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Ms. Meriam **KAZAR**

Title:

INVESTIGATING THE EFFECTS OF USING KAHOOT AS A GAMIFIED LEARNING EXPERIENCE ON STUDENTS' LEARNING MOTIVATION IN ONLINE CLASSES

The case study of Second-year MASTER students of English at Biskra University

Dissertation Submitted to the Department of Foreign Languages as Partial Fulfillment of the Requirements for Master's Degree in Sciences of Language.

Board of Examiners

Pr. Ramdane **MEHIRI**	**Professor**	**University of Biskra**	**President**
Ms. Meriam **GHENNAI**	**MAA**	**University of Biskra**	**Supervisor**
Dr. Ilham **TIGANE**	**MCB**	**University of Biskra**	**Examiner**
Mrs. Amina **MANSOURI**	**MAA**	**University of Biskra**	**Examiner**

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Declaration

I, Meriem **KAZAR, s**olemnly declare that this dissertation, submitted to the Department of the English language and Literature at Biskra University, is entirely my own work, free from plagiarism, and has not been submitted to any other educational institution. I have academic integrity through the process. I understand the severe consequences of academic misconduct and affirm the authenticity of my dissertation.

Dedication

** To the memory of my beloved grandmother and grandfather, who remain in my heart forever. May Allah grant you Al Jannah.*

** To my mother, the strongest and most loving person I know. Your endless support and wisdom have shaped who I am.*

** To my wonderful sisters, Sameh and Khadija, for being my pillars of strength and joy. I am so grateful for your love.*

**To My Fiancé,*

I'm so grateful for your presence and continues support. Thank you for being the most amazing person. Your unwavering encouragement and kindness mean the world to me.

**To my friends Amina, Lyna, Ryma, and Fadou, for your unwavering support and love. Your presence has been a constant source of comfort and encouragement.*

**To everyone who believed in me and supported me, and to myself for staying resilient and hopeful.*

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I would like to extend my heartfelt appreciation to my university community, with whom I have shared the past six years of my life.

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Abstract

The present study investigates the efficacy of integrating Kahoot! as a gamified tool on student learning motivation in online classes for Master Two students in the Department of English at the University of Mohamed Khider-Biskra. The research aims to find out the extent to which Kahoot! As a gamified learning platform can be motivating for students to learn, what aspects of this platform are the most motivating and what are the benefits and the challenges that result from integrating such a platform in online learning environment. The hypothesis posits that the utilization of Kahoot! platform can effectively elevate and augment students' learning motivation in online educational settings. To accomplish the research objective, a descriptive approach employing mixed methods of data collection was employed. This included administering a questionnaire to twenty-eight second-year (28) Master's students In the English Department at the University of Mohamed Khider-Biskra, as well as conducting an interview with a teacher familiar with utilizing Kahoot! in the same department. The findings indicate that both students and teachers recognize the potential of integrating Kahoot! in online classrooms to enhance students' learning motivation. Moreover, aspects of Kahoot! such as interactive quizzes and gamification elements are found to be the most significant in improving students' learning motivation in online classes, but still challenges were indicated such as connectivity issues and technical difficulties.

Keywords: Kahoot! Online learning, Motivation in online education.

List of Abbreviations

GBL: Game-based learning**.**

DGBL: Digital game-based learning**.**

GSRS: Game-based response system

SDT: Self-Determination Theory.

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General Introduction

Introduction

The shift towards the inclusion of online models of teaching and learning changed how students get involved in their studies. This situation puts teachers in the position of having to associate digital competencies with the teaching subject to ensure that the educational process is conducted in a good and effective way. One of the aspects that teachers consider in this situation is how they can keep the students motivated during online classes. One of the tools used for this purpose is game-based platforms and applications. a widely popular educational game-based application that offers quizzes and activities that can enhance student engagement and participation during online classes. The one promising tool in this endeavor is Kahoot! a popular game-based application that teachers can use in their online classes, which facilitates the use of quizzes and activities that can motivate students. Shawwa and Kamel (2021) from King Abdulaziz University have highlighted Kahoot's potential benefits, sparking interest in further investigation. Despite the evidence suggesting its efficacy in enhancing student motivation and learning outcomes, empirical research validating these claims remains scarce.

1. Statement of the problem

The shift from traditional face-to-face classes to online learning has made it increasingly challenging to maintain student motivation in digital classrooms. Students often struggle with feeling demotivated due to the absence of interactive elements and immediate feedback, placing educators in a critical position of needing to discover new methods to stimulate and sustain student motivation in online environments. Among the potential solutions, Kahoot! emerges as a prominent example—a game-based learning platform widely utilized to enhance student motivation in online classes.

This research aims to investigate the effectiveness of Kahoot! in enhancing student motivation and to identify the specific aspects of the platform that contribute to this

phenomenon. By examining these dynamics, the study seeks to explore the benefits associated with integrating Kahoot into online teaching practices.

2. Research Questions

RQ1.To what extent does the use of Kahoot! influence students' learning motivation in online classes at the Department of English at the University of Mohamed Khider-Biskra?

RQ2. What aspects of Kahoot! influence students' learning motivation?

RQ3.What are the potential benefits and challenges associated with integrating Kahoot as a motivating tool into online teaching in the Department of English at the University of Mohamed Khider-Biskra?

3. Aims of the Study

This study aims to:

- Investigate the efficacy of using the mobile-based game app Kahoot! on students' learning motivation in online classes.
- Find out the aspects of Kahoot! that enhance students' learning motivation.
- Determine the benefits and the challenges that encounter students while using Kahoot in online classes.

4. Research Hypothesis

Integrating Kahoot within online classes is hypothesized to increase student learning motivation.

5. Research Methodology

In this current study, the researcher employs a qualitative and quantitative approach, utilizing a combination of a questionnaire and interview to investigate the impact of Kahoot on

students' learning motivation in online English Statistics classes at the University of Mohamed Khider-Biskra.

5.1. Data Collection Tools

The data collection tools are in the form of a semi-structured questionnaire and a structured interview. The questionnaire was selected as a tool to gather students' perceptions, experience and observations regarding their use of Kahoot in online statistics class. The questionnaire contains both close- ended and open-ended question that aim to measure their level of learning motivation in the online learning environment before and after the integration of the application. The interview is conducted with the teacher of the course who has implemented Kahoot in his online statistics class to find out his attitude on the use of Kahoot and its impact on students' learning motivation.

5.3. Population and Sample

The target population of this study is Master students at the University of Mohamed Khider-Biskra the Department of English, the total number of the population is about 160 students and the representative sample is about 28 students.

5.2. Data analysis tools

To analyze the data obtained, descriptive analyses are utilized. The data collected from the questionnaire and interview are examined using this approach to assess the effectiveness of Kahoot.

8. Structure of the Dissertation

The dissertation is divided into three main chapters. The first two chapters serve as the theoretical background of the topic, while the third chapter presents the practical part of the study. The first chapter provides an overview of game-based learning, focusing specifically on Kahoot! and its integration in educational settings and specifically in online learning. It explores the potential benefits and implications of integrating Kahoot as a gamified learning approach

into online classes. The second chapter delves into student motivation in the context of online learning, exploring its definitions and types; and moving on to how we can influence the student learning motivation by integrating digital game-based learning and especially Kahoot!. The third chapter serves as the practical foundation which represents the description of the methodology used in research, data gathering tools as well as the analysis and discussion of the results.

Chapter One: Kahoot! a Game-Based Learning Platform

Introduction

In the context of modern education, the incorporation of technology has ignited creative approaches to education, sparking innovative methods for teaching and learning. Among these strategies, game-based learning platforms emerge as a dynamic and motivational pedagogical approach that leverages the intrinsic and extrinsic motivational appeal of games to enrich educational experiences. From classrooms to online platforms, game-based learning has garnered attention for its capacity to pique students' curiosity, foster motivation, and advance significant learning outcomes across diverse subject areas and age groups. This chapter explores the development and use of game-based learning platforms. It covers their history, from early educational games, and includes definitions from different researchers. Next, the chapter discusses digital game-based learning platforms as a type of GBL, focusing on their benefits and challenges, particularly how these tools can improve student motivation and learning. It also highlights game-based student response systems, a specific type of DGBL, with a detailed look at Kahoot! By examining these topics, the chapter provides a clear understanding of the potential and limitations of game-based learning in education specially Kahoot!

1. Game-based Learning

1.1 History of Game-based Learning

Game-based learning has a rich history that dates back to ancient times when games were used as educational tools (Gee, 2003). In the 20th century, educational theorists such as Piaget and Vygotsky emphasized the importance of play in cognitive development, laying the foundation for understanding the role of games in learning (Shaffer, 2006). The emergence of computers in the mid-20th century led to the development of early educational games, such as "The Oregon Trail," which introduced students to historical concepts (Prensky, 2001).

Throughout the 1980s and 1990s, educational software companies like Broderbund Software and The Learning Company produced a wide range of educational titles covering

various subjects (Egenfeldt-Nielsen et al., 2016). The late 1990s and early 2000s saw the rise of games, designed not only for entertainment but also for educational and training purposes (Clark, Tanner-Smith, & Killingsworth, 2016).

In the 21st century, game-based learning has experienced a surge in popularity, fueled by advances in technology and a growing recognition of its effectiveness in education (Kapp, 2012). Digital games, simulations, and virtual reality experiences are now widely used in classrooms worldwide to engage students and enhance learning outcomes (Squire, 2006). Additionally, the concept of gamification has emerged, applying game design elements to non-game contexts such as education and workplace training (Steinkuehler & Duncan, 2008).

1.2 Definition of Game-based learning platforms

In recent years, game-based learning has emerged as a promising educational method, offering innovative ways to engage and motivate students (Kamnardsiri, Hongsit, Khumuthyakom, & Wongta, 2017). Defined as the use of recreational activities to achieve specific learning goals, game-based learning integrates educational concepts into gaming environments, capturing students' interest and enhancing their interaction with the material (Kamnardsiri et al., 2017).

This approach involves incorporating games into real-life settings to boost student motivation and gradually introduce educational concepts (Trybus, 2015). Rather than focusing solely on entertainment, game-based learning emphasizes the design of learning activities that guide participants toward educational objectives (Trybus, 2015).

In essence, game-based learning creates environments where gameplay enhances the acquisition of knowledge and skills, offering students opportunities for problem-solving and achievement (Qian & Clark, 2016; Shu, 2018; Plass et al., 2015). By integrating educational content into gaming experiences, game-based learning provides a versatile and engaging

approach to improving student learning outcomes (Qian & Clark, 2016; Shu, 2018; Plass et al., 2015).

Figure1.1 Digital game-based learning cons (iLearn4Health, 2024)

The figure above highlights the benefits of Digital game-based learning, showing how it increase motivation, makes learning enjoyable, shifts attitude positively, enhances content knowledge, improve skills and develops cognitive abilities.

2. DGBL Approach as type of GBL

In exploring game-based learning and its types, digital game-based learning is one key type in GBL. According to Becker (2017), the importance of DGBL lies in its ability to create a high level of motivation.

2.1 Definition Digital Game-based Learning (DGBL)

The term Digital Game-Based Learning (DGBL) was initially introduced by Prensky (2001) as a novel approach to game-based learning. Prensky defined DGBL as the fusion of interactive entertainment and serious learning through digital games, emphasizing the integration of fun and educational content. Building on this, Cheng et al. (2013) highlighted how DGBL combines instructional materials within virtual gaming environments to capture

students' attention, enhance motivation, and improve learning effectiveness. Additionally, Tsai et al. (2016) further elaborate on DGBL, describing it as the use of computer games or video games to teach educational concepts and engage learners.

This progression from Prensky's foundational definition to the practical application discussed by Cheng et al. (2013) and the educational focus emphasized by Tsai et al. (2016) underscores the evolution and significance of DGBL as a powerful tool for merging entertainment and learning in educational settings.

2.2 Advantages of Using Digital Game-Based Learning

There are many benefits to using digital game-based learning (DGBL) in online classrooms, research suggests numerous benefits associated with the integration of digital games into virtual classes:

- **Multimedia Experiences:** Digital games offer immersive multimedia experiences that engage students through interactive interfaces on digital devices (Huizenga et al., 2017).
- **Feedback Mechanisms:** Players receive feedback based on their actions within the game, allowing them to respond and adjust their gameplay decisions accordingly (Waarvik, 2019).
- **Authentic Contexts and Meaningful Challenges:** Digital games provide authentic contexts and meaningful challenges, leading to engagement and rewarding experiences for players (Whitton, 2014).
- **Safe Environments for Risk-Taking and Exploration:** Games offer safe environments where players can take risks and explore while overcoming challenges and conflicts presented within the gameplay (Prensky, 2001).

- **Enhancement of Knowledge and Skills Acquisition:** In a game-based learning environment, game content and gameplay work together to enhance the acquisition of knowledge and skills (Quian and Clark, 2016).
- **Problem-Solving Spaces and Challenges:** Game activities involve problem-solving spaces and challenges that provide players/learners with a sense of achievement (Quian and Clark, 2016).
- **Learner Engagement:** DGBL is effective in engaging learners and teaching educational concepts through the interactive and captivating nature of games (Tsai et al., 2016).

These benefits collectively contribute to the effectiveness of digital game-based learning as a method for teaching and engaging learners in educational contexts. Overall, the integration of digital games into the EFL classroom offers numerous advantages that contribute to improved learning outcomes and student engagement. However, this approach has its disadvantages too.

2.3 Disadvantages of Using Digital Game-based Learning in EFL Classrooms

- **Difficulty in Reflection:** students who play computer games may find it difficult to reflect on their actions because they are too preoccupied with boosting their scores (Curtis et al., as cited in Pohl, Rester, & Judmaier, 2009, pp. 95-96).
- **Need for support:** Many games are not made to facilitate learning through gameplay alone. Explicit learner support, such as tutorials and reference materials, is frequently necessary (Tennyson & Jorczak,2008 as cited in Pohl, Rester, & Judmaier, 2009, pp.95-96).
- **Representation of reality:** there is a debate on whether realistic representations of reality should be emphasized in educational simulations whether reality should be emphasized in educational simulations or whether reality should be accurately represented in them. Incentives for environmentally friendly behavior in games have the potential to stray

from reality and mislead students about the nature of society and the economy (Bratton & Mahrg, as cited in Pohl, Rester, & Judmaier, 2009, pp. 95-96).

3. Game-Based Student Response System Platforms

Student response systems were first coined in the 1960s (Judson & Sawada, 2002). They were initially used in biology and chemistry education in the 1970s (Bessler & Nisbet, 1971). Over time, these systems have evolved to incorporate elements of gamification, giving rise to game-based response systems. These systems, are a specific type of digital game-based learning, which utilize digital game elements to enhance student engagement, motivation, and learning outcomes (Wang, 2015; Plump & LaRosa, 2017).

Game-based student response systems (SRS), often called 'clickers,' are part of the first generation of interactive learning tools. Clickers, keypads, handsets, and zappers are handheld devices enabling students to engage during lectures. They feature buttons for inputting answers, fostering active participation. These systems revolutionize classroom engagement, providing instant feedback to enhance student motivation (Caldwell, 2007).

Examples of Game-based student response systems are Kahoot! , Quizizz and Socrative. Many studies have proven that these examples can promote active learning (Plump & LaRosa, 2017) by allowing students to answer questions in the classroom by using mobile devices or computers under the teacher's control, and their responses are reported immediately.

These game-based student response systems (GSRS) platforms enable teachers to host a live interactive multiple-choice quiz to measure students' performance and to promote students' motivation. Cardwell (2007:10) reports "Such systems have been found to have a positive effect on student' performance, and that they create a more positive and active atmosphere in classrooms". In simple terms, the quote highlights the positive impact of GSRS systems like student performance and classroom atmosphere. It suggests that these tools contribute to better academic outcomes and create a more motivational learning environment for students.

