre-test.

The results revealed important insights into the effectiveness of gamified teaching applications in enhancing high school students' speaking skills. By testing our hypotheses, we were able to ensure the good effect of gamified learning apps on speaking proficiency.

These findings contribute valuable evidence to educational research and underscore the potential benefits of incorporating play approaches into language learning curricula. Moreover, our study offers practical implications for teachers looking for innovative strategies to enhance language proficiency among students. Through a comprehensive examination of our findings, we have made meaningful contributions to advancing educational practices aimed at enhancing speaking proficiency in high schools.

3.2 Sampling

Sampling is the selection of a subset of the population of interest in a research study. In the vast majority of research endeavors, the participation of an entire population of interest is not possible, so a smaller group is relied upon for data collection. Sampling from the population is often more practical and allows data to be collected faster and at a lower cost than attempting to reach every member of the population.

However, because the sample will be used to make inferences about the population, understanding the means by which the data arrived in the database is an important aspect of analyzing and drawing conclusions from that data.

in the present research, we had carefully choose students from Mohamed Bousbiat High School in Biskra, Algeria, specifically from a mathematics class this class was selected in a purpose because it was the only one in the school which made it easier to study, it included just 19 students, an ideal number for our study.

These students were highly motivated to learn English and already showed strong skills in the language because as we already know that mathematics classes are the most intelligent students in the school. Moreover, their motivation stemmed from the understanding that English would play a vital role in their future careers, particularly as a significant number of them aspired to pursue studies in Higher School of Artificial Intelligence, computer science and all of their specialties in university need English language.

The careful selection of the mathematics class was essential to the study's sampling strategy, aiming to offer detailed insights into how gamified teaching apps affect speaking skills in a particular educational setting

3.3 Data Gathering Tools Description

Data gathering tools is the process of gathering, measuring, and analyzing information on variables of interest to answer research questions, test hypotheses, and evaluate outcomes.

Many different Data gathering tools are used to collect and analyze the data, and they are developed to use the basic data collection methods.

Moreover, interviews, document analysis, observation, group discussion, photography, video, surveys, questionnaires, and case studies work under data collection methods by using their tools. It becomes easier to gather data through online resources with the help of electronic media and the internet.

3.3.1 Pre-test

The pre-test is an initial assessment conducted before any intervention in a research study. It helps establish baseline measurements for comparison with post-test results, providing insights into participants' initial levels and aiding in assessing the intervention's impact.''

The pre-test was designed with the participation of 3rd year pupils from the mathematics section of the high school,it focused to assessing their baseline level before the application of the gamified teaching apps, it consisted a various types of activities aligned with the academic topic of the solar system, drawn from their curriculum materials, these activities includes: synonyms and antonyms, filling the blanks, and matching each term with its suitable description.

Moreover, each student was supposed to read a passage aloud from them the academic text allowing for the evaluation of their speaking proficiency, pronunciation, and fluency. This systematic pre-test approach produced valuable insights into the initial speaking proficiency levels of the participating students.

These insights serve as a foundational step for further investigation into the impact of gamified teaching apps on improving oral communication skills among EFL high school students.

3.3.2 Observation Grid

"The observation grid is a structured tool used by researchers to systematically record and organize data during observational studies. It helps researchers document observations, behaviors, or events of interest in a standardized format, facilitating consistent data collection and analysis."

In the observation phase, a structured assessment was designed to record the students' behaviors via a comprehensive observation grid divided into 7 columns: fluency, pronunciation, vocabulary, usage of grammar, interaction, engagement, and confidence.

The pupils were individually evaluated, each student had their own score from 1 to 5 in each section, showing how well students' performance across linguistic dimensions was

As the teacher was delivering the lesson in the usual way, I wrote down their names to keep track of everyone's progress. This facilitated the operation of students' speaking proficiency levels prior to the implementation of gamified teaching apps.

