# BELIEF AND PERCEPTION OF INTERNATIONAL STUDENTS ABOUT THE GAME-BASED LEARNING KAHOOT! AND THE EFFECTS ON THEIR ACADEMIC ACHIEVEMENT: IN THE CASE OF CCI PROGRAM AT KIRKWOOD COMMUNITY COLLEGE, UNITED STATES OF AMERICA

# MUTHI SYAHIDAH ARIFUDDIN F022192008



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#### **Thesis**

as declared to have met the graduation requirements

**English Language Program** 

Written and Submitted by

MUTHI SYAHIDAH F022192008

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#### THESIS

Belief and Perception of International Students about the Game Based Learning Kahoot! and the Effects on Their Academic Achievement: In The Case of CCI Program at Kirkwood Community College, United States of America

Written and Submitted by

## MUTHI SYAHIDAH ARIFUDDIN Register Number: F022192008

has been defended in front of the thesis examination committee which was formed in order to complete the study of the Master Program in English Language Studies Faculty of Cultural Sciences Hasanuddin University on August, 31<sup>th</sup> 2022 and is declared to have met the graduation requirements.

Approved by:

Head of The Supervisory Committee Member of The Supervisory Committee

Dra. Nasmilah, M.Hum., Ph.D. NIP196311031988112001 Dr. Abidin Pammu, Dipl. TESOL., M.A. NIP196012311987031025

The Dean of Faculty

of Cultural Sciences

The Head of English Language Studies Program

Dr. Harlinah Sahib, M.Hum. NIP196211281987032001 Prof. Dr. Akin Duli, M.A. NIP196407161991031010

#### STATEMENT OF AUTHENTICITY

The Undersigned:

Name : Muthi Syahidah Arifuddin

Student's Number: F022192008

Program : English Language Studies

States truthfully that this thesis was the result of my own work, and it is not the work of others. If it is proven later that either some of entire part of this thesis is the work of others, I am willing to accept any sanctions for my dishonesty.

Makassar, August 2022

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Muthi Syahidah Arifuddin

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The Writer

#### ABSTRAK

MUTHI SYAHIDAH ARIFUDDIN. Kepercayaan dan Keyakinan dari Mahasiswa Internasional terhadap Pembelajaran Berbasis Permainan Kahoot! dan Efek pada Prestasi Akademik mereka: Studi Kasus CCI Program do Kirkwood Community College, Amerika Serikat. (dibimbing oleh Nasmilah dan Abidin Pammu).

Penelitian ini bertujuan untuk mengetahui keyakinan dan persepsi dalam penggunaan Kahoot!. Dalam proses pembelajaran dari hasil penelitian ini akan muncul alasan dari bagaimana efek dari prestasi yang ia miliki setelah menggunakan Kahoot!, apakah memberikan dampak positif atau menghasilkan dampak negatif bagi mahasiswa internasional. Pendekatan penelitian ini adalah deskriptif kualitatif. Alasan digunakan pendekatan ini karena tema atau objek penelitian yang dikaji dikaitkan dengan keadaan empiris lokasi penelitian telah sesuai dengan karakteristik dari penelitian kualitatif. Pengumpulan data menggunakandata mahasiswa berupa score yang di dapatkan dalam aplikasi Kahoot! sebelumnya saat belajar di Amerika Serikat. Penelitian ini menggunakan metode statement agreement melalui google form, semi wawancara yang mendalam, dan dokumentasi. Sumber data penelitian ini adalah penjelasan dan tindakan dari subjek penelitian yang meliputi beberapa mahasiswa International dari berbagai negara. Untuk efisiensi danefektifitas maka pemilihan informan dilakukan secara langsung (direct sampling). Hasil dari penelitian ini dideskripsikan bahwa keyakinan dan persepsi mereka terhadap aplikasi Kahoot! sangat mendukung dalam proses pembelajaran di kelas di Amerika Serikat. Mereka berasumsi bahwa aplikasi ini sangat membantu dari peningkatan dari prestasi akademik dengan cara belajar yang sangat menyenangkan. Terbukti dengan score mahasiswa internasional ini memeperoleh hasil yang sangatmemuaskan. Dengan spesifikasinya adalah meliputi 8 dari 11 mahasiswa International sangat antusias dengan hadirnya aplikasi game based- learning Kahoot di ikuti dengan score mereka yang meningkat dari sebelumnya. Sebaliknya, 3 orang yang lain tidak merekomendasikan game guiz ini karena dinilai sedikit sulit untuk digunakan dan tidak mempengaruhi efektifitas belajar mereka. Dimana yang menjadi fokus utama dalam penelitian ini adalah bagaimana Kahoot! mempunyai efek positif dalam peningkatan prestasi belajar mahasiswa tersebut. dari kesimpulan ini dapat disimpulkan bahwa Kahoot! menjadi aplikasi yang paling di gemari di beberapa negara terutama di Amerika Serikat.