3.1 Kahoot! As a game-based student response system (GSRS)

Kahoot! revolutionized the educational landscape as the first Student Response System (SRS) designed to incorporate gaming elements, drawing from intrinsic motivation theory (Malone, 1981) and game flow principles (Sweetser & Wyeth, 2005). Today, Kahoot remains a prominent Game-Based Student Response System (GSRS), facilitating discussions, quizzes, and surveys (Turan & Meral, 2018). Its unique features contribute to its status as a game-based response system, where teachers lead interactive sessions while students compete to answer questions quickly amidst background music (Wang, 2015). Kahoot's real-time data collection during lectures enhances engagement and participation, allowing students to learn effectively in a competitive environment (Nurhadianti & Pratolo,2020). The inception of Kahoot! stemmed from Dr. Alf Inge Wang's "Lecture Quiz" project in 2006 at the Norwegian University of Technology and Science, with collaboration from co-founders Jamie Brooker, Jhona Brand, and Asmund Furuseth (Chiang, 2020). Its widespread acceptance is evidenced by its recognition as one of the top 100 new educational apps, with over 70 million active users globally (Kapuler, 2015; Harrell, 2019).Kahoot! is considered an SRS due to its core function of allowing students to respond to questions or prompts during lectures or presentations, aligning with the traditional definition of Student Response Systems (SRS). However, what distinguishes Kahoot! as a GSRS is its integration of gaming elements and interactive features, which enhance student engagement and motivation, setting it apart from conventional SRS platforms.

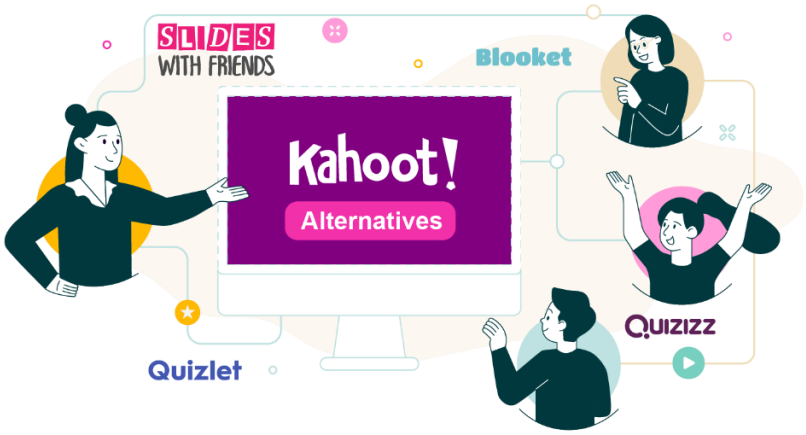


Figure 1.2 Kahoot! Logo (Kahoot!, 2019)

3.1.1 The Advantges of Kahoot!

Kahoot! a game-based learning app, also known as gamification (Bicen & Kocakoyun,2018), is an efficient tool for promoting learning by engrossing students in problem-solving (Wang & Lieberoth,2016), metacognitive support (Plump & LaRosa,2017), and critical thinking. Kahoot! is a platform that can make learning more enjoyable and accessible (Medina & Hurtado, 2017), and it has a significant role in fostering a sense of community and social interaction among students (Bicen & Kocakoyun, 2018). These finding collectively demonstrate how Kahoot! innovative approach to learning can have a profound impact on students' motivation and ultimately lead to improved learning by creating a more enjoyable learning experience.

Kahoot! stands as an uncomplicated game-based learning platform used by educators and learners. Specifically for educators (Sbandar et al., 2018), here are some positive elements of Kahoot! :

- It is free, there is no cost for creating playing, or even sharing Kahoot!
- It can easily fit a wide range of learning environments
- It presents an entertaining and challenging way to motivate learners into learning
- The quiz games are not only for individuals but also for teams

Kahoot has exceeded expectations in promoting individual reflection and peer instruction. The ability to play quizzes on a cell phone has boosted student motivation by leveraging new technology and bridging the gap between teachers and students. The friendly and enjoyable classroom environment created by the natural competition among students encourages greater involvement and motivation among students.

3.1.2 How does Kahoot! Work?

Kahoot is considered an easy platform to join for both teachers and students but mostly for students because teachers are required to sign up first, but students are not required to sign up.

Here are some steps that are required for teachers to create and use Kahoot (Kahoot! team, 2016 as cited in Sbandar et al., 2018):

1. First the teacher needs to open the website of Kahoot! : Kahoot.com and sign up for an account.

2. After successfully logging in to “Create” in the top right corner, and then locate and select Quiz. Jumble, Discussion, or Survey to craft an engaging educational activity composed of a sequence of multiple-choice questions.

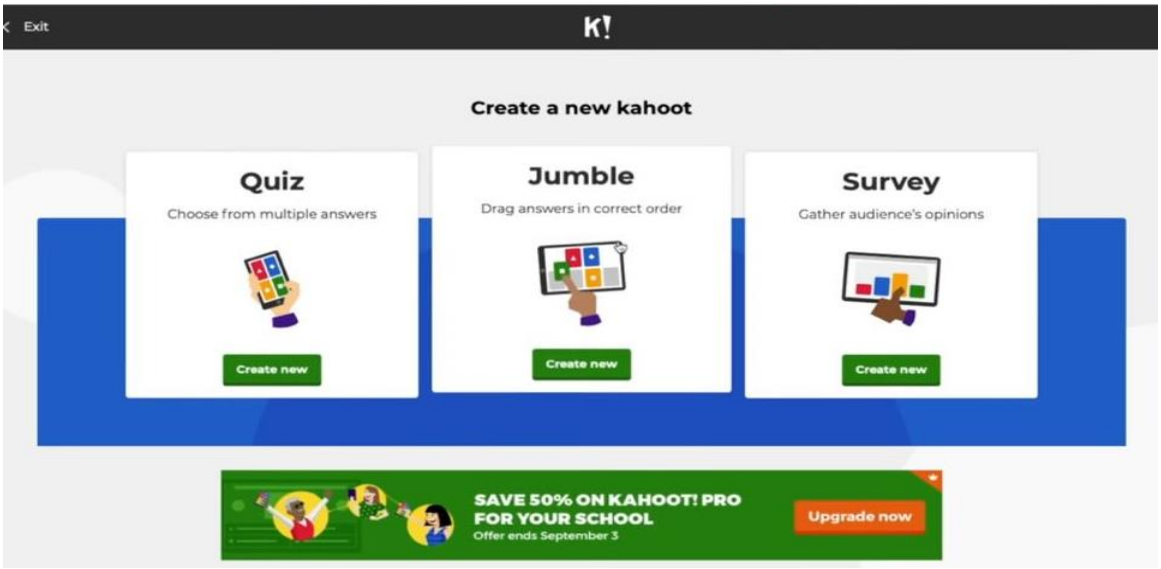


Figure 1.3 The step of choosing the type of games in Kahoot! (Kahoot!, n.d.)

Quizzes are the most commonly used format as they include timed responses and a point system creating a competitive atmosphere. The survey and Quiz are likely the same however Survey Does not use points but the Discussion format is actually identical to the Survey format, but only consists of one question. This can be used to ignite discussion and debates at the beginning or the middle of a study session. Lastly, Jumble comes with a twist by challenging

participants to place answers in their correct order rather than only selecting the correct ones. (Sbandar et al., 2018)

3. Add a good description that helps to define learning objectives for the game and keep it focused then add tags along with a cover image.

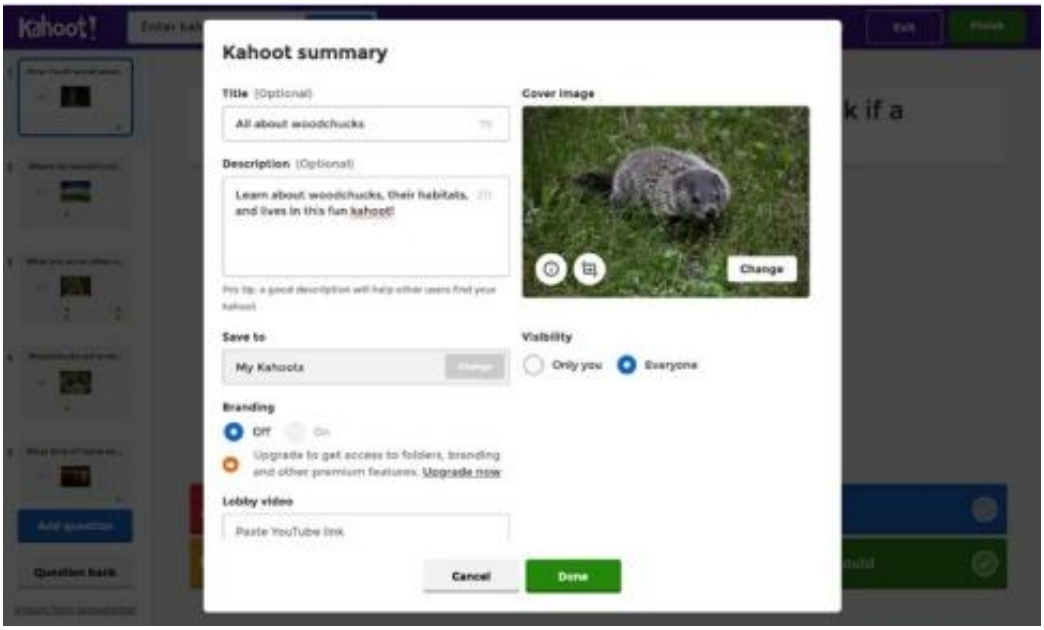


Figure1.4 The step on how to add description of the game and image (Kahoot!, n.d.)

4. Create the learning game by including questions, answers, and imagery by following the instructions on-screen to add questions, answers, images, and video clips. It is also very easy for educators to adjust the Kahoot! using different timers and point settings for multiple correct answers.

Figure1.5 The step of how to add questions, images and answers (Kahoot!, n.d)

5. Start the game so participants or students can join. Once the game is done, click the Play button. Change the game settings or options according to preferences, and then click Classic to play with one device per person, or Team Mode to play with one device per team. However, the participants are required to use a game pin to log in with either a number or a nickname.

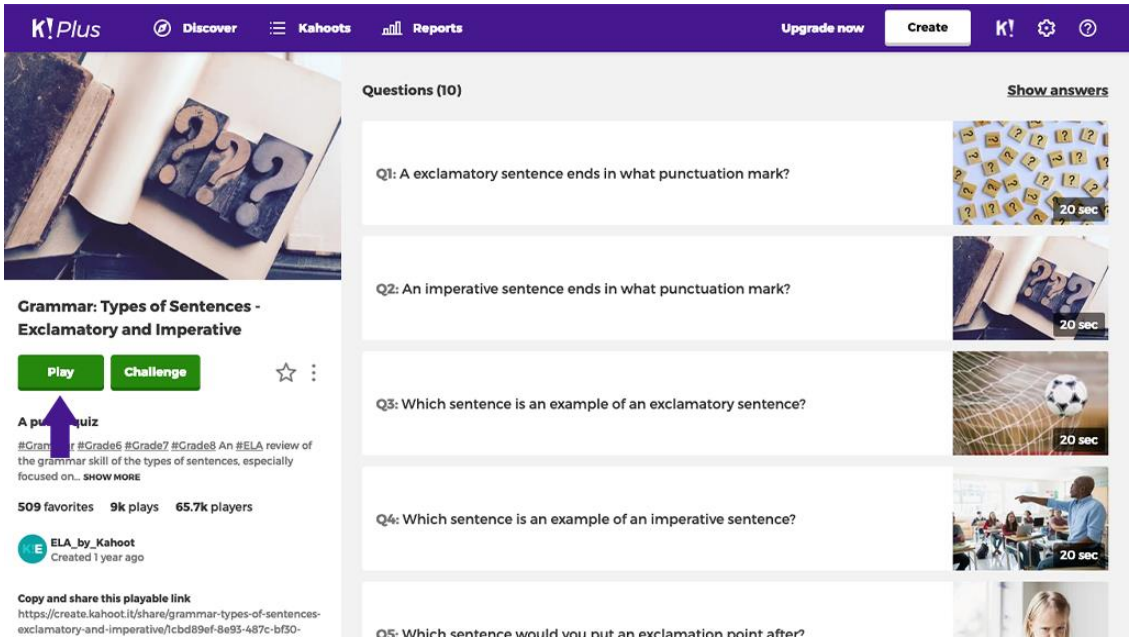


Figure1.6 The step of how to start Kahoot! quiz by clicking Play (Kahoot!, n.d.)

In the below Figure 06, it explains how to choose the mode of the game, either Classic, where students play as individuals and each has their own score, or Team Mode, where students can play as a team from one device.

Figure1.7 The step of how to choose the mode of the game in Kahoot! (Kahoot!, n.d.)

6. Play the Kahoot! click "Start" once all the participants' nicknames are visible on the waiting screen, as it is shown in the figure bellow:

Figure 1.8 waiting screen for students in Kahoot! (Kahoot!, n.d)

3.1.3 The Strengths and Weaknesses of Kahoot!

As it is identified that Kahoot! is a platform that boosts the fun environment of the classroom, still, there are some missing points, here are some strengths and weaknesses along with the Threats of Kahoot! according to (Boden & Hart, 2018):

1. **Strength:**

- Eye-catching and colorful interface.
- Promotes motivation and engagement.
- costless.
- Various question formats.
- Simple quiz generation
- Provides a comfortable environment for shy students to answer questions without feeling embarrassed.
- Provides a competitive environment for students who like competition.
- Create a sense of belonging between peers and instructor.
- The platform can be used on most devices (computers, mobiles ..)
- Allows classmates to interact socially and engage in discussions with each other.
- Adding tags to Kahoot! quizzes can stimulate further discussion and sharing through social media platforms.
- There's a collection of quizzes ready for customization.

2. **Weaknesses:**

- Because students are expected to respond quickly, they might rush to guess or answer questions without thinking carefully.
- Lots of noise happens when big groups of students get excited.
- Because students are expected to respond quickly, they might rush to guess or answer questions without thinking carefully.
- Being ranked on performance does not appeal to all students.
- Limits on characters allowed per question: ninety per question; sixty per answer.
- When the connection drops, users may lose their progress tracking.

- The system lacks direct integration into slides without third-party assistance. This means users must rely on external services to incorporate interactive elements into their presentations, complicating the setup and usage process.

Conclusion

The integration of technology in education has given rise to innovative teaching methods, notably through game-based learning platforms. These platforms, which have evolved from ancient origins and benefited from contributions by educational theorists and technological advances, represent a significant progression in educational approaches. Digital Game-Based Learning (DGBL) seamlessly combines entertainment and education by offering immersive experiences and authentic challenges. While DGBL offers various advantages, such as increased engagement and interactive learning environments, it also poses challenges like the need for additional support and reflection during the learning process. Among DGBL platforms, Kahoot! stands out for its widespread adoption among educators due to its user-friendly interface and features that promote student motivation and participation. Despite its popularity, Kahoot! faces limitations, including potential distractions and the demand for quick responses. Nevertheless, game-based learning platforms like Kahoot! provide educators with innovative methods to engage students and improve learning outcomes, contingent upon addressing inherent strengths and weaknesses to maximize their effectiveness as dynamic tools in modern education.

Chapter two: Student Motivation

Introduction

Motivation is a fundamental aspect of learning, influencing students' engagement, persistence, and academic success. In recent years, educators have increasingly turned to digital game-based learning platforms, such as Kahoot! as a means of enhancing student motivation in online classrooms. This chapter explores the concept of motivation, delves into motivation theories, and examines the role of digital game-based learning, specifically Kahoot! in influencing student motivation in online learning environments. By investigating the effectiveness of Kahoot! and identifying potential challenges, this research aims to provide insights into optimizing student motivation in online education.

1. Definitions of motivation

Researchers and scholars have studied and described the concept of motivation in various ways. According to Seven (2020), the origin of the term "motivation" is the Latin word "movere," which means "to move." He defined motivation as the feelings and emotions that arise from a person's needs and wants. Similarly, Filgona et al. (2020) describe motivation as a person's inner engine that drives them to learn, take action, understand, or improve at something, fulfilling needs such as learning to read and count to avoid being deceived when shopping. Dörnyei (2001) states that motivation influences individuals' decisions to engage in activities, the level of effort they will dedicate, and the duration of their participation, guiding both the actions chosen and the effort invested. Furthermore, Deci, Koestner, and Ryan (1999) define motivation as "the energization and direction of behavior," suggesting that it involves activating, guiding, and maintaining behavior over time through a combination of factors.

2.1 Motivation theories

To delve more into the concept of motivation, researchers have formulated various motivation theories, such as Maslow's Hierarchy of needs and McClelland's need for

achievement Theory. These theories provide insights into the underlying factors that drive human behavior and influence motivation (Pardee,1990).

2.1.1 Maslow's Hierarchy of Needs

Abraham Maslow's theory of motivation, developed in the 1940s and 1950s, remains one of the most recognized frameworks for understanding human behavior and needs. Maslow proposed that individuals are driven to fulfill a hierarchy of needs, prioritizing lower-level needs before higher-level ones (Pardee, 1990).