3.3.3 Experiment

"The experiment involves implementing an intervention or treatment to observe its effects under controlled conditions. It helps assess the intervention's impact on study objectives through comparison with control groups."

The experimental involvement aimed to evaluate, the influence of gamified teaching apps on oral communication skills among EFL high school students, involved the creation and application of a custom-designed quiz game using the Canva application. The game, consisting of 20 questions corresponded with the academic topic of the solar system, suited to the number of students in the classroom and combined varied question formats such as true/false statements, fill-in-the-blank exercises, matching exercises, and puzzles. the questions was accompanied with text-audio and video components, they were integrated into the game, featuring pronunciations by native speakers to provide authentic pronunciation cues for the students, prompting students to engage in active listening and comprehension activities Pronunciations

of key terms by native speakers were provided through audio recordings, allowing students to practice correct pronunciation by listening and repeating after the audio

The implement of this gamified activity was aimed to enhance student's motivation, participation and interaction ,fostering an immersive learning experience conducive to skill development in oral communication.

3.3.4 Post Test

''The post-test is conducted after the intervention to measure its effects. It helps evaluate changes in participants' knowledge, skills, or behaviors and assess the intervention's impact on study objectives.''

Following the experimental intervention with the gamified quiz game, a post-test was Implemented to assess any changes in the speaking proficiency levels of the EFL high school students. The post-test consisted a series of exercises designed to evaluate students' understanding of vocabulary and their ability in verbal expression regarding the scholarly subject of the solar system.

These exercises were similar to those in the pre-test, allowing for a comparison of students' speaking skills before and after the game application. Students were given handouts with different types of exercises, such as matching vocabulary terms with their descriptions, filling in blanks in sentences, and identifying synonyms and antonyms from the text. furthermore, students were provided with the same text from the audio they had heard during the game intervention, allowing to determine if they had focused during the audio presentation and whether they had corrected their pronunciation.

As in the pre-test, each student was individually asked to read a passage aloud from the text provided, serving as an indicator of their speaking ability, pronunciation, and fluency. Data collection during the post-test phase involved recording students' responses to the exercises and evaluating their oral reading performance. This systematic approach ensured consistency in assessing any changes in students' speaking proficiency following the intervention.

3.4 Results presentation

Table 01: Participants Level in English Before The Use of Gamification

		Frequency	Percentage
	0 to 5	3	16.7
	5.5 to 10	9	50.0
Valid	10.5 to 14	3	16.7
vand	14.5 to 17	3	16.7
	17.5 to 20	0	0
	Total	18	100.0

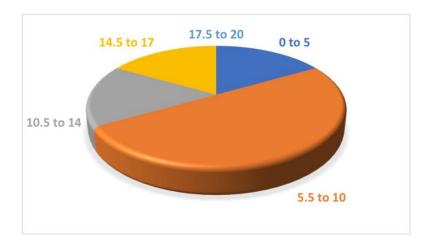


Figure 01: Participants Level in English Before The Use of Gamification

The distribution in Table 1 and Figure 1 indicate a spread of performance extremes in the pre-test. The majority are in the range of 5.5 to 10 which gives us a moderate level of understanding, while the segmented percentages in the lower and higher ranges provide insights into students' weaker and stronger area.

Table 02: Participants Level in English After The Use of Gamification

		Frequency	Percentage
	0 to 5	0	0
Valid	5.5 to 10	5	27.8
, arra	10.5 to 14	9	50.0

14.5 to 17	2	11.1
17.5 to 20	2	11.1
Total	18	100.0

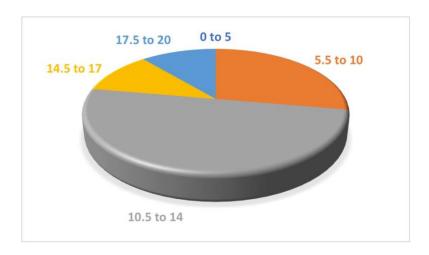


Figure 02: Participants Level in English After The Use of Gamification

Table 2 and Figure 2 indicate, the concentration of scores between 10.5 and 14 which means that the majority students performing relatively well. The segmented percentages indicate the distribution of students across different performance levels, with higher percentages in the mid-range and smaller percentages at the extremes, reflecting the diversity of abilities within the student population.