**Kata kunci:** Kahoot, Pembelajaran berbasis permainan, Aplikasi, Keyakinan & Persepsi, Prestasi Akademik.

#### **ABSTRACT**

**MUTHI SYAHIDAH ARIFUDDIN.** Belief And Perception Of International Students About The Game Based-Learning Kahoot! And The Effects on Their Academic Achievement: The Case Of CCI Program In Kirkwood Community College, USA. Supervised by Nasmilah and Abidin Pammu.

The research aims at investigating beliefs and perception in Kahoot!. The use of the learning process, the reasons and effects of their academicachievements will emerge, whether they have a positive impact or produce a negative effect on the international students. The research used the qualitative descriptive approach. The approach was used because the theme or the research object being in line with the qualitative research characteristics. Data were collected from the students 'data in the forms of the scores obtained in the Kahoot!. Previously while studying in the United States of America. The researcher used the statement agreement method via a google form, semi-in-depth interviews, and documentation. The data sources of the research were the research subjects' explanations and actions, including several international students from various countries. For efficiency and effectiveness, students were selected directly(direct sampling technique). The research results indicate that the students' beliefsand perceptions of the Kahoot! are very supportive in the learning process held in USA. They consider that this application is beneficial in improving the academic achievement with a delightful way of learning. This is proven by the scores of these international students obtaining the very satisfactory results. The specifications include 8 out of 11 international students who are very enthusiastic about the presence of the Kahoot based learning and indicate by their score improvement. On the other hand, three other informants do not recommend this quiz game because it is a little challenging to use and does not affect their learningeffectiveness. The main focus of the research is how Kahoot! has a positive effect in increasing student achievement. It can be concluded that Kahoot! becomes the most popular application in several countries, especially in the United States of America.

**Key Words:** Kahoot Game Based-Learning, Application, Belief and Perception, Academic Achievement.

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# CHAPTER I

#### A. Background

Technological advancement has transformed how activities are performed daily. In the status quo, Communication technology has recently upgraded and is essential for daily life. It affects the ability of lecturers to advance the technology they use in learning progress. Many lecturers require teaching and learning activities in the information and technology field, and it is interesting. Today, information and Communication Technologies in their teachings, such as PowerPoint, the internet, and online media, are most confining for the student rather than conventional teaching. The practice of writing on the board or lecturing is considered obsolete, Licorish et.al (2018).

Technology is increasingly used in educational settings to increase student engagement and motivation. Specifically, game-based student response systems have increased student engagement, improved classroom dynamics, and enhanced students' overall learning experience. Generally, such calls for reform come from the assumption that traditional education no longer engages students or provides them with the necessary 21st-century skills. Digital technologies are frequently portray as instruments that will promote collaboration, stimulate students to reconnect with education, and allow them to gain the new multimodal literacy abilities necessary for the current knowledge economy. Instead of simply ingesting content, digital technology provides a creative experience in which students actively engage in problemsolving in authentic contexts that highlight their productive skills. This argument has been accompanied by a shift from a cognitive concept of literacy to an appreciation of the sociocultural dynamics determining learner development and the role of communities in promoting the acquisition of information, Papastergiou (2009).

