Lived experiences among high school students in playing 4 pics 1-word mobile game

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Abstract

This qualitative study unraveled the lived experiences among Grade-10 students of Tuyan National High School in playing the mobile word game 4 Pics 1 Word. The study made use of the descriptive phenomenological research method that looked into their experiences playing the word game. The data were gathered through one-on-one interviews using researcher-made questionnaires and analyzed using the Braun and Clarke six-phase framework for doing thematic analysis employing semantic and latent approaches. Based on the findings of the study, the themes that emerged from the students' responses were: challenged, engaged, enhanced critical thinking skills, and increased vocabulary skills, which reflect that the 4 Pics 1 Word mobile application is conducive and lucrative for students in learning vocabulary. Moreover, the study found that the students' experiences in playing 4 Pics 1 Word helped them develop an interest in learning new words and increased their self-confidence in expressing themselves and their ideas.

*Keywords***:** Gamification, mobile games, vocabulary learning, words.

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1. Introduction

Gamification as employed in the process of language teaching has much more effective and interactive experiences that stimulate their engagement, critical thinking skills, and attitudes toward the learning process (Maloney, 2019; Oliveira et al., 2022; Pozo-Sánchez et al., 2022). However, along with the employment of Gamification in the teaching-learning process, students in the Philippines still struggle to assimilate in general studies and develop their English language skills including communication both oral and written, language literacy, vocabulary skills, and most importantly reading comprehension. This has also been discovered as practicable in other parts of the world (Acosta-Medina et al., 2021; He, 2022). This notion is derived from the 2018 Program for International Student Assessment (PISA) Report which reported that one of the areas in which high school students in the Philippines got lower scores was reading comprehension. Based on the statistical data, there are over 80% of Filipino students around the age of fifteen did not pass the minimum level of Reading proficiency. Aftermath, into the bargain, as a facet of the investigation, Manlapig (2020) reported in CNN Philippines that Frederick S. Perez, the current president of the Reading Association of the Philippines (RAP), ordered a thorough analysis of the PISA results and give full attention and intervention in strengthening the four basic elements in reading: fluency, reading comprehension, word recognition, and most of all vocabulary for these elements are the main foundation to achieve English language proficiency.

In the same vein, studies have found that incorporating Gamification, in all forms, helped improve the quality of the language learning experience and engagement among students, nevertheless, there have been no existing studies, particularly in the Philippine educational practices, focusing on a specific on a particular Gamification in teaching vocabulary that uses dual codes that would stimulate the students' motivation, active engagement, and critical thinking to have an effective learning experience. Along the same line, with the popularity of 4 Pics 1 Word, a mobile word game that uses images and jumbled letters to stimulate the players' motivation and critical thinking, this study has found out that Grade 10 students of Tuyan National High School have been using the said word game.

1.1 Conceptual Framework

This study is anchored by the Gamified Learning Theory by Landers (2015). Gamification or Gamified Learning Theory is defined as the use of game elements in non-gaming contexts or systems to improve users' experience and engagement, which vitalizes the motivation to learn and to be challenged while having fun. This implies that the use of gamification in a non-gamified context is to strengthen the relationship between instructional design and the outcomes of the learning experience. It aspires to affect learning-related behavior or attitudes. Gamification has become a pertinent and popular technique or strategy employed across different contexts to motivate people to venture into particular target behaviors. Gamification is used to influence a person's behavior toward learning in a particular context. Further, it targets elevating the interest, motivation, and engagement of a person in a learning experience. Aftermath, the theory claims that humans achieve a meaningful learning experience because there is not only mere learning involved; there is also active engagement, critical- thinking, a hiked-up challenge, and collaboration (Landers, 2015).