Table 1.2: Mispronounced words Before The Use of Gamification

		Frequenc	Percentage
		y	
	0 to 2	0	0
	3 to 5	2	11.1
	6 to 8	3	16.7
Valid	9 to 12	11	61.1
vuita	13 to 15	1	5.6
	16 to 20	1	5.6
	Total	18	100.0

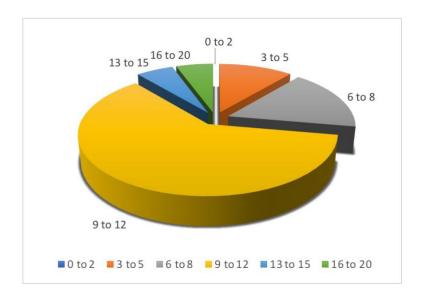


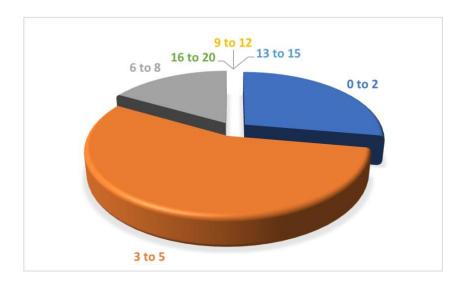
Figure 1.2: Mispronounced words Before The Use of Gamification

in Table 2.1 and figure 2.1 indicates that Before the experiment, most of students (61.1%) scored between 9 to 12 in mispronounced words test, indicating a serious issue with pronunciation accuracy.

The distribution of errors across different word count ranges gives insights into the specific parts where students struggle the most, with a higher percentage of errors observed in longer word couts

Table 2.2 Mispronounced words After The Use of Gamification

		Frequency	Percentage
	0 to 2	5	27.8
	3 to 5	10	55.6
	6 to 8	3	16.7
Valid	9 to 12	0	0
	13 to 15	0	0
	16 to 20	0	0
	Total	18	100.0



2.2 Mispronounced words After The Use of Gamification

In table 2.2 and figure 2.2 indicates that after the experiment, there is a noticeable improvement in pronunciation accuracy, as evidenced by the decrease in error percentages across all word count ranges compared to Table 1.

The absence of errors in pronouncing words from the ranges of 9 to 12, 13 to 15, and 16 to 20 indicates a significant improvement in proficiency, particularly in handling longer words

Paired Samples Statistics

		Mean	N	Standar	SEM
				d	(Standard
				Deviati	Error of the
				on	Mean)
D : 1	pre	2.33	18	.970	.229
Pair 1	post	3.06	18	.938	.221

Paired Samples Correlations

		N	Correlati	Sig.
			on	
Pair 1	pre &	18	.884	.000
	post			

Paired Samples Test

	Paired	Paired Differences						Sig.
	Mean	Stand	SEM	95% Confidence				
		ard		Interval	for the			
		Devi-		Difference				
		ation		lower	upper			
pre - Pair 1 post	722	.461	.109	951	493	- 6.648	17	.000

H0: There are no differences in students' scores after using gamified teaching apps

H1: There are differences in students' scores after using gamified teaching apps

From the table, we find that the significance level is 0.000, which is less than 0.01. Therefore, we reject the null hypothesis and accept the alternative hypothesis:

There are statistically significant differences in students' scores after using gamified teaching apps technology.