The five levels of Maslow's hierarchy, as described by Acquah et al., 2021 are:

- **Physiological needs:** These basic needs include hunger, thirst, and other bodily requirements for survival.
- **Safety needs:** This level involves the need for security and protection from physical and emotional harm.
- **Social needs:** The need for affection, belongingness, and friendship.
- **Esteem needs:** Both internal factors, such as self-respect and achievement, and external factors, such as status and recognition.
- **Self-actualization:** The drive to reach one's full potential, achieve personal growth, and experience self-fulfillment.

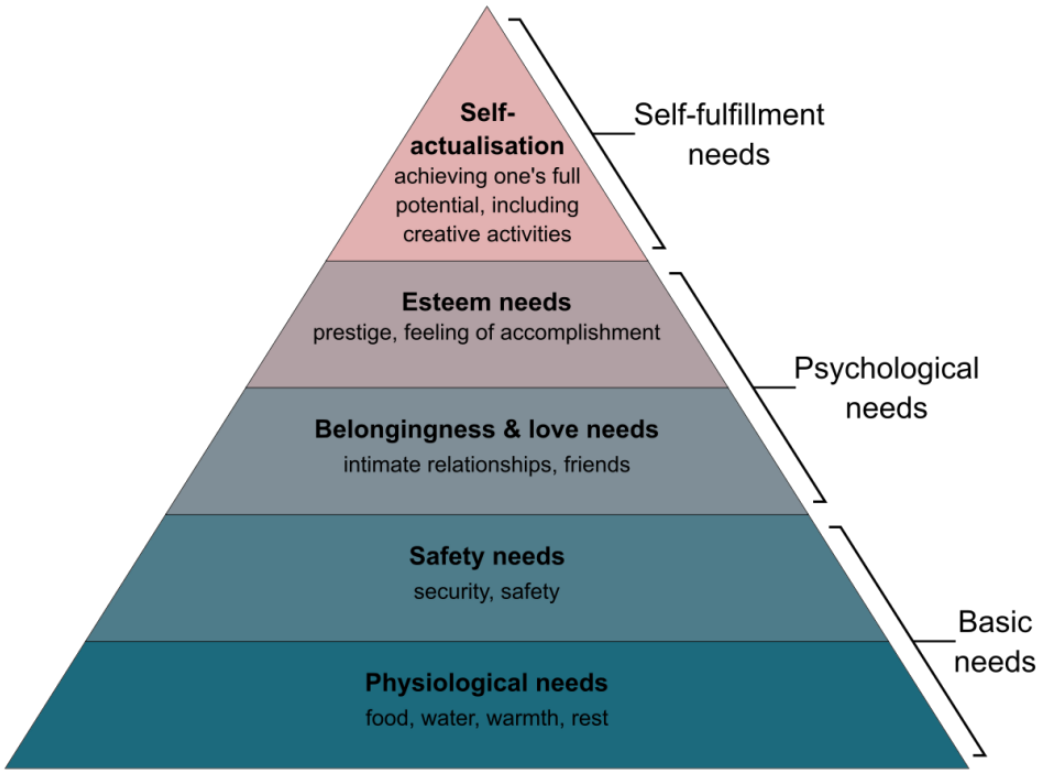


Figure2.9 Maslow's Hierarchy of needs (Verma,2021)

In the classroom, meeting students' basic needs like safety and belonging boosts their motivation to learn. Acknowledging their achievements and providing opportunities for growth build their confidence and make them motivated and want to learn more (Acquah et al., 2021). Encouraging them to pursue their interests and take on challenges helps them find purpose in learning. By understanding Maslow's Hierarchy of Needs, teachers can create a supportive environment that helps students thrive academically and personally.

2.1.2 McClelland's Need for Achievement Theory

In the early 1960s, McClelland expanded on Maslow's ideas by introducing three human motivators: the need for achievement, affiliation, and power (Arnold et al., 2005). Unlike Maslow's theory, which focus on fulfilling existing needs, McClelland's approach emphasizes the development of needs, which can vary depending on an individual's cultural background and life experiences (Acquah et al., 2021, p.26).

- **Achievement:** According to Wallace, Goldstein, and Nathan (1987), this involves the desire to independently overcome challenges, engage with ideas, and navigate interpersonal relationships to enhance self-esteem through the application of one's skills and abilities.

- **Affiliation motivation:** As explained by Michael A. Hitt and C. Chet Miller (2006) as cited in Acquah et al., 2021, p.26, this pertains to the longing for love, belonging, and connection with others. Individuals driven by affiliation seek friendships and strive to belong to social groups, often exhibiting reduced effectiveness in leadership roles.

- **Need for power:** Individuals with authority or power motivation possess a strong desire to exert control over their tasks or the tasks of others. They are driven by a need to lead and achieve success in their endeavors, aiming to enhance their status and prestige. This inclination prompts them to seek opportunities to influence and direct the actions of others, as described by (Michael A. Hitt and C. Chet Miller,2006 in Acquah et al., 2021, p.26).

Figure2.10 McClelland's Achievement motivation theory (Miller, 2022)

McClelland's theory of achievement, affiliation, and power can be applied in the classroom by offering challenging tasks for self-improvement (achievement), promoting collaboration for social connection (affiliation), and providing leadership roles or tasks that require students to be responsible for their scores (power). Additionally, incorporating group work activities with opportunities for students to demonstrate their leadership abilities can further support these motivations. Balancing these motivations can enhance student engagement and satisfaction in the educational setting.

In conclusion, understanding and applying motivation theories such as Maslow's Hierarchy of Needs and McClelland's Need for Achievement Theory can significantly enhance educational practices. By addressing the different motivational needs of students, educators can create a supportive and motivational learning environment. This not only fosters academic success but also promotes motivation for students. With a solid grasp of these foundational theories, we can now delve into more specific theories for fostering student learning motivation.

3. Student Motivation

Student motivation refers to the extent to which students enjoy learning and why they engage or disengage from schoolwork. It can be a stable trait, where students consistently enjoy learning and strive for improvement (Honchar, 2023). However, motivation can also fluctuate based on circumstances. For instance, when students try to grasp new concepts, that is also a form of motivation (Honchar, 2023). This motivation can be influenced by feelings of safety, autonomy, and interpersonal relationships (Honchar, 2023). Additionally, even if students share a common desire to succeed, their underlying motivations may vary (Lumsden, 1994). Thus, student motivation is complex and influenced by various factors, so it is important to explore its types for more insights into how students can be motivated.

3.1 Types of Student Motivation

Knowing what makes students want to start and keep working towards their goals is important for student motivation (Deci & Ryan, 2000). Researchers like Deci and Ryan have split motivation into two different types, affecting how students behave when learning.

3.1.1 Intrinsic Motivation

Intrinsic motivation, as described by Deci & Ryan (2000), is when someone does something because they find it interesting or enjoyable (p.55). They also point out that intrinsic motivation isn't just inside a person; it's also about how they interact with the activity itself. This means that some tasks might be really interesting to some students but not to others (Deci & Ryan, 2000, p.56). Lumsden (1994) adds that intrinsic motivation is when a person naturally likes a subject and feels it's important (p.1). When students are intrinsically motivated, they tend to use strategies that need more effort and help them understand things better. For example, they might ask questions, explore more, or work together with others (Lumsden, 1994). These strategies show that intrinsically motivated students actively try to understand and master the material more deeply.

3.1.2 Extrinsic Motivation

Extrinsic motivation, as explained by Deci and Ryan (2000), happens when someone does an activity to get something from outside of the activity itself (p.60). This means they're not doing it because they enjoy it, but because they want a reward or want to avoid something bad. Lumsden (1994) suggests that schools should focus on learning and effort instead of just competing with others (p.2). Extrinsic motivation is all about getting rewards or doing well to please others, like getting money or praise (Deci & Ryan, 2000). It's driven by things outside of the person, like wanting to be seen as successful or not wanting to get in trouble.

The key distinction between extrinsic and intrinsic motivation is the source of the motivation, in other words, extrinsic motivation comes from external rewards or consequences,

like praise or grades, while intrinsic motivation comes from within, driven by personal interest and enjoyment of the activity itself.

4. Theories of student motivation in learning

Öztürk (2012) Describes motivation theories that are related to students' learning motivation as below:

4.1 Self-determination theory

Proposed by Deci and Ryan in 2000, Self-Determination Theory (SDT) is considered by psychologists to be one of the most influential motivation theories. SDT explains two types of motivation: intrinsic and extrinsic, in terms of self-regulation. According to Ryan and Deci (2000), extrinsic motivation involves external influences on behavior, while intrinsic motivation involves self-regulation. The theory highlights that intrinsic motivation is closely linked to satisfying basic psychological needs: autonomy, competence, and relatedness. It also shows how these natural human tendencies are connected to key aspects of the learning process. Additionally, SDT suggests that individuals who are self-determined in their behaviors tend to achieve positive outcomes for both themselves and society. By emphasizing the importance of self-determination, the theory provides a comprehensive framework for understanding how motivation impacts personal and social well-being.

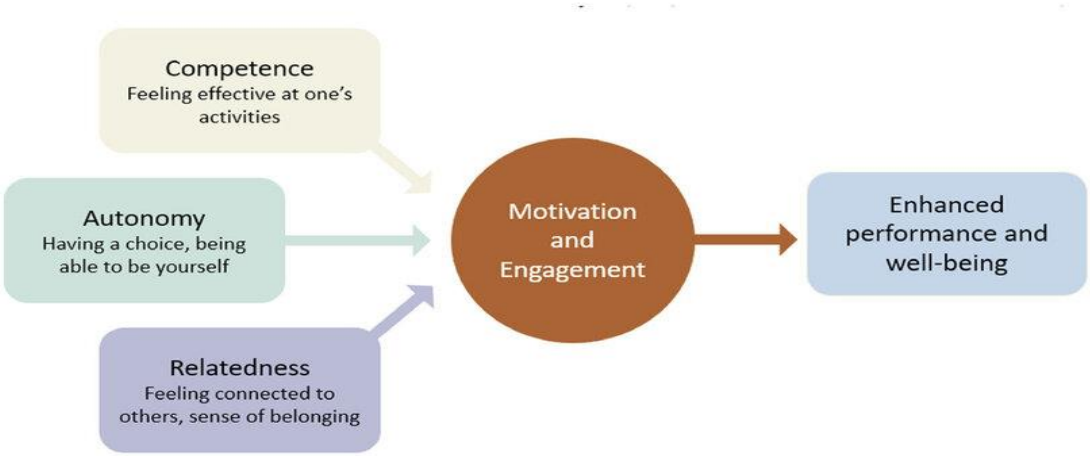


Figure2.11.SDT | Self-Determination Theory by Richard Ryan, Edward Deci (Ghani et al., 2022).

As the figure above shows that Self-Determination Theory (SDT) emphasizes three core components that drive motivation: autonomy, competence, and relatedness. Autonomy refers to the desire to make one's own choices and be the primary causal agent in shaping one's future. Competence involves the skills and knowledge required to perform actions, as well as the cognitive and emotional states associated with possessing these abilities. Relatedness pertains to one's perceived connection to specific individuals or groups. These elements are fundamental to understanding how to influence students' motivation.

4.2 Achievement Motivation Theory

Proposed by Atkinson in 1957, the Achievement Motivation Theory suggests that individuals strive to achieve their goals and place a high value on good performance. Atkinson identifies three key factors crucial for motivation: the desire for success, the likelihood of success (expectancy), and the significance of success as a reward (Oxford & Shearin, 1994, p. 8). This theory emphasizes that engaging in achievement-oriented behaviors depends on the desire for success the perceived probability of achieving that success and the value placed on the success itself. Additionally, the theory acknowledges the role of competition, as individuals often measure their success relative to the performance of others. Essentially, it posits that an individual's behavior and motivation are driven by their need for achievement, which frequently involves a competitive element.

4.3 Expectancy Theory (Vroom's Expectancy Model)

The Expectancy Theory, is a motivational theory that posits individuals are motivated to engage in certain behaviors based on their expected outcomes. It consists of three key components: expectancy, instrumentality, and valence.

- **Expectancy:** refers to the belief that increased efforts will lead to better performance.
- **Instrumentality:** the belief that better performance will result in specific outcomes.
- **Valence:** the significance or value an individual places on the expected outcomes.

Expectancy theory, as developed by Victor Vroom 1964, focuses on the relationship between effort, performance, rewards, and individual goal satisfaction, emphasizing how motivation is influenced by perceptions of these connections (Lokman et al., 2022, p.508). In educational contexts, this theory can impact students by ensuring they have the necessary skills, resources, and support for success, clearly communicating the link between performance and rewards like grades and recognition, offering rewards that cater to diverse student needs and values, and setting achievable goals with feedback mechanisms to sustain motivation. By addressing expectancy, instrumentality, and valence, teachers can create a classroom environment that fosters student motivation, ultimately influencing students' effort, performance, and goal attainment.

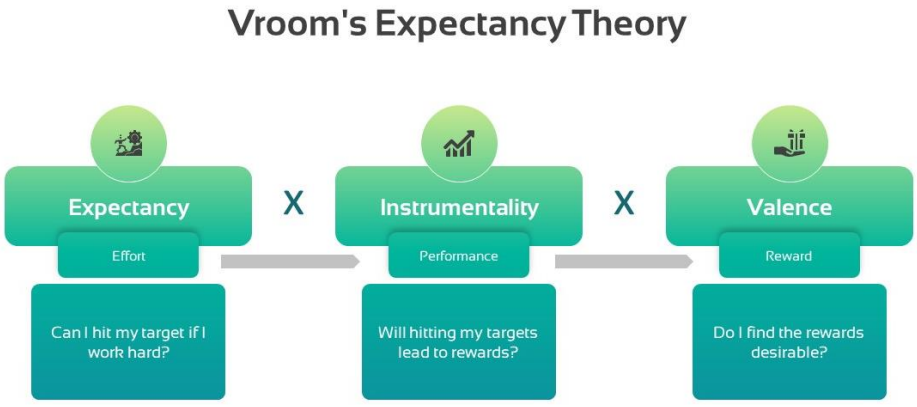


Figure 2.12 Vroom's Expectancy Theory (Slidebazaar, n.d)

4.4 ARCS MODEL (Kellers Model)

The ARCS model, created by John Keller in 1983, outlines a framework for designing motivating learning environments, focusing on four key components: Attention, Relevance, Confidence, and Satisfaction (Keller, 2010). Attention involves capturing learners' interest through engaging elements and stimulating curiosity with challenging problems (Keller, 2010; Keller & Suzuki, 2004). Relevance shows learners the personal value of the content by connecting it to their goals, motives, and past experiences (Keller, 2010; Keller & Suzuki, 2004). Confidence helps learners believe they can succeed by clearly outlining learning requirements, providing opportunities for success, and linking success to their efforts (Keller, 2010; Keller & Suzuki, 2004). Satisfaction ensures learners can apply what they've learned, receive praise or rewards, and feel a sense of achievement (Keller, 2010; Keller & Suzuki, 2004; Song & Keller, 2001). Keller defines motivational design as arranging resources and procedures to enhance motivation (Keller, 2010). The ARCS model provides strategies and guidelines for each component, along with methods to assess the motivational impact of a learning experience. The design helps teachers identify students' motivational characteristics in a learning environment and assign appropriate strategies accordingly.

Attention	Relevance	Confidence	Satisfaction
Perceptual Arousal Provide novelty and surprise	***Goal Orientation*** Present objectives and useful purpose of instruction and specific methods for successful achievement	***Learning Requirements*** Inform students about learning and performance requirements and assessment criteria	***Intrinsic Reinforcement*** Encourage and support intrinsic enjoyment of the learning experience
Inquiry Arousal Stimulate curiosity by posing questions or problems to solve	***Motive Matching*** Match objectives to student needs and motives	***Successful Opportunities*** Provide challenging and meaningful opportunities for successful learning	***Extrinsic Rewards*** Provide positive reinforcement and motivational feedback
Variability Incorporate a range of methods and media to meet students' varying needs	***Familiarity*** Present content in ways that are understandable and that related to the learners' experiences and values	***Personal Responsibility*** Link learning success to students' personal effort and ability	***Equity*** Maintain consistent standards and consequences for success

Table2.1 Keller's- ARCS Model ("ASELL@UNE: Motivational Theory and Design - ARCS Model," n.d.).