In a Brief History of Gamification, Gamification has been pervasive in past years since the 21st century, which is the birth of digital development, which blew up but only took flight with popularity in the 2010s. Moreover, the term is believed to have been coined by Nick Pelling in 2003, a British computer programmer and inventor (Chitroda, 2015). Studies also found that using Gamification motivates students to learn because of the enjoyment of the learning experiences. Studies found that children were able to learn while playing video games. From the input above, Gamification is a good tool to provide students with a great learning experience that stimulates their senses and propels their active engagement and critical thinking. Additionally, the Gamified Learning Theory implies that the Gamification process of teaching does not directly affect learning but stimulates the habit of learning

in a moderating process (Zaric et al., 2021). Gamification has been around for about five years, including being employed in pedagogical approaches. Teachers have been investigating its effectiveness on the students' academic performance. Interestingly, students have developed a positive attitude towards learning because of the new elements incorporated. Students became much more active, motivated, and challenged in solving problems and answering questions. Gamification has slowly progressed in the teaching process considering that students in this generation have a shorter attention span (Sailer, 2019).

Along the same line, this study is also surrogated with the Dual Coding Theory by Paivio (1991) which claims that the cognitive faculty of humans is unique because it has become specialized for dealing with language and non-verbal objects and events simultaneously. Simply put, this theory assumes that there are two subsystems in humans' cognition: those specialized for the representation and processing of non-verbal objects/events (imagens) and those specialized for dealing with language (logogens) (Schnotz and Hortz, 2010). Moreover, this theory argues that incorporating dual codes will help enhance the language learning experience of a human, especially when it is applied in mnemonics, problem-solving, and concept learning. The employment of both codes in the learning experience of humans fosters genuine motivation for learning and active learning engagement, most particularly in vocabulary learning. The employment of both codes in the learning experience of humans fosters genuine motivation for learning and active learning engagement most particularly in vocabulary learning. Allan Paivio discovered that our memory has two channels (codes) by which it deals with verbal and visual stimuli. Albeit, it stores them independently, they are still linked. Thus, improving the information retrieval capacity. Simply put, the word or image stimulates retrieval of the other. When teachers impose a dual coding mindset on their instructional materials, either adopted or adapted, the student's cognitive load is reduced. This implies that their working memory capacity increased. Hence, there is a learning improvement (Becton, 2022). This supports the idea that learning vocabulary should be supplemented with pictures and images for better learning and retention. The theories mentioned above are a great ancillary for this study, for they aim to unravel and discover the learning experiences of the Grade 10 students of Tuyan National High School using the online word game 4 Pics 1 Word in learning English vocabulary.

Figure 1

Conceptual Framework of the Study
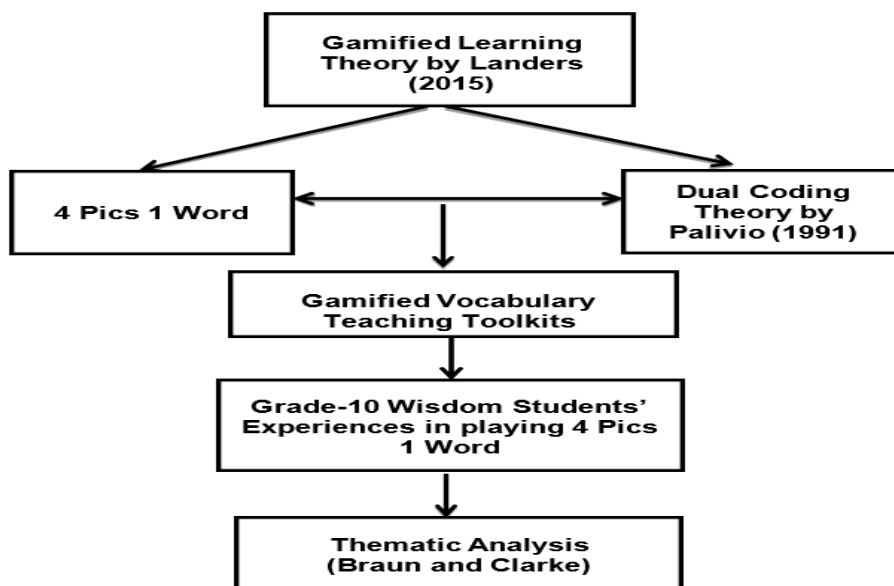
As shown in Figure 1, this study is anchored on Lander's Gamified Learning Theory (2015) and Paivio's Dual Coding Theory (1991). Further, the framework above depicts the process by which the

raw data will be gathered through personal and individual interviews. Consequently, the gathered data will be transcribed and interpreted using thematic analysis to arrive at the development of the Gamified Vocabulary Teaching Toolkit as the output of this study.