Statistics for Paired Samples

		Mean	N	Standar	SEM
				d	
				Deviati	
				on	
Pair 1	pre- words	3.78	18	.943	.222
	post-test	1.89	18	.676	.159

Correlations for Paired Samples

		N	Correlati	Sig.
			on	
Pair 1	pre-words &	18	.881	.000
	post-test			

Paired Samples Test

	Différences appariées						ddl	Sig
	Mean	Standa	SEM	95%	Confidence			
		rd		Interval	for the			
Deviati Difference								
		on		Lower	upper			
P								
ai pre-words -	1.889	.471	.111	1.654	2.123	17.00	17	.000
r post-test	1.005	. 1 / 1	•••	1.05	2.123	0	1,	.000
1								

H0: There are no differences in the number of incorrect words after using gamified teaching apps

H1: There are differences in the number of incorrect words after using gamified teaching apps

From the table, we find that the significance level is 0.000, which is less than 0.01. Therefore, we reject the null hypothesis and accept the alternative hypothesis:

There are statistically significant differences in the number of incorrect words after using gamified teaching apps technology.

3.5 Analysis of Findings

The experiment was conducted provided us a comprehensive analysis of the experimental results obtained from a study that explored the influence of gamified teaching apps on students' speaking proficiency and it allowed us to uncover several criteria of the effectively use of gamification in teaching EFL high school students.

3.5.1 The Experiment Results Analysis

Based on the results obtained, the analysis of the provided data from the paired samples test shows us an evidence of how well the experiment has worked. The pre-test group obtained a mean score of 2.33, with a good sample size of 18 and a standard deviation of 970. Whereas , the post-test obtained a higher mean score of 3.06, with similar sample size and a relatively lower standard deviation of 938. The high positive correlation coefficient of 0.884 between the pre and post measures indicates a strong relationship between the two sets of data. The subsequent paired samples t-test yielded a remarkable t-value of -6.648, with a corresponding p-value of 0.000, clearly indicating statistical significance at the conventional alpha level of 0.05. This statistical significance suggests that the observed differences between the pre-test and post-test scores are unlikely due to random chance alone. Moreover, the negative mean difference of -0.722, coupled with the 95% Confidence Interval for the Difference (-0.951 to -0.493), which does not include zero, provides further evidence that the experiment of integrating the gamifications apps led to a tangible improvement in the measured outcome. Overall, these findings strongly support the conclusion that the experiment was successful, and the intervention effectively enhanced the targeted outcome measure. , we can deduce that high school pupils from scientific streams, such as mathematics, and science see English classes as

a refreshing break. These students often face challenging academic requirements in their core science subjects, which require intense concentration and hard work. Consequently, English classes provide a much-needed respite, which could explain the positive response to the integration of new educational technology in these sessions. The observation grid clearly demonstrates this positive shift. It shows a noticeable improvement in student engagement and performance before and after the implementation of gamified teaching apps.

The study initially assessed their speaking proficiency and the frequency of mispronounced words through a pre-test. after the experiment of applying gamified teaching apps, significant improvements were shown in both areas during the post-test. The students demonstrated enhanced speaking skills and a decrease in mispronunciations, indicating the effectiveness of the intervention. Although that they already enjoying English sessions with a supportive teacher who facilitated engagement and interaction, integrating of gamification proved particularly impactful. The students engaged better with the gamified approach, feeling as though they were playing a game, which boosted their comfort, confidence, and engagement levels. This alignment with their technological preferences contributed to a more dynamic and successful learning experience overall.

The experimental results clearly indicate that the use of gamified teaching applications has a statistically significant impact on both the scores of the students and the number of incorrect words they use. This implies that such applications could potentially be a valuable tool in improving students' academic performance.

3.6 Recommendations

In our present study, and Given the significance of speaking proficiency in language acquisition, it is recommended to integrate gamified speaking activities tailored to the high school classes at least in one session at week. These apps should incorporate debate techniques, interactive exercises, and grammar reinforcement within a gaming framework. Additionally, teachers should supplement app-based learning with well-prepared lessons that emphasize oral expression and encourage students to engage in speaking tasks regularly. By combining gamified apps with traditional teaching methods and providing consistent opportunities for oral practice, students can enhance their speaking skills while reinforcing mathematical concepts, thereby maximizing learning outcomes.