The Digital Education and Learning series were developed to investigate digital technology's pedagogical potential and realities in a wide range of academic contexts across the global educational spectrum. Focus on local and global perspectives, the program addresses educational

stakeholders' evolving demands and expectations, and the ways new technologies are being used in various educational and cultural contexts. In addition, the program promotes the development of evidence-based research grounded on an awareness of the history of technology and open to the possibilities of innovation and takes critical perspectives on technological determinism.

Moreover, modern students are very much engaged with technology, and that education can no longer ignore the idea that games can be one of the platforms of learning. Digital games that can use for education are evolving rapidly (Rahmadani et al., 2021). Kahoot! is a well-known games- based learning platform that is user-friendly for educators and learners. This game-based application is specially designed and aimed to repeat and reviewthe learners' knowledge and assess in the form of a light quiz in a fun way. Kahoot! is a unique game concept. It is a free game-based learning platform that aims to make learning fun across all subjects in any language. It also can be used with many types of digital devices. Kahoot! also can be programmed to conform to learners of all ages. The platform enables teachers and students to interact in classroom settings of various sizes via competitive knowledge games using an internet connection. The embedded graphical interfaces and audio elements present a gaming experience that can promote students' motivation and learning, especially for adults.

In this research, the researcher also took the students in each country, such as Indonesia, South Africa, West Africa, Ghana, Columbia, Turki, and Egypt, who became an awardee in the Community College Initiative Program (CCI Program) by Fulbright that cooperated with Department of State, USA. CCI Program is a quality non-degree academic program at a US community college that improving technical skills, enhance leadership capabilities, and strengthen English language proficiency. This program also provided opportunities for professional internships, service learning, and community engagement activities. All International students have spent one academic year in the United States and may be earned CCI certificates in their fields of study. After completing the program, international students returned home with new skills to help them contribute to their country's economic growth and development.

This study examined CCI students at Kirkwood Community College in Cedar Rapids, Iowa, USA. As one of the Academic Community College's certificates and diploma programs, provides excellent experience in industry, skilled profession, or technological field in as little as nine months to one year. In addition, Kirkwood Community College offers personalized instruction in various industries, most notably journalism. KCC is devoted to advancing education by incorporating media skills into learning. Additionally, they began to expand the programs by providing international students and corporations with the Fulbright Community College Initiative Program.

Studying at Kirkwood Community College became shorter from the previous period which was it supposed to be two semesters and it was only one semester. Therefore, the program had the tight schedules; they had several activities such as studying in the classroom, volunteering, and internship in some companies in the USA where we needed to spend 50 hours to do volunteering and internship. Besides, the number of complaints from students that in the classroom was sometimes monotonous. Furthermore, after fulfilling the surveys from instructor, the instructorpresented Kahoot! which became an evaluation test for each chapter in a variety of disciplines. The instructor presented some questions related to the theme, and she would be assessed how far students would understand what they explained. Additionally, the instructor also presented some questions to Kahoot! All students earned the highest possible grade when they responded immediately. However, the competition attracted eleven students from each country worldwide.

#### **B. Research Questions**

From the research questions, some research questions emerged and will be answered in this research. Those research questions are:

- 1. What is the belief of CCI Program's students game-based learning Kahoot!?
- 2. What is the perception of CCI Program's students game-based learning Kahoot!?

3. How are the effects of students' academic achievement in the gamebased learning Kahoot?

#### C. Research Objectives

Based on the research questions specified above, this research is formulated to fulfill the objectives, as follows:

- To find the belief of international students who applied game-based learning Kahoot! at Kirkwood Community College, USA.
- 2. To discover the perception of international students who used game-based learning Kahoot! at Kirkwood Community College, USA.\
- 3. To identify the effects of the students' academic achievement in game-based learning Kahoot?