1.2 Related Studies

The establishment of online gamification has become much more pertinent to the teaching and learning process. Most teaching strategies, both in the pre-pandemic and new normal, incorporated adapted gamified instructional materials and online gamification to stimulate learning engagement and motivation among students, thus; gamification turns learning into something fun and interactive, therefore resulting in better student engagement. Students can obtain interactive and personalized learning, which is a good asset in enhancing their learning experience (McCain, 2019). Given the dominance of technology, it is not refutable that there are practical and beneficial ramifications it brings. A mobile application, widely known as an app, is a kind of application software intended to run on a mobile phone. It never ceases to increase its popularity; as stated by the Market Research Firm Gartner, 102 billion apps were downloaded in 2013 (91% of them were free), but they will still generate $26 billion increasing by 44.4% from $18 billion in 2012 (Pham, 2021). As a ramification of the advancements, that platform for learning a language, particularly vocabulary, has built a connection with gamification as they develop online word games that students could use to expand their vocabulary tank at their own pace. Because an average of six and a half hours a day of screen time is spent by children between the ages of five and sixteen (Kent, 2019), many teachers and parents reduce the amount of screen time among children. However, a different approach can also be viewed and proven beneficial. That is, word games posit lucrative outgrowths for children's vocabulary learning experiences as facets of their screen time.

As stated by Kent (2019) in his Brief History of Word Games, the evolution of word and language learning through gamification never ceases to evolve. In 1913, the first Crossword Puzzle was developed followed by the birth of Scrabbles during 1930's. As the world digitally evolves, it also provides a wide range of availability for word games through the advent of technology. To name a few, Words with Friends , Bookworm, and Word Scrapes are some of the new and highly downloaded online word games brought by the digital evolution. Further, the evolution does not end with mere letters and words only; there is also the incorporation of images that would stimulate the children's visual faculty. As stated by Morris et al., (2013), children learn best when they see visuals and images that would help them retain information. One of the most downloaded and played online word games is the 4 Pics One Word. 4 Pics One Word was developed by LOTUM GmbH, a mobile app developer based in Germany. It was released on February 13, 2013, and is downloadable for iOS and Android and can be played by a single-player or multiplayer. It is one of the most popular mobile game applications, with over 50 million downloads. It is a word game that presents you with four images and asks you to guess what the word, which could be seen from the puzzle as an option, presents (Taboola, 2022). Further, Taboola (2022) explained in this blog that this word game not only promotes fun but also helps improve memory and critical thinking because it stimulates the visual learning of the people who play it.

College students in Korea and China reported that mobile apps were effective for practicing pronunciation, vocabulary, listening, and reading skills. The use of language learning apps as a didactic tool for vocabulary building in an EFL context for six months fosters high school students' vocabulary building effectively (Guaqueta & Castro-Garces 2018; Bus et al., 2020). Teachers have been investigating its effectiveness on the students' academic performance. Interestingly, students have developed a positive attitude towards learning because of the new elements incorporated. Students became much more active, motivated, and challenged in solving problems and answering questions. Gamification has slowly progressed in the teaching process considering that students in this generation have a shorter attention span (Sailer, 2019). Learners' scores and their receptive lexical knowledge increase, but the acquisition of productive knowledge has also improved. This refers to the online flashcards that come from online games that are accessible and used by teachers in their

teaching process. For example, playing video games has been demonstrated to be preferable among Romanian EFL learners (Cristeaa & Fărcaşiub, 2015).

Players of video games are considered independent learners as they execute the technical skills required to play these games. They learn how to play specific video games by independently understanding the instructions given before playing the game. Online Quizlet promoted EFL learners' vocabulary development. It is an online game where players have fun learning new knowledge. This game develops the vocabulary of the players and their ability to familiarize themselves with and understand the meaning of a word through pre-and post-tests and a questionnaire. Comparable to previous studies, the findings were significantly positive (Dizon, 2016). The existence of mobile devices promotes a convenient way for users to access things that they want. Part of these convenient ways are the applications installed on their mobile phones, specifically the game applications, where they find entertainment and unconsciously learn from it (Akcil et al., 2021). The correct application of vocabulary learning strategies is the biggest contributor to a learner's success rate in learning vocabulary and, most importantly, in their learning progress, and one of them is incorporating game elements so that students will learn better. Learners, most of the time in the age of technology, are very interested in learning with mobile devices. This provides them with an interactive and collaborative online learning experience. This is in line with the idea of gamification, wherein students are engaged, challenged, and motivated to learn, especially language learning (Strayer, 2012; Lukassen et al., 2014).