In summary, these motivational theories provide key insights for enhancing student engagement and success. By applying principles from Self-Determination Theory, Achievement Motivation Theory, Expectancy Theory, and the ARCS Model, educators can create supportive learning environments. As education shifts online, using these strategies becomes crucial. The digital landscape presents unique challenges and opportunities, requiring strategies to maintain motivation. Next, we will explore how to boost student motivation and engagement in online learning.

5. Motivation in online learning

In online learning, motivation is essential for students to engage with course materials, interact with teachers and classmates, and persist in their studies despite physical separation from the instructor and institution (Ally, 2008; Hartnett et al., 2011). It involves the desire to access learning materials, engage with content, seek help, understand the material, and benefit from the learning experience using online tools and resources (Ally, 2008). Motivation is crucial

for maintaining students' interest and commitment, especially since they may feel isolated without face-to-face interaction (Hartnett et al., 2011). Previous research indicates that learner motivation is linked to important learning outcomes such as persistence, retention, achievement, and course satisfaction (Vallerand & Bissonnette, 1992; Eccles et al., 1993; Fujita-Starck & Thompson, 1994). Therefore, motivation should be given serious consideration in online learning environments, where instruction is delivered via the Internet to learners separated by time, distance, or both (Dempsey & Van Eck, 2002).

5.1 What factors influence the Improvement of students' motivation in online learning?

Understanding and addressing the role of motivation in online learning environments is crucial for ensuring successful learning outcomes (Bekele, 2010; Jones & Issroff, 2007). Therefore, it is important to explore the factors that enhance students' learning motivation in online classes. These factors include the role of the teacher and DGBL. By examining these aspects, the aim is to better understand how these factors help students become more motivated in their online classes.

5.1.1 The Role of Teacher in enhancing students learning motivation in online classes

To sustain student motivation in online learning, educators must carefully design and deliver instruction (Brophy, 2010; ChanLin, 2009; Keller, 2008). Transitioning into the role of instructors who enhance motivation, educators should implement strategies fostering engagement and persistence. This includes actively facilitating interaction, providing timely feedback, and creating supportive online communities (Garrison & Cleveland-Innes, 2005; Shea et al., 2010). Teachers significantly influence motivation by applying theories such as Self-Determination Theory (SDT), Achievement Motivation Theory, Expectancy Theory, and the

ARCS Model. By incorporating these theories, educators can effectively boost student motivation in online learning.

Here's how teachers can utilize these theories to enhance students' learning motivation in online classes:

1. Self-Determination Theory (SDT): Teachers can support students' intrinsic motivation by fostering autonomy, competence, and relatedness (Ryan & Deci, 2000). They can provide opportunities for students to make choices in their learning process, offer challenging yet achievable tasks to build competence, and create a supportive online community where students feel connected to their peers and valued by the instructor (Lens, Vansteenkiste, & Soenens, 2013)

2. Achievement Motivation Theory: Teachers can encourage students' desire for success by setting clear goals and expectations (Atkinson, 1957). They can provide feedback that focuses on progress and improvement, rather than just outcomes, to help students gauge their success. Additionally, teachers can design learning activities that promote a sense of accomplishment and mastery, reinforcing students' motivation to achieve their goals (Hattie, 2009)

3. Expectancy Theory: Teachers can enhance students' expectancy beliefs by clearly communicating the link between effort, performance, and rewards (Vroom, 1964). They can provide support and resources to help students develop the skills necessary for success, and offer rewards or incentives that are meaningful to students. By aligning students' goals with desired outcomes and providing feedback on their progress, teachers can increase students' motivation to engage in learning activities (Wigfield et al., 2009, pp. 55-75)

4. ARCS Model: Teachers can design motivating learning environments by incorporating elements of attention, relevance, confidence, and satisfaction into their online courses (Keller, 1983). They can capture students' attention with interactive and stimulating

course materials, demonstrate the relevance of the content to students' interests and goals, build students' confidence through scaffolding and support, and provide opportunities for students to apply their learning and experience a sense of satisfaction (Mayer, 2001).

In applying these theories, teachers can create online learning experiences that are engaging, meaningful, and supportive of students' motivation. By understanding and addressing students' motivational needs, teachers can help them overcome challenges and achieve success in their online learning journey. Moreover, leveraging digital game-based learning represents a dynamic approach for teachers to further stimulate student motivation in online education.

5.1.2 Digital Game-based Learning Platforms as a Tool for Influencing Students' Motivation in Online Classes

According to Nadeem et al. (2023), digital game-based learning offers significant advantages over traditional online activities, particularly in terms of enhancing student engagement and motivation. Key components contributing to this include leaderboards, point systems, and progress markers. Leaderboards promote competition among students, driving engagement and active participation. Points systems provide immediate feedback on performance, incentivizing focus and motivation. Progress markers visually represent students' advancement, aiding in goal-setting and maintaining a sense of accomplishment. Integrating these features can effectively captivate students and foster a positive attitude toward learning in online educational settings. Additionally, Woo (2014) suggests that digital game-based learning can enhance students' self-efficacy and learning motivation through elements such as rewards, feedback, and opportunities for mastery experiences, ultimately benefiting learners in various ways.

Many studies show that games can inspire students to want to learn (Connolly, Stansfield, & Hainey, 2007; Ebrahimzadeh & Alavi, 2017; Hanus & Fox, 2015). Moreover, using digital games makes learners even more motivated and eager to participate in learning

activities (Lee & Hammer, 2011). Moreover, one of the most popular digital game-based platforms is Kahoot! which is Known for its effectiveness in enhancing students' learning motivation (Gebbels,2018).

5.1.2.1 Kahoot! is a digital-game-based learning tool to motivate students

Several studies have highlighted the motivational benefits of using Kahoot! in education. For instance, Batool et al. (2024) investigated the impact of utilizing Kahoot! as a formative assessment tool in undergraduate education, finding potential improvements in learning outcomes. Similarly, Heni, Sudarsono, & Regina (2021) explored the use of Kahoot! to increase student engagement and active learning in an educational setting, highlighting its effectiveness in enhancing student participation. Additionally, Martín-Sómer, Moreira, & Casado (2021) examined the use of Kahoot! to maintain student motivation during online classes in response to the challenges posed by the COVID-19 lockdown period, suggesting its role in sustaining student engagement. Moreover, Nikou and Economides (2018) observed that Kahoot! usage on mobile devices positively impacts student learning and motivation, although they suggested the need for further research to address potential teacher concerns. Overall, these studies collectively demonstrate Kahoot's utility in sustaining student engagement and fostering enhanced learning outcomes in educational settings.

The collective studies underscore Kahoot! motivational benefits in education, highlighting its efficacy in sustaining student engagement and improving learning outcomes. However, gaps remain, such as limited contextual variation and a short-term focus, meaning that while Kahoot! may demonstrate immediate benefits for student engagement and learning during these short-term studies, there may be limited evidence regarding its effectiveness over longer periods or in different educational contexts, insufficient exploration of teacher concerns, and lack of comparison with alternative tools. However, this research investigates how integrating Kahoot! enhances student motivation in online classrooms from both teacher and

student perspectives. It aims to identify Kahoot! motivating elements and challenges encountered by teachers and students, thereby informing strategies to maximize its effectiveness in the context of Mohamed Khider-Biskra in the Department of English.

Conclusion

In this chapter, the pivotal role of motivation in education, particularly within online learning contexts, has been thoroughly explored. Various motivation theories, including Maslow's Hierarchy of Needs and McClelland's Need for Achievement Theory (1940, 1950), have been examined to understand the drivers behind student motivation, alongside distinctions between intrinsic and extrinsic motivation. The discussion also encompassed theories like Self-Determination Theory (SDT, 2000), Achievement Motivation Theory (Atkinson,1957), Expectancy Theory (Vroom,1964), and the ARCS Model (Keller,1983). Additionally, the importance of teaching presence and constructive feedback in bolstering student motivation was highlighted. Furthermore, the examination of how digital game-based learning platforms like Kahoot! contribute to enhancing student motivation in online classes was conducted. By prioritizing motivation and employing diverse instructional strategies, educators can create engaging online learning experiences conducive to student success.

Chapter Three: Fieldwork and Data Analysis

Chapter Three: Fieldwork and Data Analysis

Introduction

This chapter aims to describe the methodology used in this research work. It also presents the results obtained from the students' questionnaires and teachers' interviews. Additionally, it seeks to analyze and interpret these findings to understand the data and draw conclusions out of them. Ultimately, these results provide insights into the effectiveness of using Kahoot! address the research inquiries, and either validate or refute the primary hypothesis.

1. Research design

The primary objective of this study is to examine the influence of Kahoot! as a gamified learning platform on students' learning motivation. To address the study's inquiries, a mixed-method approach combining qualitative and quantitative data collection tools is employed to gather data. Given the study's nature, a mixed-method approach is deemed most suitable. The researcher collects data through a semi- structured questionnaire it's because the questionnaire contained open-ended questions that are analyzed qualitatively, and data through a structured interview with teachers to delve into the dissertation's topic and address its inquiries.

1.2 Population and sample

The target population of this study is second-year Master students of English department at the University of Mohamed Kheider Biskra. The population was selected because the students are familiar with Kahoot! and it has been integrated into their online classes in the module of Statistics. A non-random sampling approach was used, 28 students responded to the questionnaire and the interview was conducted with the teacher of the module.

1.3 Data collection tool

The data collection tools utilized to achieve the objectives and test the hypothesis of this research paper involved gathering both student and teacher perspectives on the integration of Kahoot! in online classes and its impact on students' learning motivation. To collect data from students, Semi- structured questionnaire and a structured interview was administered. Additionally, a structured interview format was employed for teachers to gather more in-depth information regarding the impact of Kahoot! on student motivation.

2. Questionnaire

2.1 Description of the questionnaire

This questionnaire, designed for Master Two students at the Department of English Language at the University of Mohamed Khiedr-Biskra, aims to explore the factors influencing motivation in online classes and assess how Kahoot! meets these factors to enhance learning motivation. A sample of 28 students out of a population of 160 was surveyed, with the questionnaire divided into three sections containing close-ended and open-ended questions. The first section of the questionnaire included 3 questions that aimed at collecting general information about students' age, gender, and level of motivation in online classes. Next, the second section investigates factors affecting motivation in online classes, prompting participants to identify key influences and their impact on motivation. The third section focuses on the perception of Kahoot! in improving learning motivation, asking about experiences with the platform and its effectiveness in enhancing motivation. Lastly, the last section which is some other comments invites reflections on the overall impact of tools like Kahoot! in online learning environments and elicits students' suggestions for improvement of integrating Kahoot! in online classes. Through this study, insights will be gained into students' perceptions and experiences, informing strategies for enhancing motivation in online education.

2.2 Administration of the student's questionnaire

The completed version of the questionnaire was crafted using Google Forms and distributed online to the target population through the Messenger group of Master 2. Since the target group was unavailable at the university, online submission was the only option. However, it took some time for students to respond, but we managed to gather the required number of responses.

2.3 Students' Questionnaire Results Analysis

Section One: General Background

Item1. What is your Age?

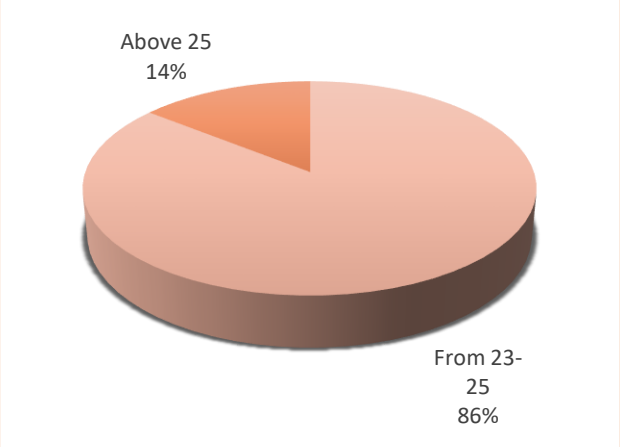


Figure3.13 Students' Age

Table 3.2

Students' Age

Option	Frequency	Percentage
From 23-25	**24**	**85,7%**
Above 25	**4**	**14,3%**
Total	**28**	**100%**

According to ***Figure 3.13***, our sample is divided into two age groups. Among the 28 students surveyed, 24 students (85.7% of the total) are aged between twenty-three and twenty-five. The remaining 4 students (14.3%) are in a different age group. This breakdown highlights

that the majority of the sample falls within a specific age range, which might have implications for the study's findings.

Item2. Specify your gender

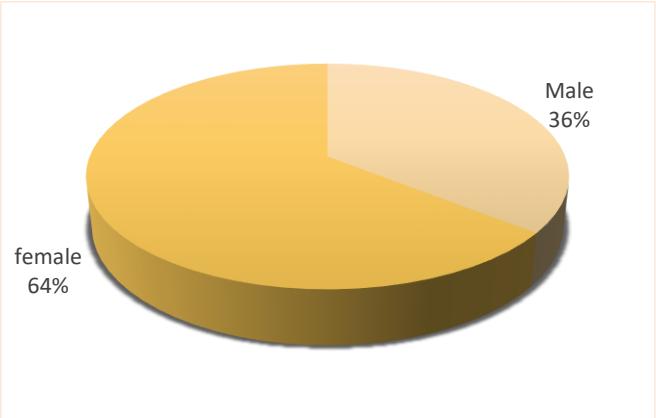


Figure 3.14 Students' Gender

Table 3.3

Students' Gender

Option	Frequency	Percentage
Male	**10**	**35,7%**
Female	**18**	**64,3%**
Total	**28**	**100%**

Figure 3.14 reveals a significant presence of female participants. Out of the total twenty-eight participants, only 10 (35.7%) are male, while the majority, comprising 64.3%, are female.

Item 03. What is your level of motivation in online classes**?**

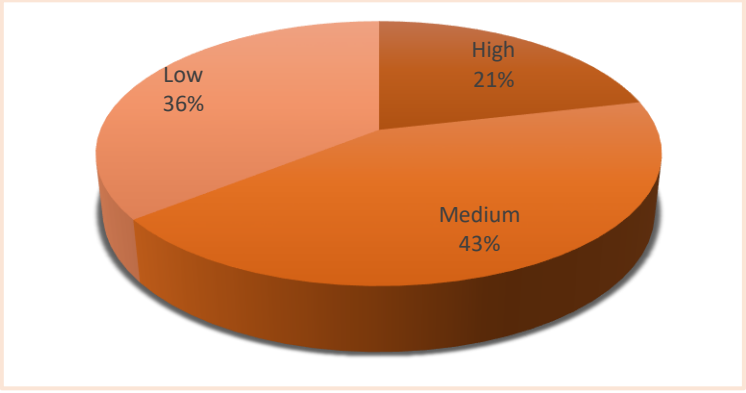


Figure 3.15 Students' Motivation level in online university classes

Table 3.4

Students' Motivation level in online university classes

Option	Frequency	Percentage
High	**6**	**21,4%**
Medium	**12**	**42,9%**
Low	**10**	**35,7%**
Total	**28**	**100%**

Upon reviewing ***Figure 3.15,*** it is evident that the majority of students, totaling 12 (42.9%), tend to exhibit a medium level of motivation in online classes. Additionally, 6 (21.4%) students indicated a high level of motivation, while 10 (35.7%) respondents reported a low level of motivation. This suggests that a significant portion of students have a medium level of motivation in online classes.

Section Two: Student's Learning Motivation in Online Classes

Item4. When you attend an online class, do you stay for the entire session, or do you leave?