#### D. Research Significance

The findings of this study are participated to contribute to the advancement of teaching and learning, particularly game-based learning. Theoretically, this study aims to determine the students' beliefs and perceptions! and the effects of their academic progress in the CCI program regarding game-based learning Kahoot. It is related to the study's findings would also affect how lecturers and instructors evaluate their classroom management. This evaluation is an effective and adequate method for enhancing classroom management, considering the circumstances of both instructors and students

This study's intended goal will be to understand how overseas students might engage in and enhance their learning process through their perspective of this game. The researcher hopes that the outcome of this investigation will have this significance.

Therefore, this research would aid professors in evaluating their instructional strategies. Teachers will learn how to engage students in the learning process by using Kahoot's game-based learning. They will observe

the students' capacity to comprehend the material due to mental acuity. They will recognize the importance of the questions that require prompt responses.

#### E. Scope of Study

This research observes the eleven CCIP students' perception and effects on their academic achievement towards Kahoot!. The research focused on using perception and observe the results of effect on their academic achievement through game-based learning Kahoot! by location, the study was conducted in Kirkwood Community College, IOWA State, USA particularly for international students (CCI Program).

#### **CHAPTER II**

#### LITERATURE REVIEW

#### A. Preview Studies

Online game-based learning has fascinated researchers and educators from all over the world, who have devoted their efforts to the creation of this method of teaching and learning aids. Quiz based learning Kahoot! become an application is a learning technology platform that merges interesting, interactive games with learning evaluation experiences. Some of the researchers are explained below.

Kadek et, al (2022), Implementing Kahoot! for Japanese Language Learning in Indonesian High School". This research examined the teacher's implementation of Kahoot! and the perspectives of the Indonesian high school teachers and students regarding the use of Kahoot! as well as the limitations they faced while utilizing Kahoot!. In addition, results indicated that the teacher's use of Kahoot! still has certain issues. The instructor and students' perceptions of Kahoot! in the classroom are evaluated as well even though with a poor internet connection presenting the greatest challenge. However, the perceptions of the students are not thoroughly studied, as they are merely investigated by questionnaires. The more thorough and accurate, it is inquiry to involve semi-structure interviews with students and longer hour-long observations will result in a comprehensive understanding of the deployment of Kahoot! in Japanese language instruction. However, the students have a better knowledge of this subject.

Fatma (2021), analyzed "Innovating pathology learning via Kahoot! game-based tool: a quantitative study of students' perceptions and academic performance". The research demonstrated an encouragement to the use of Kahoot! for gamifying formative assessment of Pathology and can provide a framework for the implementation of an online Kahoot! -based continuous formative assessment plans implemented outside-classroom in the Pathology curriculum. Furthermore, the findings revealed game-based tool Kahoot! improved Pathology comprehension. Almost 90 percent The

students were more interested, satisfying and enjoyable used Kahoot!. They recommended the app through their friends for long time use. However, around 20 percent the students assumed that the question time limit was inadequate, therefore, it was not related to advance the general academic achievement for the students.

Alf, et.al (2016), The Effect of Points and audio on Concentration, Engagement, Enjoyment, Learning, Motivation, and Classroom Dynamics Using Kahoot! They examined the effect of using points and audio on the learning environment in Kahoot! In particular, the study states findings from an experiment in which the same lecture was presented to separate groups of students using the game-based learning platform Kahoot! Moreover, the researchers divided into one group utilized Kahoot! with audio but without points, another group utilized Kahoot! without audio but with points, and the third group utilized Kahoot! without audio and points. The result of the experiment indicated that concentration, engagement, enjoyment, and motivation vary significantly depending on audio or points that are employed in Kahoot! game-based learning. The most unexpected finding was that the use of audio favorably enhanced classroom dynamics. 593 students participated in this experiment, with 44 percent of the female participants and 56 percent of the male participants.