3.6.1 Recommendations for the High School Administration:

Support Technological Infrastructure: Try improving internet access and technological infrastructure within the school to facilitate future integration of online learning resources and digital gamification tools.

Professional Development Workshops: Organize a workshops or training sessions for teachers to enhance their understanding of gamified teaching approaches and strategies.

3.6.2 Recommendations for EFL Teachers at the high schools of Biskra

Training Workshops: Try to make workshops or training sessions to familiarize teachers with gamification principles and techniques that do not rely heavily on digital resources. Provide practical examples and hands-on activities to explain how to implement gamification effectively in the classroom.

Collaborative Planning: Share ideas and strategies for integrating gamification into the curriculum. Encourage the exchange of best practices and peer support to enhance applications efforts.

3.6.3 Recommendations for EFL Students at the high school of Biskra

Active Participation: Try to engage and be active in classroom activities and speaking tasks facilitated through gamified learning approaches.

Practice Outside Class: Dedicate time outside of class to practice speaking English in real-life situations. Instead of playing meaningless games all the time, allocate a bit of time, say 10 minutes daily, to play an educational English language game like Duolingo or any other similar app.

Conclusion

The antecedent chapter carefully detailed the methodological approach chosen to align with the research goals. It was descriptive, and deliberate, explaining the reasons behind each decision. Starting with the core assumptions guiding the study, the chapter moved on to discuss the practical methods and design choices that best fit the research objectives. The selection of participants and the sampling strategy were discussed next, aiming to ensure a diverse and representative group. Tools such as observation grid, pre-test, and post-test were used for data collection, designed to measure initial proficiency and assess changes after the implement of the gamification. These instruments were rigorously evaluated for validity and reliability, ensuring the credibility of the study findings.

Overall, this methodological framework provided a solid basis for systematic data collection and rigorous analysis, investigating how gamified teaching apps can improve speaking proficiency among the EFL student of the high school, and how it can reduce mispronunciations among students facing demanding academic challenges.

General Conclusion

General Conclusion

In an era where digital technology continually reshapes educationallandscapes, the integration of gamified teaching applications has emerged as a dynamic strategy for enhancing language acquisition.the present study investigates the impact of gamification on Englishlanguage learning, specifically focusing on students' speaking skills.

We have provided a comprehensive knowledge about gamified teaching apps and how it can enhance English language speaking skill, particularly in the Algerian EFL context. This study has taken us through various stages of research, each contributing to our understanding of the subject matter and shaping our perspective on the role of gamification in language learning. In the first chapter, we set the stage for our research by providing a general introduction to the study. We discussed the increasing importance of English language proficiency in today's globalized world and the need for innovative solutions to enhance language learning results. We introduced the concept of gamification, a trend that has been gaining traction in various fields, including education. We hypothesized that incorporating game elements into the learning process could improve students' speaking skills and make language learning a more engaging and enjoyable experience. We also presented the research problem, questions, hypotheses, and objectives, providing a road map for our research. We discussed the methodology we planned to use, giving an overview of the research design, sampling strategy, and data collection and analysis methods. The chapter concluded with a recognition of the research gap in the Algerian EFL context, setting the stage for our investigation. In the second chapter, we went also deeper into the theoretical elements of our study. We conducted a comprehensive literature review, discussing the importance of speaking skills in language acquisition, the challenges faced by students in speaking, and the various