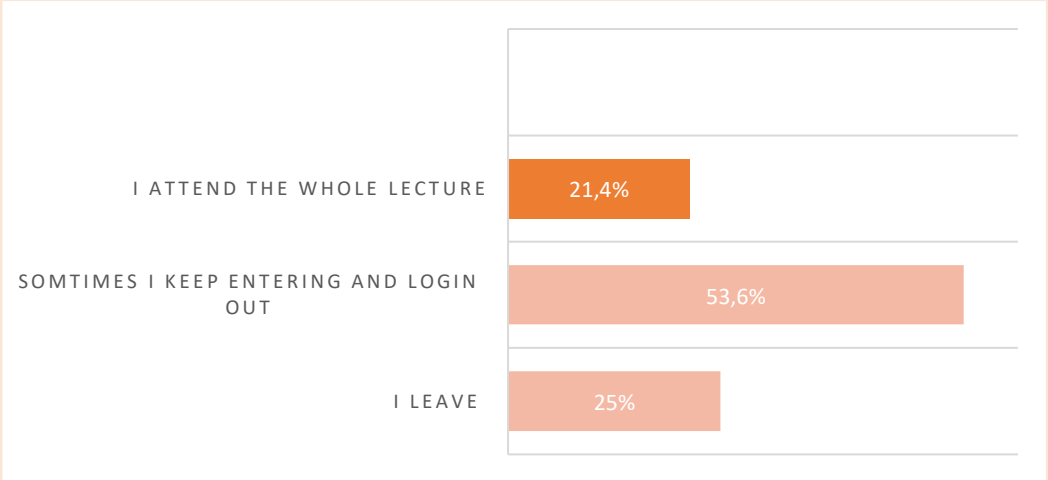


Figure3.16 Surdents' attendance in online classes

Table 3.5

Surdents' attendance in online classe

Option	Frequency	Percentage
I attend the whole lecture	**6**	**21,4%**
Sometimes I keep entering and logging out	**15**	**53,6%**
I leave	**7**	**25%**
Total	**28**	**100%**

As indicated in ***Figure3.*16,** 21.4% of students stated attending the entire lecture online, while 25% mentioned leaving the lecture. In contrast, 53.6% of students reported intermittently entering and logging out during the lecture. These findings suggest that a majority of students may not exhibit a strong interest in attending the entire lecture during online learning sessions.

Item05. Do you always feel the need to put effort into maintaining your motivation in online classes, or attention?

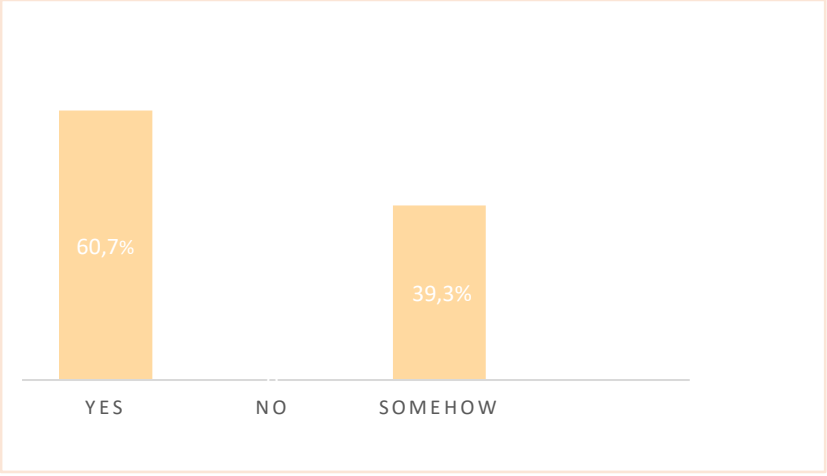


***Figure3.*17** Student's willingness to put effort into maintaining their motivation and attention in online classes

Table 3.6

Student's willingness to put effort into maintaining their motivation and attention in online classes

Option	Frequency	Percentage
Yes	**17**	**60,7%**
No	**0**	**0%**
Somehow	**11**	**39,3%**
Total	**28**	**100%**

Based on the results of ***Figure3.*17,** the findings show that 17 respondents (60.7%) answered "Yes," indicating a consistent need for effort in this regard. Interestingly, none of the respondents answered "No." However, 11 respondents (39.3%) selected "Somehow," suggesting varying degrees of need for effort. These results indicate that students are most likely to face the necessity to put efforts to sustain their motivation and attention in online classes.

Item06. Does actively participating in online classes boost your motivation?

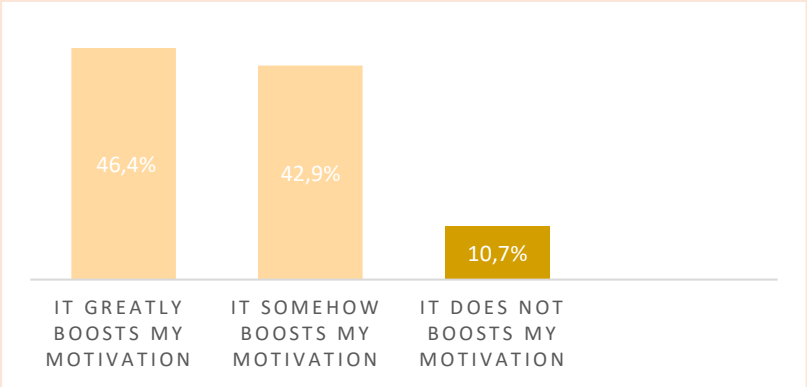


Figure3.18The influence of students' active participation on students' level of motivation in online classes

Table 3.7

The influence of students' active participation on students' level of motivation in online classes

Option	Frequency	Percentage
It Greatly boosts my motivation	**13**	**46,4%**
It Somehow affects my motivation	**12**	**42,9%**
It Does not affect my motivation	**3**	**10,7%**
Total	**28**	**100%**

As shown in ***Figure3.18,*** which aims to find if active participation influences students learning motivation in online classes; The findings indicate that 13 respondents (46.4%) reported that actively participating greatly boosts their motivation. Additionally, 12 respondents (42.9%) mentioned that it somehow affects their motivation. Conversely, 3 respondents (10.7%) stated that actively participating does not affect their motivation. These results illustrate that active participation boosts and affects students' learning motivation.

Item07. Does the sense of belonging with your classmates and instructor affect your motivation in online classes?

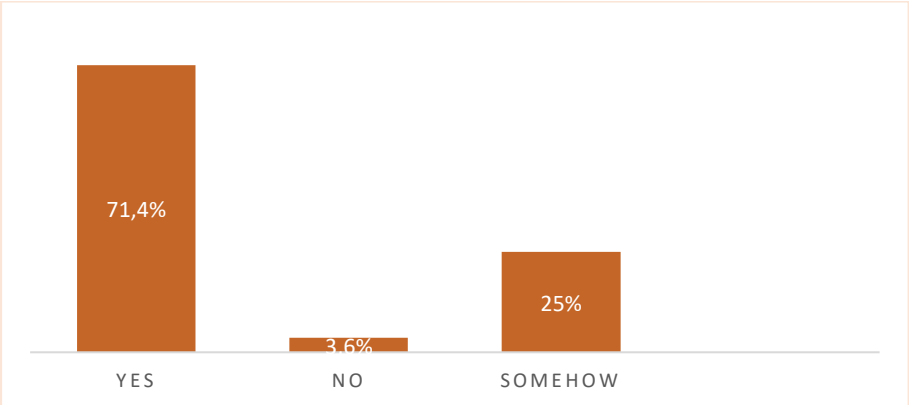


***Figure3.*19** The effects of the sense of belonging on students' motivation in online classes

Table 3.8

The effects of the sense of belonging on students' motivation in online classes

Options	Frequency	Percentage
Yes	**20**	**71,4%**
No	**1**	**3.6%**
Somehow	**7**	**25%**
Total	**28**	**100%**

Based on the results of ***Figure3.*19**, regarding whether the sense of belonging with peers and instructors affects students' learning motivation, the data reveals that the largest percentage, 71.4% of respondents, answered "Yes". Conversely, only 1 respondent (3.6%) reported "No", while 7 respondents (25%) indicated "Somehow". These findings suggest that the sense of belonging with peers and instructors does indeed impact students' learning motivation.

Item8. Does seeking support from your classmates and instructor affect your motivation in online classes?

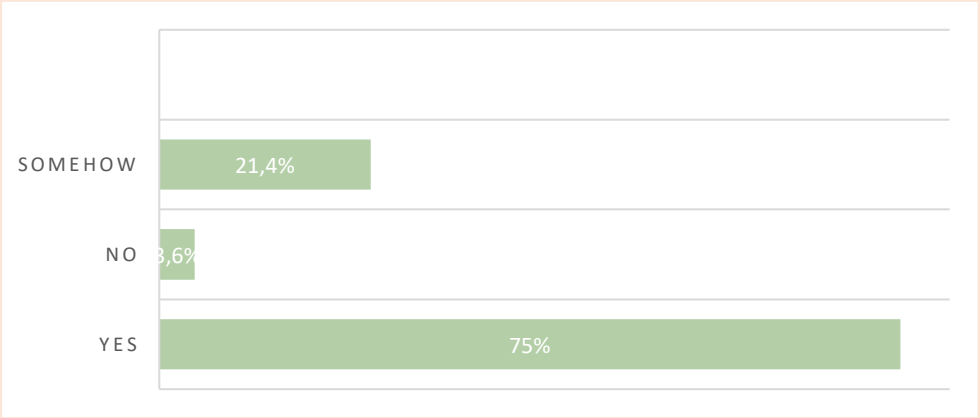


Figure3.20 The effects of seeking support from classmates and the instructor on the student's motivation

Table3.9

The effects of the sense of belonging on students' motivation in online classes

Options	Frequency	Percentage
Yes	**21**	**75%**
No	**1**	**3,6%**
Somehow	**6**	**21,4%**
Total	**28**	**100%**

According to ***Figure3.20,*** which measures whether seeking support and feedback from peers and instructors affects students' learning motivation, the majority of students, 21 (75%), answered "Yes". Conversely, only 1 student (3.6%) responded "No", while 6 students (21.4%) answered "Somehow". These results suggest that seeking support and feedback from peers and instructors can indeed play an effective role in impacting students' learning motivation.

Item09. What type of activities does the teacher include in online classes that affect your motivation?

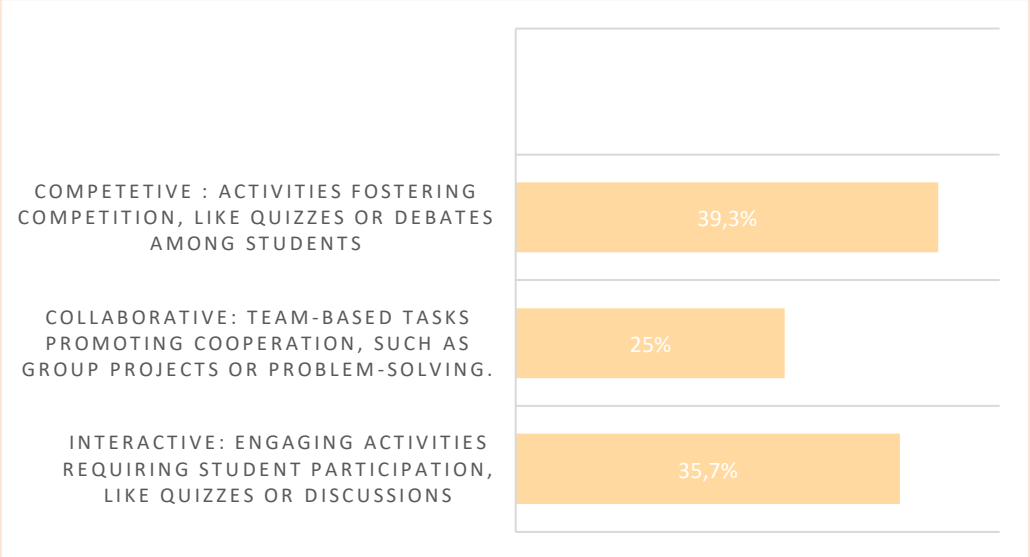


Figure3.21 Type of activities that teachers include that can affect students' motivation

Table 3.10

Type of activities that teachers include that can affect students' motivation

Options	Frequency	Percentages
Interactive: Engaging activities requiring student participation, like quizzes or discussions	**10**	**35,7%**
Collaborative: Team-based tasks promoting cooperation, such as group projects or problem-solving.	**7**	**25%**
Competitive: Activities fostering competition, like quizzes or debates among students	**11**	**39,3%**
Total	**28**	**100%**

The above ***Figure3.21,*** illustrates various types of activities that teachers can incorporate into online classes, which may influence students' learning motivation. Specifically, 35.7% of respondents stated that interactive activities affect their motivation, while 25% mentioned that collaborative activities have an impact. Additionally, 39.3% indicated that competitive activities are the ones that affect their motivation. From this data, we can infer that different interactive activities seem to have the highest impact according to the percentage of respondents, collaborative activities also play a significant role. However, competitive and interactive activities are reported to have the most significant effect on motivation by the majority of respondents.

Item10. Does the sense of feeling integrated with the activity itself affect your motivation?

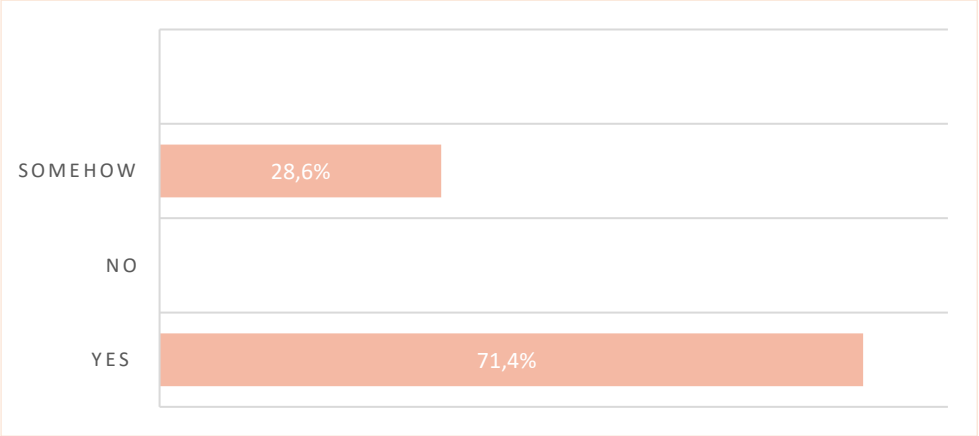


Figure3.22 Level of students' feeling of integration with the activity and how it affects their motivation

Table 3.11

Level of students' feeling of integration with the activity and how it affects their motivation

Option	Frequency	Percentage
Yes	**20**	**71,4%**
No	**0**	**0%**
Somehow	**8**	**28,6%**
Total	**28**	**100%**

As depicted in ***Figure3.22,*** the majority of respondents, 71.4%, reported affirmatively that the sense of feeling integrated with the activity itself affects their motivation. Interestingly, 0% of respondents indicated a negative response, while 2.6% reported feeling "Somehow" affected. These findings suggest a significant influence of feeling integrated with activities on students' learning motivation.

Item11. What elements of Learning online make you more motivated and satisfied?

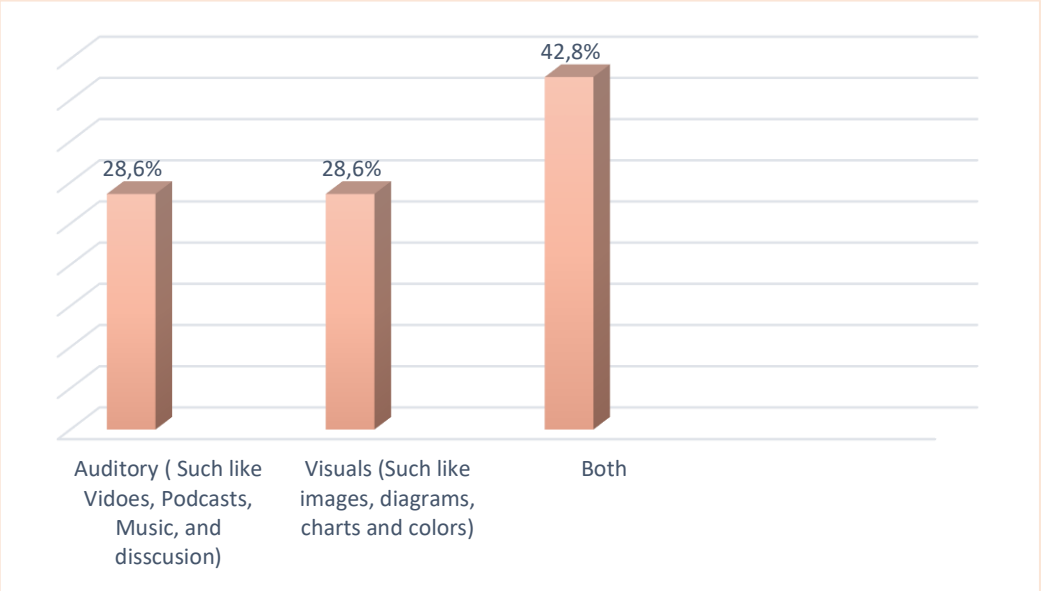


Figure3.23 Elements of online learning that motivate students

Table 3.12

Elements of online learning that motivate students

Options	Frequency	Percentage
Auditory (such as videos, Podcasts, music, and discussion)	**8**	**28,6%**
Visuals (such as images, diagrams, charts, and colors)	**8**	**28,6%**
Both	**12**	**42,8%**
Total	**28**	**100%**

The findings of ***Figure3.23,*** reveal that 8 respondents (28.6%) are motivated and satisfied by auditory elements, such as videos, podcasts, music, and discussions. Another 8 respondents (28.6%) prefer visual elements, including images, diagrams, charts, and colors. The majority, 12 respondents (42.8%), indicated that both auditory and visual elements enhance their motivation and satisfaction. These results suggest that a combination of

auditory and visual elements is most effective in boosting students' motivation and satisfaction in online learning environments.