1.3 Purpose of the Study

This study is intended to unravel the lived experiences among Grade-10 Students of Tuyan National High School in playing the mobile word game 4 Pics 1 Word. Moreover, this study aimed to develop a gamified instructional material as the output of this study. The output is highly embedded in the results and findings of the study.

2. Materials and Methods

2.1. Research Design

This paper employed the descriptive phenomenological research method coupled with the thematic analysis of Braun and Clarke (2006) which looked into the lived experiences among Grade-10 students of Tuyan National High School in playing 4 Pics 1 Word as a way of vocabulary learning.

2.2 Participants

The purposive sampling technique is used to select the ten grade 10 students of section Wisdom of Tuyan National High School who have a direct involvement in playing 4 Pics 1 Word. The study is particularly conducted in the Junior High School Building, second floor, second room, and section Grade-10 Wisdom where there are over 50 students. The school is headed by Ruben Altubar Jr. the principal of the Junior High Department who aims at making the institution conducive and innovative for a better learning experience for both teachers and students.

2.3 Data collection tool

The instrument utilized in this study is a researcher-made interview questionnaire which has predetermined questions to be asked in a predetermined order. Further, the interview relied merely on asking questions to gather and collect data from the respondents. Before conducting the study, a transmittal letter was submitted to the principal of Tuyan National High School. The letter served as permission to administer the prepared interview questions for the students and respondents. Consequently, the researchers interviewed the purposively selected ten students.

2.4 Ethical approval

Before the data collection, the researchers sought approval from the student respondents through a consent form that solicited their voluntary participation in this study. To maintain

anonymity and confidentiality, the respondents' identities were assigned a code. Likewise, the data collected were bound to privacy to ensure that it is solely used for academic purposes only.

2.4 Data Analysis

In interpreting the data, this study utilized thematic analysis by Braun and Clarke (2006). The data was gathered through one-on-one and structured interviews. The data gathered was transcribed as part of the familiarization of the raw data. The researchers carefully examined and familiarized the transcribed responses to arrive at the initial codes. Further, the researchers coded the data to identify the initial codes to label the varied responses of the students. After codes were created, patterns were identified that generated the themes that summarize the experiences of the students. Along the same line, the researchers did a thorough review of the initial themes to come up with the final themes that represent the students' varied experiences. For questions numbers one and two, the approach utilized is semantic in doing the thematic analysis because the themes emerged from the explicit content of the data. The latent approach is employed in question number three for the themes were conceptualized from reading into subtext and assumptions underlying the data.

3. Results

3.1. Grade-10 (Wisdom) Students' Profile and Experiences in Playing 4 Pics 1 Word

The table (table 1) reflects the students' profile in playing 4 Pics 1 Word in terms of their age and gender.

Table 1
Students' Profile in Playing 4 Pics 1 Word

Gender	Frequency	Percentage	Age	Exposure	Time-Frequency
Male	2	20%	16	3-4 years	2-3 hours a day
Female	8	80%	15-16	1-2 years	1-2 hours a day
Total	**10**	**100%**			

Part of the one-on-one interview is to determine the students' profile in playing the mobile word game 4 Pics 1 Word. As reflected in Table 1, it clearly shows that the selected ten Grade 10 students have the age bracket of 15–16 and have been using the mobile word game for one to four years and one to three hours a day. This implies the exposure of the students to playing the mobile word game every day. Despite the number of male respondents, they spend the most time playing each day. The range of two to three hours is not reflected as one sitting or playing. They play for at least an hour in the morning, one hour in the afternoon, and at least one hour at night. Likewise, the female respondents also spend one to three hours each day playing, but not in one sitting. The table implies, with the years of exposure and time spent playing, that the male respondents discovered the mobile word game in the mobile application store earlier than the female respondents. That is, they are more exposed to playing 4 Pics 1 Word than the female respondents. Above all, both male and female respondents have been playing the mobile word game 4 Pics 1 Word since the year the year they started in which they have procured lucrative varied learning experiences.