roles teachers play in teaching speaking. We also saw the concept of gamified teaching apps, discussing their potential benefits and the obstacles in implementing gamified education. The literature review provide that while gamified teaching apps have been used in various educational contexts, their effectiveness in improving speaking skills in the Algerian EFL context remains unexplored. This finding made our study powerful and made us needing for empirical research in this area. In the third chapter, we presented our research methodology in detail. We provided our chapter with a sampling strategy, explaining why we chose to focus on high school students from a mathematics class in Biskra, Algeria. We described the data gathering tools we used, including a pre-test, observation grid, experiment, and post-test. We also explained how we presented the results and analyzed the findings. The chapter concluded with a discussion of the findings, we reached that the use of gamified teaching apps had a statistically significant impact on students' speaking proficiency and the number of incorrect words they used. This finding provided empirical evidence supporting our hypothesis, suggesting that gamified teaching apps could potentially be a valuable tool in improving students' academic performance and enhancing their speaking skills. In the final chapter, we aim to synthesize the findings from our research, discuss their implications, and provide recommendations for future research. We will also reflect on the limitations of our study and suggest ways to address them in future investigations. This chapter aims to provide a comprehensive conclusion to our research, giving the potential of gamified teaching apps in revolutionizing English language learning and teaching.

If this study, which is the impact of gamified teaching applications on speaking proficiency, is implemented in the future, potential further research paths could include examining the longitudinal impacts of these apps, exploring how their effectiveness varies

across different cultures, and evaluating personalized teaching approaches to accommodate diverse learner needs. This would expand on the current study's findings, offering insights into sustained effects and customized pedagogical strategies.

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Appendix 1. Observation grid table

Student name	Fluency	Pronunciation	Vocabulary	Grammar	Interaction	Confidence	Engagement
1. El rmilli Alaa	2,5/5	3/5	1,5/5	1,5/5	4/5	4/5	4/5
2. Ouragh Sami	1/5	1.5/5	1.5/5	2/5	2/5	2/5	1.5/5
3. Beldjbel Ines	2/5	2/5	2.5/5	2.5/5	3.5/5	2.5/5	3/5
4. Bahaz Yasmine	2/5	1,5/5	2/5	2/5	3/5	2/5	2/5
5. Bousetta Salah	1,5/5	1,5/5	1/5	1/5	2/5	1/5	1/5
6. Boughdiri Maram	1/5	1/5	1,5/5	1/5	3/5	1/5	2,5/5
7. Targhini Afaf	1,5/5	2/5	2/5	1,5/5	3/5	2,5/5	3/5
8. Hedid Racha	1/5	1/5	2/5	2/5	3,5/5	2/5	3/5
9. Hemma Asma	1/5	1/5	1/5	1/5	2/5	1/5	1,5/5
10. Khelifa Ilyes	3/5	4/5	3/5	2,5/5	4/5	3,5/5	2,5/5
11. Sayeh Hadil	1/5	1/5	2/5	1,5/5	2/5	1/5	1/5
12. Sauidani Serine	1/5	2/5	2/5	2/5	3,5/5	2,5/5	3/5
13. Taklit Alaa	1/5	1/5	2/5	2/5	3/5	1,5/5	2/5
14. Tabouch Hanin	1,5/5	2/5	2/5	1,5/5	2,5/5	1,5/5	2.5/5
15. Kribaa Abdennacer	1/5	1/5	1,5/5	1/5	1/5	1/5	1/5
16. Maaoui Sarah	3/5	4/5	4/5	3,5/5	4,5/5	4/5	4,5/5
17. Moukran Nada	2/5	3/5	3/5	3/5	4,5/5	4/5	4/5
18. Nasri Ibtissem	1/5	1,5/5	2/5	1/5	1/5	1/5	1/5
19. Nebili Hayam	2/5	2,5/5	2/5	3/5	3,5/5	3/5	3,5/5

Session Details:

• Date: 26/02/2024

• Time: 14:00

• Classroom/Location:

• Grade/Class: Third year of high school (Mathematics)

• Teacher's Name: Mira Awatef

Appendix 2 : Pre-test

Full nai	me:																								
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The solar System

Billions of miles away in space, Earth appears as a tiny ball moving in orbit around the Sun. Seven other planets follow similar paths, accompanied by satellites and moons. Further between Mars and Jupiter, thousands of asteroids and comets traverse space. Together, these celestial bodies constitute our solar system, moving cohesively at a speed of about twelve miles per second. The Sun, a typical star, is the heart of this system, radiating essential heat and light for life on Earth. Its size dwarfs even the largest planets. The Sun's heat and light enable us to see other solar system members, including comets and meteors. Amidst the multitude of stars in the universe, our Sun stands as one of millions, with its twinkling light less intense due to its considerable distance. Planets, distinct from distant stars, reflect the Sun's light, giving them visibility as they orbit in unique paths, influenced by the Sun's gravity. Distant planets, like Jupiter, exhibit larger orbits and slower travel, taking more than eleven Earth years to complete one orbit around the Sun, unlike Earth's annual orbit.