Section Three: The Integration of Kahoot! In Online Classes And its Effect on Learning motivation.

Item12. Did the integration of Kahoot! improved your motivation to attend your online classes?

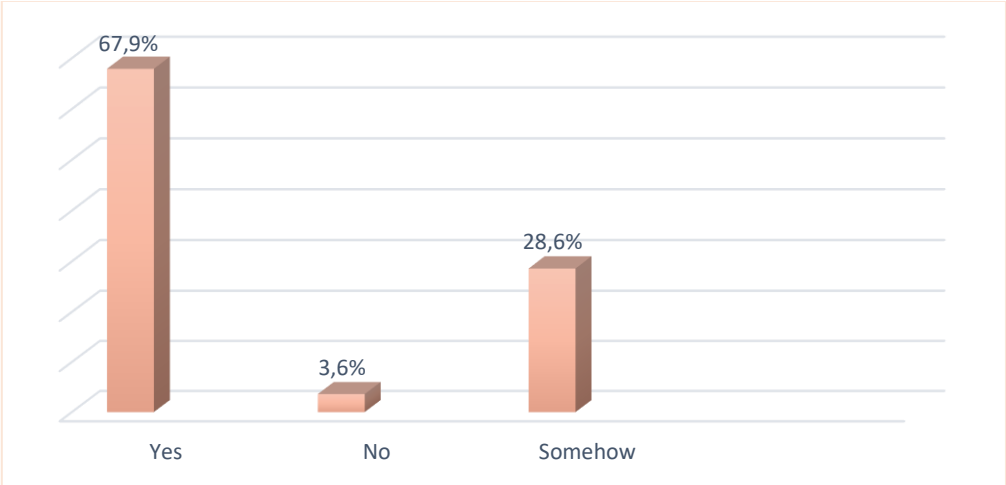


Figure3.24 Students' perception of the integration of Kahoot! And its effects on their motivation to attend

Table3.13

Students' perception of the integration of Kahoot! And its effects on their motivation to attend

Options	Frequency	Percentage
Yes	**19**	**67,9%**
No	**1**	**3,6%**
Somehow	**8**	**28,6%**
Total	**28**	**100%**

To determine if integrating Kahoot! in online classes improved students' motivation and increased attendance, the data shows that 67.9% of participants reported being more motivated to attend after using Kahoot! representing the majority. Conversely, only 1 participant (3.6%) reported no improvement, while 28.6% indicated that it somewhat increased their attendance. These findings suggest that the integration of Kahoot! in online classes significantly enhances students' motivation to attend online lectures.

Item13. After experiencing Kahoot! have you ever felt the need to put any effort into staying motivated and paying attention in online classes?

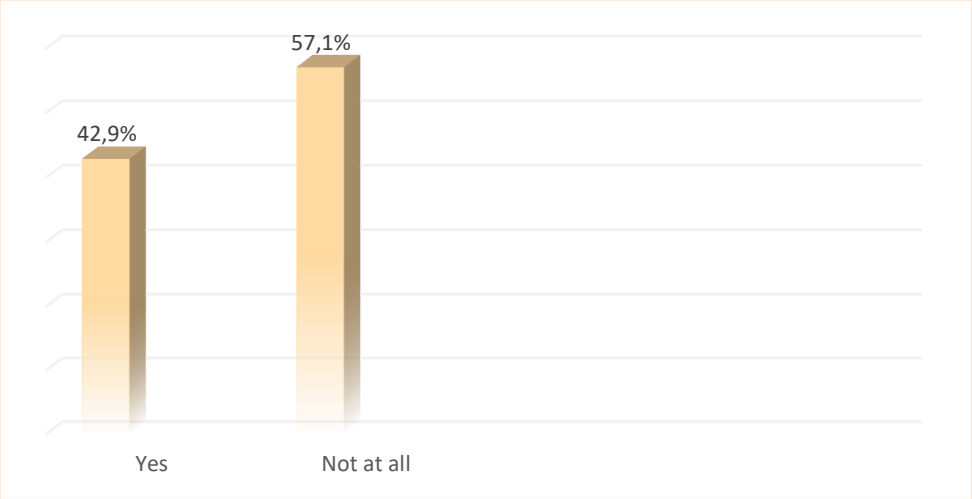


Figure3.25 Students' perception on their need to put effort into staying motivated and paying attention after using Kahoot!

Table 3.14

Students' perception on their need to put effort into staying motivated and paying attention after using Kahoot!

Options	Frequency	Percentage
Yes	**12**	**42,9%**
Not at all	**16**	**57,1%**
Total	**28**	**100%**

Figure3.25 presented above examines whether students felt the need to put any effort into staying motivated and paying attention in online classes after experiencing Kahoot! the findings reveal that 12 respondents (42.9%) answered "Yes," indicating that they did feel the need to put in effort to maintain motivation and attention. Conversely, 16 respondents (57.1%) answered "Not at all," suggesting that a majority did not feel the need to exert additional effort. In summary, the results indicate that a substantial portion of students felt the need to maintain motivation and attention after using Kahoot! the majority did not experience this need as they find it a more effective tool to motivate them.

Comparing these findings to ***Figure3.*****17** results which indicates that students need a consistent effort to stay motivated, we indicate that both findings suggest that while tools like Kahoot! can boost motivation in online classes, they don't eliminate the need for effort. Chart 13 reveals a mixed response to Kahoot's effectiveness, with some students feeling motivated while others still requiring effort. Meanwhile, Chart05 indicates a consistent need for effort among students to maintain motivation and attention, irrespective of the tools used. Thus, educators should incorporate engaging tools while also offering support and strategies to help students stay focused and motivated during online classes.

Item14. Did Kahoot! influenced your active class participation?

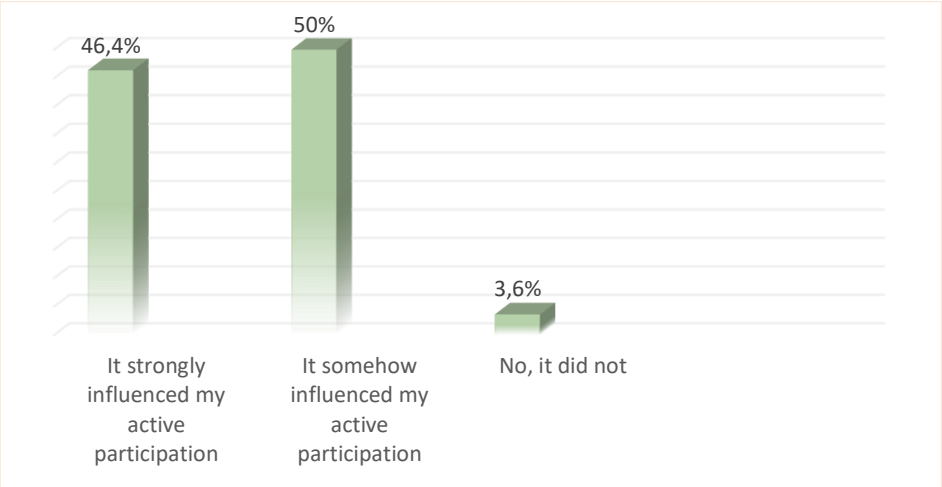


Figure3.26 The Level of Kahoot! influence on students' active participation

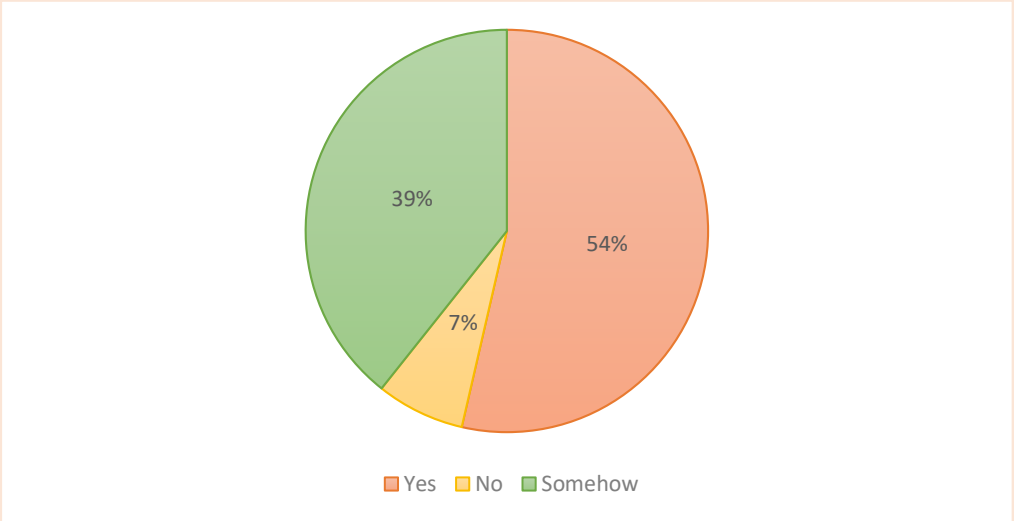
Table 3.15

The Level of Kahoot! influence on students' active participation

Options	Frequency	Percentage
It strongly influenced my active participation	**13**	**46,4%**
It somehow influenced my active participation	**14**	**50%**
No, it did not	**1**	**3,6%**
Total	**28**	**100%**

Based on the results of this figure, it describes the percentage of each student's opinion about whether Kahoot! influenced their active participation, we see that 13 students (46.4%) reported that it strongly influenced their active participation. Additionally, 14 students (50%) stated that it somehow influenced their participation, while only 1 student (3.6%) indicated that it did not influence their participation at all. these findings indicates that Kahoot! has a positive impact on the active participation of the majority of students in online classes as they reported.

Item15. Did Kahoot! influenced your sense of belonging with your peers and instructor?



Figures3.27 The influence of Kahoot! on students' sense of belonging with their peers and instructor

Table 3.16

The influence of Kahoot! on students' sense of belonging with their peers and instructor

Option	Frequency	Percentage
Yes	**15**	**53,6%**
No	**2**	**7,1%**
Somehow	**11**	**39,3%**
Total	**28**	**100%**

These findings indicate that Kahoot! has a generally positive impact on the sense of belonging among students. Specifically, the majority (53.6%) of participants reported that Kahoot! positively influenced their sense of connection with peers and instructors, suggesting that the interactive and engaging nature of the platform can enhance social integration in an online learning environment. However, there is a notable diversity in experiences, as 39.3% of students felt that Kahoot! had some impact on their sense of belonging, indicating that while the platform may offer benefits, its effectiveness can vary depending on individual or contextual factors. Additionally, a small proportion (7.1%) of students reported no influence, highlighting that for some, Kahoot! might not significantly affect their social experience in online classes. These insights underscore the importance of considering varied student experiences when integrating technological tools like Kahoot! to foster a sense of community in online learning settings.

Item16. Did Kahoot! help you with your need to seek feedback from peers and instructors?

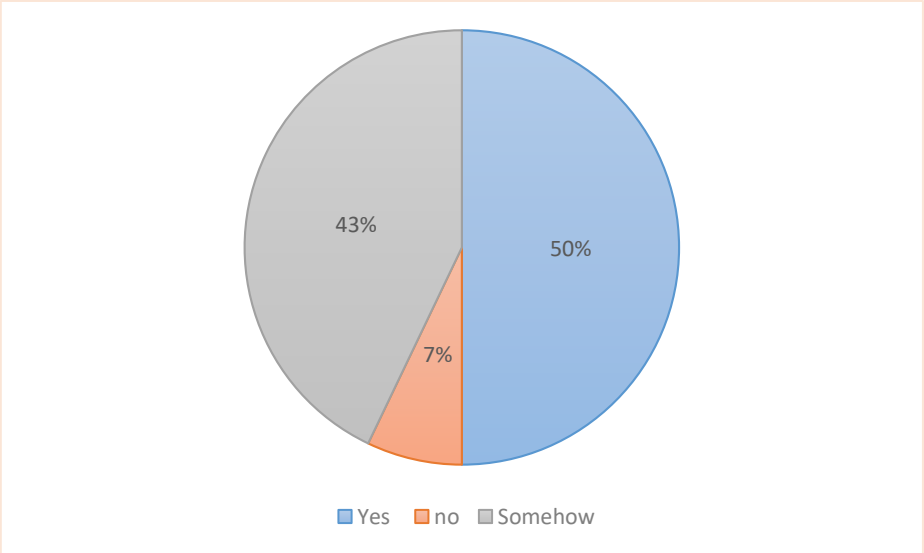


Figure3.28 The influence of Kahoot! On students' needs to seek feedback from peers and instructor

Table 3.17

The influence of Kahoot! On students' needs to seek feedback from peers and instructor

Option	Frequency	Percentage
Yes	**14**	**50%**
No	**2**	**7,1%**
Somehow	**12**	**42,9%**
Total	**28**	**100%**

According to the findings presented in ***Figure3.28***, which aimed to determine whether using Kahoot! in online classes facilitated students' ability to obtain feedback, 50% of the participants agreed by stating "Yes," indicating that Kahoot! indeed helps them seek feedback from peers and instructors. Conversely, only 7.1% disagreed, as indicated by their response "No." Additionally, 42.9% reported "Somehow," suggesting that Kahoot! still aided

them in seeking feedback to some extent. These results underline that Kahoot! had a major impact on students' feedback-seeking behaviors in online learning environments.

Item17. Did the integration of Kahoot! increase your sense of competition?

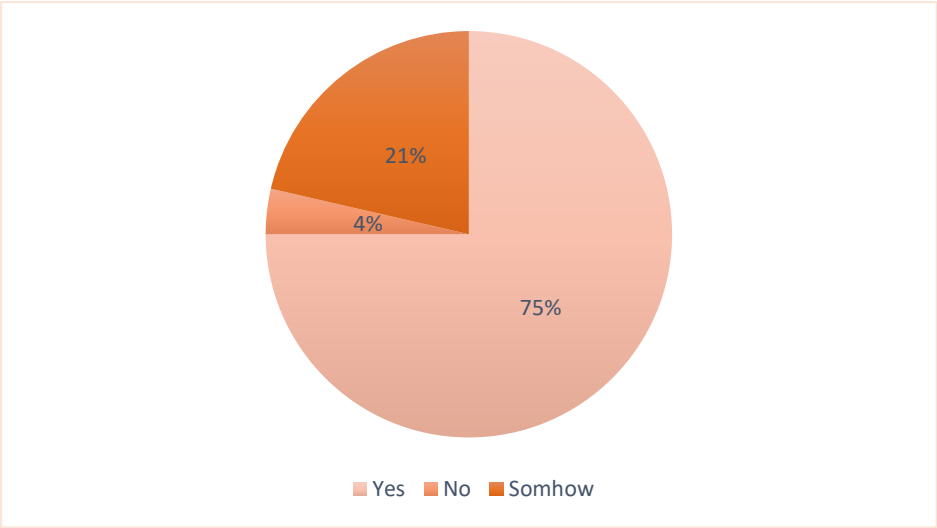


Figure3.29 The integration of Kahoot increases students' sense of competition

Table 3.18

The integration of Kahoot increases students' sense of competition

Option	Frequency	Percentage
Yes	**21**	**75%**
No	**1**	**3,6%**
Somehow	**6**	**21,4%**
Total	**28**	**100%**

Based on the results of ***Figure3.29***, it is evident that 75% of the participants, representing the majority, perceive that integrating Kahoot! in online classes has increased their sense of competion . Conversely, only 3.6% indicated a negative response, while 21.4% responded "Somehow." In summary, it can be concluded that integrating Kahoot! can enhance the sense of competition among students, consequently increasing their motivation in online classes.