3.2. Themes That Emerged from the Grade-10 Students' Responses

The four themes for their experiences were identified to wit: challenged and motivated; developed focus and active engagement; frequent utilization of critical thinking; and enjoyed and expanded vocabulary. Further, themes for the effects of 4 Pics 1 Word on the students' vocabulary skills were conceptualized based on the underlying ideas of their responses.

3.2.1. Challenged

4 Pics 1 Word is challenging. It is a word game that is intellectually the players unravel the word that is being implied in the pictures presented. That is this word game-propelled challenge to ignite the players to be motivated to learn. During their specific time of playing 4 Pics 1 Word, the students always felt challenged especially when they had a hard time understanding and grasping some of the pictures presented or shown. Moreover, when they reached the difficult level of the word game, the challenge elevated. There are pictures that students have a hard time analyzing and understanding to unlock the words implied in the pictures. Consequently, the students were motivated to figure it out, accomplish the level, and discover the vocabulary that the pictures depicted. As expressed by the Grade-10 students:

S1: *"I always feel challenged and difficult because there are four pictures and you have to guess the word and there are words that are not familiar so I collect them so that hmm learn new words. I always want to know what" is the right word that sometimes, uhmmm, I used hints."*

S2: *"I am very challenged because there are pictures that are difficult to guess that makes me want to solve it."*

S3: *"There is always a challenge but sometimes easy. And I feel so motivated because I want to know the right word by looking and, you know, analyzing the pictures and like it's challenging."*

This patently showed that in order not to alleviate the motivation among students to learn, there should be a challenge exhibited in learning by imposing a gamified learning experience (Bovermann & Bastiaens 2020). 4 Pics 1 Word is one way of stimulating the student's interest and motivation by eliciting morphological challenges through the presentation of pictures. As reflected in their responses, one student expressed that the mobile word game 4 Pics 1 Word is challenging and pushes him to be motivated to get the correct word. This experience helped them learn how to be motivated to do and achieve things. Through the presentation of pictures in teaching vocabulary and as a way of gamified instructional material, students will be challenged and motivated to learn and improve their academic performance level because the element of bringing the challenge into learning posits motivation for the students to have a drive to accomplish and achieve their goals. Simply put, this concept increases the level of their motivation by imposing challenges that would foster their engagement (Rohman, 2016). That is, it is lucrative to utilize gamification with dual codes (pictures and words) in teaching and learning vocabulary

3.2.2. Engaged

Learners in this digital generation have shorter attention spans and fluctuating interest in specific matters. Having that said, it is indispensable to stimulate their active engagement at the beginning of the teaching-learning process to capture their interest and attention. 4 Pics 1 Word is a mobile word game that presents four images and asks players to give the word depicted from the shown pictures. This concept helped the students develop their focus and active engagement in learning English vocabulary through playing the mobile word game. There is an active learning process exhibited from their experience in playing 4 Pics 1 Word.

S5: *"Oh, it is always fun and engaging that, you know, it helps me to be mentally active in learning. It is like it is not just a game, it's ah, I think my focus in accomplishing things practiced and developed because that there is like the active practice of my brain. And the words I learned I use them in speaking with my friends or even writing essays.*

S2: *"There are pictures that make me so interested that sometimes I feel like I don't want to like spare time to play this and focus on the words that I will learn. I feel excited to play this mobile game."*

As reflected in the responses of the students, it is suggested to have a vocabulary drill through the employment of the 4 Pics 1 Word concept at the beginning of the class to stimulate the students' active engagement and focus, because learners in the 21st century have a shorter attention span by which their interest will fluctuate at any point. Engagement should have been elicited in the learning experience among students because the effectiveness of gamified-based learning showed how fun learning helped to engage the students in a meaningful and active learning experience. Several educators have been incorporating gamification into their teaching because it has a different and positive impact on students' engagement (Tews et al., 2015, p. 16). Additionally, gamification can be perceived by students in different ways, requires constant refinement to be useful, and can incorporate gamification principles into educational activities. This provides students with a better, fresher, and more active learning experience towards the subject matter (Putz et al., 2020).