Task 01: give the synonyms of the following words:

1. Orbit:		
2. Celestial:		
3. Dwarfs:		
4. Radiating:		

	5.	Essential:
	6.	Distant:
	7.	Cohesively:
	Gi	ve the antonyms of the following words:
Aı	ntony	yms:
	1.	Tiny:
	2.	Slowly:
	3.	Visible:
	4.	Overwhelms:
	5.	Distant:
Та	sk 0	2: Fill in the blanks with the appropriate words from the box:
	1.	The bodies in our solar system move in predictable paths called
		around the Sun.
	2.	, such as asteroids, also revolve around the Sun between the orbits of
		planets.
	3.	The Sun, a typical, is the heart of our solar system, and its light
		from its core.
	4.	with their tails are starry-headed objects often visible as they draw near
		the Sun.
	5.	The of meteors through space is a fascinating phenomenon.

6.	All these bodies together form our vast solar system, moving as a unit
	through
7.	Stars, when visible at night, have less intense light than the Sun, mainly due to their
	from Earth.
8.	The planets give off no light of their own but the Sun's light, making
	them visible in the night sky.

Box of Words: Orbits, Cosmic, Celestial, Gravity, Comets, Swarms, Emanates, Tranquil

Task 03: Match the Word with Its Description:

The word	Description
• Orbit	Makes something else
	seem small or
	insignificant in
	comparison.
Celestial	Related to the sky or
	outer space.
• Dwarfs	The curved path an
	object takes around a
	star.
Radiating	Absolutely necessary;
	extremely important.

Essential	In a united and
	cooperative manner.
Cohesively	Sending out rays or
	waves, such as heat or
	light.

Appendix 3 : Post-test

Full Name:....

The solar system is a vast and wondrous expanse of celestial bodies that orbit around a central star, known as the Sun. At the heart of this cosmic arrangement, the Sun shines brightly, radiating light and heat to all the planets and other objects in its orbit. Orbiting the Sun are eight planets, ranging from tiny, rocky worlds like Mercury and Mars to huge gas giants like Jupiter and Saturn. In addition to planets, there are also celestial bodies known as dwarf planets, such as Pluto, which exist in the distant reaches of the solar system. These dwarf planets often form swarms of smaller objects, including asteroids and comets, which travel through space under the influence of gravity. Comets, with their tails of gas and dust, make distant revolutions around the Sun, while asteroids can be found scattered throughout the solar system. Together, these celestial bodies create a celestial dance, governed by the forces of gravity and cosmic laws, shaping the dynamic and ever-changing nature of our cosmic neighborhood.

Activity one:

Extract synonyms and antonyms from the text:

Synonyms	Antonyms
Celestial =	Tiny #
Distant =	Cosmic #
Radiating =	Comets

Activity Two: Filling the blanks using these words: orbits, cosmic, celestial, radiating, comets, revolution, asteroids, distant, tiny, huge, swarms, gravity

In the vast expanse of space, bodies move in predictable paths called
around the Sun. These bodies include not only the familiar planets but also
, such as asteroids, that also revolve around the Sun between the orbits of planets.
The Sun, a typical, is the heart of our solar system, and its light from
its core with their tails are starry-headed objects often visible as they draw near
the Sun. The of meteors through space is a fascinating phenomenon. All these
bodies together form our vast solar system, moving as a unit through
Stars, when visible at night, have less intense light than the Sun, mainly due to their
from Earth. The planets give off no light of their own but the Sun's
light, making them visible in the night sky.