Item18. Did the use of Kahoot! help you increase the sense of feeling integrated with online activities?

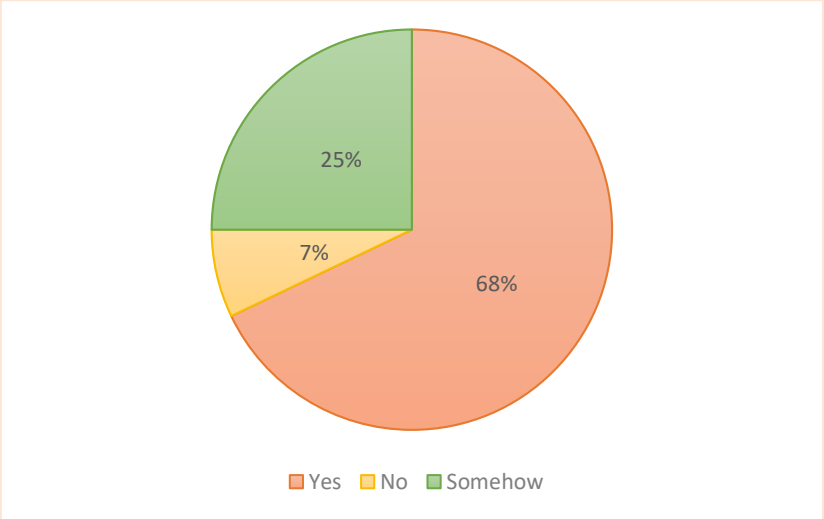


Figure3.30 Level of student's sense of integration with the activities after using Kahoot!

Table 3.19

Level of student's sense of integration with the activities after using Kahoot!

Option	Frequency	Percentage
Yes	**19**	**67,9%**
No	**2**	**7,1%**
Somehow	**7**	**25%**
Total	**28**	**100%**

Figure3.30 depicts that 67.9% of students felt integrated with the activities when Kahoot! was utilized in the online class, while only a few (7.1%) students did not experience this integration. Additionally, 25% responded "somehow," indicating that Kahoot! serves as a helpful tool in fostering students' sense of integration with the class activities.

Item19. What aspects of Kahoot helped you to feel more satisfied with your experience in online classes?

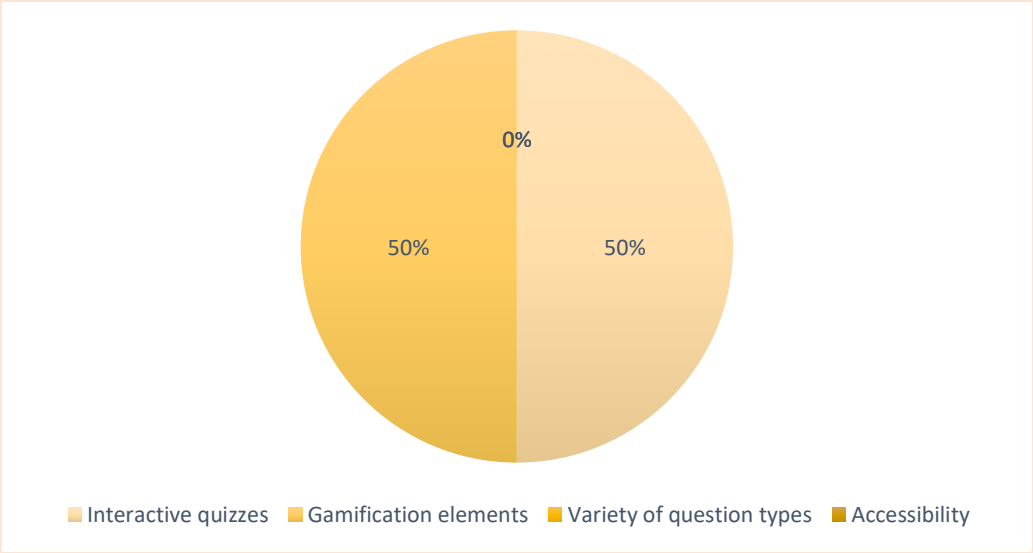


Figure3.31 Elements of Kahoot! that makes students satisfied with their online classes experience

Table 3.20

Elements of Kahoot! that makes students satisfied with their online classes experience

Options	Frequency	Percentage
Interactive quizzes	**14**	**50%**
Gamification elements	**14**	**50%**
Variety of question types	**0**	**0**
Accessibility	**0**	**0**
Total	**28**	**100%**

According to ***Figure3.31***, which represents the elements of Kahoot! and identifies which ones are more likely to make students more satisfied with their online learning experience, the results indicate that students were satisfied with two elements. Specifically, 50% reported satisfaction with "Interactive quizzes," while the other half, also 50%, reported satisfaction with "Gamification elements." Based on these findings, teachers can enhance student satisfaction and motivation by incorporating these two elements of Kahoot! into their online classes.

Item20. Do you think that Kahoot! could play an important role in enhancing motivation in online classes?

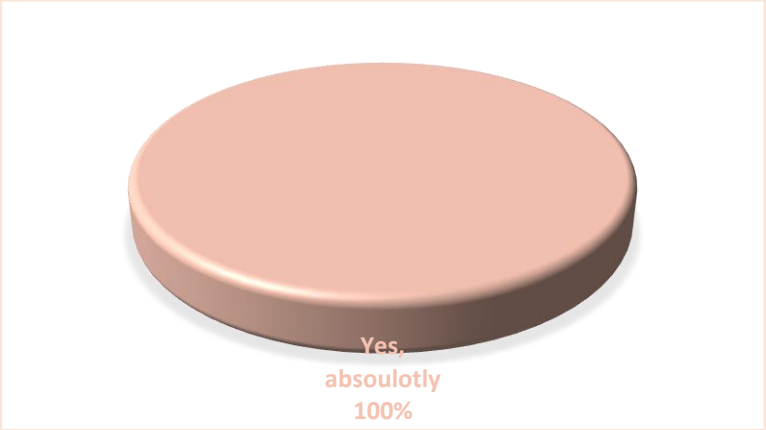


Figure 3.32 Students' agreement on the integration of Kahoot!

According to the students' answers to this question, all of them agreed that Kahoot can play an important role in enhancing motivation in online classes, as all the answers were "Yes", "Absolutely" One of the students wrote, "Absolutely! Kahoot can be a fantastic tool for enhancing motivation in online classes, its interactive nature makes learning more engaging and fun".

Item21. What challenges have you encountered during the use of Kahoot? In your online classes?

Based on the results of this question, the responses have been categorized into themes for a clearer understanding of the issues:

1. Internet Connectivity Issues:

- "Probably, internet"
- "Internet problems only"
- "Internet connectivity and time management"
- "Internet connection and accessibility to the app"
- "Internet connectivity"

- "Internet login"

- "Internet and limited time to answer questions"

- "Technical issues like server downtime or connectivity problems"

2. Time Management:

- "The timing of games and the internet connection"

- "Time constraint and unreliable internet connection"

- "Internet and limited time to answer questions"

- "The internet and the limited time to answer questions."

3. Technical Difficulties:

- "Actually, I did not face any challenge. But sometimes I face technical issues like internet connection and the downloading of the application itself."

- "Technical issues like server downtime or connectivity problems."

4. User Experience:

- "It seems difficult and ambiguous"

- "Thinking fast maybe!"

5. Cheating Concerns:

- "In online settings, there is always the risk of students cheating during Kahoot quizzes by collaborating with peers or using external resources to find answers."

6. No Challenges:

- "Nothing"

- "Honestly, nothing"

- "It was easy, no challenges."

- "I don't face any challenges."
- "Nothing really"
- "I didn't face any challenges"
- "I have never used it"
- "No challenges"
- "Nth"

The primary challenges faced by students when using Kahoot! in online classes are related to internet connectivity and time management. Technical difficulties and user experience issues were also noted, along with concerns about potential cheating. However, a substantial number of students reported no challenges, suggesting that Kahoot! is generally well-received and effective for many users. This analysis highlights the importance of addressing connectivity and technical issues to enhance the overall user experience of Kahoot! in online learning environments.

Item22. If you could change a certain thing about Kahoot! and its integration into online classes, what could it be and why?

According to the student's response to this question and their suggestions for some changes that they would like to be added in Kahoot! we divided them into 7 themes:

1. No Changes Needed:

- "Nothing"
- "Nothing"
- "It seems well organized; nothing could be omitted."
- "It's good enough"
- "I would change nothing because it looks perfect for me"
- "Nothing."
- "No nothing"

- "No"

- "I would change nothing"

- "Nothing"

2. Enhancing Features and Gamification:

- "Maybe adding new features like designing personal rooms where I can do personal activities and gaming. In addition to designing collaborative rooms for the group activities."

- "The more use of collaborative, competitive activities"

- "I would add some other fun gamification elements"

- "I would add more gamification elements and other elements to prevent cheating"

- "I will add more fun stuff"

3. Flexibility and Variety in Question Types:

- "To allow the learners to change their answer after submission"

- "I would add more flexibility in question types. While multiple-choice and true/false questions are effective, incorporating other formats like short answers or interactive diagrams could better assess diverse learning styles and complex concepts, enhancing the overall learning experience."

4. Feedback and Quality Improvement:

- "The limited feedback for open-ended questions"

- "to make it with a higher level and good quality of learning"

5. Cheating Prevention:

- "Risk of cheating during quizzes"

- "I would add more gamification elements and other elements to prevent cheating"

6. Timing and Response Time:

- "Make more time for students to answer so they can think"

7. Increased Use and Integration:

- "The integration of more quizzes because it motivates me"

Student suggestions for improving Kahoot! include enhancing features and gamification, increasing flexibility in question types, improving feedback and learning quality, preventing cheating, and allowing more response time. Many students are satisfied with Kahoot!, but these improvements could enhance its effectiveness in online classes.

2.4 Discussion and Interpretation of Students' Questionnaire

The study provided insights into the demographic breakdown of participants, with a majority aged between twenty-three and twenty-five and a notable representation of female students. It revealed diverse motivation levels among students, with most reporting medium motivation. However, challenges were evident in maintaining attendance and participation, especially motivation, as many students reported intermittent engagement during online classes. Despite this, the integration of Kahoot! appeared beneficial. The results indicate that Kahoot! affects many elements that can enhance students' learning motivation. Firstly, Kahoot! enhances attention and active participation. The element of surprise in the platform, such as themed quizzes or special events quizzes, makes learning more enjoyable for students, encouraging them to participate and pay more attention in online classes, which is significant for enhancing their motivation. Secondly, Kahoot! contributes to a sense of belonging among students. The platform's competitive nature fosters a feeling of relatedness to others and to the activities, motivating students to engage more actively. Moreover, Kahoot! encourages students to seek support and feedback from instructors and peers, thereby enhancing their motivation. By using Kahoot!, students are more inclined to identify their strengths and areas of improvement, leading to increased motivation to excel. However, challenges such as connectivity issues and technical difficulties were noted. Suggestions for improvement include enhancing features and incorporating more gamification elements to

address these challenges. Overall, the findings underscore the importance of interactive tools like Kahoot! in online education, while highlighting areas for refinement to optimize student engagement and learning outcomes.

Overall, the findings underscore the importance of interactive tools like Kahoot! in online education. They also highlight areas for refinement to optimize student engagement and learning outcomes.

2. The Teacher's Interview

2.1 Description of the Teacher Interview

To investigate the effects of using Kahoot! in online classes from the teacher's viewpoint, a semi-structured interview is conducted. The interview consists of 11 comprehensive questions that seek to gather insights about the teacher's aims behind using Kahoot! His thoughts and opinions about how the experience with Kahoot! impacted their teaching experience in online classes, its impact on student learning motivation, and the challenges faced during its implementation.

2.3 Administration of the interview

The interview targeted a teacher at the University of Mohamed Khider-Biskra who utilized Kahoot! in his online class with Master 2 students. Conducted face-to-face for 7 minutes, the researcher recorded the interview, allowing for the coverage of most of the key points intended for discussion.

2.4 Analysis of the teacher interview

Item1. What motivated you to start using Kahoot! in your online classes?

The first item aimed to determine what motivated the teacher to use Kahoot! in his online class.

Interviewee A: *"What motivated me to use Kahoot? is that I find it an easy and interactive way to do activities instead of the usual activities, I find it as an enjoyable way to complete activities or do activities"*

The teacher stated that he was motivated by the platform's ease of use and interactive nature, which he found preferable to traditional activities. Additionally, he mentioned that Kahoot! provides a fun way to complete or conduct activities.

Item2. Which activities do use Kahoot for?

The rationale for this item is to highlight the activities for which the teacher uses the platform Kahoot! and to gain a clear understanding of how Kahoot! activities can benefit students.

IntervieweeA: *"I use it mainly for activities that acquire some information collection, activities that require students to recollect or remember something"*

The interviewee mentioned that he primarily uses Kahoot! for activities that involve information gathering and for tasks that require students to recall or remember content. This suggests that Kahoot! can help students reinforce their lectures and retain the information.

Item3.How do you think Kahoot has enhanced the learning experience for your students in the online environment?

This question aims to understand the teacher perspective on the impact of Kahoot! on students' online learning experiences. Specifically, it seeks to gather insights into how the use of Kahoot! has potentially improved learning outcomes in an online setting.

Interviewee A: *"The gamified nature of Kahoot! helps students to engage more with the activities when I use the app, instead of just using them on Black-board or a written format"*

By asking this question, the answer provided by the interviewee was that Kahoot's gamified nature was the primary factor in engaging students with the activities, as opposed to using traditional blackboard or written formats. This gamified approach also helped enhance the online learning experience for students.

Item4. How do you perceive the impact of Kahoot on student learning and motivation in your online classes?

The purpose of this question is to get the interviewee's opinion on how Kahoot can be useful in terms of student motivation and learning in online classes.

Interviewee A: *"In terms of motivation it usually engages students who know how to use the app and also, I think it's an effective way to revise lessons in terms of my phonetics and oral course. I find it an effective way to help students to remember the content when I use Kahoot! in terms of learning"*

Analyzing this response, it is evident that the teacher perceives Kahoot! as a valuable tool for increasing student motivation and engagement, particularly among those familiar with the app. Furthermore, the teacher highlights Kahoot's effectiveness in lesson revision, as a result of his experience with Kahoot in his phonetics and oral courses, suggesting that it aids in content retention and reinforces learning. This indicates that Kahoot! serves dual purposes: enhancing student motivation and facilitating better retention of course material.

Item5. Did integrating Kahoot! in your online class make students attend more and for a longer duration?

Interviewee A: *"I don't know about attending but I think I succeeded in attracting more students. Perhaps in the lectures because of Kahoot! but usually, the students who attended were the ones who used Kahoot. The app Kahoot! kept students coming back"*

As seen above in the teacher's response, the teacher was able to attract more students to attend his lectures mainly those who use the app. From his response, we can confirm that Kahoot! played a significant role in keeping students interested and coming back to the lectures.

Item6. When you integrated Kahoot into your online class, did your students manifest a sense of belonging to the group?

The purpose of this question is to investigate whether the use of Kahoot! in the online classroom environment fosters a sense of belonging among students. It aims to understand whether Kahoot! activities contribute to creating a positive classroom community and whether students feel connected to their peers during online learning experiences.

Interviewee A: *"I am not sure about belonging because I use it as an individual game and every student has its score; I never tried it as a collaborative activity but perhaps I will in the future"*

The interviewee's response suggested uncertainty regarding the sense of belonging attributed to the nature of activities typically played in Kahoot! These activities often require individuals to play alone for their scores. However, the interviewee expressed consideration for incorporating collaborative activities into Kahoot.

Item7. Did integrating Kahoot! in your online class make students active participants in your online class?

Interviewee A: *"Yes, in terms of participating because it gave them a more implicit way of participating because they are not exposed, they are not raising their hands and talking alone in the classroom, they shouldn't be shy or something like that. It helped even the shy students to participate"*

Based on the teacher's response, students demonstrated increased participation following the integration of Kahoot! due to its user-friendly and secure nature. The platform's

design, which eliminates the need for students to raise their hands or speak individually, particularly benefits shy students, encouraging them to participate more freely.

Item8. Did the sense of competition that Kahoot! makes, made students more motivated in your online class?