Through presenting pictures and a gamified approach to teaching, students' attention and active engagement will be captured and stimulated. This implies the need to foster a gamified learning experience in the classroom, coupled with visual representations so that students will be much more active and engaged in learning vocabulary. Gamification is vivid evidence that helps students develop interests and engagement in the process of learning (Boyinbode, 2018).

3.2.3. Enhanced critical thinking skills

One of the elements that is stipulated in 4 Pics 1 Word is it exhibits the critical thinking of the players by which they will analyze the pictures presented and the jumbled letters to come up with the correct word depicted from the pictures. That is, the nature of the 4 Pics 1 Word mobile application is to elicit the player's critical thinking by presenting four images that depict a certain vocabulary. Learning in digital platforms and venturing students into gamified learning experiences, especially in language learning in 32 all aspects motivate students to learn more, utilize more of their critical thinking, and impose problem-solving skills (Zheng, et al., 2015; Reddy et al., 2022). As students have been playing the mobile word game, they have also developed their critical thinking and improved their memorization skills. The students would carefully analyze and critically think of the correct word depicted from the four pictures shown. As the Grade-10 students expressed:

S9: *"It sometimes stressful that hmmmm that I need to think so hard and critically so that I could answer the correct word. But I like it because it helps me to practice my critical thinking."*

S10: *"When you play it, you need to use your critical thinking because you are only, hm, like given pictures to see and guess the word. I always feel so mentally stressed but it's worth it. New words such as new learning."*

One way to exhibit the students' critical thinking is to impose activities that stimulate such skills. The concept of 4 Pics One Word can be used as instructional material to impose a gamified learning experience for students that would stimulate their critical thinking and analysis skills to improve their learning experiences. Further, showing pictures in teaching and learning vocabulary helped improve their memory. The use of images and visual representations in teaching and learning vocabulary is easier to retain than without images. When teachers impose a dual-coding mindset on their instructional materials, either adopted or adapted, the student's cognitive load is reduced. This implies that their working memory capacity increased. Hence, there is a learning improvement (Becton, 2022). This supports the idea that learning vocabulary should be supplemented with pictures and images for better learning and retention.

This strongly reflects the Dual Coding Theory of Paivio (1991), which states that incorporating both images and words helped improve the retention of information and the learning experience of the students. The images presented will serve as an ancillary for a better memory enhancer to remember information effectively (Moradan & Vafaei, 2016). Teachers and instructors should adapt and modify instructional materials accordingly by providing pictures that make students use their critical thinking, active engagement, and fascination toward learning (Wasilewska, 2017).

3.2.4. Increased vocabulary skills

Gamification is incorporated into the teaching-learning process to impose genuine fun in learning among students. As per verity, online gamification increased the level of enjoyment and involvement among high school students in learning English courses. Students can learn better when there is an incorporation of gamification because this would not only elicit learning but also a genuine love for learning (Cristobal et al., 2022).

The grade 10 (Wisdom) students conspicuously stated how their true enjoyment of playing the mobile word game helped them expand their English vocabulary. With fun in learning, it is easier for them to learn because there is enjoyment that surrogates the learning of English vocabulary. Moreover, the presence of pictures also gave them a fun experience that also helped them learn new words.

S5: *"It's just so enjoyable that it makes me happy and academic advantage 'because I learned new words which are very different from other online games I played."*

S2: *"There are pictures that are interesting and fun and it is more enjoyable when I get the word correctly. It's fulfilling to, ah get the word."*

Because it is a mobile word game, students attained a fun and enjoyable gamified learning experience. Since students learn better when the learning approach is gamified, gamified teaching approaches for teaching vocabulary should be considered now in the teaching approaches of the institution, especially in English language teaching.

Noting that *"there are pictures that are interesting and fun and it is more enjoyable when I got the word correctly, it's fulfilling to, ah get the word,"* this implies that through the concept of the mobile word game, students learn words effectively when it is gamified. Thus, gamified teaching of vocabulary will help increase their vocabulary tank. Incorporating games into the teaching process provides excitement for learners' learning experiences and improves their performance and vocabulary acquisition (Korlu & Mede (2018).