The other is from Kathryn (2017), the title is the Effects of Kahoot! on Vocabulary acquisition and Retention of Students with Learning Disabilities and other health Impairments. This study aimed to analyze the influence of Kahoot! on vocabulary learning, retention, and student satisfaction. Seven sixth-grade students with a learning disability or other health impairment who participated in the study received language arts education in a pull-out replacement classroom. The result of the research is to indicate that in terms of both vocabulary acquisition and retention, the mean scores of all seven students improved from the baseline phase to the intervention phase. The seven students reported on the student satisfaction survey that they considered Kahoot! review sessions to be engaging. It was enjoyable and interesting. They looked forward to utilizing it, and it helped them stay on track.

According to Laremenko (2017), "Enhancing English Learners'

Motivation through Online Games". She believed that online games could

encourage intrinsic motivation and encourage student engagement in learning activities. The usage of online games in English as a second language (ESL) instruction revealed a direct correlation between high- energy, enjoyable competition and enhanced motivation. The desire to succeed or receive a reward enhances intrinsic motivation. Therefore, the instructor can use this component to introduce, review, or consolidate the complex linguistic material. The program Kahoot! for game-based student motivating was incredibly helpful. It enhanced the English learning of students.

Furthermore, a research project was conducted by Wang et al. (2016) at the Norwegian University of Science and Technology. The study is about to investigate the effects of a traditional non-gamified response system, a game-based learning system (Kahoot!), and a paper-form formative assessment for a quiz in lecturers. It was indisposed towards the use of Kahoot! Students were found to be more motivated by Kahoot! Rather than Clickers and the paper-form quiz. The students' responses also indicated a higher level of satisfaction and engagement. However, a positive effect on learning outcomes was not evident as it found no significant differences. The games also enhanced motivation, classroom dynamics, and academics. This study has demonstrated that using a game-based learning approach can result in better achievement and chemistry compared to traditional learning methods. In the whole of education, when educators plan to integrate gamification into learning, it is also vital that they realize the importance of motivation and resist merely incorporating the gaming elements into their lecturers or lessons in depth.

The other analysis was taken from the International Journal entitled Perceptions of Students for Gamification Approach: Kahoot! as a case study conducted by Bicen (2018). This study was conducted on preschool teaching at the Ataturk Faculty of Education. The purpose of this study is to evaluate the effect of a gamification approach on students' perceptions. The participants of this research are students divided fifty-five female and ten males. This study used a quantitative and qualitative approach. In the first section, the researcher applied Kahoot!' in the learning process to check students" understanding of the material, and then the researcher instructs students to write evaluation notes about the implementation of "Kahoot!' in

the learning process. The researcher investigates the effectiveness of "Kahoot!' and describes the student's perception during used "Kahoot!' in the learning process.

However, it brings on the elements for students involved in academic programs. The display of Kahoot! has a good potential for application in the teaching and learning process as it can potentially introduce motivation as well as engagement. It is possible that educational transformation with the use of tools such as Kahoot! may eventually make innovation methods. It is accessed more rapidly as an impact of digital technology advancement.

#### B. Theoretical Review

#### 1. Belief

Indeed, a theory of human behavior and motivation in which people's self-perceptions are fundamental for asserting control and individual responsibility. Self-referential thought bridge Knowledge, action, individuals assess their own experiences and thought processes through self-reflection. According to Bandura (1986), the belief was defined as a reference of self-thoughts that bridge Knowledge and action, allowing each person to assess their own experiences and thought patterns through personal reflection. This perspective is compatible with that of theorists who contend that the potency of beliefs makes them a filter through which new phenomena are perceived, and subsequent behavior is mediated. (Rokeach et al., 1960). It means that Knowledge and action have a significant connection to interpret something. On the other hand, Knowledge, skills, and prior success are frequently poor indicators of subsequent success because people's ideas about their capacities and the results of their efforts significantly impact how they act. Lately, this hypothesis, which contends that strong beliefs cause people to interpret, and subsequently mediate behavior based on new phenomena, is congruent with this point of view.