Activity Three:

Verb	Noun	Adjective
To orbit		
	Revolution	
To radiate	Radiation	
To affect		

Resumé

La présente étude examine l'impact de la gamification sur l'apprentissage de la langue anglaise, en se concentrant spécifiquement sur les compétences en expression orale des étudiants. L'étude se déroule à Biskra, en Algérie, où l'anglais est enseigné du primaire à l'université. La recherche vise à comprendre comment les applications pédagogiques gamifiées influencent la maîtrise de l'expression orale des étudiants en anglais langue étrangère (EFL) dans cette région. Elle utilise une méthode quasi expérimentale, en utilisant un pré-test, une grille d'observation, une expérience et un post-test pour collecter des données. Le pré-test et la grille d'observation aident à établir la maîtrise initiale de l'expression orale des étudiants et leur comportement. L'expérience implique la mise en œuvre d'une application pédagogique gamifiée, suivie d'un post-test pour mesurer ses effets.

Les résultats révèlent des améliorations significatives des compétences en expression orale des étudiants et une diminution des erreurs de prononciation après la mise en œuvre de l'application pédagogique gamifiée. Les conclusions soulignent les avantages potentiels de l'intégration des applications pédagogiques gamifiées dans les programmes d'apprentissage des langues, offrant des implications pratiques pour les enseignants cherchant des stratégies innovantes pour améliorer la maîtrise linguistique des étudiants.

Mots-clés : Applications pédagogiques gamifiées, Étudiants en anglais langue étrangère (EFL), Maîtrise de l'expression orale, Apprentissage de la langue anglaise, Étudiants en EFL, Compétences en expression orale, Acquisition linguistique, Apprentissage des langues traditionnel, Technologie éducative, Enseignement des langues, Collecte de données, Taille de l'échantillon

ملخص

تقوم الدراسة الحالية بفحص تأثير تطبيق اللعب على تعلم اللغة الإنجليزية، مركزة بشكل خاص على مهارات التحدث لدى الطلاب. تجري الدراسة في بسكرة، الجزائر، حيث يُدرس الإنجليزية من المرحلة الابتدائية إلى الجامعية. تهدف البحث إلى فهم كيفية تأثير التطبيقات التعليمية الملهمة باللعب على إتقان الطلاب للتعبير الشفهي باللغة الإنجليزية كلغة أجنبية في هذه المنطقة. تستخدم الدراسة منهجاً نصف تجريبياً، مع استخدام اختبار أولي، وشبكة ملاحظة، وتجربة، واختبار نهائي لجمع البيانات. يساعد الاختبار الأولي وشبكة الملاحظة في تحديد إتقان الطلاب الأولي للتعبير الشفهي وسلوكهم. تتضمن التجربة تنفيذ تطبيق تعليمي ملهم باللعب، تليها اختبار نهائي لقياس تأثيراتها.

تكشف النتائج عن تحسينات كبيرة في مهارات التحدث لدى الطلاب وانخفاض في أخطاء النطق بعد تنفيذ التطبيق التعليمي الملهم باللعب. تؤكد الاستنتاجات على الفوائد المحتملة لدمج التطبيقات التعليمية الملهمة باللعب في برامج تعلم اللغات، مما يقدم الأثار العملية للمعلمين الذين يبحثون عن استراتيجيات مبتكرة لتعزيز إتقان اللغة لدى الطلاب.

الكلمات الرئيسية: تطبيقات التعليم الملهمة باللعب، طلاب اللغة الإنجليزية كلغة أجنبية، إتقان النطق، تعلم اللغة الإنجليزية، طلاب اللغة، الإنجليزية كلغة أجنبية، مهارات التحدث، اكتساب اللغة، التعلم اللغوي التقليدي، التكنولوجيا التعليمية، تعليم اللغات، جمع البيانات، حجم العينة