3.3. The effect of playing 4 pics 1 word in students' vocabulary skills

3.3.1. Developed Interest in Collecting New Words

Playing 4 Pics 1 Word has developed the students' interest in collecting new, unfamiliar words that they have employed in their writing and discourse. Their responses patently claim how playing the word game helped them enhance their vocabulary skills. Student expressed*: "It is very helpful because I can learn new English words then whenever I play, I always feel motivated but sometimes in difficult. Sometimes easy but more complicated. But most of all, it helped through in learning new words searching in Merriam."* As the nature of 4 Pics 1 Word, students accumulate a lot of unfamiliar words with definitions that seem so familiar and easy to understand.

Once they unraveled the correct answer, they would segue to their mobile dictionary and search for the meaning of the words. This, after they had learned the meaning of the words, they immediately wrote them in their vocabulary notebook with example sentences. Consequently, with these new words that they have gained, they have become much more interested in learning more words, either through constantly playing 4 Pics 1 Word or through reading books. This promotes a higher potential for learners to have an interest in learning vocabulary in a repetitive and enjoyable process until it is absorbed (Waluyo & Bucol, 2021).

The experience of playing the mobile word game gives the students the habit of collecting new words every day, which they already incorporate into their writing and conversations. Students also become much more interested in reading books in which they can learn new words that they can include in their vocabulary notebooks. Students in Nigeria became much more interested in learning vocabulary due to the hype that online gamification brought to their learning experience (Boyinbode, 2018).

3.3.2. Increased confidence in expressing oneself

With the words that they have learned and collected, students have become confident in expressing their ideas and thoughts with ease and spontaneity in writing. When it comes to speaking, students are still anxious about what words to use, but when it comes to writing, students stated that it is easy for them to construct and express their ideas about certain subject matter with the words that they have learned from the game. One of the students stated, *"Oh, it is always fun and engaging that, you know, it helps me to be mentally active in learning. It is like it's not just a game, it's ahhh, I think my focus in accomplishing things is practiced and developed because kanang kuan there is like active as if of my brain. And the words I learned, I use them in speaking with my friends or even writing essays."* This patently emphasized how playing 4 Pics 1 Word helped them increase their confidence in dealing with people and in expressing themselves with the words that they have been learning from the mobile word game.

Playing the mobile word game has become a habit, and as time goes by, the students will learn heaps of words day by day. This will help them become effective communicators and leaders because they have the facility of the language, and simultaneously, they will learn how to relay information that is easy to understand. Further, this will help them become globally aware because it will be much easier for them to understand the world around them in general. They will become effective facets of the community, doing the desired professions that require communication. It has the potential to develop a conducive learning environment by applying gamification as a strategy in teaching and as a way of introducing learners to the essence of technologies in their studies. It also has the potential to increase students' motivation in learning as it promotes engagement and an enjoyable teaching-learning process, which enhances their confidence in verbalizing their ideas (Dahalan et al., 2023).

4. Discussion

The result of the study patently dictates that the selected Grade 10 students of Tuyan National High School have varied learning experiences, which concludes that learning vocabulary in a gamified way gives them a positive learning experience. With the themes that emerged from the students' experiences, it clearly states that playing the mobile word game 4 Pics 1 Word has a lucrative outgrowth for individual learning. For one, some of the students feel challenged whenever they play the mobile game, which motivates them to achieve and get the correct word. This experience implies that playing 4 Pics 1 Word helps students develop motivation for learning. Learning digital and venturing students into online games, particularly those relating to the English language, motivates students to learn more, utilize more of their critical thinking, and impose problem-solving. Further, it also develops their cooperation and interaction skills using the language, either oral or typewritten (Zheng et al., 2015).