It is similar from the Stanford Encyclopedia of Philosophy (2014) states that "belief" often refers to our attitude whenever we accept something as the case or see it as accurate. To believe anything in this

meaning does not require active consideration: Only a few of the many belief's adults hold can be in the forefront of the mind at any given time. Nor does the term of belief in conventional philosophical usage indicate ambiguity or extensive reflection regarding the issue (as it sometimes does in ordinary English usage). Thus, belief formation is one of the most fundamental and essential mental processes, and the concept of belief is central to the philosophy of mind and epistemology. For instance, the mind-body dilemma, which is essential to the philosophy of mind, involves the question of whether and how a purely physical entity may hold beliefs. Likewise, much epistemology focuses on whether and how our views qualify as Knowledge or are justified.

The other side is, White (1999) stated that "beliefs also are fundamental concepts in all fields that study human behavior and learning". Beliefs also assist humans in defining and comprehending the world and themselves, are vital in defining tasks, and play an essential role in defining action.

In an amount of research, the definition of beliefs is presented independently. However, researchers do not appear to have achieved consistency in the definition of beliefs. Due to its complexity, it may be challenging to establish a definite set of meanings or be adequately defined. According to Pajarees (1992), "Identify beliefs is the best in game of player's choice". However, students' beliefs affect their motivation, attitude, achievement, proficiency, anxiety, success, behavior, and language learning strategy. Some of these beliefs are positive, and some of them are negative. Based on the explanationabove, the researcher concluded that the belief was defined as interpreting something using the connection between Knowledge and action.

#### 2. Perception

#### a. Definition of Perception

Perception is one of the terms used in psychology to describe the interpretation content that gained from observation.

Perception is a psychological process that begins with a feeling and continues with the simultaneous categorization, classification, interpretation, and liking of several stimuli. Slameto (2003;12) found that interpretation is a method for receiving data or a message.

Robbins (2003) defines perception as how an individual governs and interprets sensory perception to assign meaning to their surroundings.

#### b. Perception Process

There are two competing expert theories. The first section is a theory regarding the perception process by Goldstein, while the second section is by Michele Kehoe.

According to Goldstein (2014), there are five distinct perceptual processes:

#### 1) Bottom-up Processing

The method of perception that occurs when stimuli enter the receptors is known as bottom-up processing. This is often referred to as data-driven processing.

#### 2) Top-down Processing

Top-down processing, also known as knowledge-based processing, is processing that is founded on the information. This knowledge is not required for interpretation, but as we shallsee, it is frequently and frequently used without our knowledge. The following theory is presented by Kehoe (2013) in his book Make that Grade Organizational Behavior. He asserts that there are three perceptual processes, namely:

#### 3) Selective Attention

This is the strategy used to select the environment perceptually. This might be described as scanning a person, an item, or an event. It also filters out extraneous details.

#### 4) Perceptual Household

After the information and scanning device have been filtered, the next step is to apply a perceptual threshold. This process involves sensory input to the brain and is influenced by

several variables, including physical health, movement state, training, and experience.

#### 5) Habituation

The habituation occurs when the brain accepts new information and associates it with previous experiences. This procedure can also facilitate the learning process.

#### c. Aspects of Perception

According to Kehoe (2013), there are three perception factors:

#### 1) Individual

The subjective nature of the perception process is influenced by an internal factor. This element is related to perception, desire, need, motivation, and aspiration. This factor influences how people select knowledge that is beneficial and important to them.

#### 2) Object

This factor relates to the physical attributes of the viewed thing. External affects include contrast, intensity, magnitude, movement, repetition, and location. Therefore, students' perspectives might change when an object is repeated; this is an external influence on how something is perceived.

#### 3) Context

This aspect includes three components: physical factors, social factors, and organizational factors. As a result, physical variables include the formality or informality of the environment. It can be stated that the individual and the environment are the two most influential factors in perception. Individual refers to the aspect that originates within the individual. The individual's perceptible object is included in the environment. Context could make things change it. It depend on the environment that bring them to the positive and negative thoughts.

