### **CHAPTER 2**

### LITERATURE REVIEW

This chapter provides a concise overview of several theories that underpin the study, specifically focusing on theories pertaining to perception, digital gamebased learning, and Kahoot.

## 2.1 Perception

Perception can be defined as an individual's sense of receiving an understanding of the phenomena that occur. It involves the process of stimulating one's mind and interpreting the meaning of events (Altman et al., 1985). Pitcher (2015) determines that perception occurs when people think differently. Moreover, perception encompasses the interpretation of stimuli from the environment, including objects and phenomena. The sensory system plays a crucial role in selecting and transforming these stimuli into meaningful representations. Ultimately, an individual's response and behavior are influenced by their perception of the world around them.

Altman et al. (1985) identify four key factors that impact an individual's perception. The first factor is the selection of stimuli, wherein individuals focus on a limited number of stimuli, selectively choosing cues and filters based on their perceptions. The second factor involves the organization of stimuli. Once information is selected, individuals arrange it into a meaningful framework, drawing upon their past experiences. The third factor, the situation, significantly affects how individuals perceive things. Each person's perception is shaped by their familiarity, expectations, and the context in which they find themselves (Altman et al., 1985). Lastly, the fourth factor pertains to an individual's self-concept, which encompasses their feelings and perceptions of themselves. Self-concept is of paramount importance because it shapes one's mental image, influencing their actions and how one interpret the world. Consequently, each person's unique self-concept contributes to their individualized perception of the world, leading to varying interpretations.

# 2.2 Digital Game-Based Learning

The use of media in teaching methodologies is increasingly diversified, driven by current technological trends, with a notable example being Digital Game-Based Learning (DGBL). DGBL encompasses the integration of educational content or learning designs into digital games (Chang & Hwang, 2019). Additionally, DGBL encompasses digital and playful activities that incorporate educational objectives and assessments (Hung et al., 2018). The primary goal of DGBL is to address significant challenges in education, such as anxiety, low motivation, comprehension difficulties, reduced engagement, and limited interaction, ultimately delivering beneficial outcomes for students (Yükseltürk et al., 2018).

DGBL offers a succinctly entertaining and engaging learning experience that combines substantive educational content with emergent gameplay within a novel and exciting medium. As we progress into the new millennium, technological advancements have given rise to a distinct form of DGBL (Tan et al., 2019). Moreover, games have been shown to facilitate learning and reduce training time across various subject areas and age groups (Van Eck, 2006). Furthermore, Licorish et al. (2018) argue that incorporating educational games into classrooms reduces distractions and enhances teaching and learning performance beyond what traditional settings can offer. The benefits of using games in education are numerous, enabling students to engage with instructional materials and topics in a creative, enjoyable, and playful manner (Anastasiadis et al., 2018).

Another noteworthy characteristic of games frequently emphasized is their capacity to provide motivating and engaging experiences. Games are inherently motivating, and capable of encouraging students to enhance their skills and knowledge (Bawa, 2020). Consequently, motivating and engaging interactions are among the most commonly cited attributes of games. Games can inspire learners to remain immersed for extended periods (Plass et al., 2015). Consequently, a sense of empowerment fosters challenge, interest, and the ability to locate information while playing games (Lee et al., 2016).

### 2.3 Kahoot

Kahoot is a DGBL platform renowned for its user-friendliness and suitability for both educators and learners. This game-based learning platform offers seamless integration into the classroom, where it serves as a means to provide metacognitive support and a lively learning atmosphere with students actively participating and teachers facilitating the process (Bicen & Kocakoyun, 2018). Kahoot, which is freely accessible, can be used on various devices, including mobile devices, desktops, and similar phones. It offers a range of language-related activities, such as quizzes, discussions, and surveys, that enhance the learning experience by making it more enjoyable, attractive, and challenging (Yürük, 2019). Notably, Kahoot was introduced in Norway in September 2013 and has since gained a user base of 70 million worldwide (Wang & Tahir, 2020).