Additionally, some of the students, based on the findings of the study, found the mobile game engaging, for they developed a strong focus on being engaged in playing the mobile word game and getting the depicted word from the shown pictures. This proves that to stimulate students' active engagement, there should be the employment of gamification in the teaching of vocabulary, which will help students develop positive attitudes toward learning and improve their vocabulary skills. Students learn better when there is active engagement in online games, especially mobile games because the education system faces the new normal setup (Alawamleh et al., 2020). Through the habit of playing the mobile word game 4 Pics 1 Word, students develop an interest and passion for collecting words that they often use in casual discourse and formal writing. Along the same line, with the words that the students have accumulated, they have become confident in expressing themselves and their ideas on particular subject matter. This resulted in a high level of self-esteem as a person and as a student. One student claimed that: *"The words I learned from the game made me realize how beautiful and interesting the English language is because there are words that we are not familiar but I am using them now in speaking to impress my classmates and teacher in my essay writing."* Learning vocabulary through gamification imposes effective learning that encapsulates the entire aspect of the learning

process. This suggests that learning vocabulary through games will help improve the students' learning experience because they will develop a positive attitude toward learning and engage in the learning process (Ulla et al., 2020).

Along with the experiences mentioned, with the habit of playing the mobile word game 4 Pics 1 Word, students enhanced their critical thinking skills, as the nature of the mobile word game is to propel the student's mental faculty to think and analyze the pictures to come up with the accurate word depicted from the pictures. This feature of the mobile word game is a good source to practice students' critical thinking. Thus, this concept should be one of the blueprints for teaching vocabulary. Further, this study suggested that teachers may impose a gamified teaching approach for vocabulary or exhibit a gamified-learning-based approach through which students can have a novel learning of vocabulary. Students are given the freedom to construct their learning by using their critical thinking (Martin & Ertzberger 2013).

Further, as the name of the mobile word game suggests, students learned new and unfamiliar English vocabulary by analyzing the pictures presented. This implies that the development of gamified learning materials for vocabulary and gamified learning vocabulary activities should be implemented. Other countries have also developed learning applications for vocabulary learning.

In Taiwan, Chen et al., (2019) developed an English vocabulary learning app with a self-regulated learning mechanism (EVLAPP-SRLM). It helps the learners improve their self-regulated learning abilities to improve their learning outcomes. Makoe & Shandu (2018) designed and implemented a vocabulary learning mobile app named VocUp to enhance English vocabulary teaching and learning in Open Distance Learning in South Africa.

The lived experiences of the Grade 10 students in playing the 4 Pics 1 Word application, as unraveled by the study, concluded that gamified vocabulary teaching should be employed in the actual classroom teaching. The teachers and facilitators may conceptualize and impose gamified learning activities for vocabulary learning so that students will develop a positive attitude towards learning and procure a gamified learning experience that can help them develop their critical thinking skills and increase their vocabulary skills. Introducing game-thinking and game mechanics to the environment of learning can provide a dynamic experience for ordinary activities and school tasks. It was concluded that gamification can improve academic performance among students due to the gamified materials that stimulate their engagement, problem-solving skills, self-confidence, and competitiveness (Hanafiah et al., 2019).

5. Conclusion

This result provided a glimpse of the lived experiences among the Grade 10 (Wisdom) students of Tuyan National High School in playing the mobile word game 4 Pics 1 Word. With the emerging themes, it can be concluded that playing 4 Pics 1 Word elicits lucrative ramifications that would help improve the learning experience among students, especially in learning English vocabulary. Students developed an interest in accumulating new words, which they have incorporated into their writing and discourse. This implies that students also improved their confidence in expressing their ideas.

Further, this dictates how gamified learning improves the learning experience of the students, and therefore a gamified English vocabulary teaching approach is suggested to exhibit an enjoyable learning experience for students. Along the same line, this study found out, based on the student's experiences, that learning vocabulary through pictures in a gamified approach helped them retain the words longer by way of frequent utilization of their critical thinking in playing the mobile word game 4 Pics 1 Word.

6. Recommendations

In light of the findings of the study, the following are suggested:

- Gamified teaching of English vocabulary since the students have a lucrative gamified learning experience in playing 4 Pics One Word.

- The administrators of the institution should encourage the teachers to incorporate Gamification in teaching English vocabulary that employs dual codes which are pictures and letters that would stimulate the students' interest and active engagement.

- The English teachers of Tuyan National High School could devise gamified instructional materials that incorporate images in teaching English vocabulary that would stimulate the student's critical thinking and motivation.

- Teachers should encourage their students to venture into playing the mobile word game 4 Pics 1 Word during their free time at school to expand their vocabulary and to intellectually entertain themselves.

Conflict of Interest: There is no conflict of interest in this study.

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