#### 3. Academic Achievement

Holland (1997) highlighted that those surroundings promote the development of competencies, stimulate people to participate in various activities, and recognize individuals for their values and attitudes. As a result, the environment affects individual and professional self-perceptions, competencies, attitudes, interests, and values. Added that a college student's experiences include, but are not limited to, the following:

- **a.** A student's search for academic environments that match their patterns of abilities, interests, and personality profiles.
- **b.** The effects of academic environments on students' social behavior to acquire the desired abilities, interests, and values.
- **c.** A student's achievement as a function of personality type and academic environment.

In addition, according to Peng (2020), academic Achievement also plays a significant role in child development since academic skills, particularly in reading and mathematics, influence various outcomes, such as educational achievement, performance, and income at work, physical and mental health (Calvin et al.,2017; Ermawati et al., 2018). Therefore, a great deal of research over the past few decades has investigated factors related to academic achievement and how to incorporate these aspects into intervention and training to increase academic performance and correct learning issues (Gersten et al., 2018; Muhtar et al., 2021). This extensive body of research has identified two primary categories of academic development factors: the first is a set of domain-specific fundamental skills. For instance, metalinguistic skills, fluency, and comprehension methods are essential for word reading and understanding. Other key academic success characteristics include cognitive talents such as working memory, logic, and executive function.

Therefore, the relationship between cognitive abilities and academic achievement has been questioned by the theory of mutualism, which asserts that different skills and abilities become bidirectionally related during human development because of interactions between

cognitive processes that were initially uncorrelated (van der et al.,2006). Consequently, cognitive abilities and academic accomplishments should impact one another as they mature. Especially for young children, verbal and numeric working memory tests are frequently used to assess language, reading, and number skills, including phonological awareness and reading comprehension.

#### 4. Kahoot!

#### a. The History of Kahoot!

Morten Versvik, Johan Brand, and Jamie Brooker launched Kahoot! in 2012. They collaborated with Professor Alf Inge Wang and entrepreneur Asmund Furuseth on a collaborative initiative with the Norwegian University of Science and Technology (NTNU). Building a firm with learning at its core, they initially focused on the classroom, but it appears that game-based learning has become a cultural phenomenon! Today, Kahoot! is played in business training sessions, at sporting and cultural events, and in any in-person or online social and learning setting.

Moreover, Kahoot! have leading features that can encourage everyone, including children, students, and employees, to realize their full learning potential. The learning platform makes it simple for any individual or organization to create, distribute, and host engaging learning sessions. Kahoot! Sessions can be hosted anywhere, physically, or electronically, using any internet-connecteddevice.

In addition, it have also free and premium programs are available in the classroom, at work (in-person or virtual), and at home for social use or self-study. Today, Kahoot! 9 million teachers worldwide, hundreds of millions of students and families, and 97% of Fortune 500 corporations utilize it.

#### b. The definition of Kahoot!

Kahoot!, a game-based learning, creates a fun and competitive environment that can develop students' interest when they study reading. Cetin (2018) stated that Kahoot! is to be amusing, educational, beneficial, ideal, and nice. In addition, He seems to be hinting that Kahoot is a tool for student exam evaluation in addition to digital assessment. Kahoot is also a quiz game that instructor can use to distribute questions to students using Kahoot media. This Kahoot also has several aspects that encourage students' learning motivation. Students can access the quiz from any device with a web browser, such as an iPad, Android device, or Chromebook, without needing a Kahoot account.

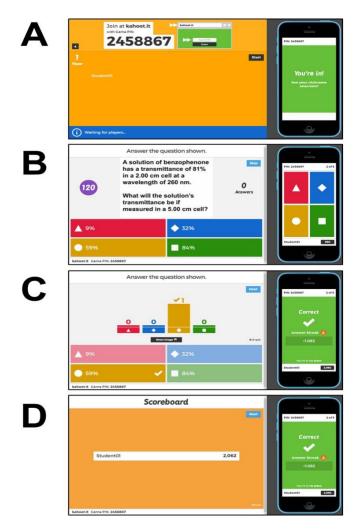
#### c. How the Kahoot Game App Works

In Kahoot!, the instructor leads the game, and all participants gain learning points. For correctly and rapidly answering questions. After each round of the game, a scoreboard will display the highest-scoring pupils, which can generate a sense of rivalry in learning among kids (Wang et al., 2015).