Interviewee A: *"Yes, the most of the Kahoot! sessions I used were competitive because everyone was trying to achieve their best score. Therefore, yes it was so competitive"*

In response to Item 8, Interviewee A affirmed that the sense of competition fostered by Kahoot! sessions significantly motivated students in the online class. According to the interviewee, the competitive nature of Kahoot! sessions, where participants strive to achieve their highest scores, contributed to heightened motivation among students.

Item9. How do you think Kahoot! could be used to support students who may be struggling or unmotivated in online classes?

Interviewee A: *"I think it can be used by integrating more videos or media, this is something that perhaps I don't use a lot but Kahoot! has some features that integrate videos, audio, or pictures that can motivate students more"*

According to the response given by the teacher, he suggested that Kahoot! could support struggling or unmotivated students in online classes by integrating more videos or media. Although the interviewee admitted to not utilizing this feature extensively, Kahoot! offers capabilities for integrating videos, audio, or pictures, which have the potential to motivate students more effectively.

Item10. What challenges, if any, have you faced in implementing Kahoot! in your online classes?

Interviewee A: *"Mainly access to the internet, and having students access to the app because I usually use the free version of the app and the free version has to twenty slots, the premium version is very expensive"*

In this response, the teacher identified the challenges he faced in implementing Kahoot! in online classes, primarily citing issues related to internet access and student accessibility to the app. The teacher noted reliance on the free version of the app, which limits the number of available slots to twenty. Additionally, the interviewee mentioned the expense associated with upgrading to the premium version as a barrier to addressing these challenges.

Item11. Are there any ways in which you think Kahoot! could be designed to better support students' learning motivation in online classes?

Interviewee A: *"Integrating media, can be more interactive than just using it mainly through text. Whenever I integrate more videos or pictures; it is even more interactive to students and more motivating who are visual learners and they like media to engage with learning"*

According to the teacher words, Kahoot! could better support students' learning motivation in online classes by integrating media. The interviewee proposed that incorporating more videos or pictures would enhance interactivity and motivation, particularly for visual learners who prefer engaging with media during the learning process.

3. Discussion and Interpretation of the Teacher Interview Results

The researcher interviewed a teacher who uses Kahoot! in online classes to gather insights into its impact on student learning motivation. The teacher highlighted Kahoot!'s ease of use and interactive nature as primary motivations for its adoption, noting that it makes learning more enjoyable compared to traditional activities. Kahoot! is primarily used for

tasks involving, information retention and memory recall, aiding in reinforcing lectures and retaining information. The gamified nature of Kahoot! significantly enhances student engagement and motivation, particularly in lesson revision.

Despite some challenges, such as internet access issues and the limitations of the free version of Kahoot!, the teacher observed increased student participation and attendance due to the platform's engaging format. Kahoot!'s design allows even shy students to participate without fear, fostering a more inclusive online classroom environment. The competitive element of Kahoot! sessions also serve as a strong motivator for students, driving them to engage more deeply with the material and strive for high scores.

To conclude, the teacher suggested that integrating more media, such as videos and pictures, could further enhance Kahoot!'s effectiveness, particularly for visual learners. While acknowledging some challenges in implementation, the teacher believes that Kahoot! holds significant potential to support diverse learning needs and build a positive classroom community. In conclusion, Kahoot's interactive and gamified elements make it a valuable tool for enhancing students learning motivation in online classes.

Conclusion

The third chapter was devoted to the fieldwork of the study, comprising the research methodology along with a thorough analysis and discussion of the findings. Its primary objective was to scrutinize and discuss the data acquired from the students' questionnaires and the teacher interview. In summary, the questionnaire was distributed among M2 students from the English department at Mohamed Khider-Biskra University. It aimed to elucidate the indicators of student's learning motivation and their level of motivation in online classes, as well as their perspectives on how integrating Kahoot! has influenced these indicators. The purpose of the teacher interview was to gather in-depth insights on how integrating Kahoot! can enhance students' learning motivation and address challenges associated with its

integration. Despite challenges in maintaining attendance and participation, integrating Kahoot! led to increased motivation, attendance because after integrating Kahoot! students' didn't feel the need to put any efforts to stay motivated. Using Kahoot! influenced various elements among students, such as the sense of competition, integration with the activity itself, and making students active participants. Moreover, it helps students seek feedback from peers and instructors in an easy way Connectivity issues and technical difficulties were noted, along with suggestions for improvement, such as enhancing features and gamification elements. The teacher interview highlighted Kahoot's positive impact on student learning motivation, emphasizing its ease of use and gamified format. Despite challenges, Kahoot! significantly enhanced student motivation and participation, driving deeper learning experiences in online classrooms. Overall, Kahoot's interactive elements make it a valuable tool for optimizing student motivation in online education.

General Conclusion

General conclusion

This study explored the impact of using Kahoot! as a gamified tool to boost students' learning motivation in online classes at the University of Mohamed Khider-Biskra. The research addressed key questions about the influence of Kahoot! on motivation, the specific elements that affect it, and the potential benefits and challenges of using Kahoot! in online teaching. It aimed at verifying the following proposed hypothesis: Integrating Kahoot within online classes is hypothesized to increase student learning motivation.

The dissertation consists of three chapters. The first chapter provides an overview of game-based learning, its history, definitions, and types, with a focus on Kahoot! including its definition, functionality, strengths, opportunities, and weaknesses. The second chapter discusses student motivation, covering general and specific theories, and the role of the instructors as well as digital game-based learning in enhancing motivation. It also focuses on the use of Kahoot! as gamified learning platform in class to improve students' motivation. The final chapter outlines the research methodology, data analysis, discussion, and summary of findings.

The researcher employed a mixed-method approach to align with the study's objectives. Both quantitative and qualitative data were gathered using a questionnaire with the students in the English Department at the University of Mohamed Kheidr-Biskra out of (28) and an interview with the teacher in the same department . This approach provided a comprehensive understanding of student attitudes and opinions regarding the integration of Kahoot! in their online classes.

The study's findings reveal that students encounter various motivational challenges in online classes, including feelings of isolation, a lack of competition, and struggles with attendance and active participation. However, integrating Kahoot! proves to be an effective solution for addressing these demotivational factors. By fostering a sense of competition and

belonging, facilitating support and feedback from peers and instructors, and enhancing engagement through gamified learning activities, Kahoot! significantly boosts students' motivation levels. Additionally, Kahoot! supports information retention and memory recall, making it valuable for reinforcing lectures and aiding in lesson revision. Despite encountering technical and connectivity issues, the study's results confirm the hypothesis that integrating Kahoot! positively impacts students' learning motivation. This suggests that the educational system should integrate game-based learning platforms like Kahoot! to improve students' learning motivation and overall online learning experiences.

Pedagogical Implications and Recommendations

This study aimed to investigate the effects of Kahoot! as a gamified learning tool on improving students' learning motivation in online classes. The findings have significant implications for enhancing students' learning motivation in online education, including the following:

- Teachers should consider integrating more media and gamified learning tools to enhance students' learning motivation in online classes.
- The integration of more opportunities for digital game-based learning in classes.
- More opportunities of training on the use of DGBL for teachers and students.
- Offering technical support to teachers' and students in the use of DGBL in classes.

Limitations of the Study

Even though the predetermined objectives of the study were accomplished, this inquiry has its limitations, which include:

- Limited teachers' sample size: it was difficult to interview several teachers because only one teacher integrated Kahoot into the online classes.

- Inaccurate self- report: some students may inaccurately report and describe their levels of motivation.

Suggestions for Future Researcher

- Further research is needed to generalize the positive impact of Kahoot! on students' motivation. This necessitates conducting studies with a larger sample of teachers and students from various educational levels.
- Experimental studies are needed to examine the issue further and without the impact of students' inaccurate self-reports.

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Appendices

Appendix A

A Questionnaire for Master students at the University of Biskra

This questionnaire aimed to find out the level of your learning motivation in online classes and specifically after the integration of Kahoot as a gamified learning tool. Please tick the appropriate answers or box(es) and when applicable, provide a full statement. Ensure that your answers will remain anonymous and that they will only be utilized for this study.

Thank you for participating.

Section One: General Background

Q1. What is your Age?

☐ From 23-25

☐ Above 25

Q2. Specify your Gender:

☐ Male

☐ Female

Q3. What is your level of motivation in online university classes?

☐ High

☐ Moderated

☐ Low

Section Two: Student's learning Motivation in Online Classes

Q4. When you attend an online class, do you stay for the entire session, or do you leave?

☐ I attend the whole lecture

☐ Sometimes I keep entering and logging out

☐ I leave

Q5. Do you always feel the need to put effort into maintaining your motivation in online classes, or paying attention?

☐ Yes

☐ No

☐ Sometimes

Q6. Does actively participating in online classes boost your motivation?

☐ It Greatly boosts my motivation

☐ It Somehow affects my motivation

☐ It Does not affect my motivation

Q7. Does the sense of belonging with your classmates and instructor effects your motivation in online classroom?

☐ Yes

☐ No

☐ Somehow

Q8. Does seeking support from your classmates and instructor effects your motivation in online classes?

☐ Yes

☐ No

☐ Somehow

Q9. What type of activities that teacher includes in online classes that effects your motivation?

☐ Interactive: Engaging activities requiring student participation, like quizzes or discussions.

☐ Collaborative: Team-based tasks promoting cooperation, such as group projects or problem-solving.

☐ Competitive: Activities fostering competition, like quizzes or debates among students.

Q10.Does the sense of competition in online classes keep you motivated?

☐ Yes

☐ No

☐ Somehow

Q11. Does the sense of feeling integrated with the activity itself effects your motivation?

☐ Yes

☐ No

Q12.What elements of learning online make you more motivated and satisfied?

☐ Auditory (such like Videos, Podcasts, music and discussion ..)

☐ Visuals (such like images, diagrams, charts and colors …)

☐ Both

SECTION THREE: The Integration of Kahoot! in Online Classes and its Effect on Learning Motivation.

Q12. Did the integration of Kahoot improved your motivation to attending your online classes?

☐ Yes

☐ No

☐ Somehow

Q13. After experiencing Kahoot, have you ever felt the need to put any effort into staying motivated and paying attention in the online class?

☐ Yes

☐ Not at all

Q14. Did Kahoot influenced your active class participation?

- ☐ It strongly influenced my active participation
- ☐ It somehow influenced my active participation
- ☐ No, it did not

Q15. Did Kahoot influenced your sense of belonging with your peers and instructor?

- ☐ Yes
- ☐ No

Q16. Did Kahoot help you with your need to seek feedback from peers and instructor?

- ☐ Yes
- ☐ No
- ☐ Somehow

Q17. Did the integration of Kahoot increase your sense of competition?

- ☐ Yes
- ☐ No
- ☐ Somehow

Q18. Does the use of Kahoot helped you increase the sense of feeling integrated with online activities?

- ☐ Yes It definitely did
- ☐ No it did not
- ☐ Somehow

Q19. What aspects of Kahoot helped to feel more satisfied with your experience in online class?

- ☐ Interactive quizzes
- ☐ Gamification elements
- ☐ Variety of question types
- ☐ Accessibility

Q20. Do you think that Kahoot could play an important role in enhancing motivation in online classes?

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Q21. What challenges have you encountered during the use of Kahoot! In your online classes?

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Q22. If you could change a certain thing about Kahoot and its integration in online classes what could it be and why?

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Appendix B

Teacher Interview

I sincerely appreciate your willingness to participate in this interview, which seeks to delve into the advantages of incorporating the Kahoot app into online classes. Your insights and responses hold great value and will make a substantial contribution to our research. I am truly honored to have the opportunity to benefit from your expertise in this field.

Thank you for generously sharing your knowledge.

Student Name: Meriem. **KAZAR**

Questions

Q1. What motivated you to start using Kahoot in your online classes?

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Q2. Which activities do you use Kahoot for?

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Q3. How do you think Kahoot has enhanced the learning experience for your students in the online environment?

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Q4. How do you perceive the impact of Kahoot on student learning and motivation in your online classes?

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Q5. Did integrating Kahoot! in your online class made students attend more and for longer duration?

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Q6. When you integrated Kahoot in your online class, did your students manifest a sense of belonging to the group?

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Q7. Did integrating Kahoot in your online class made students active participants in your online class?

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Q8. Did the sense of competition that Kahoot! makes, made students more motivated in your online class?

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Q9. How do you think Kahoot could be used to support students who may be struggling or demotivated in online classes?

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Q10. What challenges, if any, have you faced in implementing Kahoot in your online classes? How did you overcome those challenges?

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Q11. Are there any ways in which you think Kahoot could be designed to better support motivation in online learners?

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Thank you for sharing your insights and experiences with using Kahoot in your online classes. Is there anything else you'd like to add or any final thoughts on the impact of Kahoot on student engagement and motivation?

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المخلص

تبحث هذه الدراسة في فعالية دمج منصة كاهوت! كأداة ترفيهية في تحفيز التعلم لدى الطلاب في الفصول الدراسية عبر الإنترنت لطلاب السنة الثانية في قسم اللغة الإنجليزية بجامعة محمد خيضر بسكرة. تهدف الدراسة إلى معرفة مدى فعالية منصة كاهوت! كمنصة تعلم ترفيهية في تحفيز الطلاب على التعلم، وأي جوانب من هذه المنصة هي الأكثر تحفيزًا، وما هي الفوائد والتحديات التي تنجم عن دمج هذه المنصة في بيئة التعلم عبر الإنترنت. تفترض الفرضية أن استخدام منصة كاهوت! يمكن أن يعزز ويرفع من تحفيز الطلاب على التعلم في البيئات التعليمية عبر الإنترنت بشكل فعال. لتحقيق هدف البحث، تم استخدام نهج وصفي يعتمد على أساليب جمع بيانات مختلطة. شمل ذلك توزيع استبيان على ثمانية وعشرين (28) طالب ماجستير السنة الثانية في قسم اللغة الإنجليزية بجامعة محمد خيضر بسكرة، بالإضافة إلى إجراء مقابلة مع معلم ملم باستخدام منصة كاهوت! في نفس القسم. تشير النتائج إلى أن كلا من الطلاب والمعلمين يعترفون بقدرة دمج كاهوت! في الفصول الدراسية عبر الإنترنت على تحسين تحفيز الطلاب على التعلم. علاوة على ذلك، تم العثور على أن جوانب كاهوت! مثل الاختبارات التفاعلية وعناصر الألعاب هي الأكثر أهمية في تحسين تحفيز الطلاب على التعلم في الفصول الدراسية عبر الإنترنت، ولكن تم الإشارة أيضًا إلى وجود تحديات مثل مشكلات الاتصال وصعوبات تسجيل الدخول والتقنية

كلمات مفتاحية: كاهوت!، منصة التعلم المبني على الألعاب، التعلم عبر الإنترنت، التحفيز في التعلم عبر الإنترنت

Résumé

Cette étude examine l'efficacité de l'intégration de Kahoot! comme outil de gamification sur la motivation des étudiants à apprendre dans les cours en ligne pour les étudiants de Master 2 du Département d'Anglais à l'Université Mohamed Khider-Biskra. La recherche vise à déterminer dans quelle mesure Kahoot! en tant que plateforme d'apprentissage ludifiée peut motiver les étudiants à apprendre, quels aspects de cette plateforme sont les plus motivants et quels sont les avantages et les défis résultant de l'intégration d'une telle plateforme dans un environnement d'apprentissage en ligne. L'hypothèse postule que l'utilisation de la plateforme Kahoot! peut efficacement élever et augmenter la motivation d'apprentissage des étudiants dans les contextes éducatifs en ligne. Pour atteindre l'objectif de la recherche, une approche descriptive utilisant des méthodes mixtes de collecte de données a été employée. Cela comprenait l'administration

d'un questionnaire à vingt-huit (28) étudiants de deuxième année de Master au Département d'Anglais de l'Université Mohamed Khider-Biskra, ainsi que la conduite d'un entretien avec un enseignant familier avec l'utilisation de Kahoot! dans le même département. Les résultats indiquent que les étudiants et les enseignants reconnaissent tous deux le potentiel de l'intégration de Kahoot! dans les salles de classe en ligne pour améliorer la motivation des étudiants à apprendre. De plus, des aspects de Kahoot! tels que les quiz interactifs et les éléments de gamification sont considérés comme les plus significatifs pour améliorer la motivation des étudiants à apprendre dans les cours en ligne, mais des défis ont été signalés tels que des problèmes de connectivité et des difficultés de connexion et techniques.

Mots-clés : Kahoot!, plateforme d'apprentissage ludifiée, apprentissage en ligne, motivation dans l'apprentissage en ligne.