Kahoot essentially serves as a student response system, operating as an educational game within the classroom environment. It enables teachers to create multiple-choice game-based quizzes, discussion prompts, and surveys (Ismail et al., 2019; Plump & LaRosa, 2017). Multiple-choice questions can be framed in a debate format using the Kahoot platform and are open to participation by all students (Bicen & Kocakoyun, 2018). In this format, multiple-choice questions are displayed on the screen, and students respond using their smartphones, tablets, or computers. Consequently, Kahoot transforms the learning experience into a game-like activity, fostering student engagement. Moreover, Kahoot operates as an eLearning platform that fosters an interactive and engaging classroom environment (Plump & LaRosa, 2017; Wang & Tahir, 2020).

Kahoot strategically aligns itself with current educational trends, capitalizing on its popularity. These trends encompass gamification and increased student engagement. Kahoot not only encourages broader and more active student participation but also allows students to choose their preferred level of engagement (Licorish et al., 2017). Points are awarded to students for correct answers, and the speed of their responses also influences their point totals. Additionally, Kahoot displays students' rankings, much like in game shows, motivating them to strive for the top position (Licorish et al., 2017). Consequently, integrating Kahoot into

English language learning represents an effective means of infusing authenticity into the learning process, thereby promoting an exciting and engaging educational experience (Dellos, 2015).

# 2.4 How to Play Kahoot in the Classroom

Kahoot is most effectively utilized in a group setting, particularly within the context of teaching and learning. Below is an overview of how to employ Kahoot in the classroom to administer a quiz or a lesson:

- Select the Desired Quiz Game: Instructors should begin by logging in with their credentials. They can then navigate to "My Kahoot" from the main menu. On this page, a list of created quizzes will be displayed. Instructors can choose the quiz they wish to play by clicking the "Play" button.
- 2. Configure Game Options: Next, instructors will have the option to configure game settings: Classic or Team Mode. Classic mode is chosen when each student possesses an individual device to access the quiz, allowing for player vs. player competition. Conversely, Team mode is employed for team vs. team gameplay, where students share devices.
- 3. Initiate the Game for Player Participation: Subsequently, a unique PIN will be generated to grant students access to the quiz. Students can promptly engage in the game without the need for registration. To participate in the quiz game, students should input the PIN, and provide their nicknames or group names. Once all participants have joined, click "Start."
- 4. Pose Questions and Select Answers: Questions will be displayed on the screen, while only answer choices will appear on the student's individual devices. The options for student answers will automatically change as new questions are presented.
- 5. Monitor the Top Five Players on the Scoreboard: Additionally, the current scores of each student will be visible on the questions that have been completed, and rankings will be adjusted accordingly. At the conclusion of the session, the name of the student with the highest score

will be revealed. This score is determined by the number of correct answers provided and the speed at which they were submitted.

## 2.5 Studies of the Relevant Research

In a previous study conducted by Bicen and Kocakoyun (2018), the focus was on Preschool teaching at the Ataturk Faculty of Education. The primary objective of this study was to assess the impact of a gamification approach on students' perceptions. Questionnaires were distributed to a cohort of 65 students who were enrolled in early childhood education programs. The findings indicated that gamification had a positive effect, increasing students' interest and motivation to strive for success.

Similarly, Tan et al. (2019) conducted a prior study involving two groups of Malaysian ESL students enrolled in a remedial course at a public university. The study encompassed 57 participants who engaged in weekly Kahoot sessions spanning an entire semester, covering various aspects of English language learning. The results of this study demonstrated that students found Kahoot to be a valuable tool for enhancing motivation, reinforcement of concepts, and overall learning improvement.

Furthermore, Licorish et al. (2018) investigated the student experience utilizing Kahoot, a game-based student response system, within the context of an Information Systems Strategy and Governance course at a research-intensive teaching university in New Zealand. The key findings affirmed that Kahoot contributed significantly to enhancing student learning in the classroom, particularly in terms of classroom dynamics, engagement, motivation, and the overall learning experience. Additional factors that facilitated improved learning outcomes included the incorporation of timely feedback and gamification elements through the development of event content within Kahoot.

It is noteworthy that these previous studies focused on the utilization of a game-based student response system and were primarily conducted in senior high schools. In contrast, the present study implements Kahoot as a part of Digital Game-Based Learning (DGBL) in higher education settings. Furthermore, the data collection and analysis methods employed in the previous studies primarily utilized

questionnaires and standard deviation, which are quantitative approaches. In contrast, the present study adopts semi-structured interviews and thematic analysis within a qualitative research paradigm for data collection and analysis.