Before using Kahoot! to play a game, the user (instructor) must design and create a guiz or survey. After registering and logging into one's account, there are step-by-step instructions for creating a quiz or survey. The questions on the quiz or survey consist of multiple-choice questions with two to four possible answers, all of which may be correct. The user can optionally select a time limit for each question that ranges from 5 to 120 seconds. The user can also determine whether individual questions carry points. Images (including generic pictures or presents) and video clips can be attached to the questions to visualize them after saving a quiz or survey with meta-information such as target audiences, language, and difficulty levels. In addition, the user can share links to the guizzes with other people on major social media platforms. The user does not have to develop their Kahoot constantly! quizzes or surveys because a significant number of public quizzes can be used, Wang (2015).

The teacher needs a laptop or mobile phone to play this game, but we can only use smartphones to participate. The 15 players required to enter a username or PIN. There must be at least one accurate response, and the time limit for each question is adjustable between 5 seconds and 2 minutes (Wang, 2015)

Kahoot! is a game-based blended learning strategy that has been implemented in a variety of settings, including schools. Kahoot! is an ICT game that combines other games. It has questions on a variety of topics. After installing the software, users can create and design questions based on their needs and subjects, select the time, and play it with an unlimited number of people, creating a social, game-like learning environment. The three types of Kahoot! Applications are quizzes, debates, and surveys. The most prevalent format is the quiz. The game's objective is for players to accurately react to questions displayed at the front of the stage and gain the most points. The top five highest point totals for each question are displayed on the leaderboard, and the overall winner is disclosed at the end.



The picture shows the interfaces for the projector (left), user device (right), user response question (B), post question indication of proper response (C), and post question leaderboard (D). Images were taken in the "Preview" mode, which allows teachers to concurrently watch each user's screen and the projected screen. (Copyright Kahoot!, 2017)

Kahoot! Participating students need only a web-enabled device to input the unique game PIN generated for each quiz. Using pseudonyms for leaderboard rankings eliminates concerns about students' reluctance to answer questions in a public setting but prevents the instructor from tracking individual student performance post-quiz. When constructing questions, users can include question text, four answer options (including the correct answer), a response

time restriction, and an image or video (if desired). If a less competitive atmosphere is desired, question scoring can be disabled. However, the time limit remains in force.

For this course, questions were generated using material from the open-source Analytical Chemistry, but another thing is the purposes of preparation prior to a comprehensive CSI class, time limits were used to simulate the estimated amount of time that could be spent during the actual exam. An informal survey of students following the activity showed that most enjoyed the use of Kahoot! for a competitive quiz test review but it was this time limit that received the most negative feedback. One of the main drawbacks of this platform is that Kahoot! requires that a time limit is imposed, with an upper value. Other systems that have less focus on the competitive aspect of the quizzes provide the option to remove these time limits and could be used if the game aspect was less important to an instructor.

The researcher can conclude that:

- 1. The use of Kahoot's media in learning benefits students where they can be helped in recall the material given, making them more motivate, feeling happy, not feeling bored, and participating in doing the exercise actively. Besides that, they can discuss and collaborate in answering the questionsdisplayed on the screen. They also liked the characteristics of the Kahoot game, which gave rise to competition desires among students, so who challenged them to be the best in the class.
- 2. Kahoot's media can foster their interest and motivation in learning, especially in Internet subjects. With this increased interest and motivation, their knowledge also can be improved.
- Constraints in this learning media are more on devices and internet connections that not all students have appropriate devices, such as mobile devices, and laptops. This factor is one of the supporting of Kahoot's media learning.

#### C. Conceptual Framework

The study focuses on the concepts of game-based learning that to prove their academic achievement on International Students at Kirkwood Community College. Knowing the student's belief and perception could be an essential part of providing students with additional knowledge to comprehend. This research is descriptive qualitative methods are the online game Kahoot! and the dependent variable is student perception. The design of the study is one on one interviewing.

